RESUME

July 2026

Zeev Zalevsky



Mailing address: Faculty of Engineering
Bar-Ilan University
52900
Ramat-Gan
Israel

Date of Birth: 20.2.1971

Contact Details: (Office) 972-3-7384175
(Lab) 972-3-5317017
(Fax) 972-3-7384051
(Bitnet) Zeev.Zalevsky@BIU.AC.IL
(Web-Site) https://www.eng.biu.ac.il/zalevsz/

Education

1989-1993	B.Sc - Electrical Engineering, *Cum Laude*, Tel - Aviv University
1993-1996	Direct Ph.D studies in Tel - Aviv University. Thesis subject: "Unconventional Optical Processors for Pattern Recognition and Signal Processing", Advisors – Prof. David Mendlovic and Prof. Amos Hardy.

Professional Occupation

1993-1996	Teaching assistant at Tel - Aviv University in various courses ("Introduction to Electrical Engineering", "Introduction to Physical Electronics").
1998	Adjunct Lecturer at Ariel Academic College ("Signal and Systems")
1998-2003	Adjunct Lecturer at Tel-Aviv University in various courses ("Optical Communication", "Introduction to Electrical Engineering").
2007	Adjunct Lecturer at Weizmann institute in linear optics course
1996-2001	Project Officer, Israeli Air Force, R&D Dept.
2001-2003	Founder and CTO/ Sr. VP R&T at Civcom ltd (optics communications company that was bought by Padtec)
2003	Research fellow, Technion
2003-2004	Short term research visit at Bath University funded by UK Engineering and Physical Science Research Council
2003-2004	Founder & Chief Technology Officer (CTO) at Explay ltd (micro projectors company that was bought by ADM, today Kaga Electronics)
2004-2014	Founder and President of Xceed Imaging ltd (ophthalmic devices for presbyopia company that was sold to Brien Holden Vision Institute from Australia)
2004-2007	Senior Lecturer (Assistant Prof.) at Bar-Ilan University

2004-2019	The founder and the head of the electro-optics track in the school and later on in the faculty of engineering at Bar-Ilan University
2006-2018	Director of the Nano-Photonics center at the Institute of Nanotechnology and Advanced Materials (BINA) in Bar-Ilan
2007-2010	Associate Prof. at Bar-Ilan University
2008	Founder of PhotoFree (a start up company working on RF based devices that interfere with unauthorized film and image shooting)
2010-present	Full Prof. at Bar-Ilan University
2011-2015	Visiting Prof. in Friedrich-Alexander-University of Erlangen-Nuremberg.
2010-2014	Head of Ph.D student committee in faculty of engineering and member of the University graduate students committee.
2011-present	Member of the high education council of Bar-Ilan University
2012-2014	Member of the appointment committee of Bar-Ilan University
2012-2028	Elected member of **the Senate of Bar-Ilan University**
2013-2014	Samsung DS CTO Distinguished Advisory Board Member
2013-present	Founder and chief scientific officer (CTO) of Z-square ltd (micro-endoscopy)
2014-2025	Founder and CTO of ContinUse Biometrics ltd (optical biosensing & authentication).
Oct. 2013-Mar. 2014	Vice Dean of Engineering
Oct. 2014-Sep. 2018	Vice Dean of Engineering
2014-2016	Member of the appeals committee of Bar-Ilan University
2014-2018	Member of the coordinating committee of Bar-Ilan University
2016-2022	Adjunct Professor at the Department of Physics, Faculty of Science, Toronto Metropolitan University, Toronto, Canada and Associate Member of the Yeates School of Graduate Studies (YSGS) at Toronto Metropolitan University
2017-2018	Member of the prize committee of Bar-Ilan University
2017-2021	Founder and CTO of LensFree ltd (performance enhanced CT device).
2017-2019	Member of the appointment committee of Bar-Ilan University
2018-2019	The champion of the entrepreneur center of Bar-Ilan University, the Unbox
2019-2026	Founder and chief technological officer (CTO) of Cognifiber ltd (in-fiber optical processor)
2020-2026	Founder and chief scientific officer (CSO) of Nano-drops ltd (ophthalmic nanodrops based solution for presbyopia and visual aberrations)
2020-2024	Founder and chief scientific officer (CSO) of SuperSpectra ltd (noninvasive detection of progress in Alzheimer based on super resolved Raman spectroscopy)
2019-2024	Dean of Engineering, Bar-Ilan University
2022-2026	Adjunct faculty at Chandigarh University, India
2022-2025	Head of the engineering cluster at the energy and sustainability center of Bar-Ilan
2022-present	Member of Supreme Scientific Council of Migal
2024-present	Foreign member of the Serbian Academy of Nonlinear Sciences (SANS).
2024-present	Vice president for academy-industry relations.
2025-present	Head of the energy and sustainability center
2026	Member of the Senate committee for selecting honorary doctorate recipients

Prizes

1990	**Dean's prize** for outstanding undergraduate studies achievements.
1994	**Wolf award** for research students.
1995-1996	**Eshkol fellowship** awarded by the Israeli ministry of science for PhD students.
2007	**Krill prize** from the Wolf foundation (Wolf prize for young scientists).
2008	**ICO** (International Commission of Optics) **prize and Abbe's medal** for significant contribution in the field of optical super resolution.
2009	**Juludan prize** for advancing technology in medicine. Given for developing extended depth of focus contact lenses to correct presbyopia.
2009	Second place award (1 out of 4 **finalists**) of the **international Bepi Colombo prize for transferring innovation into applications**.
2010	**Fellow of SPIE (the international society for optics and photonics) Award**.
2011	**The international SAOT** (School for Advanced Optical Technologies) **young researcher prize** for pioneering contributions in the development of optical techniques for enhanced imaging resolution and its use for biomedical applications

	(this prize is annually awarded by the German federal and state governments through the Friedrich-Alexander-University of Erlangen-Nuremberg). The prize comes together with 4 years long **Visiting Professorship in Friedrich-Alexander-University** of Erlangen-Nuremberg.
2011	**Lean and Maria Taubenblatt prize** for excellence in medical research for the development of a “Multi-functional bio-medical micro probe”.
2011	**Best paper award** for paper presented in the 2011 Information Optics Workshop (WIO2011) entitled "Geometrical super resolved lensless imaging".
2012	**Fellow of OSA (the optical society of America) Award**.
2012	**Young investigator prize in nanoscience and nanotechnology** given by the Israel National Nanotechnology Initiative (INNI) together with the Ministry of Industry, Commerce and Labor.
2012	Selected to be **IEEE Senior Member**
2012	Winner of **The International Wearable Technologies (WT) Innovation World Cup 2012 Prize** for the invention of the “Opto-Phone”: a continuous biomedical monitoring technology (was chosen to be the winner out of more than 300 entries from all around the world).
2014	**Best paper award** for paper presented in the 2013 Information Optics Workshop (WIO2013) entitled "Image Processing for Super-Resolution Localization in Fluorescence Microscopy,”
2014	**First place winner of the ICIS’2014 startup competition** with the Opto-Care technology (biomedical multifunctional monitoring bracelet) and **second place in the ICIS’2014 startup competition** with IC-Touch technology (the cornea tactile stimulation contact lens for blind).
2014	**OSA Outstanding Reviewer Award**. Selected by the Editors-in-Chief of OSA. Those are the core publications from scores of nominations by OSA Topical and Associate Editors. This award is intended to publically recognize the indispensable contribution to the success and stature of OSA’s journal publishing program.
2014	**Fellow of EOS (European Optical Society) Award**.
2015	**Image Engineering Innovation Award** of the Society for Imaging Science and Technology (IS&T) for the invention of the Kinect as breaking through 3-D sensing technology and product.
2015	**2015 Outstanding Young Scientist Award (OYSA) of NANOSMAT** for significant contributions in the fields of nano-photonics, nano-technology and nano-materials involving the usage of nanoparticles for biomedical imaging, sensing and for nano devices, as well as for professional career achievements.
2015	**Fellow of the Nanosmat Society (FNS) Award**.
2016-2022	**Guest Professorship Fellowship** at the Department of Physics, Faculty of Science, **Toronto Metropolitan University**, Toronto, Canada (**Adjunct Professor**).
2016	**Fellow of the IET (Institution of Engineering and Technology) Award**.
2016	**ITMO University** (St. Petersburg, Russia) **Professorship Program Winner Award**.
2016	**Serial Innovator Award given by the International Wearable Technologies (WT) Innovation World Cup of 2015**.
2016	**Fellow of the Institute of Physics (IOP) Award (FInstP).**
2017	**SPIE Startup Challenge Winner Prize** (22 out of few hundreds of entries moved to semi-finals and 6 were selected for the finals and we have received the second place prize) for our project of tactile cornea stimulation allowing functionality to blind people (named as IC Touch).
2017	The technology I co-invented and took part in developing, for remote biometrics monitoring which was commercialized to ContinUse Biometrcis received the **2017 Europe Technology Innovation Leadership Award** for the contactless biometric authentication market given by Frost & Sullivan.
2017	**Global Innovation Award** given by TechConnect World Innovation Summit & Expo for our Hand Free Bio-Sensing Technology which I co-invented and took part in developing.
2017	**IAAM Scientist Medal Award for 2017** given by the International Association of Advanced Materials (IAAM) in their European congress due to notable and outstanding contribution in the field of "Advanced Materials Science and Technology".

2017 **The Winner of the Photonics Award** (1st place) at Startup World, Munich, Germany with our solution for hand held remote and contactless bio-sensing technology (ContinUse Biometrics).

2017 **Prize4Life 2nd ALS Assistive Techn121ology Competition Award Winner** (2nd place).

2018 The **Dr. Horace Furumoto Innovations Professional – Young Investigator Award** given by the ASLMS (American Society for Laser Medicine and Surgery).

2018 The **Asian Advanced Materials Award** for the year 2018 given by IAAM in their congress in Singapore for my outstanding contribution in the field of "Advanced Materials and Technology".

2018 **National Academy of Inventors (NAI) Fellow Award** for demonstrating a highly prolific spirit of innovation in creating or facilitating outstanding inventions that have made a tangible impact on quality of life, economic development, and the welfare of society.

2018 **2018 BIG Innovation Award**. The technology I have co-invented and took part in developing and which was commercialized from my lab to a startup company Z square (micro endoscopy) won the 2018 BIG (Business Intelligence Group) Innovation Award.

2018 **SPIE Prism Award for photonic innovation** for co-inventing the remote laser based continues bio-monitoring and authentication technology being developed by ContinUse Biometrics.

2018 **Imaging Science and Technology (IS&T) Society Fellow Award** for contribution in the fields of optical imaging and microscopy.

2018 **Best Lecturer Prize** in the International ChipEx 2018 conference.

2019 Chinese **President's International Fellowship Initiative (PiFi) Award** of the Chinese Academy of Sciences (CAS) for senior visiting scientists.

2019 **Amity Best Researcher Award** for my contribution in the field of Communication given at the International Conference on Automation, Computational & Technology Management (ICACTM-2019) organized by IEEE and held in London (UK), April 2019.

2019 **Rector Prize for Scientific Innovation** given by the Rector of Bar Ilan University.

2019 **Fellow of the ASLMS** (American Society for Laser Medicine and Surgery).

2019 **Fellow of IEEE (the Institute of Electrical and Electronics Engineers) Award**.

2020 **Edison Award (Silver prize)** for co-inventing the super-resolving and minimally invasive micro-endoscope technology being developed by Z square.

2020 Fellow of the International Association of Advanced Materials (**FIAAM**, Sweden) **Award**.

2020 **IEEE Distinguished Lecturer Award**.

2020 **Red Dot Award: Design Concept** awarded to high-performance single-use endoscopy. Was awarded with a seal of distinction that acknowledges the co-inventing of the super-resolving and minimally invasive micro-endoscope technology being developed at Z square.

2020 **VEBLEO Scientist Award.** This award is for outstanding researchers at a mid-stage in their career, who are leaders in their field.

2021 **AIMBE Fellow Award**. Selected to the American Institute for Medical and Biological Engineering (AIMBE) College of Fellows.

2021 **Joseph Fraunhofer Award/Robert M. Burley Prize**, given by OSA for significant contributions to the field of optical super-resolution including the invention of many novel concepts bypassing Abbe's limits of diffraction and the geometric limits set by the sensor.

2021 **Lotfi Zadeh Memorial Award** conferred on Micro2021 conference, May 2021.

2021 **E&T Innovation Award Winner.** The work entitled "Contact free bio-sensing and diagnosis," which I co-invented, was the winner in the **Future Unicorn** category of **Engineering and Technology (E&T) Innovation Award of 2021**.

2021 **CES (Consumer Electronics Show) 2022 Innovation Awards Honoree** for Zsquare which I have co-founded and which developed a cost effective, high performance, single-use endoscopes.

2022 **German Innovation Awards 2022** for the co-invention of disposable micro-endoscopy technology which was commercialized to Z square startup company.

2022	**Meitner Humboldt Research Award (Humboldt-Forschungspreis).** Humboldt research prize winner for doing research visit at FAU, Erlangen, Germany.
2022	Elected **Fellow of Asia-Pacific Artificial Intelligence Association.**
2023	**SPIE - 2023 Chandra S. Vikram Award in Optical Metrology** in recognition of key contributions to the invention of a laser-based, remote, nano-vibrations sensor with primary applications in biomedical sensing and diagnostics.
2023	**Israel Vacuum Society (IVS) Excellence Award for Research** recognizing leading scientists for outstanding research in fields related to material science and nanotechnology.
2023	**German Berthold Leibinger innovation prize in applied laser technologies.** Received together with Javier Garcia for the development work in applied laser technology entitled "*Laser based remote bio-sensing and diagnosis of cardio-pulmonary diseases*," Ditzingen, Germany.
2023	**IEEE Photonics Society (IPS) 2023 Laser Instrumentation Award.** Received together with Javier Garcia for "eminent impact to the field of laser based enhanced remote bio-sensing and its usage for photonic medical diagnosis."
2024	**IAAM** (International Association of Advanced Materials) **Scientist Medal** in recognition of outstanding contributions to advanced materials science and technology.
2024	Elected as **foreign honorable member of the Serbian Academy of Nonlinear Sciences** (SANS).
2024	**Fellow of Industry Academy within the International Artificial Intelligence Industry Alliance** (AIIA).
2022-2026	**Overseas Academic Expert** of International Academic Platform for Opto-electronics Perception Science and Technology under Complex Environment, Xian, China.
2024	**SPIE Dennis Gabor Award in Diffractive Optics** for significant contributions to the field of diffractive optics and holography, particularly in super-resolved imaging and imaging through scattering media.
2025	**The Vidyasagar Award** given at the 14th International Conference on Computing, Communication and Sensor Network (CCSN 2025).

Miscellaneous Additional Scientific Achievements/Awards/Prizes/Honors

1994	Tel - Aviv's University **Dean's award/fellowship**.
1998	Selected to be the **nominee** for the Israeli **air force commander technology prize** for contribution to the development of "Blue Sky" project.
2004, 2019	**Principle Investigator short term visiting award** for 3 months visit stay given by the Valencian state, Spain to visit Prof. Javier Garcia at the Univ. of Valencia.
2005	Zalevsky was **one of the inventors of the optical sensor of the gaming technology module of the Kinect** (http://www.wipo.int/patentscope/search/en/WO2007043036). The machine learning work on human motion capture within Kinect won the 2011 MacRobert Award for engineering innovation. Kinect Won T3's "Gadget of the Year" award for 2011. It also won the "Gaming Gadget of the Year" prize. 'Microsoft Kinect for Windows Software Development Kit' was ranked second in "The 10 Most Innovative Tech Products of 2011" at Popular Mechanics Breakthrough Awards ceremony in New York City. It was selected by MIT technological review as one of world's 50 most innovative companies for 2011 (Kinect was developed by PrimeSense which was sold to Apple).
2008	**LaserFocusWorld commendation award for excellence in technical communications** for his paper entitled: *"Optical imaging resolves beyond the diffraction limit,"* in Laser Focus World, 97-100 (April 2008).
2009	Selected by the Israeli financial journal TheMarker as **One out of 7 outstanding & promising young Israeli researchers**: http://www.themarker.com/markets/1.524871
2009	**Finalist for the Prism award of SPIE for photonic innovation** for inventing the extended depth of focus technology for ophthalmic applications being developed by Xceed Imaging.

2009 **Diploma of honor awarded in remembrance of eminent contribution** to the optical meeting of ICO-Photonics in Delphi 2009.

2010 The international **Huber water technology prize**: **1 of top 10 research finalists**.

2011 **Best paper competition finalists** in the Israel Machine Vision Conference (IMVC) 2011: Two papers were chosen as the finalists in the competition (1 of top 10 papers):

- "*ULSI Copper and Silver Interconnect Microstructure Based Image Enhancement Algorithm," by H. Duadi, P. Livshits, E. Gur, A. Inberg, Y. Shacham-Diamand, A. Weiss and Z. Zalevsky*
- "*Improved algorithm for automated alignment of wafers via optimized features location," by M. Parshin and Z. Zalevsky*

2011 **Ramon Technological Breakthrough Contest: semi finalist**.

2011 The work on remote sensing of biomedical parameters was selected as one out of the "**100 out of box thinking Israeli inventions exhibition**" being presented in the Bloomfield science museum in Jerusalem. This invention called the optical heartbeat monitor was selected as **Israel's top 45 greatest inventions of all time**:
http://www.israel21c.org/technology/israels-top-45-greatest-inventions-of-all-time
http://www.jewishledger.com/2011/10/innovations-inc-israels-50-greatest-inventions/

2012 **Finalist of the Robotdalen international innovation award in robotics** for his activity in developing robotic platform for automated search and rescue missions of humans in fire, Sweden 2012.

2012 **Newest and most innovative research award/Hot topic award** of ARVO for paper entitled "*Electro-Mechanical Tactile Corneal Stimulation System for Vision Substitution*," that was presented in the annual meeting of the Association for Research in Vision and Ophthalmology (ARVO), in Florida on May 2012. It was selected by the annual meeting program committee as emerging trend and hot topic abstract which is the newest and most innovative research being conducted by researchers in the various specialties presented in ARVO (only about 5% out of more than 6000 presented abstracts are selected).

2012 **German Berthold Leibinger innovation prize nominee distinction award in applied laser technology**: Finalist of the Berthold Leibinger Innovationspreis for 2012, for the prize worthy development work in applied laser technology entitled "*Laser based simultaneous remote biomedical monitoring*," Ditzingen, Germany.

2012 **IET Innovation Award Highly Commended Entry.** The work entitled "A new principle for remote continuous monitoring of intraocular pressure variation," was selected to be one out of five **Finalists in the categories of Emerging Technologies and Healthcare Technologies in the Institute of Engineering and Technology (IET) Innovation Award of 2012** (out of more than 420 candidates).

2009,14,15,18 Inclusion in the Who's Who in the World 2009 (26th edition); Inclusion in the commemorative 30th Pearl Anniversary Edition of Marquis Who's Who in the World; Inclusion in the Who's Who in the World 2014 (31st Edition); Inclusion in the Who's Who in the World 2015 (32nd Edition); Inclusion in the Who's Who in the World 2018 Edition.

2012 **Selected to be one out of 50 most prolific authors of Applied Optics journal:** was ranked 15th in the top 50 most-published authors in Applied Optics. The selection was made as part of the 50th anniversary celebration of the journal: http://www.opticsinfobase.org/ao/journal/ao/anniversary/50mostpublished.cfm

2013 **Certificate of appreciation given by the journal of Optical Engineering** for extensive service as a reviewer during the calendar year of 2012.

2013 **The Universal Biotech Innovation Prize finalist** for the microendoscope invention (top 12 finalists out of 255 international submissions).

2013 **Finalist of the 2013 EURETINA Science & Medicine Innovation Awards** for spatially dependent PPG signal extraction from the retina (1 out of 6 finalists).

2013 Our invention that provides blind people the capability to "see" by tactile stimulation of their cornea was selected to be one out of **the top 10 incredible Israeli advances in vision** (invention #6):
http://israel21c.org/health/top-10-incredible-israeli-advances-in-vision/
as well as in:
http://nocamels.com/2014/07/sci-fi-the-top-ten-israeli-inventions-that-allow-the-blind-to-see/

2013	**Journal's Top Downloaded Paper Award**. The paper "All-optical silicon simplified passive modulation," by R. Aharoni, O. Baharav, L. Bidani, M. Sinvani, D. Elbaz, Z. Zalevsky was rated as the second most downloaded paper in JEOS:RP journal during the period of 2011 and 2012.
2013	The Israel-EU **Annual HAMSA Award** for winning the BiophotonicsPlus Competition of the EU on the topic of "Minimally invasive photoplethysmograhy (PPG) measurements".
2013, 2019	**OSA Fellow Travel Award** to visit and lecture in Kyrgyz Republic in March 2013; and to visit Lima Peru in March 2019.
2013	Our solution "Contact lens display" was chosen to be among the 12 **Finalists of the Wearable Technologies Innovation World Cup 2013 Award** (selected out of more than 600 submissions).
2013	Our solution "Contact lens Display" was chosen to be among the **finalists** of **The Phone as a Wearable Hub Award** – partnered by Intel.
2013	**The Tesla Award** for Outstanding Technical Communication on Electro-Optics.
2014	**SPIE Startup Challenge Finalist Award** (8 out of more than few hundred of entries, 20 of which have advanced to semi-finals) for the microendoscopy project.
2014	**Semi-finalist of the international Big C Competition**. Our work for a non contact photonic device for melanoma and breast cancer monitoring was selected to be semi-finalist of the international Big C Competition (one out of the best 160 entries out of more than 750 submissions).
2014	One out of the two nominees of the faculty of engineering for the Bar Ilan University best lecturer award for 2014.
2014	The paper entitled "Improved noncontact optical sensor for detection of glucose concentration and for indication of dehydration level," was selected as **"Top Biophotonics Stories of 2014"** by the Biophotonics journal: http://www.photonics.com/Article.aspx?AID=57009
2014	Our technological solution "FabriXense -Smart biosensing clothing" was chosen to be among the **Finalists of the International Wearable Technologies (WT) Innovation World Cup 2014 Award** in the category of Smart Clothing (selected out of more than 500 submissions).
2014	One out of the 7 runners up for the **Untold News Award** that won the **"People's Choice" Award for the most important/best invention** with the tactile bionic contact lens that lets the blind "see" through touch.
2014	**IET Innovation Award Highly Commended Entry.** The work entitled "Homecare sensor for early detection of melanoma and breast cancer," was selected to be one out of five **Finalists in the categories of Emerging Technologies in the Institute of Engineering and Technology (IET) Innovation Award of 2014** (out of more than 400 candidates).
2015	**Second place winner for the Hot Seat Startup Pitch Session of IEEE IoT Startup Event** (Tel Aviv, Aug. 2015) was given to my pitch for FabriXense on Unified Biometric Sensor Embedded in Fabrics.
2015	Our paper by *C. Abraham, Y. Beiderman, N. Ozana, F. Tenner, M. Schmidt, M. Sanz, J. Garcia and Z. Zalevsky, "Photonic non-contact estimation of blood lactate level," Biomedical Optics Express **6**(10), 4144-4153 (2015)*; was nominated and selected to be featured in **OSA Spotlight on Optics** (only two per month are selected out of hundreds of published papers).
2015	**SPIE Startup Challenge Finalist Award** (6 out of more than few hundred of entries) for the glucose monitoring ("Opto-Care") project.
2015	**Forbes Magazine** has selected our cornea tactile stimulating contact lens as one of the 12 most promising Israeli technologies that will change the lives of the disabled in 2015: http://www.forbes.com/sites/zackmiller/2015/01/20/12-israeli-technologies-changing-the-lives-of-the-disabled-in-2015/3/
2015	The optical heartbeat monitor that I have co-invented was selected to be one of **Israel's Top 5 Tech Inventions of 2015**. https://www.rebelmouse.com/_articles/israels-top-5-tec-1460746096.html
2015	**Certificate of appreciation given by the journal of Biomedical Optical** for extensive service as a reviewer during the calendar year of 2014, 2015 and 2017.
2015	Our blind sight technology allowing blind people to "see" via spatial tactile stimulation of their cornea (IC-Touch technology) was granted to take part in **the**

	A3I (Accelerating Inclusion in Israel) program (12 technological ideas were selected out of more than 70 submissions).
2015-18	**SPIE visiting lecturer program**. As part pf the program was invited to lecture in the Indian Institute of Space Science and Technology (IIST), Thiruvananthapuram, Kerala, India (Nov. 2015); Xi'an Institute of Optics & Precision Mechanics (XIOPM), Chinese Academy of Sciences (CAS), China (Sep. 2016), OPTO 2017 conference in Warsaw, Poland (July 2017); The 13th Int. Conf. “Correlation Optics 2017”, Chernivtsi, Ukraine (Sep. 2017); Switzerland, EPFL (June 2018).
2015	**Global Innovation Award finalist** with our technological solution “FabriXense - Smart biosensing clothing” (one out of 9 finalists that were selected out of 181 considered applications).
2015	Our solution on remote photonic biomedical sensing that was commercialized from Bar Ilan to ContinUse Biometrics was shosen to be one out of ten **finalists of Geektime Conference** (out of more than 500 submissions) organized on 21.10.2015 at Habima, Tel-Aviv. It was rated as the second place out of the ten finalists.
2015	The project “Disposable Multi-Functional Endoscope for Nano Therapy,” was selected by the ENATRANS EU consortium and its Nanomedicine Translation Advisory Board (TAB) for the Stage I of the TAB, the first **European nanomedicine accelerator**.
2015	The Israel-EU **Annual HAMSA Award** for receiving the EU Marie Curie grant as the supervisor of Dr. Yair Rivenson as visiting fellow in the group.
2015	Semi-Finalist of the DigitalHealth.il Start-Up Contest on Nov. 2015 organized by EY Israel, Start-Up Nation Central, Veritas and IATI with our smart clothing technology (FabriXense).
2015	Our technological solution “Home-use Cancer Detecting Band Aid” was chosen to be among the **Finalists of the International Wearable Technologies (WT) Innovation World Cup 2015 Award** in the category of Healthcare & Wellness (selected out of about 450 submissions).
2015	**Christians for Israel Chair in Medical Research** awarded for the academic year of 2013/2014 for my research on Non-Contact Photonic Biomedical Diagnostics and Sensing of Diseases.
2015	**IET Innovation Award Highly Commended Entry.** The work entitled “Smart bio-sensing clothing," was selected to be one out of five **Finalists in the categories of Emerging Technology Design and Manufacturing Technology in the Institute of Engineering and Technology (IET) Innovation Award of 2015** (out of more than 300 candidates).
2016, 2019	**ICO Traveling Lecture Award** to visit and lecture in Uzbekistan Republic in March 2016; and to visit and lecture in Lima, Peru in March 2019.
2016, 2017	**Certificate of recognition given by ACS publications** for serving we reviewer to ACS publications during the calendar year of 2015 and then for the year of 2016.
2016	**Tubitak Bideb 2221 Fellowship for Visiting Scientists Award** given by **Tubitak** (The Scientific and Technological Research Council of Turkey).
2016-2024	**Traveling Lecturer for OSA's Centennial**. Funded lecturing visit to the University of Riga, Latvia on March 2016; to Saratov Russia on September 2016; to University of Oulu, Finland on June 2017, to Dehradun, India on Oct. 2019, to Chandigarh, India on Oct. 2024.
2016	**Erasmus+ Actions Fellowship** for short visits to visit/lecture in the University of Valencia, Spain.
2016	SPIE Startup Challenge Semi-Finalist (25 out of few hundreds of entries) for our smart clothing (FabriXense) project.
2016	One out of 10 **Finalists of BOLEO** (business opportunity in Israeli lasers and electro optics) startup competition, Lev academic Center, Jerusalem, Feb. 2016.
2016	Our technology of “Non-contact wearable continues in-blood glucose concentration sensor” was chosen to be one out of 3 **Finalists of the Innovative solutions for accurate measure and real-time control of glucose level by Moscow professional sports athletes** (out of overall of 38 submissions).
2016	The remote laser based sensing and authentication technology which I co-invented was selected as one out of **50 top innovators in the 11th annual New England Venture Summit**, Boston, Dec. 7th 2016.

2016 **Finalist** (one out of 5) **for the Geek Time Award for the CTO of the year (2016).** https://www.geektime.com/2017/01/26/here-were-the-winners-of-geektimes-geek-awards-2017-the-best-of-israels-startup-scene/

2016 **German Berthold Leibinger innovation prize nominee distinction award in applied laser technology**: Finalist of the Berthold Leibinger Innovationspreis for 2016, for the prize worthy development work in applied laser technology entitled "*Laser Based Remote Bio-Sensing and Authentication*," Ditzingen, Germany.

2016 **IET Innovation Award Highly Commended Entry.** The work entitled "Non-contact and continues optical sensor for authentication and bio-sensing," was selected to be one out of five **Finalists in the categories of Emerging Technology Design and Start-up in the Institute of Engineering and Technology (IET) Innovation Award of 2016** (out of more than 300 candidates).

2017 **Erasmus+ Actions Fellowship** for short visits to visit/lecture in the University of Zagreb, Croatia.

2017 **Finalist for the Prism award of SPIE for photonic innovation** for co-inventing the remote laser based continues bio-monitoring and authentication technology being developed by ContinUse Biometrics.

2017 **Photonic Integrated Circuit (PIC) Award Finalist** in the category of Device Characterization with the solution of "Photonic Integrated Circuitry Sensor for Remote Sensing and Characterization Of Devices' Malfunctioning" (I have received the second place from all candidates in my category. There were 3 finalists chosen in this category). http://www.picawards.net/vote

2017 Our remote photonic bio-sensing technology that was commercialized to ContinUse Biometrics was chosen to be one of eight **Finalists of iNNOVEX Disrupt 2017 competition** (out of 120 submissions).

2017 Selected by Marquis Who's Who for the 2017 **Albert Nelson Marquis Lifetime Award**.

2017 **IHEL Award** for homeland security research on "Remote detection of terrorists hiding in underground attack tunnels"

2017 **Short term visiting fellowship award given by the SNSF** (Swiss National Science Foundation) for the project of "Microfluidic Lab on a Chip for Novel Biomedical Applications,"

2017 **Top 20 Finalist of the Photonics Award** at Startup World, Munich, Germany with our solution for ultra-thin endoscopy technology (Z square medical).

2017 Advances in Engineering **Prestigious Key Scientific Article Certificate** for our following papers which were identified as a key scientific article contributing to research excellence in science and engineering (invited articles are less than 0.1% of the whole published literature):

- "Silicon based mechanic-photonic wavelength converter for infrared photo-detection,"
- "Analysis of photonic noise generated due to Kerr nonlinearity in silicon ring resonators,"

2017 **UK-Israel Science Lectureship Award** received to visit Prof. Kishan Dholakia at the Univ. of St. Andrews, Scotland, to lecture on my research on extended depth of focus and super resolution and to establish collaboration.

2017 The technology that I have co-invented and took part in developing and which was commercialized to ContinUse Biometrics was chosen by **CBinsight** (the top market intelligence platform of VC community) to be included in **the top 40** (out of 2000) companies globally (including all categories) presenting at CBInsights A-ha! Conference in the Demo Day.

2017 **ICI 2017 Innovation Award finalist** (one out of 9 finalists which were selected out of more than 30 submissions) with the micro-endoscopy technology I have co-invented and took part in developing and which was commercialized to Zsquare.

2017 **Appreciation trophy for plenary speakers** at the ICAOP-2017 (International Conference on Advances in Optics and Photonics (XLI conference of the optical society of India), Hisar, India (Nov. 2017).

2017 **IET Innovation Award Highly Commended Entry.** The work entitled "Non-contact and continues optical sensor for authentication and bio-sensing," was selected to be one out of five **Finalists in the category of Emerging Technology Design in the**

Institute of Engineering and Technology (IET) Innovation Award of 2017 (out of more than 300 candidates).

2018 **Top 10 Finalist of the 4YFN Awards** to Identify Best International Startup received for co-inventing and technological leading the in-fiber optical computing technology which was commercialized to CogniFiber.

2018 The startup Cognifiber which commercialized the technology that I have co-invented at BIU entered the prestigious **Intel startups accelerator program**.

2018 The startup Fibrixense which commercialized the technology that I have co-invented at BIU entered the Power Camp of the Design Terminal Accelerator in Hungary as one of **top 15** startups out of more than 125 submissions. Right after the camp our technology was one out of the **6 winners** that were accepted to the mentoring program of the accelerator.

2018 Gartner has selected the eye drops technology for correcting vision which I have co-invented to be included in **Gartner's Top 100 Emerging Technology** Report.

2018 **MedTech Innovator's Top 50 Companies** selected ContinUse Biometrics which I have co-founded.
http://markets.businessinsider.com/news/stocks/medtech-innovator-announces-50-leading-startups-selected-for-2018-showcase-and-acceleratorrecord-breaking-700-applications-for-2018-program-from-34-countries-1026882737

2018 **Allied Health member** of the Society of American Gastrointestinal and Endoscopic Surgeons (**SAGES**).

2018 The technology I co-invented and which was commercialized to ContinUse Biometrics was selected to **the Top 100 Science Spinoffs** and has entered 2% out of 5,000 global science spinoffs according to the criteria of: uniqueness of the technology/product, high commercial potential and positive impact to the humanity's well-being.

2018 **NWO** (Nederlandse Orgnisatie voor Wetenschappelijk Onderzoek) **Visitors Travel Award** received to visit Prof. Oded Raz at the Eindhoven University of Technology in order to collaborate on optical encryption system approaching closer the noise level and the quantum communication limits and enhancing the electronic-to-optical conversion efficiencies.

2018 A technology I co-invented was commercialized to a startup company called Nano Drops solving many vision problems and need for spectacles with eye drops. The technology was chosen as one out of 35 technologies inspiring the world: "35 ways Israel inspired the world in 2018," https://www.israel21c.org/35-ways-israel-inspired-the-world-in-2018/

2018 **Best Research Work Award** given to our paper presented at the 38th Annual Meeting of the Israeli Society for Vision and Eye Research:
D. Smadja, M. Lellouche, M. Krauthammer, Y. Harel, A. Abulafia, D. Zadok and Z. Zalevsky, "Nano-drops for correcting refractive errors,"

2018 **Indian Intraocular Implant and Refractive Surgery Convention** (**IIRSI) gold medal award** given for the presentation of the work preseted at the IIRSI Convention, Chennai, India:
D. Smadja, Z. Zalevsky and J. P. Lellouche, "Nanotechnologies and Visual Correction, the next step?,"

2019 ContinUse Biometrics startup which I co-founded and which is based on a technology that I have co-invented, won the first place prize of the **Sompo Digital Lab Challenge** at Ecomotion, Tel-Aviv.

2019 ContinUse Biometrics startup which I co-founded and which is based on a technology that I have co-invented, won the 2019 Mobility **EXPO** in Japan.

2019 **Appreciation trophy for keynote speakers** at the 8th Mediterranean Conference on Embedded Computing (MECO 2019), Budva, Montenegro (June 2019).

2019 **Appreciation trophy for invited speakers** at the International Workshop on Optoelectronic Perception (IWOP) 2019, Xian, China (June 2019).

2019 **Appreciation trophy for plenary speakers** at the International Conference on Optics and Electro-Optics (ICOL-2019), Dehradun, India (Oct. 2019).

2019 **IET Innovation Award Highly Commended Entry.** The work entitled "Non-contact, remote and continuous photonic sensing of hemodynamic activity in the brain," was selected to be one out of five **Finalists in the category of Start-Up and**

	Information Technology in the Institute of Engineering and Technology (IET) Innovation Award of 2019 (out of more than 360 candidates).
2020	Selected as **SPIE Community Champion** for my volunteerism with the society in 2019.
2020	MedTech Outlook magazine has selected ContinUse Biometrics (whos technology I co-invented) to be one of the "Top 10 Biosensor Solution Providers 2020".
2020	MedTech Outlook magazine has selected Z square (whos technology I co-invented) to be one of “Top 10 endoscopy solution providers for 2020”: https://www.medicaltechoutlook.com/magazines/September2020/Endoscopy/?digitalmagazine#page=1
2020	**3rd place in an international competition for engineering the future Menora for Hanuka**. Abhijit Sanjeev (my PhD student) and myself have developed a **holographic Menora** for allowing remote 3D experience of light. The competition was organized by ministry for foreign afairs and the innovation center of JCE.
2020	**E&T Innovation Award Highly Commended Entry.** The work entitled “Combined treatment of light-based home-use device and special eye drops for removing the need of spectacles," which I co-invented was selected to be one out of five **Finalists in the categories of Excellence in R&D and Future Unicorn in the Engineering and Technology (E&T) Innovation Award of 2020**.
2020	**Amity Global Academic Excellence Award** for my contribution in the field of Optical Computing given at the International Conference on Intelligent Engineering and Management (ICIEM-2020) organized by IEEE and held in London (UK), April 2020.
2021	**8400 Fellowship** and **Yad-HaNadiv Foundation grant** for health entrepreneurship leadership program.
2021	Donisi Health (former CU-BX) which is based on a technology that I have co-invented is the first place **winner of the 2021 OpenMed Innovation Competition** which was part of the MEDinIsrael conference. CU-BX also won the vote to be named **top Israeli innovator in smart mobility** in an Israeli-Japanese pitch event.
2021	Donisi Health (former CU-BX), the startup I have co-funded and which is based on a technology I co-invented was selected by StartUp Insights to be one of the top 5 startups tackling AFib (out of 383 inspected startups).
2021	Cognifiber startup that I have co-funded made it for the semi-finalpitch competition award organized by EY.
2021	I was selected for the **International Faculty Exchange Program (IFEP) as Guest Faculty/Visiting Faculty** (Aug. 2021-Nov. 2021), Chandigarh Univ., Mohali, Punjab, India.
2021	The technology I co-invented and took part in developing, for remote bio-sensing which was commercialized to ContinUse Biometrcis/Donisi Health was selected to be one out of 8 finalists in **Accenture HealthTech Innovation Challenge Award**. We also won the first place in **Saint Gobain innovation challenge** in automotive technologies that was held in Israel in October.
2021	**ICI (Innovation in Cardiovascular Intervention) 2021 Innovation Award Winner** with the technology I have co-invented and took part in developing on remote bio-sensing and which was commercialized to Donisi Health (CU-BX).
2021	Finalist of **Bell Prize** given by Bell Labs and Nokia. Selected as one of 8 finalists out of more than 200 applicants.
2021	**E&T Innovation Award Highly Commended Entry.** The work entitled “Contact free bio-sensing and diagnosis," which I co-invented, was selected to be one out of 3 **Finalists in the categories of R&D, Digital Health and Social Care and Future Unicorn in the Engineering and Technology (E&T) Innovation Award of 2021**.
2021	**Distinguished Scientist Award** in the International Scientist Awards on Engineering, Science and Medicine given by VDGOOD Professional Association during event on August in Trivandrum, India.
2021,22,23	**Erasmus+ Actions Fellowship** for short visits to visit/lecture in the Politehnica University of Bucharest, Romania.
2022	**Erasmus+ Actions Fellowship** for short visits to visit/lecture in Oulu University, Finland.
2022	**Excellence Service Award** in the International Scientist Awards on Engineering, Science, and Medicine given by INSO Professional Association, India.

2023	China **National Talent 1000 Award** program.
2023-2026	**Mercator-Fellow** of DFG funded research proposal entitled “Locally high-resolution photoacoustic tomography with contactless speckle vibration analysis,” with FAU, Erlangen, Germany
2023	**The Edmund Optics Educational Award Finalist** for fiber-based leakage detector experiment.
2024	International Academic Awards (ACA) selection for **Best Researcher Award** in material science category.
2025	**Top viewed article recognition** in Laser & Photonics Reviews for my article entitled: Roadmap on Label Free Super Resolution Imaging.
2025	**2024 Top Scholar by ScholarGPS**. My scholarly contributions have placed you in the top 0.5% of all scholars worldwide.
2025	**Erasmus+ Actions Fellowship** for short visits to visit/lecture in FAU University, Erlangen, Germany.

Prestigious International Grant Awards

2009	**National Institutes of Health (NIH) exploratory/developmental research grant Award** (together with Hamutal Slovin as co-PI) for “Novel nano-pipette for imaging of deep cortal layers and deep brain structures”.
2011	**PianoPlus competition Award** of the European commission on photonics-based internet access networks of the future. Awarded to Zeev Zalevsky on the topic of “Filters and optical spectrum analyzer for access networks of the future”.
2013	**BiophotonicsPlus competition Award** of the European Competition for Collaborative R&D Funding on photonic appliances for life sciences and health. Awarded to Zeev Zalevsky on the topic of “Minimally invasive photoplethysmograhy (PPG) measurements”.
2015	**Marie Curie Award** granted to Yair Rivenson as visiting fellow in the group of Zalevsky as the host for a one-year visit during 2017/2018.
2017	**Cisco Innovation Grant Award** for project entitled “Stealthy optical communications forcing on-the-fly optical decryption,” done in collaboration with Dan Sadot from BGU as co-PI.
2017	Zsquare (a startup company I have co-founded) was awarded a $120K **Microsoft Prize for startup companies**.
2018	**BINA-INL bilateral research award** on hyper spectral imaging in silicon based on MEMS.
2024	**North American Neuro-Ophthalmology Society (NANOS) 2024 Pilot Grant** together with Dr. Nitza Goldenberg-Cohen on “Non-Invasive Identification of Alzheimer’s Disease Through Ocular Analysis Utilizing Raman Spectroscopy,”

Prestigious Awards Granted to Students/Researchers for Research Work Done in the Group

2012	Asaf Shahmoon has received the **Rector prize** for excellence in research.
2012	The project on remote detection of biomedical parameters, in which Zeev Zalevsky supervised a high school student Roy Tal-Yosef, was awarded a commendation prize for reaching the 6 place out of the 50 finalists (selected out of hundreds of participants) in the **Israeli national young scientists and developers competition** held in the Bloomfield science museum in Jerusalem. This work and technological invention was also **chosen to represent Israel in the international EU science competition in Slovakia**.
2013	The joint research work of the Ph.D studies of Asaf Shahmoon entitled “Photonic Devices Based Sub-Micron Structures for Tunable Applications and for Bio-Sensing,” awarded Asaf Shahmoon **the European international Photonics21 Student Innovation award** (he won the award out of around 200 submissions from all around the world).
2014	Our entrepreneurship project (together with Hagai Ligomeski and Asaf Shahmoon) entitled “Optical reader for early detection of foot having increased risk to develop diabetic ulcer” won the **first place in the AcademicTec Competition** founded by the ministry of commerce/economics.

2014 A technology that I have invented and developed (an optical lens integrating a micro mirrors array and which allows an imager to significantly increase its field of view), and which was funded by the ministry of defense **received The Technological Excellence Award given by the Israeli Chief of Staff** (an award given to technological officers in the ministry of defense). The award was given to Major Itshak Layani who was the project manager of this research activity in the ministry of defense.

2015 Aviya Bennett received **Intel Excellence Award** for graduate students for her master research on "Fast Optoelectronic Responsivity of novel MOS nanostructures,"

2015 **Best student poster award** in the OASIS conference (the main optics and electro optics event in Israel taking place every 2 years) was given to the work entitled: "*Optical Realization of the Radon Transform*," by T. Ilovitsh, A. Ilovitsh, J. Sheridan and Z. Zalevsky.

2015 Tali Ilovitsh has received the **Rector prize** for excellence in research.

2016 Tomer Yeminy has received the **Katzir travel award** for Ph.D students that funded his short research stay in the U.S at the lab of Alan Willner.

2016 Asaf Illovitsh received the **Velvalle fund prize** for research work related to the world of military intelligence for our research paper entitled *"Super resolved passive imaging of remote moving object on top of sparse unknown background,"* by A. Ilovitsh and Z. Zallevsky that appeared in Appl. Opt. 53, 6340-6343 (2014).

2017 **Best student poster award** in the OASIS conference (the main optics and electro optics event in Israel taking place every 2 years) was given to the work entitled: "*Remote Glucose Sensing using Time varied Speckle Patterns,*" by N. Ozana, A. Schwarz, R. Califa, A. Shemer, S. Polani, J. Garcia and Z. Zalevsky.

2017 Yossi Danan has received the **Rector prize** for excellence in research.

2018 Nisan Ozana was selected to receive the **Prof. Rahamimoff Travel Grant** of the **U.S.-Israel Binational Science Foundation (BSF)** travel grant for Young Scientists on the topic of Remote Photonic Sensing of Brain Activity.

2018 The project on beam shaped ultra sound submitted by Tali Ilovitsh for the **Marie Curie Fellowship** in the group received the **Marie Sklodowska-Curie Actions Seal of Excellence.**

2018 Nisan Ozana has received the **Wolf award for research students** for his Ph.D research on remote laser based bio-medical sensing.

2018 Gal Shpun and Itai Henn received the **best poster award** given by Nano Letters in the international Neural interface 2018 conference for the poster entitled: "*Photolithography & 3D Nano-printing Combination for 3D Vision Restoration Implant*," by G. Shpun, I. Henn, Y. Chemla, N. Farah, Z. Zalevsky and Y. Mandel.

2018 **Best student poster award** (1st place) in the LALS conference was given to the work entitled: "*Optical configuration of skin hydration detection by temporal analysis of skin speckle patterns,*" by Y. Sabari, N. Ozana and Z. Zalevsky.

2018 Niv Gorodesky was the second place runner up in the **international IET young students' competition** where he presented the research work doen in the group on LIFT and metallic glasses. The competition was held in the LALS conference.

2019 **Best poster award of the ISMBE 2019 conference** on biomedical engineering, Haifa, Israel for work entitled: "*Neural Activation Threshold Reduction Using 3D micro-well Electrodes: Towards a High-Resolution Hybrid Retinal Prosthesis*," by G. Shpun, N. Farah, E. Lasnoy, A. Markus, Z. Zalevsky and Y. Mandel

2019 Nisan Ozana has received the **Rector prize** for excellence in research.

2022 Nadav Shabairou has received the KLA prize for research excellence.

2023 Doron Duadi has received the KLA prize for research excellence.

Ph.D students from the group that continued for post doc stays abroad

2013 Dr. Asaf Shahmoon received a Minerva post doc fellowship in Germany

2014 Dr. Amihai Meiri received an NSF Postdoctoral Fellowship in the University of Utah, USA

2016 Dr. Tali Ilovitsh received a Postdoctoral Fellow in School of Medicine, in University of California, Davis and then in Stanford University, USA

2016	Dr. Asaf Ilovitsh received a Postdoctoral Fellow in School of Medicine, in University of California, Davis, USA.
2019	Dr. Omer Wagner received a Blavatnik award for a post doc stay in Cambridge, UK
2020	Dr. Nisan Ozana received a postdoctoral fellowship in Harvard medical school, Boston, USA

Fields of Research

Super resolution, bio-medical optics and medical imaging/sensing, nano-photonics and silicon photonics, diffractive optical elements and beam shaping, in-fiber devices and sensors, photonic computing, microwave photonics.

Impact of the research

In google scholar: H-index of 63; i10-index of 369 and citations number of 21650.

Review Activity

- Acting as a reviewer at various scientific journals including *Nature Photonics*, *Nature Materials*, *Nano Letters, Nature Communications*, *Nature Light: Science & Applications (LSA)*, *Nature Scientific Reports*, *Communications Physics of Nature*, *ACS Nano, ACS Photonics, Biophotonics, NanoScale*, *Communications Physics, Langmuir, Additive manufacturing, ACS applied materials interfaces, Laser & Photonics Reviews, Light Advanced Manufacturing, Science Advances, IEEE Reviews in Biomedical Engineering (RBME), Advanced Photonics, PNAS and others peer review journals.*
- *Acting as a scientific evaluation panel member and reviewer for various scientific grants: From Israel: ISF, MOST (also committee chair), BSF, Pazi, MALAG committee member; From abroad: NWO (Dutch research council), International: New Zealand, Netherlands, Austria, Finland, DFG etc; from the EU: ERC*
- *Former member of prize committee of Optica (OSA), IEEE, SPIE*

Undergraduate Students

Since 2004 I have supervised more than 150 undergraduate students in their final engineering project task.

Graduate Students

- **Master students**

1. Alex Zlotnik, M.Sc (joint supervision in TAU)
2. Yonathan Solomon, M.Sc (joint supervision in TAU)
3. Gal Shochat, M.Sc (joint supervision in TAU)
4. Eran Rossman, M.Sc (joint supervision in TAU)
5. Vardit Eckhouse, M.Sc (joint supervision in TAU)
6. Damian Goldring, M.Sc (joint supervision in TAU)
7. Eyal Ben-Eliezer, M.Sc (joint supervision in TAU)
8. Michael Parshin, M.Sc (from BIU)
9. Amikam Borkowski, M.Sc (joint supervision, in TAU)
10. Yoed Abraham, M.Sc (from BIU)
11. Doron Abraham, M.Sc (from BIU)
12. Yevgeny Beiderman, M.Sc (from BIU)
13. Yana Reznick, M.Sc (from BIU)
14. Tomer Yeminy, M.Sc (joint supervision, in BGU)
15. Ohad Fixler, M.Sc (from BIU)
16. Ted Frumkin, M.Sc (from BIU)
17. Ran Aharoni, M.Sc (from BIU)
18. Asaf Ilovitsh, M.Sc (from BIU)
19. Ofer Margalit, M.Sc (from BIU)
20. Shachar Paz, M.Sc (from BIU)
21. Mark Golberg, M.Sc (joint supervision, in TAU)
22. Ariel Schwartz, M.Sc (from BIU)
23. Alon Shapira, M.Sc (from BIU)

24. Sagie Asraf, M.Sc (from BIU)
25. Yossi Danan, M.Sc (from BIU)
26. Nisan Ozana, M.Sc (from BIU)
27. Liron Bidani, M.Sc (from BIU)
28. Tzuriel Ram-Cohen, M.Sc (from BIU)
29. Aviya Bennet, M.Sc (from BIU)
30. Hadar Zafri, M.Sc (from BIU)
31. Shai Ben Yaish, M.Sc (from BIU)
32. Niv Gorodesky, M.Sc (from BIU)
33. Stav Buchsbaum, M.Sc (from BIU)
34. Jonathan Azougi, M.Sc (from BIU)
35. Chen Abraham, M.Sc (from BIU)
36. Talya Sirkis, M.Sc (from BIU)
37. Chen Tzur, M.Sc (from BIU)
38. Gilad Rachamim, M.Sc (from BIU)
39. Daniel Dahan, M.Sc (from BIU)
40. Sagiv Benichou, M.Sc (from BIU)
41. Gal Shpun, M.Sc (from BIU)
42. Rotem Hendel, M.Sc (from the Technion)
43. Barak Straussman, M.Sc (from the Technion)
44. Mathan Benjamin, M.Sc (from BIU)
45. Nadav Shabairou, M.Sc (from BIU)
46. Elnathan Davidovich, M.Sc (from BIU)
47. Maor Tiferet, M.Sc (from BIU)
48. Yarden Zabari, M.Sc (from BIU)
49. Hadas Lupa, M.Sc (from BIU)
50. Ziv Shemesh, M.Sc (from BIU)
51. Liron Gino, M.Sc (from BIU)
52. Shay Yederman, M.Sc (from BIU)
53. Maor Laufer, M.Sc (from BIU)
54. Ariel HaLevy, M.Sc (from BIU)
55. Doron Duadi, M.Sc (from BIU)
56. Zeev Kalyuzhner, M.Sc (from BIU)
57. Ori Carmi, M.Sc (from BIU)
58. Gal Chen, M.Sc (from BIU)
59. Meir Grossman, M.Sc (from BIU)
60. Raz Shahmoon, M.Sc (from BIU)
61. Ola Shteinberg, M.Sc (from BIU)
62. Ofir ben David, M.Sc (from BIU)
63. Noam Lhiyani, M.Sc (from BIU)
64. Daniel Calili, M.Sc (from BIU)
65. Natalya Segal, M.Sc (from BIU)
66. Hen Shukrun, M.Sc (from BIU)
67. Tal Raviv, M.Sc (from BIU)
68. Avi Yosovich, M.Sc (from BIU)
69. Elad Israeli, M.Sc (from BIU)
70. Yehor Krapovnytskyi, M.Sc (from BIU)
71. Coral Cohen, M.Sc (from BIU)
72. Asaf Malran, M.Sc (from BIU)
73. Gilad Stern, M.Sc (from BIU)

- **Ph.D students**

1. Vicente Mico, Ph.D (joint supervision in Valencia, Spain)
2. Ofer Limon, Ph.D (from BIU)
3. Aviram Gur, Ph.D (from BIU)
4. Amir Shemer, Ph.D (from BIU)
5. David Sylman, Ph.D (from BIU)
6. Doron Abraham, Ph.D (from BIU)
7. Yevgeny Beiderman, Ph.D (from BIU)
8. Arkady Rudnitsky, Ph.D (joint supervision, in TAU)

9. Hamootal Duadi, Ph.D (from BIU)
10. Ran Aharoni, Ph.D (from BIU)
11. Asaf Shahmoon, Ph.D (from BIU)
12. David Elbaz, Ph.D (from BIU)
13. Amihai Meiri, Ph.D (from BIU)
14. Assaf Bitman, Ph.D (from BIU)
15. Ariel Schwartz, Ph.D (from BIU)
16. Alex Zlotnik, Ph.D (from BIU)
17. Amikam Borkowski, Ph.D (joint supervision, in TAU)
18. Dror Malka, Ph.D (from BIU)
19. Maya Aviv, Ph.D (from BIU)
20. Tali Ilovitsh, Ph.D (from BIU)
21. Asaf Ilovitsh, Ph.D (from BIU)
22. Adi Vegerhof, Ph.D (from BIU)
23. Moshik Cohen, Ph.D (from BIU)
24. Yossi Danan, Ph.D (from BIU)
25. Hadar Pinchas, Ph.D (from BIU)
26. Tomer Yeminy, Ph.D (joint supervision, in BGU)
27. Issaschar Gabay, Ph.D (from BIU)
28. Omer Wagner, Ph.D (from BIU)
29. Ofer Fogel, Ph.D (from BIU)
30. Jonathan Bar Magen Ph.D (from BIU)
31. Nisan Ozana, Ph.D (from BIU)
32. Sagie Asraf, Ph.D (from BIU)
33. Dana Gotthilf Nezri, Ph.D (from BIU)
34. Aviya Bennett, Ph.D (from BIU)
35. Ted Frumkin, Ph.D (joint supervision, in BGU)
36. Benjamin Lengenfelder, Ph.D (joint supervision, in FAU)
37. Itai Orr, Ph.D (from BIU)
38. Niv Gorodesky, Ph.D (from BIU)
39. Matan Benyamin, Ph.D (from BIU)
40. Abhijit Sanjeev, PhD (from BIU)
41. Deep Pal, PhD (joint supervision, in Indian Institute of Technology, Dhanbad)
42. John Linden, PhD (from BIU)
43. Mark Golberg, PhD (from BIU)
44. Nadav Shabairou, PhD (from BIU)
45. Ya'akov Mandelbaum, PhD (joint supervision with Chemistry BIU and JCT)
46. Gal Shpun, PhD (from BIU)
47. Jeremy Belhassen, PhD (joint supervision with JCT)
48. Doron Duadi, PhD (from BIU)
49. Shimon Elkabetz, PhD (from BIU)
50. Zeev Kalyuzhner, PhD (from BIU)
51. Lior Tobaly, PhD (from BIU)

Visiting research fellows and post docs

- Dr. Amir Shemer (lab engineer 2005-2018)
- Dr. Dror Fixler (a post doc research term in the group in 2005)
- Prof. Javier Garcia
- Dr. Vicente Mico
- Dr. Victor Shienman (on-going long term research position in the group)
- Dr. Arkady Rudnitsky (on-going long term research position in the group)
- Prof. Moshe Sinvani (on-going long term research position in the group)
- Mr. Mark Kunin (long term research engineer assisting position in the group 2013-2015)
- Dr. Garry Berkovic (2 years long sabbatical stay in the group in 2012-2013)
- Dr. Konstantin Goulitski (long term research position in the group during 2013)
- Dr. Pazit Polak (on-going long term research position in the group during 2015-2017)
- Prof. Carlos Ferreira
- Prof. David Mas and Prof. Belen Ferrer (during 2012 and during 2018)

- Dr. Eyal Cohen (a post doc research term in the group during 2012-2015)
- Dr. Ariel Schwartz (a post doc research term in the group during 2013-2015)
- Prof. Meir Danino (on-going long term research position in the group)
- Dr. Yair Rivenson (2014-2015, a post doc research term in the group)
- Dr. Asaf Shahmoon (2013-2014, a post doc jointly conducted with the University of Erlangen, Germany)
- Dr. Yevgeny Beiderman (2010-2015 a post doc research term in the group)
- Dr. Yoav Sintov (1 year long sabbatical stay in the group in 2014)
- Dr. Danping Liu (6 months long research position in the group)
- Dr. Sergei Nikonetchnei (on-going research position in the group)
- Dr. Yael Bishitz (2015-2016 a post doc research term in the group)
- Prof. Jérémie Zoueu
- Dr. David Smadja
- Mr. Michaelo Chef (lab engineer assisting position during 2014-2015)
- Mr. Sergei Agdarov (on going lab engineer assisting position in the group since 2014)
- Prof. Yafim Beiderman (on-going long-term research position in the group since 2015)
- Dr. Amihai Meiri (2015-2017 a post doc research term in the group)
- Dr. Itai Carmeli (2015-2023 a research term in the group). **Received the IVS prize for technicians.**
- Dr. Dror Malka (2015-2016 a research post doc term in the group)
- Dr. Yair Rivenson (Research fellow in the group while the supervision is done following **Marie Curie Award** granted following submission done in Sep. 2014).
- Dr. Vismay Trivedi (2019-2022 a research post-doc term in the group). Received the **PBC Fellowship** Program for Outstanding Chinese and Indian Post-Doctoral Fellow.
- Dr. Rinsa Salahudeen Rafeek (2022-2023 a research post-doc term in the group).
- Dr. Ariel Ashkenazi (2026 a research post-doc term in the group).

Sport hobbies:

- Short distance runs: 10km/15km in various competitions (Givat-Shmuel run, Rosh ha Ayin run etc), Eyal run (15km) etc
- Long distance runs:
    - Half-Marathon run (21.1km)- Tel Aviv half marathon; Night run of Tel Aviv; San Francisco half-marathon; Jerusalem half marathon, Dead sea half marathon
    - Volcanic mountains race (30km in Golan heights)
    - Peak to peak race (30km climbing Hermon Mountain)
    - **Marathon run** (42.2km)- Tel-Aviv, Tiberia, Jerusalem, Bible marathon
    - **Ultra-Marathon run**:
        - 50km: Ultra-marathonia (Tel-Aviv along east Yarkon river), Tanach-Tashach (Latrun), Midbar-La-Yam (Pura)
        - 70km: Yam-le-yam ultra-marathon (Modiyin to Tel Aviv),
        - 100km: Sovev Emeq (Kibutz ha-zorea)
        - 160km: Sovev Emeq (Emeq Izrael)
    - **Long relay races:**
        - 230km: Mountain to valley (M2V)- 24 sections (did overall distance of about 35km)
        - 100km: Tanach-Tashach- 12 sections (did overall distance of about 39km)
- Long distance sea swim:
    - Kef ha Carmel-swimming around the Carmel Mountain Cape (7.6km; 5.5km)
    - Bikurey yam (5.3km; 5km)
    - Crocodile swim (4.5km)
    - Port2Port (4.5km)
    - Posidon swim (3.8km)
    - Crossing the sea of Galilee (3.5km)
    - 3D3S swim (a **swimming ultra-marathon** in which 3 X 10km swims are done in 3 different seas over 3 days)
- Triathlon (1.5km swimming, 40km biking, 10km running):
    - Tel-Aviv
- Half Ironman (1.9km swimming, 90km biking, 21.1km running)
    - Israman north (along the sea of Galilee)
- Long distance cycling: 65km cycling competition circling the sea of Galilei

- Mountains climbing: Mt. Kilimanjaro in Tanzania (about 6000m), Mt. Olympus in Greece (about 3000m), Mt. Washington in NH USA (about 2000m), Mt. Huashan in China (about 2150m), Mt. Xuedou in China (about 900m), Kluftáfossur ridge in Faroe Islands (850m), Mt. Hermon in Israel/Syria (about 2100m), Mt. Meron in Israel (about 1200m), Mt. Midzor in Serbia/Bulgaria (about 2170m).

Professional Activities

1. Member of the organizing/steering committee of the Israeli Lasers and Electro-Optics Society (ILEOS).
    a. Organized the Electro-Optics Conference, OASIS, Tel-Aviv, March 2007; March 2009; March 2011; March 2013; April 2019 (member of the scientific committee member).
    b. Organized the ILEOS topical meeting in Bar-Ilan University, Ramat-Gan, March 2008.
2. Special issue editor of the Journal of Nano Photonics (Dec. 2009, Jan. 2010, Feb. 2011).
3. Special issue editor of the Journal of Applied Optics (January 2008).
4. Special issue editor of the Journal on Holography and Speckles (Dec. 2008).
5. Special issue editor of the Journal of Photonics and Nanostructures-Fundamentals and Applications (PNFA), (Dec. 2009).
6. **Editor in Chief of Recent Patents on Signal Processing (2011-2015).**
7. Lifeboat Foundation advisory board.
8. Chairman of a session in OASIS conference in Tel-Aviv, March 2007; March 2009; March 2011.
9. Member of the organizing/steering committee of the Israeli-Turkish workshop on nano photonics, March 2007.
10. Chairman of a session in OSA topical meeting in Florida, March 2008.
11. Chairman of a session in ILEOS topical meeting in Israel, March 2008.
12. Co-general chair of the organizing/steering committee, chairman of sessions and the co-initiator of the international Mediterranean conference on nano photonics (Medi Nano) in Istanbul (October 2008); in Athens (October 2009); in Belgrade (October 2010); Rome (October 2011); Barcelona (2012); Lyon (2013) and Tel-Aviv (2015); Athens (2016).
13. Chairman of a session in the 27th annual conference of the Israeli Vacuum Society (IVS), Herzelia, Israel October 2008, September 2013.
14. Session chair in SPIE meeting, Orlando, Florida, April 2009.
15. Member of the organizing/technical steering committee of IEEE COMCAS conference in Tel-Aviv in November 2009; November 2011, October 2013, November 2017, November 2019.
16. Chairman of sessions in IEEE COMCAS conference in Tel-Aviv November 2009; November 2011.
17. Member of the steering committee of the International workshop on Optical Super Computing (OSC) conference in Bertinoto, Italy in November 2009; November 2011; July 2012.
18. Member of the program committee of the EOS Topical meeting on optical micro systems in Capri, Italy in November 2009; in September 2011, in September 2015.
19. Member of the organizing/steering committee and a chairman of High and Super Resolution Imaging (SHRI) conference in Lipica, Slovenia (September 2009).
20. Chairman of a session in the nano photonics conference in Australia 2009.
21. Technical committee member of the SPIE 3D imaging, visualization and display conference: Defense Security and Sensing DSS2010 April 2010 Orlando Florida; DSS2010 April 2011 Orlando; DS213 April 2012 Baltimore; Defense, Security and Sensing DSS13 (DS219) April 2013 Baltimore; ST130 May 2014 Baltimore, SI116 April 2016 Baltimore, Conf. 10219 April 2017 Anaheim, SI115 April 2018 Orlando, SI117 April 2020 Anaheim.
22. Chairman and organizer of the annual nano photonic conference of BINA in 2008 (Dead Sea, Israel), 2009 (Ramat Rachel, Israel), 2010 (Nahariya, Israel).
23. Chairman and organizer of the bi-national Bar-Ilan Valencia conference on April 2010.
24. Managing member of the international committee of ICIS.
25. **The general conference chair of ICIS 2014 (Tel-Aviv).**
26. Chairman of sessions and member of the scientific committee in the IEEE Convention of Electrical and Electronics Engineers in Israel, Eilat (November 2010, Dec. 2014).
27. Chair of the scientific committee of the nano technology conference organized in Wahl center near Bar-Ilan University, April 2011.
28. Member of the organizing/steering committee of the International Workshop on Information Optics (WIO), Spain, July 2011.
29. Management Member in the Israeli Engineers Association (starting from 2010).
30. Chairman of a session in SPIE Europe meeting, Conference 8082, Optical Measurement Systems for Industrial Inspection VII, Munich, Germany (May 2011).

31. Leading guest editor for the Journal of Atomic, Molecular, and Optical Physics (2011).
32. Guest editor of special issue on nano-photonics in the Open Optics Journal (2011).
33. Session chair in ISABEL 2011, (the 4th International Symposium on Applied Sciences in Biomedical and Communication Technologies), October 2011, Barcelona, Spain.
34. **The general chair of the annual conference of the optical engineering chapter of the Society of Electrical and Electronic Engineering in Israel, Bar-Ilan Univ., Ramat-Gan (March 2012).**
35. Judge in the Agilent award finals given by Ariel University center to graduating students (June 2012).
36. Judge in the ACC (Advanced Communications Center) annual Feder Awards competition for outstanding student research works (2013).
37. Management member of ILEOS (2012).
38. Steering committee of the 15th Israel Materials Engineering Conference (IMEC-15), Dead sea, Israel (March 2012).
39. Technical committee member and a session chair in imaging systems (IS) topical conference of OSA, June 2012; July 2016; June 2019.
40. Program Committee member of Optical Methods for Imaging, Characterization and Inspection of Bio-Materials and Structures, World of Photonics Congress, Munich, Germany (May 2013).
41. **Program Chair in imaging systems (IS) topical conference of OSA, Arlington, Virginia, June 2013.**
42. Program committee member of the 1st International Biophotonics Meeting in Israel, Tel-Aviv (December 2012).
43. Program committee member and a session chair in "Optical Methods for Inspection, Characterization and Imaging of Biomaterials," Conference EOM105, part of SPIE Optical Metrology Symposium, held within the LASER World of Photonics event in Munich, Germany in May 2013; June 2015; June 2017; June 2021.
44. Member of the organizing committee of conference on Technologies for Remote Sensing, Detection and Imaging in Ariel, Israel, June 6th, 2013.
45. The organizing committee member of the Israeli Fiber Lasers and Applications Workshop, Bar-Ilan Univ., June 23-24, 2014.
46. **General chair in imaging systems (IS) topical conference of OSA, Seattle, July 2014.**
47. Guest Editor for Applied Optics journal special issue on Imaging Systems and Applications (2014)
48. Guest Editor for Optical Engineering journal special issue on Fiber Lasers.
49. Technical committee member in Computational Sensing and Imaging (COSI) topical conference of OSA, Hawaii, June 2014.
50. Editorial Board of Frontiers in Nanobiotechnology as Review Editor.
51. General chair of the international biophotonics conference, Dec. 2015, Israel
52. **Associate Editor of IEEE Access Journal** (during 2013-2020)
53. Special issue editor of the Journal of Imaging Science and Technology (2015).
54. Guest Editor for Applied Optics journal special issue on Imaging Systems and Signal Recovery (2015).
55. Guest Editor of the Journal of Imaging Science and Technology (JIST) in special issue of ICIS (published in 2015) conference
56. **Associate Editor for the Journal of Imaging Science and Technology (JIST)** (during 2015-present)
57. Session chair of the Life Sciences Baltics 2014 forum, 10-12 September 2014, Vilnius, Lithuania.
58. **Associate Editor of Opt. Express** (during 2014-2020).
59. Head of the iNNOVEX Technical Program Committee, Feb. 2015; Feb. 2016; Feb. 2017; Feb. 2018.
60. Session chair in the conference of the Israeli Society for Vision and Eye Research (ISVER): March 2015; March 2018
61. Program committee member in imaging systems (IS) and Computational Sensing and Imaging (COSI) topical conference of OSA, Arlington, Virginia, June 2015.
62. Session chair in imaging systems (IS), Arlington, Virginia, June 2015.
63. Program committee member of SPIE conference OSD05 on Computational Optics, Jena (Sep. 2015); Frankfurt (May 2018).
64. International scientific committee member of the 37th annual international conference of the IEEE Engineering in Medicine and Biology Society (EMBS), Milano (Aug. 2015).
65. Program committee member of photonics west SPIE BIOS conference BO410 on High-Speed Biomedical Imaging and Spectroscopy: Toward Big Data Instrumentation and Management, San Francisco, Feb. 2016.
66. Member of the Scientific Committee and a session chair in LANE conference, Furth, Germany: Sep. 2016; Sep. 2018; sep. 2020.
67. **Program Chair in Computational Optical Sensing and Imaging (COSI) topical conference of OSA, Heidelberg, Germany, July 2016.**

68. Session chair of SPIE conference 9716 on Optical Methods in Developmental Biology IV, Photonics West (Feb. 2016).
69. Technical committee member of SPIE conference 9720 on High-Speed Biomedical Imaging and Spectroscopy: Toward Big Data Instrumentation and Management, Photonics West (Feb. 2016).
70. Technical program committee member for the 2016 IEEE Photonics Conference on Biophotonics, Hawaii, Oct. 2016.
71. Guest Editor of the journal of Materials. Special issue on Special Issue "Nanoprobes for Imaging" (2017).
72. Guest Editor of the journal of Applied Optics journal special issue on Modern Imaging following COSI 2016 conference chairing in Germany (2016).
73. **General Chair in Computational Optical Sensing and Imaging (COSI) topical conference of OSA, July 2017.**
74. Technical program committee member of the International Conference on Computational Photography (ICCP): Stanford, May 2017; Pittsburgh, May 2018.
75. Committee members of Information Photonics meeting (IP'17) in OPIC2017 in Yokohama, Japan (April 2017).
76. Technical Program Committee member of Data Sciences Conference part of SPIE Photonics West (Feb. 2018).
77. Technical Program Committee member of Computational Imaging III conference SPIE (April 2018); Computational Imaging V SPIE conf. SI111 (April 2020); Computational Imaging VI SPIE conf. SI112 (April 2021).
78. Guest Editor of special issue in the journal of Frontiers in Molecular Biosciences.
79. Guest Editor of the journal of Applied Optics feature issue on “Imaging and Applied Optics” following COSI 2017 conference chairing in San Francisco (2017).
80. Session chair in the EAMC conf. Sweden (Aug. 2017).
81. Session chair in SPIE conference #10479: Photonic Diagnosis and Treatment of Infections and Inflammatory Diseases, Photonics West, San Francisco, Feb. 2018.
82. Session chair in Advanced Materials World Congress (AMWC), Singapore (Feb. 2018).
83. **General conference chair of *Laser Applications in Life Sciences* (LALS), Ramat-Gan, Nov. 2018.**
84. Member of LALS international advisory board.
85. Guest editor for special issue in the journal of Applied Sciences following LALS conference (Feb. 2019).
86. Member of the 2018, 2019 NAI Fellows Advisory Committee (NAIFAC).
87. Member of the Zero Project nominations evaluation committee.
88. Member of the International Advisory Committee of Photonics 2018, The International Conference on Fiber Optics and Photonics, Dec. 2018, New Delhi, India
89. International Fiber Lasers and Applications (IFLA) conference organizing committee (April 2019).
90. **A member of the OSA, Robert E. Hopkins Leadership Award Committee for a term of March 2019-February 2021**.
91. Member of the International Advisory Committee in International Conference on Optics and Electro-Optics (ICOL-2019), Oct. 2019, Dehradun, India
92. Guest editor of special issue of Applied Sciences on optical fiber-based data processing.
93. Technical Program Committee (TPC) member of ICO-25-OWLS-16-Dresden-Germany-2020
94. **General Chair of SPIE conference on tissue optics and photonics, Photonics Europe 2020, Strasbourg, France** (April 2020, presented digitally due to covid)**; Photonics Europe 2022, Conf. 12147, Strasbourg, France** (April 2022), **Conf. 13010 Strasbourg, France** (April 2023), **Conf. 14098 Strasbourg, France** (April 2026).
95. Session chair in Laser Applications in Life Sciences (LALS), Nancy, France, April 2022.
96. Editorial Board Membership for the Open Biomedical Engineering Journal, Jan. 2020.
97. **Editorial Board member of eLight journal**, journal published through Springer Nature.
98. Lead topical editor for JOSA A/B journal on topic of LIDARs.
99. General program committee member of VIII SYMPOSIUM ON OPTICS & BIOPHOTONICS, Saratov Fall meeting, Russia (Sep. 2020).
100. **Senior Editor of IEEE Access Journal (2020-present)**
101. **General co-chair of Quantum sensing and super resolution symposium at CLEO (May 2021)**
102. **Editor in Chief of the journal of electronic imaging (JEI) of SPIE (2021-2026).**
103. **Receiving Editor of Journal of Optics and Laser Technology (2022-2025).**
104. **SPIE Publication committee member for 2021-2024.**
105. **An Official Nominator for the 2021 VinFuture Prize, the “Vietnamese Nobel prize”.**

106. An Official Nominator for the 2022 Kyoto Prize in Advanced Technology given by the Inamori Foundation.
107. Topic chair of special session on Deep Tissue Imaging and Quantum Sensing at IPC (Oct. 2021).
108. General co-chair of Deep Sensing and Super-Resolution panel, CLEO (May 2022).
109. Co-chair of Special Symposium on Advances in Neurophotonics at IPC (Nov. 2022, Nov. 2023)
110. Program Chair in imaging systems (IS) topical conference of OSA, in Vancouver, July 2022.
111. General co-chair of Advances in Optical Neuroimaging, CLEO (May 2023).
112. General Chair in imaging systems (IS) topical conference of OSA, in Boston, August 2023.
113. Editorial Board member of the Journal of Optics published by the Optical Society of India in collaboration with M/s Springer. April 2023.
114. Program chair of the International Conference on Artificial Intelligence and its Applications (ICAIA) in 2023, 2024.
115. Scientific committee member, Mediterranean Conference on Embedded Computing (MECO), June 2024, Montenegro; June 2025, Montenegro.
116. Technical program committee member, Optica Digital Holography and Three-Dimensional Imaging, June 2024, Paestrum, Italy.
117. Conference co-chair of SPIE conference DS109 on Computational Imaging VIII, Orlando, USA. April 2025.
118. Wolf prize nominator for 2025.
119. **Conference general co-chair** of Computing, Communication and Sensor Network (CCSN2025) Conference, New Delhi, India, Sep. 2025.
120. Associate Editor, Frontiers in Neurology (during 2025-2026).
121. Member of the IEEE Laser Instrumentation Award Committee for a term of February 2024- February 2026.
122. **A chair of the IEEE Laser Instrumentation Award Committee for a term of February 2026- February 2027.**
123. Member of the Optica Joseph Fraunhofer Award/Robert M. Burley Prize Selection Committee for a term of April 2026- April 2028.

Scientific publications and presentations

Books

1. H. M. Ozaktas, Z. Zalevsky and M. A. Kutay, *The Fractional Fourier Transform with applications in optics and signal processing*, John Wiley and Sons (2001).
2. Z. Zalevsky and D. Mendlovic *Optical Super Resolution*, Springer (2004).
3. Z. Zalevsky and I. Abdulhalim, *Integrated Nanophotonic Devices*, 1st Ed., Elsevier (2010); Z. Zalevsky and I. Abdulhalim, *Integrated Nanophotonic and Nanoplasmonic Devices*, 2nd Ed., Elsevier (2014).
4. Z. Zalevsky, *Super-Resolved Imaging: Geometrical and Diffraction Approaches*, Springer Verlag, *SpringerBriefs in Physics* (2011).
5. Z. Zalevsky, A. Borkowski, O. Amir and J.-P. Bouhnik, "Resolution related Considerations in Nuclear Detection," *Horizons in World Physics, Volume 272*, Nova publishers (2012).
6. Z. Zalevsky, P. Livshits and E. Gur, "New approaches to image processing based failure analysis of nano scale ULSI devices," Elsevier (2014).

Books Editing

1. P. Ferraro, A. Wax and Z. Zalevsky, *Coherent light microscopy for imaging and quantitative phase analysis,* Springer (2011).
2. Z. Zalevsky, *Recent Advances in Nanotechnology*, VDM (Verlag Dr. Muller) publishing (2011).
3. N. Shaked, Z. Zalevsky and L. Satterwhite, *Biomedical Optical Phase Microscopy and Nanoscopy*, Elsevier (2012).
4. A. Gupta, M. Hinchey and Z. Zalevsky, "Artificial Intelligence and its Applications," ICAIA 2023 Proceedings, Springer. Part I (2023) and Part II (2025).

Book Chapters

1. D. Mendlovic, Z. Zalevsky and H. M. Ozaktas, Optical pattern recognition, Ed. F. T. S. Yu and S. Jutamulia, Ch 4: "The applications of the fractional Fourier transform to optical pattern recognition," Cambridge University Press (1998).

2. A. W. Lohmann, D. Mendlovic and Z. Zalevsky, Progress in Optics, Vol. XXXVIII, Ch. 4: "Fractional transformation in optics," (1998).
3. Z. Zalevsky, D. Mendlovic and A. W. Lohmann, Progress in optics, Vol. XL, Ch. 4: "Optical system with improved resolving power," (1999).
4. Z. Zalevsky, D. Mendlovic, G. Shabtay and E. Marom “Optical and electro-optical image converters,” Wiley Encyclopedia of Electrical and Electronics Engineering, Ed. J. G. Webster, John Wiley and Sons, Vol. 15, 204-217 (1999).
5. D. Mendlovic, Z. Zalevsky, E. Gur, G. Shabtay, U. Levy and E. Marom, Optical Information Processing: A Tribute to Adolf Lohmann, Ch. 13: “From Computer Generated Holograms Towards Optical Signal Processors,” SPIE Press (2002).
6. D. Mendlovic, Z. Zalevsky, N. Cohen, E. Gur and G. Shabtay, ”Free space all optical switching,” Perspectives in Modern Optics and Optical Instrumentation, Anita Publications (New Delhi), 119-154 (2002).
7. Z. Zalevsky and K. Mills, “Innovative Holographic Approaches for High Resolution Image Reconstruction,” in *Optical Holography: A Tribute to Emmett Leith*, SPIE Press (2004).
8. D. Mendlovic, Z. Zalevsky, G. Shabtay and U. Levy, “Fourier Data Processing in Optics,” Wiley Encyclopedia of Electrical and Electronics Engineering, Ed. J. G. Webster, John Wiley and Sons (Sep. 2003).
9. Z. Zalevsky, V. Eckhouse, “Optical communication networks: Advanced performance monitoring using non conventional techniques,” Wiley Encyclopedia of Electrical and Electronics Engineering, Ed. J. G. Webster, John Wiley and Sons (Feb. 2004).
   Z. Zalevsky, V. Eckhouse, “Communication Networks: Performance Monitoring,” Encyclopedia of Optical and Photonic Engineering CRC Press, 22 Sep 2015,
10. Z. Zalevsky, D. Fixler, V. Mico and J. García, "Nano-Photonics for Bio-Medical Super Resolved Imaging," in *Bionanotechnology: Global Prospects*, CRC 3rd Ed. Hdbk BioMed Eng (2008).
11. Z. Zalevsky, D. Fixler, J. García and V. Mico, "Holography and Structured Illumination for Super Resolved Imaging," in *New Directions in Holography and Speckles*, American Scientific Publishers (2008).
12. Z. Zalevsky, "Super Resolved Imaging in Wigner based Phase Space," McGraw-Hill book on phase space optics (2009).
13. V. Micó, J. García, L. Camacho and Z. Zalevsky, “Quantitative phase imaging in microscopy using a spatial light modulator,” *Coherent light microscopy for imaging and quantitative phase analysis,* Springer (2011).
14. Y. Beiderman, A. Amsel, Y. Tzadka, D. Fixler, M. Teicher, V. Mico, J. Garcia, B. Javidi and Z. Zalevsky, “Coherent microscopy for nano metric 3-D movement monitoring of cells,” *Coherent light microscopy for imaging and quantitative phase analysis,* Springer (2011).
15. V. Mico, Z. Zalevsky, J. García, M. Teicher, Y. Beiderman, E. Valero, P. García-Martínez and C. Ferreira, “Three-dimensional mapping and ranging of objects using speckle pattern analysis,” *Coherent light microscopy for imaging and quantitative phase analysis,* Springer (2011).
16. D. Sylman, Z. Zalevsky, V. Micó and J. García, “Resolution Enhanced Imaging based upon Spatial Depolarization of Light,” Springer Book: Information Optics and Photonics, Eds. T. Fournel and B. Javidi (2010).
17. Z. Zalevsky, A. Borkowski, B. Javidi, O. Amir and J.-P. Bouhnik, “Resolution Enhanced Pixilated Nuclear Detection,” *Horizons in World Physics, Volume 272*, Nova publishers (2011).
18. V. Micó, C. Ferreira, Z. Zalevsky and J. García, “Basic principles and applications of digital holographic microscopy” Microscopy Book Series entitled *"Microscopy: Science, Technology, Applications and Education"* Ed. A. Méndez-Vilas and J. Díaz Álvarez, Formatex Research Center Publisher, Vol. 2, 1411-1418 (Dec. 2010).
19. A. Gur, D. Fixler, V. Micó, J. García and Z. Zalevsky, “Linear versus Non Linear Super Resolved Microscopy” Microscopy Book Series entitled *"Microscopy: Science, Technology, Applications and Education,"* Ed. A. Méndez-Vilas and J. Díaz Álvarez, Formatex Research Center Publisher, Vol. 2, 1426-1435 (Dec. 2010).
20. H. Duadi, O. Margalit, V. Mico, J. A. Rodrigo, T. Alieva, J. Garcia and Z. Zalevsky, "Digital holography and phase retrieval," *Holography, Research and Technologies*, Ch. 20, pp. 407-420, Ed. J. Rosen, InTech Publisher (2011).
21. Z. Zalevsky, A. Schwarz, A. Gur, R. Aharoni, A. Weiss, D. Fixler, Y. Garini, D. Mendlovic, V. Micó, C. Ferreira and J. García, “Usage of Wavelength Multiplexing for Super Resolved Imaging and Spatial Data Compression,” *Advances in Communications and Research, Volume 9,* Nova publishers, 119-150 (2011).

22. A. Shahmoon, A. Meiri and Z. Zalevsky, "*Sub-Micron Particle Based Reconfigurable Photonic Devices*" *Recent Advances in Nanotechnology*, pp. 3-20, VDM (Verlag Dr. Muller) publishing (2012).
23. V. Micó, Z. Zalevsky, L. Granero and J. García, "Synthetic aperture digital lensless holographic microscopy for superresolved biological imaging," *Biomedical Optical Phase Microscopy and Nanoscopy*, Elsevier (2012).
24. A. Shahmoon, S. Aharon, D. Fixler, H. Slovin and Z. Zalevsky, "Biomedical Micro-Probe for Super Resolved Image Extraction," *Nanobiotechnology Handbook*, Taylor and Francis (2012).
25. D. Malka, G. Berkovic, Y. Hammer and Z. Zalevsky, "Online and real time water quality monitoring system based upon Raman super resolved spectrometer," *Nanomaterials for Water Management: Signal Amplification for Biosensing from Nanostructures Volume*, Pan Stanford Publishing (2014).
26. A. Meiri, E. Gur, J. Garcia, V. Micó, B. Javidi and Z. Zalevsky, "Super resolved holographic configurations," *Multi-dimensional Imaging*, John Wiley & Sons Publishing Company-Compressive Sensing (2014).
27. M. Cohen, R. Shavit and Z. Zalevsky, "Nanoplasmonic Metal - Insulator - Metal Waveguides," *Planar Waveguides and other Confined Geometries – Theory, Technology, Production and Novel Applications,* Springer Series in Optical Sciences Volume 189, 45-66 (2015).
28. D. Malka and Z. Zalevsky, "Multicore Photonic Crystal Fiber Based Intensity Splitters/Couplers," *Photonic Crystals: Characteristics, Performance and Applications*, Ch. 3, Nova publishers (2016).
29. O. Wagner and Z. Zalevsky, "Super resolving approaches suitable for brain imaging applications," Advanced Optical Methods for Brain Imaging, Springer Nature Singapore Pte Ltd, Ch. 11, 221-244 (2018).
30. D. Malka, E. Cohen and Z. Zalevsky, "Design of 4 x 1 power beam combined based on multicore photonic crystal fiber," Special Issue: Solid State Lasers Materials, Technologies and Applications, Federico Pirzio (Ed.), Applied Sciences, April 2018 (72-80), [ISBN: 978-3-03842-842-2].
31. O. Wagner and Z. Zalevsky, "Label-Free Super-Resolving Microscopy with Nanoparticles," SPIE Spotlights series, ISBN: 9781510623040, Volume: SL4 (2018).
32. H. Pinhas, Y. Danan, A, Meiri, O. Wagner, A. Shahmoon, T. Ilovitsh, Y. Ramon, D. Malka, M. Danino, M. Sinvani and Z. Zalevsky, "Usage of Silicon for Label-Free Super-Resolved Imaging," In: Astratov, V. (eds) Label-Free Super-Resolution Microscopy. Biological and Medical Physics, Biomedical Engineering, Springer, Cham (2019). https://doi.org/10.1007/978-3-030-21722-8_9
33. Y. Mandelbaum, R. Mottes, Z. Zalevsky, D. Zitoun and A. Karsenty, "Investigations of Shape, Material and Excitation Wavelength Effects on Field Enhancement in SERS Advanced Tips" In Application of SERS for Nanomaterials, pp. 101-129, MPDI Publisher (2022).
34. N. Ozana and Z. Zalevsky, "Noninvasive photonic sensing of glucose in blood stream," CRC (2022).
35. Z. Zalevsky, "Teaching Optics: A Tribute to John Greivenkamp," Ch 13, Field Guide to Optics Education: A Tribute to John Greivenkamp, Vol. FG53 (2022). https://doi.org/10.1117/3.2635872.ch13
36. Z. Kalyuzhner and Z. Zalevsky, "Leveraging Machine Learning for Advanced Biomedical Imaging: Insights from Speckle Pattern Analysis," Biomedical Imaging book, Advances in Artificial Intelligence and Machine Learning, Published by Springer Nature, Ch. 7, ISBN978-981-97-5344-4 (2024).

Papers Reprints in Collections

1. A. W. Lohmann, D. Mendlovic and Z. Zalevsky, "Status report on the fractional Fourier transform", Tel Aviv Uni. (April 1995).
2. D. Mendlovic and Z. Zalevsky, "Workshop on Non conventional Optics," (June 1996).
3. D. Mendlovic, Z. Zalevsky, G. Shabtay and E. Marom, "High-efficiency arbitrary array generator," SPIE Milestone series Vol. Ms. 146, selected papers on, "Multiple Imaging and Beam Generation", Ed. Raymond K. Kostuk.
4. A. W. Lohmann, Z. Zalevsky and D. Mendlovic, "Synthesis of pattern recognition filters for fractional Fourier processing," SPIE Milestone series Vol. Ms.156, selected papers on, "Optical Pattern Recognition", Ed. F. T. S. Yu and S. Yin.
5. A. W. Lohmann, R. G. Dorsch, D. Mendlovic, Z. Zalevsky and C. Ferreira, "Space-bandwidth product of optical signals and systems," SPIE Milestone series Vol. Ms.181, selected papers on, " Phase-Space Optics ", Ed. M. E. Testorf, J. Ojeda-Castañeda and A. W. Lohmann.
6. D. Mendlovic, A. W. Lohmann and Z. Zalevsky, "Space-bandwidth product adaptation and its application to superresolution: examples," SPIE Milestone series Vol. Ms.181, selected papers on, " Phase-Space Optics ", Ed. M. E. Testorf, J. Ojeda-Castañeda and A. W. Lohmann.
7. Z. Jaksi, S. Vukovi, E. Özbay and Z. Zalevsky, Ed. of *Proc. of Abstracts of the 3rd Mediterranean Conference on Nanophotonics (MediNano-3),* Serbian Ministry of Science (2010).

Peer Review Publications

1. D. Mendlovic, Z. Zalevsky, J. Garcia and C. G. Ferreira, "Logarithmic harmonics proper expansion center and order for efficient projection invariant pattern recognition," Opt. Commun. 107, 292-299 (1994).
2. D. Mendlovic, Z. Zalevsky and N. Konforti, "Joint transform correlator with incoherent output," JOSA A11, 3201-3205 (1994).
3. D. Mendlovic, Z. Zalevsky, I. Kiryuschev and G. Lebreton, "Composite harmonic filters for scale, projection and shift invariant pattern recognition," Appl. Opt. 34, 310-316 (1995).
4. Z. Zalevsky and D. Mendlovic, "Optical implementation of the Bode transform," Appl. Opt. 34, 828-831 (1995).
5. D. Mendlovic, Z. Zalevsky, R. Dorsch, Y. Bitran, A. Lohmann and H. Ozaktas, "A new signal representation based on the fractional Fourier transform: Definitions," JOSA A12, 4964-4971 (1995).
6. Z. Zalevsky and D. Mendlovic, "Polynomial expansion for shift and 1-D or 2-D scale invariant pattern recognition," Appl. Opt. 34, 5146-5152 (1995).
7. D. Mendlovic, Z. Zalevsky, N. Konforti, R. Dorsch and A. Lohmann, "Incoherent fractional Fourier transform and its optical implementation," Appl. Opt. 34, 7615-7620 (1995).
8. Z. Zalevsky and D. Mendlovic, "Light Propagation analysis in Graded Index Fiber-Review and Applications," Fiber and integrated optics 15, 55-61 (1997).
9. A. W. Lohmann, R. G. Dorsch, D. Mendlovic, Z. Zalevsky and C. Ferreira, "About the space bandwidth product of optical signal and systems," JOSA A13, 470-473 (1996).
10. Y. Bitran, Z. Zalevsky, D. Mendlovic and R. Dorsch, "Performance analysis of the fractional correlation operation," Appl. Opt. 35, 297-303 (1996).
11. Z. Zalevsky, I. Ouzieli and D. Mendlovic, "Wavelet transform based composite filters for invariant pattern recognition," Appl. Opt. 35, 3141-3147 (1996).
12. A. W. Lohmann, D. Mendlovic, Z. Zalevsky and R. G. Dorsch, "Some important fractional transformations for signal processing," Opt. Commun. 125, 18-20 (1996).
13. A. W. Lohmann, D. Mendlovic and Z. Zalevsky, "Fractional Hilbert transform," Opt. Let. 21, 281-283 (1996).
14. D. Mendlovic, Z. Zalevsky, A. W. Lohmann and R. G. Dorsch, "Signal spatial-filtering using the localized fractional Fourier transform," Opt. Commun. 126, 14-18 (1996).
15. Z. Zalevsky and D. Mendlovic, "The fractional Wiener filter," Appl. Opt. 35, 3930-3936 (1996).
16. Z. Zalevsky, D. Mendlovic and R. G. Dorsch, "The Gerchberg-Saxton Algorithm Applied in the Fractional Fourier or the Fresnel Domains," Opt. Lett. 21, 842-844 (1996).
17. A. W. Lohmann, Z. Zalevsky and D. Mendlovic, "Synthesis of Pattern Recognition Filters for Fractional Fourier Processing," Opt. Commun. 128, 199-204 (1996).
18. J. Garcia, D. Mendlovic, Z. Zalevsky and A. W. Lohmann, "Space variant simultaneous detection of several objects using multiple anamorphic fractional Fourier transform filters," Appl. Opt. 35, 3945-3952 (1996).
19. D. Mendlovic, R. G. Dorsch, A. W. Lohmann, Z. Zalevsky and C. Ferreira, "Optical illustration of a varied fractional Fourier transform order and the Radon-Wigner Display," Appl. Opt. 35, 3925-3929 (1996).
20. Z. Zalevsky and D. Mendlovic, "The fractional Radon transform-definition," Appl. Opt. 35, 4628-4631 (1996).
21. J. Garcia, Z. Zalevsky and D. Mendlovic, "Two dimensional Wavelet transform by wavelength multiplexing," Appl. Opt. 35, 7019-7024 (1996).
22. J. Garcia, R. Dorsch, A. W. Lohmann, C. Ferreira, and Z. Zalevsky, "Flexible optical implementation of fractional Fourier transform processors: Applications to correlation and filtering," Opt. Commun. 133, 393-400 (1997).
23. D. Mendlovic, A. W. Lohmann and Z. Zalevsky, "SW - Adaptation and its application for super resolution - Examples," JOSA 14, 563-567 (1997).
24. Z. Zalevsky, D. Mendlovic and J. Garcia, "Invariant pattern recognition using wavelength multiplexing," Appl. Opt. 36, 1059-1063 (1997).
25. Z. Zalevsky, D. Mendlovic and J. H. Caulfield, "Localized Partially Space-Invariant Filtering," Appl. Opt. 36, 1086-1092 (1997).
26. D. Mendlovic, Z. Zalevsky and N. Konforti, "Computation considerations and fast algorithms for calculating the diffraction integral," J. Modern Opt. 44, 407-413 (1997).
27. D. Mendlovic, Z. Zalevsky, G. Shabtay and E. Marom, "High Efficiency Arbitrary Array Generator," Appl. Opt. 35, 6875-6880 (1996).

28. Z. Zalevsky, D. Mendlovic and G. Shabtay, "Optical Transfer Function Design Using a Phase Only Coherent Transfer Function," Appl. Opt. 36, 1027-1032 (1997).
29. D. Mendlovic, A. W. Lohmann, N. Konforti, I. Kiryuschev and Z. Zalevsky, "One dimensional superresolution optical system for temporally restricted objects," Appl. Opt. 36, 2353-2359 (1997).
30. G. Shabtay, Z. Zalevsky, D. Mendlovic, I. Raveh, C. Ferreira and J. Garcia, "Invariant pattern recognition based on 1-D Wavelet functions and the polynomial decomposition," Opt. Commun. 136, 306-312 (1997).
31. Z. Zalevsky, D. Mendlovic and J. H. Caulfield, "Fractional correlator with real time control of space invariance property," Appl. Opt. 36, 2370-2375 (1997).
32. D. Mendlovic, Z. Zalevsky, D. Mas, J. Garcia and C. Ferreira, "The Fractional Wavelet Transform," Appl. Opt. 36, 4801-4806 (1997).
33. Z. Zalevsky, I. Raveh, G. Shabtay, D. Mendlovic and J. Garcia, "Single output, color pattern recognition using a fractional correlator," Opt. Eng. 36 2127-2136 (1997).
34. D. Mendlovic, J. Garcia, Z. Zalevsky, E. Marom, D. Mas, C. Ferreira and A. W. Lohmann, "Wavelength multiplexing system for a single mode image transmission," Appl. Opt. 36 8474-8480 (1997).
35. A. W. Lohmann, D. Mendlovic and Z. Zalevsky, "A digital method for measuring the focus error," Appl. Opt. 36, 7204-7209 (1997).
36. D. Mendlovic, I. Kiryuschev, Z. Zalevsky, A. W. Lohmann and D. Farkas, "Two dimensional super resolution optical system for temporally restricted objects," Appl. Opt. 36, 6687-6691 (1997).
37. D. Mendlovic, D. Mas, A. W. Lohmann, Z. Zalevsky and G. Shabtay, "Fractional triple correlation and its applications," JOSA A15, 1658-1661 (1998).
38. D. Mendlovic and Z. Zalevsky, "Definition and Properties of the Generalized Temporal-Spatial Wigner Distribution Function," Optik 107, 49-56 (1997).
39. Z. Zalevsky, D. Mendlovic and A. W. Lohmann, "The ABCD-Bessel transformation," Opt. Commun. 147, 39-41 (1998).
40. D. Mendlovic, Z. Zalevsky and A. W. Lohamnn, "Various approaches in super resolution," Optics and Photonics News, 8, 21-22 (1997).
41. A. W. Lohmann, Z. Zalevsky, R. G. Dorsch and D. Mendlovic, "Experimental considerations and scaling property of the fractional Fourier transform," Opt. Commun. 146, 55-61 (1998).
42. A. W. Lohmann, D. Mendlovic, Z. Zalevsky and G. Shabtay, "The use of Ewald's surfaces in triple correlation optics," Opt. Commun. 144, 170-172 (1997).
43. D. Mendlovic, U. Levy, G. Shabtay, Z. Zalevsky and E. Marom, "Encoding technique for the design of zero order (on axis) Fraunhofer computer generated holograms," Appl. Opt. 36, 8427-8434 (1997).
44. U. Levy, D. Mendlovic and Z. Zalevsky, "On axis phase only computer generated holograms based on a minimal etching process," J. Modern Opt. 45, 1437-1449 (1998).
45. G. Shabtay, D. Mendlovic and Z. Zalevsky, "Proposal for optical implementation of the Wigner distribution function," Appl. Opt. 37, 2142-2144 (1998).
46. Z. Zalevsky, "Experimental implementation of a continuous 2-D on axis optical Wavelet transformer with white light illumination," Opt. Eng. 37, 1372-1375 (1998).
47. G. Shabtay, D. Mendlovic and Z. Zalevsky, "Optical implementation of the continuous Wavelet transform," Appl. Opt. 37, 2964-2966 (1998).
48. D. Mendlovic, D. Farkas, Z. Zalevsky and A. W. Lohmann, "High frequency enhancement via super resolution optical system for temporally restricted objects," Opt. Let. 23, 801-803 (1998).
49. K. B. Wolf, D. Mendlovic and Z. Zalevsky, "The generalized Wigner function for analysis of super resolution systems," Appl. Opt. 37, 4374-4379 (1998).
50. A. W. Lohmann, D. Mendlovic and Z. Zalevsky, "Fourier optics of the triple correlation," Opt. Commun. 152, 243-246 (1998).
51. E. Gur, D. Mendlovic and Z. Zalevsky, "Optical implementation of fuzzy logic controller: Part I," Appl. Opt., 37, 6946-6950 (1998).
52. D. Mendlovic, Z. Zalevsky and P. Andreas "A Novel Device for Achieving Negative or Positive Dispersion and its Application for Temporal Pulse Compression," Optik, 110, 45-50 (1999).
53. D. Mendlovic and Z. Zalevsky, "Novel configurations of optical temporal signal processing," Optik 110, 223-228 (1999).
54. E. Gur, D. Mendlovic and Z. Zalevsky, "Optical implementation of fuzzy logic controller: Part II," Appl. Opt. 38, 4354-4358 (1999).
55. I. Raveh, D. Mendlovic, Z. Zalevsky and A. W. Lohmann, "Digital method for defocus correction: experimental results," Opt. Eng. 38 (1999).
56. Z. Zalevsky, D. Mendlovic and A. W. Lohmann, "Super resolution optical systems using fixed gratings," Opt. Commun. 163, 79-85 (1999).

57. I. Raveh, D. Mendlovic, Z. Zalevsky and A. W. Lohmann, "Image restoration from vibrating photographic systems," Appl. Opt. 38 (1999).
58. A. Shemer, D. Mendlovic, Z. Zalevsky, J. Garcia and P. G. Martinez, "Super resolving optical system with time multiplexing and computer decoding," Appl. Opt. 38, 7245-7251 (1999).
59. Z. Zalevsky, D. Mendlovic and E. Gur, "Discussion on multidimensional fuzzy control," Appl. Opt. 39, 333-336 (2000).
60. Z. Zalevsky, D. Mendlovic and H. M. Ozaktas, "Energetic efficient synthesis of mutual intensity distribution," J. Opt. A: Pure Appl. Opt. 2, 83-87 (2000).
61. Z. Zalevsky, D. Mendlovic and U. Levy, "A new optical random coding technique for security systems," Opt. Commun. 180, 15-20 (2000).
62. U. Levy, G. Shabtay, D. Mendlovic, Z. Zalevsky and E. Marom, "Iterative algorithm for determining optimal beam profiles in a 3-D space, Appl. Opt. 38, 6732-6736 (1999).
63. Z. Zalevsky, D. Mendlovic, E. Rivlin and S. Rotman, "Improved target detection performances in IR cluttered environment using the contrasted statistical processing approach," Opt. Eng. 39, 2609-2617 (2000).
64. Z. Zalevsky, D. Mendlovic and G. Shabtay, "Pulse amplitude modulation masks for incoherent super resolution," Opt. Commun. 177, 149-155 (2000).
65. G. Shabtay, Z. Zalevsky, U. Levy and D. Mendlovic, "Optimal synthesis of 3-D complex amplitude distributions," Opt. Lett. 25, 363-365 (2000).
66. Z. Zalevsky, D. Mendlovic and E. Marom, “Special sensor masking for exceeding system geometrical resolving power," Opt. Eng. 39, 1936-1942 (2000).
67. J. Esteve-Taboada, J. Garcia, C. Ferreira, D. Mendlovic and Z. Zalevsky, “Two dimensional optical wavelet decomposition with white light illumination by wavelength multiplexing,” Appl. Opt. 18, 157-163 (2001).
68. A. Shemer, Z. Zalevsky, D. Mendlovic, E. Marom, J. Garcia and P. G. Martinez, "Improved super resolution in coherent optical system," Appl. Opt. 40, 4688-4696 (2001).
69. E. Sabo, Z. Zalevsky, D. Mendlovic, N. Konforti and I. Kiryuschev, “Super resolution optical system using two fixed generalized Dammann gratings,” Appl. Opt. 39, 5318-5325 (2000).
70. E. Sabo, Z. Zalevsky, D. Mendlovic, N. Konforti and I. Kiryuschev, “Super resolution optical system using three fixed generalized gratings: Experimental results,” JOSA, A18, 514-520 (2001).
71. Z. Zalevsky, D. Mendlovic, and E. Gur, “Optical implementation of 2nd order Volterra operators,” JOSA A18, 164-169 (2001).
72. Z. Zalevsky, D. Memdlovic and A. W. Lohmann, “Understanding super resolution in Wigner space,” JOSA A17, 2422-2430 (2000). (**Invited paper in special issue**).
73. D. Mendlovic, Z. Zalevsky and H. M. Ozaktas, “Wigner related phase spaces for signal processing and their optical implementation,” JOSA A17, 2339-2354 (2000). (**Invited paper in special issue**).
74. G. Shabtay, D. Mendlovic and Z. Zalevsky, “Joint transform correlator for optical temporal signals,” Appl. Opt. 39, 6556-6560 (2000).
75. Z. Zalevsky, D. Mendlovic, M. A. Kutay, H. M. Ozaktas and J. Solomon, “Improved acoustic signal discrimination using fractional Fourier transform based phase-space representations,” Opt. Commun. 190, 95-101 (2001).
76. Z. Zalevsky, E. Sabo, D. Mendlovic and E. Marom, “Light efficient imaging with improved resolving ability,” Opt. Commun. 190, 69-77 (2001).
77. Z. Zalevsky, E. Leith and K. Mills, “Optical implementation of code division multiplexing for super resolution. Part I. Spectroscopic method,” Opt. Commun. 195, 93-100 (2001).
78. Z. Zalevsky, E. Leith and K. Mills, “Optical implementation of code division multiplexing for super resolution. Part II. Temporal method,” Opt. Commun. 195, 101-106 (2001).
79. Z. Zalevsky, E. Leith and K. Mills, “Spatially partially incoherent and broad spectrum holographic stereo vision,” Appl. Opt. 40, 5967-5972 (2001).
80. K. Mills, Z. Zalevsky and E. Leith, “Holographic generalized first arriving light approach for resolving images viewed throughout a scattering medium,” Appl. Opt. 41, 2116-2121 (2002).
81. D. Sazbon, Z. Zalevsky, E. Rivlin and D. Mendlovic, "Using Fourier/Mellin-based correlators and their fractional versions in navigational tasks," Journal of Pattern Recognition, Vol. 35 (12), pp. 2993-2999 (2002).
82. G. Shabtay, D. Mendovic, Z. Zalevsky and L. Lipson, “The optimal system for sub wavelength point source localization,” Opt. Commun. 198, 311-315 (2001).
83. Z. Zalevsky, Y. Shrot, U. Levy and D. Mendlovic, “A novel denoising algorithm for obtaining a super resolved position estimation," Opt. Eng. 41, 1350-1357 (2001).
84. Z. Zalevsky, D. Mendlovic and G. Shabtay, “Transformations in optics: Novel perspectives, approaches, applications and implementations,” J. of Opt. & Quant. Elect. 34, 1175-1181 (2002).

85. Z. Zalevsky and A. Goldman, “Spectral and spectral-spatial modeling and optimization of target detection in visible cluttered environment,” Opt. Eng. 41, 1358-1364 (2002).
86. Z. Zalevsky, D. Mendlovic, E. Marom, N. Cohen, E. Goldenberg, N. Konforti, A. Shemer, G. Shabtay, U. Levy and R. Appelman, "Ultrafast all-optical switching," J. Opt. Netw. 1, 170-183 (2002).
87. E. Gur, Z. Zalevsky, N. Cohen and D. Mendlovic, “Iterative approach for optimizing a multistage interconnection network,” Journal of optical networking, Vol. 1, 363-372 (2002).
88. J. Solomon, Z. Zalevsky, D. Mendlovic and J. Garcia, “Filter multiplexing by use of spatial code division multiple access approach,” Appl. Opt. 42, 772-779 (2003).
89. A. Shemer, Z. Zalevsky, D. Mendlovic, N. Konforti and E. Marom, “Time multiplexing super resolution based on interference grating projection,” Appl. Opt. 41, 7397-7404 (2002).
90. Z. Zalevsky, K. Mills and E. Leith, “Broad source holographic reconstruction by use of wavelet encoding,” Appl. Opt. 41, 6193-6199 (2002).
91. G. Shabtay, E. Eidinger, Z. Zalevsky, D. Mendlovic and E. Marom, “Tunable birefringent filters- optimal iterative design,” Opt. Express 10 1534-1541 (2002).
92. J. Solomon, Z. Zalevsky and D. Mendlovic, “Super resolution using code division multiplexing,” Appl. Opt. 42, 1451-1462 (2003).
93. V. Eckhouse, Z. Zalevsky and D. Mendlovic, “Dynamic sub wavelength holographic encryption,” J. optical memory and neural networks, (in print).
94. D. Elkind, Z. Zalevsky, U. Levy and D. Mendlovic, “OTF shaping and depth of focus using phase only filter,” Appl. Opt. 42, 1925-1931 (2003).
95. G. Shabtay and Z. Zalevsky, “Fiber Bragg gratings as interleavers,” Journal of optical networking 2, 19-34 (2003).
96. J. Solomon, Z. Zalevsky and D. Mendlovic, “Invariant pattern recognition using spatial code division multiplexing approach,” Appl. Opt. 42, 3345-3355 (2003).
97. E. Gur, D. Mendlovic and Z. Zalevsky, “Optical generation of fuzzy based rules,” Appl. Opt. 41, 4753-4760 (2002).
98. E. Ben Eliezer, Z. Zalevsky, E. Marom and N. Konforti, “All optical extended depth of field imaging system,” J. of Optica and Pure Physics- A, 5, S164-S169 (2003).
99. Z. Zalevsky and V. Eckhouse, “In channel OSNR and BER measurement using temporal super resolution via dynamic range conversion,” J. of Lightwave Tech. 21, 2734-2741 (2003).
100. Z. Zalevsky, D. Abraham, V. Eckhouse and Y. Beiderman, “In band optical signal to noise ratio network monitoring using periodic polarization modulation,” J. Opt. Networking, 2, 303-314 (2003).
101. D. Goldring, Z. Zalevsky, E. Goldenberg, A. Shemer and D. Mendlovic, “Optical characterization of PLZT compound,” Appl. Opt. 42, 6536-6543 (2003).
102. D. Goldring, Z. Zalevsky, G. Shabtay, D. Abraham and D. Mendlovic, “Magneto-Optic Based Devices for Polarization Controlling,” JOPA A, 6, 98-105 (2004).
103. D. Goldring, Z. Zalevsky and D. Mendlovic, “Enlargement of the Information Capacity in Optic Fiber Channels Using Non-Orthogonal Polarization Coding,” JOPA A, 6, S52-S58 (2004).
104. Z. Zalevsky, J. Solomon and D. Mendlovic, “Geometrical super resolution using code division multiplexing,” Appl. Opt., 42, 32-40 (2005).
105. N. Cohen, Z. Zalevsky, G. Shochat and D. Mendlovic, “Realization of temporal linear transformations by the use of spatial diffraction-based optical system,” JOSA A, 21, 732-736 (2004).
106. A. Zlotnik, Z. Zalevsky and E. Marom, “Optical Encryption using synthesized mutual intensity function,” Appl. Opt., 43, 3455-3465 (2004).
107. Z. Zalevsky, V. Eckhouse, N. Konforti, A. Shemer, D. Mendlovic and J. Garcia, “Super resolving optical system based on spectral dilation,” Opt. Commun. 241, 43-50 (2004).
108. Z. Zalevsky and V. Eckhouse, “Polarization mode dispersion manipulation using periodic polarization modulation,” JOPA A, 6, 862-868 (2004).
109. Z. Zalevsky, N. Shamir and D. Mendlovic, “Temporally masked camera readout technique for obtaining an invariance to platform’s vibrations,” Opt. Eng., 44, 1-9 (2005).
110. Z. Zalevsky, N. Shamir and D. Mendlovic, “Geometrical Super-Resolution in Infra-Red Sensor: Experimental Verification,” Opt. Eng., 43, 1401-1406 (2004).
111. V. Eckhouse, Z. Zalevsky, N. Konforti, D. Mendlovic, “Sub wavelength structure imaging,” Opt. Eng., 43, 2462-2468 (2004).
112. A. Zlotnik, Z. Zalevsky and E. Marom, “Super-Resolution using Non-Orthogonal Polarization Coding,” Appl. Opt., 44, 3705-3715 (2005).
113. Z. Zalevsky and R. Appelman, "All optical switching technologies for protection applications," IEEE magazine on Comm. 42, S35-S40 (2004).
114. Z. Zalevsky, E. Rivlin and M. Rudzsky, “Motion Characterization from Co-Occurrence Vector Descriptor,” J. Pat. Rec. Lett., 26, 533-543 (2005).

115. D. Sazbon, Z. Zalevsky and E. Rivlin, "Qualitative real-time range extraction for preplanned scene partitioning using laser beam coding," Pat. Rec. Lett., 26, 1772-1781 (2005).
116. Z. Zalevsky, A. Shemer, V. Eckhouse, D. Mendlovic and S. Zach, “Radio-Frequency photonic filter for highly resolved and ultrafast information extraction," JOSA A, 22, 1668-1677 (2005).
117. N. Cohen and Z. Zalevsky, "Optical recursive implementation of the Cantor network," J. of Optical Net., 3 666-674 (2004).
118. E. Ben-Eliezer, E. Marom, N. Konforti and Z. Zalevsky, "Experimental realization of an imaging system with an extended depth of field," Appl. Opt., 44, 2792-2798 (2005).
119. V. Mico, Z. Zalevsky, P. Garcia-Martinez and J. Garcia, "Single step superresolution by interferometric imaging," Opt. Exp., 12, 2589-2594 (2004).
120. J. Garcia, Z. Zalevsky and D. Fixler, "Synthetic aperture superresolution by speckle pattern projection," Opt. Exp., 13, 6073-6078 (2005).
121. Z. Zalevsky, A. K. George, F. Luan, G. Bouwmans, P. Dainese, C. Cordeiro and N. July, “Photonic crystal in-fiber devices,” Opt. Eng. 44, 125003 (2005).
122. Z. Zalevsky, F. Luan, W. J. Wadsworth, S. L. Saval and T. A. Birks, “Liquid crystal based in-fibre tunable spectral structures," Opt. Eng. 45, 35005 (2006).
123. Z. Zalevsky, J. Garcia, P. Garcia-Martinez and C. Ferreira, "Spatial information transmission using orthogonal mutual coherence coding," Opt. Lett. 20, 2837-2839 (2005).
124. Z. Zalevsky and A. Zlotnik, "Single Snap-Shot Double Field Optical Zoom," Opt. Exp. 13, 9858-9868 (2005).
125. Z. Zalevsky, J. Garcia and C. Ferreira, "Super Resolved Imaging of Remote Moving Targets," Opt. Let. 31, 586-588 (2006).
126. D. Fixler, J. Garcia, Z. Zalevsky, A. Weiss and M. Deutsch, "Speckle Random Coding for 2-D Super Resolving Fluorescent Microscopic Imaging," Micron 38, 121-128 (2007).
127. Z. Zalevsky, A. Rudnitsky and M. Nathan, "Nano photonic and ultra fast all-optical processing modules," Opt. Exp. 13, 10272-10284 (2005).
128. V. Mico, Z. Zalevsky, P. Garcia-Martinez and J. Garcia, "Superresolved imaging in digital holography by superposition of tilted wavefronts," Appl. Opt. 45, 822-828 (2006).
129. Z. Zalevsky, A. Shemer, A. Zlotnik, E. Ben-Eliezer and E. Marom, "All-optical axial super resolving imaging using low-frequency binary-phase mask," Opt. Exp. 14, 2631-2643 (2006). Also published in Virtual Journal for Biomedical Optics, Volume 1(5), Page 2631, May 2006.
130. Z. Zalevsky, E. Rossmann, E. Sabo, E. Rivlin and D. Mendlovic, "Cancer Diagnosis by Microscopic Axial Super Resolving Reconstruction Approach of Cytological and Histological Images," Opt. Eng. 45, 83201 (2006).
131. Z. Zalevksy, J. García and P. García-Martínez, "Interlacing Multiplexing Techniques for Optical Morphological Correlation," Opt. Commun. 264, 45-50 (2006).
132. Z. Zalevsky, Y. Kapellner, I. Eyal and N. Cohen, “Self Q-switching effect in a Nd:YVO4 /KTP lasing unit,” Opt. Eng. Let. 45, 70506 (2006).
133. D. Fixler, J. Garcia, Z. Zalevsky, A. Weiss and M. Deutsch, "Pattern Projection for Sub-pixel Resolved Imaging in Microscopy," Micron 38, 115-120 (2007).
134. J. García, Z. Zalevsky, P. García-Martínez, C. Ferreira, M. Teicher and Y. Beiderman, "3D Mapping and Range Measurement by Means of Projected Speckle Patterns," Appl. Opt. 47, 3032-3040 (2008).
135. Z. Zalevsky, A. Rubner, J. Garcia, P. Garcia-Martinez, C. Ferreira and E. Marom, "Joint Transform Correlator with Spatial Code Division Multiplexing," Appl. Opt. 45, 7325-7333 (2006).
136. Z. Zalevsky, E. Gur and D. Mendlovic, "Fuzzy-logic optical optimization of mainframe CPU and memory," Appl. Opt. 45, 4647-4651 (2006).
137. E. Ben-Eliezer, E. Marom, N. Konforti and Z. Zalevsky, "Radial mask for imaging systems that exhibit high resolution and extended depths of field," Appl. Opt. 45, 2001-2013 (2006).
138. Z. Zalevsky, A. Shemer, D. Mendlovic and S. Zach, "Passive and periodically ultra fast RF-photonic spectral scanner," Optics Exp. 14, 8367-8381 (2006).
139. Z. Zalevsky, P. García-Martínez and J. García, "Superresolution using gray level coding," Opt. Exp. 14, 5178-5182 (2006).
140. V. Mico, Z. Zalevsky and J. García, "Superresolution optical system by common-path interferometry," Opt. Exp. 14, 5168-5177 (2006). Also published in Virtual Journal for Biomedical Optics, Volume 1(7), Page 5168, Jul. 2006.
141. V. Mico, Z. Zalevsky, P. Garcia Martinez and J. Garcia, "Synthetic aperture superresolution with multiple off-axis holograms," JOSA A23, 3162-3170 (2006). Also published in Virtual Journal for Biomedical Optics, Volume 2(1), Jan. 2007. Selected to be one of the Top Downloaded Articles in Holography from OSA Publishing (Dec. 2013 and in Dec. 2014). Selected to be one of the Top Downloaded Articles in Holography from Journal of the Optical Society of America A and Optics Letters

(July 2015). Selected to be one of the most downloaded articles in this topic area over the past year from the Journal of the Optical Society of America A (June 2016). Selected to be one of the top downloaded articles on holography from JOSA A (August 2016).

142. G. Shochat Z. Zalevsky and E. Marom, "Realization of an optical communication tunable filter using a diffraction-based optical system," JOSA A, 24, 179-187 (2007).
143. Z. Zalevsky, S. Ben Yaish, E. Guetta, Y. Beiderman and S. Gannot, "Optical realization of Viterbi decoder for communication network," Opt. Exp. 15, 3635-3649 (2007).
144. V. Mico, J. García, C. Ferreira, D. Sylman and Z. Zalevsky, "Spatial Information Transmission Using Axial Temporal Coherence Coding," Opt. Lett. 32, 736-738 (2007).
145. Z. Zalevsky, S. Rozental and M. Meller, "Usage of Turbulence for Super Resolved Imaging," Opt. Lett. 32, 1072-1074 (2007).
146. Z. Zalevsky, E. Rossmann and D. Mendlovic, "All-Optical Wavelet Transform Realization and Usage for Imaging, Image Processing and Increased Depth of Focus," Opt. Eng. 46, 087001 (2007).
147. Z. Zalevsky and S. Ben-Yaish, "Extended depth of focus imaging with birefringent plate," Opt. Exp. 15, 7202-7210 (2007).
148. O. Limon, A. Rudnitsky, Z. Zalevsky, M. Nathan, L. Businaro, D. Cojoc and A. Gerardino, "All-optical nano modulator on a silicon chip," Opt. Exp. 15, 9029-9039 (2007).
149. Z. Zalevsky, H. M. Ozaktas and A. M. Kutay, "Fractional Fourier transform- Exceeding the classical concepts of signal manipulation," Optics and Spectroscopy 103, 868-876 (2007).
150. Z. Zalevsky, S. Ben Yaish, O. Yehezkel and M. Belkin, "Thin spectacles for myopia, presbyopia and astigmatism insensitive vision," Opt. Express 15, 10790-10803 (2007). Also published in Virtual Journal for Biomedical Optics, Volume 2(9), Page 10790, Sep. 2007.
151. Z. Zalevsky, "Integrated micro and nano photonic dynamic devices: A review," J. of Nano Photonics 01(01), 012504 (2007).
152. Z. Zalevsky, E. Saat, S. Orbach, V. Mico and J. Garcia, "Exceeding the resolving imaging power using environmental conditions," Appl. Opt. 47, A1-A6 (2008).
153. Z. Zalevsky, J. García and V. Micó, "Transversal Super Resolution with Non-Contact Axial Movement of Periodic Structures," JOSA A24, 3220-3225 (2007).
154. V. Mico, Z. Zalevsky and J. García, "Synthetic aperture microscopy using off-axis illumination and polarization coding," Optics Communications, 276, 209-217 (2007).
155. Z. Zalevsky and J. Garcia, "All-Optical Super Resolved and Extended Depth of Focus Imaging with Random Pinhole Array Aperture," Opt. Commun. 281 (5), 953-957, (2008).
156. O. Limon, Z. Zalevsky and L. Businaro, "Metal-oxide semiconductor, field effect transistor-based microscale electro-optical multimode interference modulator on a silicon chip," J. of Nano Photonics 01(01), 011660 (2007).
157. Z. Zalevsky, A. Shemer, D. Mendlovic and S. Zach, "Passive and Temporally Continuous Optical Spectral Analyzer of RF Signals via Wavelength Coding," Opt. Commun. 281 (5), 1087-1092, (2008).
158. I. Raveh and Z. Zalevsky, "All-optical axially multi-regional super resolved imaging," Opt. Express 15, 17912-17921 (2007). Also published in Virtual Journal for Biomedical Optics, Volume 3(1), Page 17912, Jan. 2008.
159. Z. Zalevsky, O. Margalit, E. Vexberg, R. Pearl and J. Garcia, "Suppression of phase ambiguity in digital holography by using partial coherence or specimen rotation," Appl. Opt. 47, D154-D163 (2008).
160. V. Mico, O. Limon, A. Gur, Z. Zalevsky and J. Garcia, "Transversal Resolution Improvement using Rotating Grating Time Multiplexing Approach," JOSA A 25, 1115-1129 (2008).
161. E. Gur and Z. Zalevsky, "Single image digital super resolution: A revised Gerschberg-Papoulis algorithm," Int. Journal of Computer Science, 32:2 (2008).
162. E. Gur, V. Sarafis, I. Falat, F. Vacha, M. Vacha and Z. Zalevsky, "Super-resolution via iterative phase retrieval for blurred and saturated biological images," Opt. Express 16, 7894-7903 (2008).
163. R. A. Bartels, B. G. Hoover, Z. Zalevsky, and H. John Caulfield, "Manipulating Light Waves: introduction," Appl. Opt. 47, MLW1-MLW3 (2008).
164. Z. Zalevsky, "Optimizing the Scanning Procedure of Search and Track Systems," Opt. Eng. 47, 056401 (2008).
165. Z. Zalevsky, A. Shemer and S. Zach, "RF-photonic chirp encoder and compressor for seamless analysis of information flow," Opt. Express 16, 7904-14 (2008).
166. J. García, V. Micó, D. Cojoc and Z. Zalevsky, "Full Field of View Superresolution Imaging based on Two Static Gratings and White Light Illumination," Appl. Opt. 47, 3080-3087 (2008). Also published in Virtual Journal for Biomedical Optics, Volume 3(7), Page 3080, Jul. 2008.
167. J. Garcia, V. Mico and Z. Zalevsky, "Superresolved Holographic Microscopy," GIT Imaging and Microscopy, 38-39 (January 2008).

168. V. Mico, J. Garcia and Z. Zalevsky, "Optical imaging resolves beyond the diffraction limit," Laser Focus World, 97-100 (April 2008). (**invited paper**)
169. V. Mico, Z. Zalevsky and J. Garcia, "Common-path Phase-shifting Digital Holographic Microscopy: a way to Quantitative Phase Imaging and Superresolution," Opt. Commun. 281**,** 4273-4281 (2008).
170. D. Elbaz and Z. Zalevsky, "Low-Loss with Nearly Zero Chromatic Dispersion Single Mode Fiber," Opt. Eng. (in print).
171. Z. Zalevsky and A. Zlotnik, "Axially and transversally super resolved imaging and ranging with random aperture coding," JOPA A 10, 1-11 (2008).
172. V. Micó, Z. Zalevsky, C. Ferreira and J. García, "Superresolution digital holographic microscopy for three dimensional samples," Opt. Exp. 16, 19260-19270 (2008).
173. V Micó, J. García and Z. Zalevsky, "Axial superresolution by synthetic aperture generation," JOPA A 10, 125001 (2008). Selected to be one of *Journal of Optics A: Pure and Applied Optics* Highlights of 2008 (the top contributions of 2008 while the papers have been chosen for being the most cited, most downloaded or of the highest quality rating).
174. D. Abraham, A. Chelli, Y. Shappir, M. Rosenbluh and Z. Zalevsky, "Silicon on insulator photo-activated modulator," Microelectronic journal 39, 1429-1432 (2008).
175. A. Borkowski, Z. Zalevsky and B. Javidi, "Geometrical Super Resolved Imaging Using Non periodic Spatial Masking," JOSA A 26, 589-601 (2009).
176. O. Limon, L. Businaro, A. Gerardino, L. Bitton, A. Frydman and Z. Zalevsky, "Fabrication of Electro Optical Nano Modulator on Silicon Chip," Journal of Microelectronic Engineering, (2009).
177. E. Gur, Y. Weizman and Z. Zalevsky, "Super Resolved Imaging of Micro-Electronic Devices for Improved Failure Analysis," IEEE Trans. On Device and Materials Reliability 9, 209-214 (2009).
178. D. Abraham, Z. Zalevsky, A. Chelly and J. Shappir, "Fabrication of vertically positioned silicon on insulator photo-activated modulator," Photonic and Nanostructures- Fundamentals and Applications (PNFA) 7, 190-197 (2009).
179. O. Margalit, V. Sarafis and Z. Zalevsky, "The Effect of Grana and Inter-Grana Components of Chloroplasts on Green Light Transmission: A Preliminary Study," Optik 121, 1439-1442 (2010).
180. R. Aharoni, L. Klein, D. Vaknin and Z. Zalevsky, "Fiber Microphones for Speech Detection and Allocation," Journal of holography and speckles 5, 1-6 (2009).
181. V. Mico, Z. Zalevsky and J. Garcia, "Optical superresolution: imaging beyond Abbe's diffraction limit," Journal of holography and speckles 5, 7-14 (2009).
182. A. Shemer, Z. Zalevsky and S. Zach, "Optical Pulses-Bursts Position Modulation for Antenna Beam Forming," Opt. Eng. 48, 045003 (2009).
183. T. Fessl, S. Ben-Yaish, F. Vacha, F. Adamec and Z. Zalevsky, "Depth of Focus Extended Microscope Configuration for Imaging of Incorporated Groups of Molecules, DNA Constructs and Clusters inside Bacterial Cells," Opt. Commun. 282, 2495-2501 (2009).
184. A. Schwarz, A. Weiss, D. Fixler, Z. Zalevsky, V. Micó and J. García, "One-Dimensional Wavelength Multiplexed Microscope without Objective Lens," Opt. Commun. 282, 2780-2786 (2009).
185. Z. Zalevsky and B. Javidi, "A novel approach to attaining high-resolution imaging," SPIE Newsroom. DOI: 10.1117/2.1200903.1562 (9 March 2009).
186. Z. Zalevsky, E. Fish, N. Shachar, Y. Vexberg, V. Micó and J. Garcia, "Super resolved imaging with randomly distributed, time and size varied particles," JOPA A 11, 085406 (2009).
187. V. Micó, J. García, B. Javidi and Z. Zalevsky, "Phase-shifting Gabor Holography," Opt. Lett. 34, 1492-1494 (2009).
188. O. Limon and Z. Zalevsky, "Nano Photonic Interferometer Realizing All-Optical XOR Gate on a Silicon Chip," Opt. Eng. 48, 064601 (2009).
189. Z. Zalevsky, V. Mico and J. Garcia, "Nano photonics for optical super resolution from an information theoretical perspective: a review," J. of Nano Photonics 3, 032502 (2009).
190. O. Limon, L. Businaro and Z. Zalevsky, "Miniaturized Bragg modulator on a silicon chip," J. of Nano Photonics 3, 031760 (2009).
191. V. Mico, J. Garcia and Z. Zalevsky "Quantitative phase imaging by common-path interferometric microscopy: application to super-resolved imaging and nanophotonics," J. of Nano Photonics 3, 031780 (2009).
192. E. Gur and Z. Zalevsky, "Image deblurring through static or time varying random perturbation medium," J. of Electronic Imaging 18, 033016 (2009).
193. Z. Zalevsky, Y. Beiderman, I. Margalit, S. Gingold, M. Teicher, V. Mico and J. Garcia, "Simultaneous remote extraction of multiple speech sources and heart beats from secondary speckles pattern," Opt. Express 17, 21566-21580 (2009). (The most downloaded OSA paper in December 2009). It was also published in Virtual Journal for Biomedical Optics, Volume 4(13), Dec. 2009.

194. A. Zlotnik, S. Ben Yaish, O. Yehezkel, K. Lahav-Yacouel, M. Belkin and Z. Zalevsky, "Extended Depth of Focus Contact Lenses for Presbyopia," Opt. Lett. 34, 2219-2221 (2009). Also published in Virtual Journal for Biomedical Optics, Volume 4(9), Page 2219, Sep. 2009.
195. M. Nazarathy, Z. Zalevsky, A. Rudnitsky, B. Larom, A. Nevet, M. Orenstein and B. Fischer, "All-optical linear reconfigurable logic with nonlinear phase erasure," J. Opt. Soc. Am. A 26, A21-A39 (2009).
196. S. Levy, I. Shlimak, A. Chelly, Z. Zalevsky and T. Lu, "Influence of Ge nanocrystals and radiation defects on C-V characteristics in Si-MOS structures," Journal of Physica B: Condensed Matter 404, 5189-5191 (2009).
197. L. Granero, V. Micó, Z. Zalevsky and J. García, "Superresolution imaging method using a phase-shifting digital lensless Fourier holography," Opt. Exp. 17, 15008-15022 (2009).
198. V. Micó, L. Granero, Z. Zalevsky and J. García, "Superresolved phase-shifting Gabor holography by CCD shift," JOPA A 11, 125408 (2009).
199. M. Paturzo, P. Ferraro, A. Zlotnik and Z. Zalevsky, "Aliasing based Incoherent Optical Spatial Image Processor," Appl. Opt. 48, 5537-5545 (2009).
200. Z. Zalevsky, Y. Beiderman, Y. Azani, Y. Cohen, C. Nisankoren, M. Teicher, V. Mico and J. Garcia, "Cleaning and Quality Classification of Optically Recorded Voice Signals," Recent patents on signal processing 2, 6-11 (2010), DOI: 10.2174/1877612401002010006; Y. Beiderman, Y. Azani, Y. Cohen, C. Nisankoren, M. Teicher, E. Rivlin, V. Mico, J. Garcia and Z. Zalevsky, "Spatial Processing for Improved Quality Recognition of Optically Recorded Voice Signals and Illumination Varied Scenery" Recent Patents on Signal Processing 1, 91-100 (2011), DOI: 10.2174/1877612411101020091.
201. Z. Zalevsky, "Extended depth of focus imaging: a review," SPIE Rev. 1, 012001 (2010).
202. A. Zlotnik, S. Ben-Yaish and Z. Zalevsky, "Extending the Depth of Focus for Enhanced 3-D Imaging and Profilometry: An Overview," Appl. Opt. 48, H105-H112 (2009). (One of the ten most downloaded OSA papers in December 2009). It was also published in Virtual Journal Advances in Optics and Photonics, Volume 1(3), Dec. 2009.
203. S. Ben Yaish, A. Zlotnik, I. Raveh, O. Yehezkel, M. Belkin and Z. Zalevsky, "Intra-Ocular Omni-Focal Lens with Increased Tolerance to Decentration and Astigmatism," Journal of Refractive Surgery, Vol. 26, 71-76 (2010).
204. M. Parshin and Z. Zalevsky, "Improved algorithm for automated alignment of wafers via optimized features location," J. of Electronic Imaging 18, 043001 (2009).
205. Y. Beiderman, E. Rivlin, M. Teicher and Z. Zalevsky, "Illumination insensitive pattern recognition using spectral manipulation and k-factor spatial transforming," Recent patents on signal processing 2, 22-27 (2010).
206. H. Duadi and Z. Zalevsky, "Optimized Iterative Quantization Algorithm for Phase-Only Beam Shaping Masks," Opt. Commun. 283 (6), 951-957 (2010).
207. Z. Zalevsky, E. Grossman, R. Zioni, A. Gur and E. Gur, "Optical through-turbulence imaging configuration: Experimental validation," Opt. Lett. 35, 453-455 (2010).
208. D. Sylman, Z. Zalevsky, V. Mico and J. Garcia, "Super-Resolved or Field of View Enlarged Imaging based upon Spatial Depolarization of Light," Opt. Commun. 283, 1715-1719 (2010).
209. J. Rodrigo, H. Duadi, T. Alieva and Z. Zalevsky, "Multi-stage phase retrieval algorithm based upon the gyrator transform," Opt. Exp. 18, 1510-1520 (2010).
210. A. Shahmoon, O. Limon, O. Girshevitz, Y. Fleger, H. V. Demir and Z. Zalevsky, "Tunable nano devices fabricated by controlled deposition of gold nanoparticles via focused ion beam," Microelectronics Engineering 87, 1363-1366 (2010).
211. S. Buhbut, A. Rudnitsky, M. Rosenbluh, A. Zaban and Z. Zalevsky, "Polarizing and spectrally selective photonic device based upon dielectric nanorods," Microelectronics Engineering 87, 1319-1322 (2010).
212. L. Granero, V. Micó Z. Zalevsky and J. García, "Synthetic aperture superresolved microscopy in digital lensless Fourier holography by time and angular multiplexing the object information," Appl. Opt. 49, 845-857 (2010). It was also published in Virtual Journal for Biomedical Optics, Volume 5(5), March 2010.
213. V. Micó, J. García, Z. Zalevsky, and B. Javidi, "Phase-shifting Gabor holographic microscopy," IEEE Journal of Display and Technology 6, 484-489 (2010). Selected also as a paper in the Virtual Journal for Biomedical Optics (VJBO).
214. A. Shahmoon, M. Birenboim and A. Frydman and Z. Zalevsky, "Design and Fabrication of 1X2 Nano Photonic Switch," J. of Nanotechnology 2010, Article ID 953212, 5 pages (2010).
215. L. Camacho, V. Mico, Z. Zalevsky and J. Garcia, "Quantitative phase microscopy using defocusing by means of a spatial light modulator," Opt. Exp. 18, 6755-6766 (2010).
216. H. Duadi, O. Margalit, Z. Zalevsky and V. Sarafis, "Optimized extended depth of focus simulated analysis for confocal microscopy," JOSA A 27, 1378-1384 (2010). Also published in Virtual Journal for Biomedical Optics, Volume 5(10), Page 1378, July 2010. Top Downloaded JOSA article in May 2012.

217. B. Larom, M. Nazarathy, A. Rudnitsky, A. Nevet and Z. Zalevsky, “Cascadable and reconfigurable photonic logic gates based on linear lightwave interference and non-linear phase erasure,” Opt. Exp. 18, 13600-13607 (2010).
218. V. Mico, E. Valero, Z. Zalevsky and J. Garcia, “Depth sensing using coherence mapping,” Opt. Commun. 283, 3122-3128 (2010).
219. E. Gur, Y. Weizman, P. Perdu and Z. Zalevsky, “Radon transform based image enhancement for microelectronic chips inspection,” IEEE Transactions on Device and Materials Reliability 10, 403 - 408 (2010).
220. D. Sylman, Z. Zalevsky and H. J. Caulfield, “Entanglement based Optical Transient Encryption”, Optics Commun. 283, 4551-4557 (2010).
221. A. Shahmoon, Y. Abraham, O. Limon, L. Bitton, A. Frydman, R. Unger and Z. Zalevsky, “All-optical nano modulator, sensor, wavelength converter, logic gate and flip flop based on manipulated gold nanoparticle,” J. of Nano Photonics 4, 041780 (2010).
222. S. Buhbut, A. Rudnitsky, A. Zaban, M. Rosenbluh and Z. Zalevsky, “Dielectric nanorods cladding as polarization and fluorescence selective photonic device,” J. of Material Science and Engineering 4 (12), 40-46 (2010).
223. A. Shahmoon, O. Limon, O. Girshevitz and Z. Zalevsky, “Self Assembly of Nano Metric Metallic Particles for Realization of Photonic and Electronic Nano Transistors,” Int. J. Mol. Sci. 11, 2241-2252 (2010). Notified as one of the journal's most highly accessed article.
224. Y. Beiderman, M. Teicher; J. Garcia, V. Mico and Z. Zalevsky, “Optical technique for classification, recognition and identification of obscured objects,” Opt. Commun. 283, 4274-4282 (2010).
225. Y. Beiderman, A. Amsel, Y. Tzadka, D. Fixler, V. Mico, J. Garcia and Z. Zalevsky, “A microscope configuration for nanometer 3-D movement monitoring accuracy,” Micron 42, 366-375 (2011).
226. V. Micó and Z. Zalevsky, “Superresolved digital in-line holographic microscopy for high resolution lensless biological imaging,” J. of Biomedical Optics 15(4), 046027 (2010). Also published in Virtual Journal of Biological Physics Research, Volume 20(5), September 1, 2010.
227. A. Zlotnik, Y. Abraham, L. Liraz, I. Abdulhalim and Z. Zalevsky, “Improved Extended Depth of Focus Full Field Spectral Domain Optical Coherence Tomography,” Opt. Commun. 283, 4963-4968 (2010).
228. Z. Zalevsky, S. Ben Yaish, A. Zlotnik, O. Yehezkel and M. Belkin, “Cortical Adaptation and Visual Enhancement,” Opt. Lett. 35, 3066-3068 (2010).
229. Z. Zalevsky, A. Rudnitsky, A. Haran, A. Zentner, D. David and Y. Noter, “Irradiation Test Results of Three Components Selected from Novel Optical Rotman Lens Configuration for Space Systems,” Journal of Aerospace Science and Technology 15, 261-268 (2011).
230. D. Sylman, V. Micó, J. García and Z. Zalevsky, “Random angular coding for superresolved imaging,” Appl. Opt. 49, 4874-4882 (2010).
231. H. Duadi and Z. Zalevsky, “Optimized Design for Realizing Large and Uniform 2-D Spots Array,” JOSA 27, 2027-2032 (2010).
232. Y. Beiderman, I. Horovitz, N. Burshtein, M. Teicher, J. Garcia, V. Mico and Z. Zalevsky, “Remote estimation of blood pulse pressure via temporal tracking of reflected secondary speckles pattern,” J. of Biomedical Optics 15, 061707-1 - 061707-7 (2010).
233. A. Barzilay, A. Salomon, D. Avraham and Z. Zalevsky, “Micro-Processor based Improved Ultrasonic Direction and Range Finder,” International Journal of Computer Science and Information Technologies (IJCSITs) 1(4), 303-308 (2010).
234. A. Gur, D. Fixler, V. Micó, J. Garcia and Z. Zalevsky, “Linear optics based nanoscopy,” Opt. Exp. 18, 22222-22231 (2010).
235. D. Abraham, A. Chelly, J. Shappir and Z. Zalevsky, “Hybrid optical and electrical reconfigurable logic gates based on silicon on insulator technology,” Journal of Photonics and Nanostructures-Fundamentals and Applications (PNFA) 9, 35–41 (2011).
236. H. Duadi, A. W. Lohmann and Z. Zalevsky, “Image Data Compression Based on Non-Negative Incoherent Imaging Systems,” Appl. Opt. 49, 5713-5720 (2010).
237. O. Fixler, N. Bar-David and Z. Zalevsky, “Spectral separation of sunlight for enhanced operability of photo-voltaic cells,” Journal of Photonics for Energy 1(1), 015501 (2011).
238. V. Micó, Z. Zalevsky and J. García, “Edge processing by synthetic aperture superresolution in digital holographic microscopy,” 3D Research journal 02, 01001 (2011)
239. A. Zlotnik, M. Paturzo, P. Ferraro and Z. Zalevsky, “Optical Spatial Image Processor based on Aliasing of Pseudo-Periodic Sampling,” Journal of supercomputing 62(2), 673-680 (2012).
240. E. Gur and Z. Zalevsky, “Resolution enhanced remote sensing via multi spectral and spatial data fusion,” International Journal of Image and Data Fusion 2(2),149-165 (2011).

241. A. Rudnitsky, A. Shahmoon, M. Nathan, M. Nazarathy, B. Larom, A. Martucci, L. Businaro, A. Gerardino and Z. Zalevsky, “All-Optical Integrated Micro Logic Gate,” Microelectronics Journal 2, 42, 472-476 (2011).
242. E. Gur and Z. Zalevsky, “Manipulating Multistage Interconnection Networks Using Fundamental Arrangements,” International Journal of Computer Science and Information Technology (IJCSIT), Vol. 2 (6), December 2010.
243. A. Gur, Z. Zalevsky, V. Micó, J. García and D. Fixler, “The Limitations of Nonlinear Fluorescence Effect in Super Resolution Saturated Structured Illumination Microscopy System,” Journal of Fluorescence 21, 1075-1082 (2011).
244. A. Shahmoon and Z. Zalevsky, “Magneto-Optic In-Fiber Micro Modulator,” Journal of Microelectronic Engineering 88, 2744–2747 (2011).
245. D. Fixler, H. Duadi, R. Ankri and Z. Zalevsky, “Determination of Coherence Length in Biological Tissues,” Lasers in Surgery & Medicine 43, 339-343 (2011).
246. A. Borkowski, E. Marom, Z. Zalevsky and B. Javidi, “Enhanced Geometrical Super Resolved Imaging with Moving Binary Random Mask,” JOSA A28, 566–575 (2011). Selected also as a paper in the Virtual Journal for Biomedical Optics (VJBO). Top Downloaded JOSA article in image processing, October 2012.
247. Y. Beiderman, R. Blumenberg, N. Rabani, M. Teicher, J. Garcia, V. Mico and Z. Zalevsky, “Demonstration of remote optical measurement configuration that correlates to glucose concentration in blood,” Biomedical Optics Express 2, 858–870 (2011). Top Downloaded Articles on Glucose Sensing and Blood/Tissue Oxygenation from Biomedical Optics Express until 2017.
248. N. Shamir, Z. Zalevsky, L. Yaroslavsky and B. Javidi, “Blind source separation of images based on general cross correlation of linear operators,” Journal of Electronic Imaging 20(02), 023017 (2011).
249. A. Shahmoon, A. Meiri and Z. Zalevsky, “Sub-Micron Particle based Structures as Reconfigurable Photonic Devices Controllable by External Photonic and Magnetic Fields,” Sensors 11, 2740-2750 (2011).
250. A. Shahmoon, H. Slovin and Z. Zalevsky, "Biomedical Super Resolved Imaging Using Special Micro-Probe," BioNano Science journal 1, 103-109 (2011).
251. A. Calabuig, V. Micó, J. Garcia, Z. Zalevsky and C. Ferreira, “Single-exposure super-resolved interferometric microscopy by RGB-multiplexing,” Opt. Lett. 36, 885-887 (2011). Selected also as a paper in the Virtual Journal for Biomedical Optics (VJBO).
252. L. Granero, Z. Zalevsky and V. Micó, “Single-exposure two-dimensional superresolution imaging in digital holography using a VCSEL source array,” Opt. Lett. 36, 1149-1151 (2011).
253. H. Duadi, P. Livshits, E. Gur, A. Inberg, Y. Shacham-Diamand, A. Weiss and Z. Zalevsky, “A Novel Algorithm to Enhance Blurred Microscopy Images of Metallic Ultra Thin-Films Microstructures,” Journal of Microelectronic Engineering 92, 145-148 (2012).
254. A. Gur, R. Aharoni, Z. Zalevsky, V. G. Kutchoukov, V. Mico, J. Garcia and Y. Garini, “Sub-Wavelength and Non-Periodic Holes Array based Fully Lensless Imager,” Opt. Commun. 284, 3509-3517 (2011).
255. H. Duadi and Z. Zalevsky, “Special diffractive optical elements for data encoding,” The Open Optics Journal 5, (Suppl 1-M7) 46-50 (2011).
256. R. Aharoni, M. Sinvani, O. Baharav, M. Azoulay and Z. Zalevsky, “Experimental Characterization of Photonic Fiber-Integrated Modulator,” The Open Optics Journal 5, (Suppl 1-M6) 40-45 (2011).
257. A. Meiri and Z. Zalevsky, “Nano electro-optical modulator and all optical logic gate on a silicon chip,” J. of Nano Photonics 5(1), 051811 (2011).
258. Z. Zalevsky and M. Belkin, “Coherence and Speckle in Photomedicine,” Photomedicine and Laser Surgery 10, 1-2 (2011).
259. D. Abraham, A. Shahmoon, A. Meiri and Z. Zalevsky, “Hybrid Optically and Electrically Controllable Field Effect Transistor based on Manipulated Nanoparticles,” J. of Nano Photonics 5, 051825-1: 051825-11 (2011).
260. Z. Zalevsky, Y. Beiderman, V. Micó and J. Garcia, “A novel technique for remotely monitoring key biological parameters,” SPIE Newsroom, DOI: 10.1117/2.1201106.003742 (20 June 2011).
261. Y. Reznick, E. Banin, A. Lipovsky, R. Lubart and Z. Zalevsky, “Direct laser light enhancement of susceptibility of bacteria to gentamicin antibiotic,” Opt. Commun. 284, 5501–5507 (2011).
262. H. Duadi and Z. Zalevsky, “Wiener Filter in the Gyrator Domain,” Journal of Modern Optics 58, 1628-1632 (2011).
263. D. Elbaz and Z. Zalevsky, “Low-Leakage with Attenuated Material Loss Hybrid Coaxial Cable,” Progress In Electromagnetics Research B (PIER B) 32, 243-262 (2011).
264. H. Duadi, E. Gordon, G. A. Bittan, A. Loven and Z. Zalevsky, “Correlation based interpolation technique for accurate 3-D estimation via projection of axially varied patterns,” 3D Research 2, 1-6 (2011).

265. T. Yeminy, D. Sadot and Z. Zalevsky, “Spectral and Temporal Stealthy Fiber-Optic Communication using Sampling and Phase Encoding,” Opt. Exp. 19, 20182-20198 (2011).
266. O. Fixler and Z. Zalevsky, “Geometrically Super Resolved Lensless Imaging using Spatial Light Modulator,” Appl. Opt. 50, 5662-5673 (2011).
267. A. Calabuig, J. Garcia, C. Ferreira, Z. Zalevsky and V. Mico, “Resolution improvement by single-exposure super-resolved interferometric microscopy with a monochrome sensor,” JOSA A 28, 2346-2358 (2011). Selected also as a paper in the Virtual Journal for Biomedical Optics (VJBO).
268. D. Abraham, A. Chelly, D. Elbaz, S. Schiff, M. Nabozny and Z. Zalevsky, “Modeling of current-voltage characteristics of the photo-activated device based on vertical SOI technology,” Journal of Active and Passive Electronic Components, Vol. 2012, Article ID 276145, 7 pages, doi:10.1155/2012/276145 (2012).
269. A. V. Butenko, V. Sandomirsky, R. Kahatabi, Z. Dashevsky, V. Kasiyan, Z. Zalevsky and Y. Schlesinger, "Experimental and theoretical investigation of the pyroelectric effect of the p-n junction in a paraelectric semiconductor," Journal of Physica B: Condensed Matter 407, 439–450 (2012).
270. A. Schwarz, Y. Sanhedrai and Z. Zalevsky, “Digital Camera Detection and Image Disruption using Controlled Intentional Electromagnetic Interference,” IEEE Transactions on Electromagnetic Compatibility 54, 1048 (2012).
271. A. Shemer, I. Gabay, M. Tur, A. Boag, H. Kleinman, S. Zach and Z. Zalevsky, “Mono-Detection Spatially Super Resolved Microwave Imaging for RADAR Applications,” Opt. Commun. 285, 2519–2524 (2012).
272. Y. Kapellner and Z. Zalevsky, “Multi-functional Micro Projection Device based on Screen Substitute for Low Power Consumption Computing,” J. Low Power Electron. Appl. 2, 79-97 (2012).
273. D. Fixler, R. Ankri, H. Duadi, R. Lubart and Z. Zalevsky, “Depolarization of Light in Biological Tissues,” Optics and Lasers in Engineering 50, 850–854 (2012).
274. Y. Beiderman, R. Talyosef, D. Yeori, J. Garcia, V. Mico and Z. Zalevsky, “The usage of PC mouse components for continuous measuring of human heart beats,” Appl. Opt. 51, 3323-3328 (2012). Selected also to be published in the Virtual Journal for Biomedical Optics (VJBO). Top Downloaded Article in Imaging Systems from Applied Optics during June 2013.
275. A. Bitman, Y. Lumer, I. Moshe and Z. Zalevsky, “Characterization of spectrally broadband THz beam propagation,” J. Opt. Soc. Am. B 29, 1436-1442 (2012). Top Downloaded Articles in Physical Optics from JOSA B during June 2013.
276. D. Elbaz, S. Buhbut, B. Z. Kupfer, A. Zaban and Z. Zalevsky, “Optical fiber based radial polarizer,” Opt. Commun. 285, 2746–2749 (2012).
277. D. Elbaz, D. Malka and Z. Zalevsky, “Photonic crystal fiber based 1xN intensity and wavelength splitters/couplers,” Electromagnetic 32, 209-220 (2012).
278. A. Shahmoon, A. Meiri, P. Livshits and Z. Zalevsky, “Nanoparticles and Plasmon Resonance Based Probe for Failure Analysis of ULSI Microchips and Electrical Characterizations of Metallic Interconnects Microelectronic Engineering,” Microelectronic engineering 104, 69–74 (2013).
279. Z. Zalevsky, Y. Bregman, N. Salomonski and H. Zafrir, “Super Resolving Magnetic Sensing System for Wide Coverage Real Time UXO Detection and Mapping,” J. Appl. Geophysics 84, 70-76 (2012).
280. P. Livshits, A. Inberg, Y. Shacham-Diamand, D. Malka, Y. Fleger and Z. Zalevsky, “The Precipitation of Gold Nanoparticles on Insulating Surface for Metallic Ultra-Thin Film Electroless Deposition Assistance,” Journal of the Applied Surface Science 258, 7503–7506 (2012).
281. D. Cojoc, S. Finaurini, P. Livshits, E. Gur, A. Shapira, V. Mico and Z. Zalevsky, “Toward fast malaria detection by secondary speckle sensing microscopy,” Biomedical optics express 3, 991-1005 (2012). Published also in "Optics & Photonics News" magazine of OSA. This article was also reviewed in **Nature Photonics** by an article reporting our findings. Top Downloads Biomedical Optics Express article in May 2012 and in June 2013. Top downloads Articles in Cellular Imaging, Function, and Manipulation from Biomedical Optics Express in June 2014.
282. Y. Reznick, E. Banin, A. Lipovsky, R. Lubart and Z. Zalevsky, “The synergistic effect of visible light and gentamycin on Pseudomona aeruginosa microorganisms,” Journal of Visualized Experiments (JoVE) e4370, doi:10.3791/4370 (2013); http://www.jove.com/video/4370/the-synergistic-effect-visible-light-gentamycin-on-pseudomona?status=a6376k
283. Z. Zalevsky, E. Gur, J. Garcia, V. Micó and B. Javidi, “Superresolved and field of view extended digital holography with particle encoding,” Opt. Lett. 37, 2766-2768 (2012).
284. A. Amsel, A. Rudnitsky and Z. Zalevsky, “An Implantable Self-Powered Medical Device for Blood Irradiation Therapy,” Journal of Atomic, Molecular, and Optical Physics, Volume 2012, Article ID 963187, 5 pages, doi:10.1155/2012/963187 (2012).
285. R. Aharoni, O. Baharav, L. Bidani, M. Sinvani, D. Elbaz and Z. Zalevsky, “All-optical silicon cavity based modulator,” Journal of Europ. Opt. Soc. Rap. Public. 7, 1202 (2012). The second most downloaded article from the 2011 and 2012 issues.

286. A. Meiri, S. Tzur, Y. Cohen, O. Bass, A. Fish and Z. Zalevsky, “Multi-layer photonic logic gate integrated into microelectronic chip,” Journal of Nanophotonics 6(1) (Jan. 2012).
287. A. Douplik, W. L. Leong, A. M. Easson, S. Done, B. C. Wilson, A. Shahmoon and Z. Zalevsky, “Microendoscopic spectral imaging as a tool for small ductual diagnostics: preliminary experience,” Journal of Innovative Optical Health Sciences 5 (3), 1250021 (7 pages), 2012.
288. R. Aharoni, L. Bidani, M. Sinvani and Z. Zalevsky, “Initiatory concept of localized CO2 laser based tapering rig for realization of in-fiber devices,” Optics Engineering 51(7), 075002 (2012).
289. A. Shahmoon, A. Douplik and Z. Zalevsky, “Micro-size multi-core fiber as an imaging tool from internal organ,” Physics Procedia 39, 830-834 (2012).
290. A. Ilovitsh, S. Zach and Z. Zalevsky, “Contour super resolved imaging of static ground targets using satellite platform,” Appl. Opt. 51, 5863-5868 (2012).
291. A. Shahmoon, D. Elbaz, S. Buhbut, B. Z. Kupfer, A. Zaban and Z. Zalevsky, “Nanorods coated fiber for generating enhanced radially polarized field,” Microelectronic engineering 98 ,414-418 (2012).
292. Z. Zalevsky, “Integrated Silicon Nanophotonic Data Processing Devices: A Brief Review,” Recent patents on signal processing 3(1), 42-48 (2013). One out of the six Most Cited Articles in all the issues of the journal of Recent Patents on Signal Processing.
293. R. Aharoni, M. Sinvani, Y. Tischler and Z. Zalevsky, “Basic model of absorption depth and injection levels in silicon under intermediate illumination levels,” Opt. Commun. 291 (2013).
294. A. Inberg, P. Livshits, Z. Zalevsky and Y. Shacham-Diamand, “Electroless deposition of silver thin films on gold nanoparticles catalyst for micro and nanoelectronics applications,” Microelectronic Engineering 98, 570-573 (2012).
295. N. Shamir, N. Kopeika and Z. Zalevsky, “Blind Source Separation of Images based upon Fractional Autocorrelation,” Journal of Electronic Imaging 21, 043027 (2012).
296. A. Bitman, I. Moshe and Z. Zalevsky, “Improving depth of field in broadband THz beams using non diffractive Bessel beams,” Opt. Lett. 37, 4164-4166 (2012).
297. E. Kolberg, Y. Beiderman, R. Talyosef, R. Amsalem and Z. Zalevsky, “Robotic Platform for Automated Search and Rescue Missions of Humans,” International Journal of Advanced Robotic Systems 10, 81:2013 (2013).
298. Z. Zalevsky, A. Schwarz, A. Gur, R. Aharoni, A. Weiss, D. Fixler, Y. Garini, D. Mendlovic, V. Micó, C. Ferreira and J. García, “Usage of Wavelength Multiplexing for Super Resolved Imaging and Spatial Data Compression,” Journal of Current Issues in Media and Telecommunications 5(3), 235-266 (2013).
299. D. Malka, G. Berkovic, Y. Hammer and Z. Zalevsky, “Superresolved Raman Spectroscopy,” Spectroscopy Letters 46(4), 307-313 (2013).
300. D. Fixler and Z. Zalevsky, ”Estimation of flow rate and direction of medium with low scattering coefficient via linear polarization measurement,” Optics and Lasers in Engineering 51 (2), 91 (2013).
301. A. Anand, V. Trivedi, S. Mahajan, V. Chhaniwal, Z. Zalevsky and B. Javidi, “Speckle Based Optical Sensor for Low Field Faraday Rotation Measurement,” IEEE Sensors 13, 723-727 (2013).
302. A. Shahmoon, O. Limon, L. Businaro, G Ciasca, Y. Azugi, A. Gerardino and Z. Zalevsky, “Fabrication of an electro-optical Bragg modulator based on plasma dispersion effect in silicon,” Microelectronics Engineering 105, 107–112 (2013).
303. A. Shenhav, Z. Brodie, Y. Beiderman, J. Garcia, V. Mico and Z. Zalevsky, “Optical sensor for remote estimation of alcohol concentration in blood stream,” Opt. Commun. 289, 149-157 (2012).
304. V. Mico, Z. Zalevsky and J. Garcia, “Superresolved common-path phase-shifting digital in-line holographic microscopy using a spatial light modulator,” Opt. Lett. 37, 4988–4990 (2012). Selected also as a paper in the Virtual Journal for Biomedical Optics (VJBO).
305. T. Frumkin, A. Meiri, M. Rosenbluh and Z. Zalevsky, “Nano Scale Optical Viterbi Decoder Realized on a Silicon Chip,” Journal of Nanophotonics 7(1) (Jan. 2013).
306. Z. Zalevsky, G. Elani, E. Azoulay, D. Ilani, Y. Beiderman and M. Belkin, “Electro-Mechanical Tactile Stimulation System for Sensory Vision Substitution,” Opt. Eng. 52(2), (Feb. 2013).
307. T. Yeminy, D. Sadot and Z. Zalevsky, “Sampling Impairments Influence Over Stealthy Fiber-Optic Signal Decryption,” Opt. Commun. 291, 193-201 (2013).
308. Z. Zalevsky, S. Gaffling, J. Hutter, L. Chen, W. Iff, A. Tobisch, J. Garcia and V. Mico, “Passive Time Multiplexing Super Resolved Technique for Axially Moving Targets,” Appl. Opt. 52, C11-C15 (2013).
309. S. Paz, D. Sylman, A. Zlotnik and Z. Zalevsky, “Extending the depth of focus in tomography systems for glass lattices 3D mapping,” Appl. Opt. 52, C50-C57 (2013).
310. A. Shahmoon and Z. Zalevsky, “Electrical model for analyzing chemical kinetics, lasing and bio-chemical processes,” Processes 1, 12-29 (2013).
311. D. Malka and Z. Zalevsky, “Multicore photonic crystal fiber based 1x8 two dimensional intensity splitters/couplers,” Electromagnetic 33(5) (2013).

312. M. Aviv, E. Gur and Z. Zalevsky, “Experimental results of revised Misell algorithm for imaging through weakly scattering biological tissue,” Appl. Opt. 52, 2300–2305 (2013). Selected also as a paper in the Virtual Journal for Biomedical Optics (VJBO), Vol. 8, Iss. 5, Jun. 6, 2013.
313. A. Rudnitsky, A. Zaban and Z. Zalevsky, “Passive high ratio sunlight concentration configurations,” Journal of Europ. Opt. Soc. Rap. Public. 8, 13033 (2013).
314. A. Meiri, A. Shahmoon and Z. Zalevsky, “Optically reconfigurable structures based on surface enhanced Raman scattering in nanorods,” Microelectronic Engineering 111, 251-255 (2013).
315. **M. Cohen, Z. Zalevsky and R. Shavit, “Towards Integrated Nanoplasmonic Logic Circuitry,” Nanoscale Journal 5(12), 5442-9 (2013).** In June 2015 it was rated by BioMedLib as the first out of top 20 articles in the domain of this article since 2013.
316. F. Tenner, C. Brock, R. Hohenstein, Z. Zalevsky and M. Schmidt, “Remote Optical Detection of the Fusion State in Laser Deep Penetration Welding,” Physics Procedia 41, 515–519 (2013).
317. O. Bass, A. Meiri, Z. Zalevsky and A. Fish, “Photonic XOR with inherent loss compensation mechanism for memory cell implementation in a standard nanoscale VLSI fabrication process,” Opt. Lett. 38, 1473-1475 (2013).
318. A. Inberg, P. Livshits, Z. Zalevsky and Y. Shacham-Diamand, “Silver Nanometer-Scale Thin Films Deposited by Electroless Plating on Insulating Surfaces Activated by Gold Nanoparticles,” Electrochemica Acta 113, 792-796 (2013).
319. M. Karni, D. Zidon, P. Polak, Z. Zalevsky and O. Shefi, “Thermal Degradation of DNA,” DNA and cell biology 32 (6), 298-301 (2013).
320. P. Polak, Z. Zalevsky and O. Shefi, “Gold nanoparticles-based biosensing of single nucleotide DNA mutations,” International Journal of Biological Macromolecules 59, 134– 137 (2013).
321. **A. Shahmoon, S. Aharon, O. Kruchik, M. Hohmann, H. Slovin, A. Douplik and Z. Zalevsky, “In vivo minimally invasive interstitial multi-functional microendoscopy," Sci. Rep. 3: 1805, Nature Publishing Group (2013).**
322. A. Zlotnik, Y. Kapellner, Z. Afik, I. Layani and Z. Zalevsky, “Geometric superresolution and field of view extension achieved using digital mirror devices,” Journal of Micro/Nanolithography, MEMS, and MOEMS (JM3) 12(3), 033001 (2013).
323. M. Golberg, D. Fixler, A. Shainberg, S. Zlochiver, V. Micó, J. Garcia, Y. Beiderman and Z. Zalevsky, “Speckle based configuration for simultaneous in vitro inspection of mechanical contractions of cardiac myocyte cells,” Journal of Biomedical Optics 18 (10), 101310 (July 15, 2013).
324. A. Ilovitsh, S. Zach and Z. Zalevsky, “Optical Synthetic Aperture Radar,” J. of Modern Opt. 60 (10), 803-807 (2013).
325. L. Bidani, O. Baharav, M. Sinvani and Z. Zalevsky, “Usage of Laser Timing Probe for Sensing of Programmed Charges in EEPROM Devices,” IEEE Transactions on Device and Materials Reliability 14(1), 304-310 (2014).
326. M. Aviv (Shalev), M. Pesce, S. Tilve, E. Chieregatti, Z. Zalevsky and F. Difato, “Motility-flow and growth cone navigation analysis during in vitro neuronal development by long-term bright-field imaging,” Journal of Biomedical Optics 18 (11), 111415 (2013).
327. A. Bitman, I. Moshe and Z. Zalevsky, “Broadband THz, extended depth of focus imaging based on step phase mask aided interferometry,” Opt. Commun. 309, 1-5 (2013).
328. T. Frumkin, H. Genish, A. A. Ishaaya and Z. Zalevsky, “Silicon nano photonic multi taper for efficient light coupling between fiber and silicon waveguide,’’ Journal of Nanophotonics 7 (2013).
329. **Z. Zalevsky, “Nonlinear optics: Defying Abbe’s law,” Nature Photonics, News & Views 7(8), 593-594 (2013).**
330. Z. Zalevsky, D. Fixler, A. Shainberg, Y. Beiderman, M. Golberg, S. Zlochiver, V. Micó and J. Garcia, “Photonic inspection of cardiac myocyte cell contractions,” SPIE Newsroom, 14 August 2013, DOI: 10.1117/2.1201308.004974.
331. A. Borkowski, Z. Zalevsky, N. Cohen, Z. Hadas, E. Marom and B. Javidi, “Experimental Validation of 2-D Generalized Geometric Super Resolved Approach,” Opt. Commun. 310, 179-186 (2014).
332. A. Ilovitsh, S. Zach and Z. Zalevsky, “Time Multiplexing Super Resolving Technique for Imaging from a Moving Platform,” Journal of Visualized Experiments (JoVE) 84, e51148, doi:10.3791/51148 (2014). http://www.jove.com/video/51148/time-multiplexing-super-resolving-technique-for-imaging-from-moving
333. Z. Zalevsky and M. Belkin, “Seeing sense: tactile corneal stimulation turning touch into vision,” Expert Rev. Ophthalmol. 8(6), 517–520 (2013).
334. Z. Zalevsky, J. Azugi, O. Limon and A. Rudnitsky, “Lens surface roughening for tears invariant contact lens performance,” Opt. Commun. 315, 168-175 (2014).

335. T. Ilovitsh, A. Meiri, C. G. Ebeling, R. Menon, J. M. Gerton, E. M. Jorgensen and Z. Zalevsky, "Improved localization accuracy in stochastic super-resolution fluorescence microscopy by K-factor image deshadowing," Biomedical Optics Express 5 (1), 244-258 (2014).
336. D. Fixler and Z. Zalevsky, "In vivo Tumor Detection Using Polarization and Wavelength Reflection Characteristics of Gold Nanorods," Nano Lett. 13, 6292−6296 (2013).
337. M. Ritenberg, E. Beilis, A. Ilovitsh, Z. Barkai, A. Shahmoon, S. Richter, Z. Zalevsky and R. Jelinek, "Beating speckles via electrically-induced vibrations of Au nanorods embedded in sol-gel," Sci. Rep. 4, Nature Publishing Group, Article 3666 (2014).
338. A. Rudnitsky, A. Shahmoon, A. Douplik and Z. Zalevsky, "Fiber endoscope with inflatable lens," Opt. Commun. 317, 53-56 (2014).
339. I. Margalit, Y. Beiderman, A. Skaat, E. Rosenfeld, M. Belkin, R.-P. Tornow, V. Mico, J. Garcia and Z. Zalevsky, "A new method for remote continuous monitoring of intraocular pressure variations," J. of Biomedical Optics 19 (2), 027002 (February 06, 2014).
340. S. Ben Yaish, A. Zlotnik, O. Limon, K. Lahav, R. Doron and Z. Zalevsky, "Multifocal Rigid Gas Permeable Contact Lenses with Reduced Halo," Opt. Commun. 19, 113-116 (2014).
341. J. Bar Magen Numhauser and Z. Zalevsky, "Stereovision Imaging in Smart Mobile Phone Using Add On Prisms," 3D Research Journal 5(1), Article No. 6, March 2014.
342. M. Cohen, R. Shavit and Z. Zalevsky, "Observing Optical Plasmons on a Single Nanometer Scale," Sci. Rep. 4, Nature Publishing Group, Article 4096 (2014).
343. A. Bitman, S. Goldring, I. Moshe and Z. Zalevsky, "Computed tomography using broadband Bessel THz beams," Opt. Lett. 39, 1925-1928 (2014). Selected also as a paper in the Virtual Journal for Biomedical Optics (VJBO).
344. A. Borkowski, E. Marom and Z. Zalevsky, "Geometric Super Resolved Imaging based upon Axial Scanning and Phase Retrieval," Appl. Opt. 53, 3954-3966 (2014). Selected also as a paper in the Virtual Journal for Biomedical Optics (VJBO).
345. A. Schwarz, A. Shemer and Z. Zalevsky, "Light Intensity and SNR Improvement for High Resolution Optical Imaging via Time Multiplexed Pinholes Arrays," Appl. Opt. 53, 4483–4492 (2014).
346. N. Ozana, N. Arbel, Y. Beiderman, V. Mico, M. Sanz, J. Garcia, A. Anand, B. Javidi, Y. Epstein and Z. Zalevsky, "Improved noncontact optical sensor for detection of glucose concentration and for indication of dehydration level," Biomedical Optics Express 5, 1926-1940 (2014). Top Download from Biomedical Optics Express in June and in July 2014; Top Downloads from Biomedical Optics Express for the topic of Clinical Optical Diagnostics for 2014-2015; Selected as "**Top Biophotonics Stories of 2014**" by the Biophotonics journal: http://www.photonics.com/Article.aspx?AID=57009.; Top Downloaded Articles on Glucose Sensing and Blood/Tissue Oxygenation from Biomedical Optics Express until 2017.
347. F. H. Imai, D. C. Linne von Berg, T. Skauli, S. Tominaga and Z. Zalevsky, "Imaging systems and applications: Introduction to the feature," Applied Optics. 53, ISA1-ISA2 (2014). Top Download from Appl. Opt. in May and in June 2014;
348. A. Bitman, S. Pearl, I. Moshe and Z. Zalevsky, "Terahertz ultrashort pulse behavior: near-field and far-field propagation," Electromagnetics 35, 167-176 (2015).
349. S. Mahajan, V. Trivedi, V. Chhaniwal, Z. Zalevsky, B. Javidi and A. Anand, "Optical temperature sensor using speckle field," Sensors & Actuators: A. Physical 216, 312–317 (2014).
350. V. Mico, C. Ferreira, Z. Zalevsky and J. García, "Spatially-multiplexed interferometric microscopy (SMIM): converting a standard microscope into a holographic one," Opt. Exp. 22, 14929-14943 (2014).
351. Y. Sintov, D. Malka and Z. Zalevsky, "Prospects for diode pumped Alkali atom based hollow core photonic crystal fiber lasers," Opt. Lett. 39, 4655-4658 (2014). Selected also as a paper in the Virtual Journal for Biomedical Optics (VJBO).
352. V. Sheinman, A. Rudnitsky, R. Toichuev, A. Eshiev, S. Abdullaeva, T. Egemkulov and Z. Zalevsky, "Implantable Photonic Devices for Improved Medical Treatment," Journal of Biomedical Optics 19, 108001 (2014).
353. A. Ilovitsh and Z. Zalevsky, "Super resolved passive imaging of remote moving object on top of sparse unknown background," Appl. Opt. 53, 6340-6343 (2014).
354. D. Malka, Y. Sintov and Z. Zalevsky, "Fiber Lasers Monolithic Coherent Beam combiner based on Multi-Core Photonic Crystal Fiber," Opt. Eng. 54, 5 pages (2015).
355. I. Carmeli, M. Cohen, O. Hieflero, Y. Lilach, Z. Zalevsky, V. Mujica and S. Richter, "Space Quantization of Light Transmission formed by Strong Coupling of Plasmonic Cavity Modes with Photosynthetic Complexes," Nature Commun. 6 (2015).
356. Z. Zalevsky, I. Raveh, O. Limon, S. Ben Yaish, K. Lahav Yacouel, R. David and A. Zlotnik, "Clinical Trials of Interference-based Extended Depth of Focus Intra Ocular Lens Design," Photonics 1, 296-302 (2014), Published in a special issue on Optics and Technologies for Ophthalmology and Visual Science, MDPI publication.

357. Y. Beiderman, E. Kolberg, I. Halachmi, B. Abramov, R. Amsalem and Z. Zalevsky, "Usage of automated remote sensing system for optimized treatment of cattle," Journal of Agricultural Engineering XLV, 153-160 (2014).
358. Y. Beiderman, M. Belkin, Y. Rotenstreich and Z. Zalevsky, "Experimental Quantification of the Tactile Spatial Responsivity of Human Cornea," Journal of Medical Imaging 2(1), 016002 (2015).
359. A. Herzog, D. Malka, Z. Zalevsky and A. A. Ishaaya, "Effect of spatial-coherence on damage occurrence in multimode optical fibers," Opt. Lett. 40(3), 415-418 (2015).
360. J. Azougi, A. Rudnitsky, G. Berkovic and Z. Zalevsky, "Fully integrated magneto-optic in-fiber micro modulator," Journal of Physical Chemistry & Biophysics 4, 167 (2014). **Selected as one of High Impact List of Articles**
361. D. Malka, G. Berkovic, Y. Tischler and Z. Zalevsky, "Super-Resolved Raman Spectra of Toluene and Toluene–Chlorobenzene Mixture," Spectroscopy Letters 48, 431-435 (2015).
362. S. Asraf, A. Meiri, J. Lubat, A. Shemer and Z Zalevsky, "Brillouin Optical Spatial Fourier Domain Analyzer," Opt. Eng. 54, 011009 (2015).
363. T. Ilovitsh, A. Ilovitsh, J. Sheridan and Z. Zalevsky, "Optical Realization of the Radon Transform," Opt. Exp. 22, 32301-32307 (2014). Selected also as a paper in the Virtual Journal for Biomedical Optics (VJBO).
364. A. Ilovitsh, E. Preter, N. Levanon and Z. Zalevsky, "Time multiplexing super resolution using Barker-based array," Opt. Lett. 40, 163–165 (2015).
365. H. Duadi, N. Alon, O. Cohen, T. Samet, O. Shefi and Z. Zalevsky, "Promotion of Neural Sprouting Using Low Level Green LED Phototherapy," Journal of Biomedical Optics Letters 20(2), 20502 (2015).
366. A. Schwarz, J. Wang, A. Shemer, Z. Zalevsky and B. Javidi, "Lensless three-dimensional integral imaging using variable and time multiplexed pinhole array," Opt. Lett. 40, 1814-1817 (2015).
367. F. Tenner, Z. Zalevsky and M. Schmidt, "Optical tremor analysis with speckle imaging technique," Journal of Imaging Science and Technology 59(1), 10402-1-10402-6(6) (2015).
368. **I. Margalith, N. Ozana, Y. Beiderman, M. Kunin, G. Abebe Campino, R. Gerasi, J. Garcia, V. Mico and Z. Zalevsky, "Demonstration of a remote optical measurement configuration that correlates with breathing, heart rate, pulse pressure, blood coagulation and blood oxygenation," Proceedings of the IEEE 103, 248 - 262 (2015). (invited paper).**
369. O. Limon and Z. Zalevsky, "Ophthalmic Halo Reduced Lenses Design," Opt. Commun. 342, 253–258 (2015). Selected as one out of 23 papers published by all Elsevier journal to be in the Virtual Special Issue on the International Year of Light containing papers that show the importance of light and light-based technologies in daily life. One of the most downloaded paper during May-September 2015.
370. **T. Ilovitsh, Y. Danan, R. Meir, A. Meiri and Z. Zalevsky, "Cellular imaging using temporally flickering nanoparticle," Sci. Rep. 5, Nature Publishing Group, Article 8244 (2014).**
371. Y. Bishitz, N. Ozana, Y. Beiderman, F. Tenner, M. Schmidt, V. Mico, J. Garcia and Z. Zalevsky, "Noncontact optical sensor for bone fracture diagnostics," Biomedical Opt. Exp. 6, 651-657 (2015).
372. D. Mas, B. Ferrer, D. Cojoc, S. Finaurini, V. Mico, J. Garcia and Z. Zalevsky, "Novel image processing approach to detect malaria," Opt. Commun. 350, 13-18 (2015). One of the most downloaded paper during June-November 2015.
373. T. Yeminy, D. Sadot and Z. Zalevsky, "All-Optical Silicon-Photonic Constellation Conversion of Amplitude-Phase Modulation Formats," IEEE photonics 7(2), (April 2015).
374. T. Ilovitsh, Y. Danan, A. Ilovitsh, A. Meiri, R. Meir and Z. Zalevsky, "Superresolved labeling nanoscopy based on temporally flickering nanoparticles and the K-factor image deshadowing," Biomedical Opt. Exp. 6, 1262-1272 (2015).
375. O. Wagner, A. Schwarz, A. Shemer, C. Ferreira, J. García and Z. Zalevsky, "Super Resolved Imaging Based upon Wavelength Multiplexing of Projected Unknown Speckle Patterns," Appl. Opt. 54, D51-D60 (2015).
376. Y. Rivenson, M. Aviv (Shalev), A. Weiss, H. Panet and Z. Zalevsky, "Digital resampling diversity sparsity constrained wavefield reconstruction using single magnitude image," Opt. Lett. 40, 1842-1845 (2015).
377. A. Ilovitsh, T. Ilovitsh, E. Preter, N. Levanon and Z. Zalevsky, "Super resolution using Barker-based array projected via spatial light modulator," Opt. Lett. 40, 1802-1805 (2015).
378. **A. Meiri, C. G. Ebeling, J. Martineau, Z. Zalevsky, J. Gerton and R. Menon "Increased Localization Precision by Interference Fringe Analysis," Nanoscale 7, 10430–10437 (2015).**
379. E. Y. Lam, G. Bennett, C. Fernandez-Cull, D. Gerwe, M. Kriss and Z. Zalevsky, "Imaging systems and signal recovery: introduction to feature issue," Applied Optics 54, IS1-IS2 (2015).
380. **N. Sidelman, A. Kolbe, M. Cohen, Z. Zalevsky, A. Herrman and S. Richter, "Rapid Particle Patterning in Surface Deposited Micro-Droplets of Low Ionic Content via Low-Voltage Electrochemistry and Electrokinetics," Sci. Rep. 5, Nature Publishing Group, 13095 (2015).**

381. T. Ilovitsh, Y. Danan, R. Meir, A. Meiri and Z. Zalevsky, "Cellular superresolved imaging of multiple markers using temporally flickering nanoparticles," Sci. Rep. 5, Nature Publishing Group, 10965 (2015).

382. Y. Sintov, S. Goldring, S. Pearl, E. Lebiush, B. Sfez, D. Malka and Z. Zalevsky, "A robust All-fiber Q-Switched 1 micron Yb3+ Fiber laser," Applied Physics B: Lasers and Optics 120(3), 489-495 (2015).
383. D. Malka, M. Cohen, J. Turkiewicz and Z. Zalevsky, "Optical Micro-Multi-Racetrack Resonator Filter Based on SOI Waveguides," Journal of Photonics and Nanostructures-Fundamentals and Applications (PNFA) 16, 16-23 (2015).
384. T. Ilovitsh and Z. Zalevsky, "Temporally flickering of contrast agents for enhanced optical imaging," WIREs Nanomed Nanobiotechnol 8, 439–448 (2016), doi: 10.1002/wnan.1375 (**invited paper**).
385. A. Ilovitsh, V. Mico and Z. Zalevsky, "Super resolved optical system for objects with finite sizes using circular gratings," Opt. Exp. 23 (18), 23667-23679 (2015).

386. T. Ilovitsh, A. Weiss, A. Meiri, C. G. Ebeling, A. Amiel, H. Katz, B. Mannasse-Green and Z. Zalevsky, "K-factor image deshadowing for three-dimensional fluorescence microscopy," Sci. Rep., Nature Publishing Group 5, Article number: 13724 (2015).

387. D. Malka, Y. Sintov and Z. Zalevsky, "Design of a 1x4 Silicon-Alumina Wavelength Demultiplexer based on Multimode Interference in Slot Waveguide Structures," Journal of Optics (JOPT) 17 125702 (9pp) (2015).
388. C. Abraham, Y. Beiderman, N. Ozana, F. Tenner, M.I Schmidt, M. Sanz, J. Garcia and Z. Zalevsky, "Photonic non-contact estimation of blood lactate level," Biomedical Optics Express **6**(10), 4144-4153 (2015). This paper was nominated and selected to be featured in OSA Spotlight on Optics. The summary on this paper in OSA Spotlight on Optics:
http://www.osapublishing.org/spotlight/summary.cfm?id=327375
389. Y. Danan, Y. Ramon, J. Azougi, A. Douplik and Z. Zalevsky, "Decoupling and tuning the light absorption and scattering resonances in metallic composite nanostructures," Opt. Exp. 23, 29089-29099 (2015).

390. M. Cohen, R. Shavit, and Z. Zalevsky, "Enabling High Efficiency Nanoplasmonics with Novel Nanoantenna Architectures," Sci. Rep., Nature Publishing Group 5, Article number 17562 (2015).

391. T. Ilovitsh, A. Ilovitsh, A. Weiss, R. Meir and Z. Zalevsky, "Three dimensional imaging of gold-nanoparticles tagged samples using phase retrieval with two focus planes," Sci. Rep. 5, Nature Publishing Group, Article number: 15473 (2015).

392. A. Vegerhof, A. Rudnitsky, Y. Beiderman, H. Duadi, R. Popovtzer and Z. Zalevsky, "Manipulated magnetic nano particles for Photonic biomedical mapping," Nanoscience and Nanotechnology Letters 7, 861–869 (2015).
393. M. Mizrahi, E. Holdengreber, S. E. Schacham, E. Farber and Z. Zalevsky, "Improving RADAR's spatial recognition," IEEE Microwave Magazine 17(10), 28-34 (2016).
394. M. Mizrahi, E. Holdengreber, E. Farber and Z. Zalevsky, "Frequency multiplexing spatial super-resolved sensing for RADAR applications," Microwave & Opt. Technol. Lett. 58, 831–835 (2016).
395. Y. Rivenson, M. Aviv and Z. Zalevsky, "Compressive Fresnel holography approach for high resolution viewpoint inference," Opt. Lett. 40, 5606-5609 (2015).
396. A. Zev, A. Chelly, A. Karsenty and Z. Zalevsky, "Nanoscale silicon on insulator photo-activated modulator building block for optical communication," IEEE Photonics Technology Letters 28, 569-572 (2016).
397. A. Ilovitsh and Z. Zalevsky, "Time multiplexing based extended depth of focus imaging," Opt. Lett. 41, 183-186 (2016).
398. C. Ferreira, V. Micó, P. García-Martínez, I. Moreno, J. García and Z. Zalevsky, "Anamorphic Lohmann's first type system with a non-orthogonalcylindrical doublet. Application to optical encryption," Asian Journal of Physics 24(12), 1679-1702 (2015). **Invited paper**.
399. Y. Bishitz, N. Ozana, A. Schwarz, Y. Beiderman, J. Garcia and Z. Zalevsky, "Optical configuration of pigmented lesion detection by frequency analysis of skin speckle patterns," Biomedical Optics Express 7, 1003-1014 (2016).
400. L. Granero, C. Ferreira, Z. Zalevsky, J. García, and V. Micó, "Single-exposure super-resolved interferometric microscopy by RGB multiplexing in lensless configuration," Optics and Lasers in Engineering 82, 104-112, DOI: 10.1016/j.optlaseng.2016.02.010 (2016).
401. O. Wagner, M. Schultz, Y. Ramon, E. Sloutskin and Z. Zalevsky, "Optical-tweezing-based linear-optics nanoscopy," Opt. Exp. 24, 8013-8027 (2016). Selected also as a paper in the Virtual Journal for Biomedical Optics (VJBO).

402. N. Ozana, S. Buchsbaum, Y. Bishitz, Y. Beiderman, Z. Schmilovitch, A. Schwarz, J. Keshet and Z. Zalevsky, “An optical remote sensor for peanut kernel abortion classification,” Appl. Opt. 55, 4005-4010 (2016).
403. N. Ozana, Y. Beiderman, A. Anand, B. Javidi, S. Polani, A. Schwarz, A. Shemer, J. Garcia and Z. Zalevsky, “Non-contact speckle based optical sensor for detection of glucose concentration using magneto-optic effect,” Journal of Biomedical Optics 21(6), 065001 (2016).
404. H. Zafrir, Y. Ben Horin, U. Malik, C. Chemo and Z. Zalevsky, “Novel determination of radon-222 velocity in deep subsurface rocks, and the feasibility to using radon as an earthquake precursor,” Journal of Geophysical Research Solid Earth 121, 1-19 (2016).
405. D. Malka, Y. Danan, Y. Ramon and Z. Zalevsky, “A Photonic 1 × 4 Power Splitter Based on Multimode Interference in Silicon–Gallium-Nitride Slot Waveguide Structures,” Materials 9(7), 516 (2016).
406. N. Gorodesky, N. Ozana, Y. Berg, O. Dolev, Z. Kotler and Z. Zalevsky, “Estimation of through glass laser vias depth based on optical differential measurements of acoustic response in glass,” Journal of Optics 18, 095402 (2016).
407. Z. Zalevsky, A. Schwarz, A. Zlotnik, Y. Kapellner Rabinovitz, H. Pinhas and A. Shemer, “Computational expansion of imaging from visible to IR and gamma imaging systems” SPIE Newsroom, DOI: 10.1117/2.1201605.006422 (16 May 2016).
408. A. Bennett, A. Chelly, A. Karsenty, I. Gadasi, Z. Priel, Y. Mandelbaum, T. Lu, I. Shlimak and Z. Zalevsky, “Fast Optoelectronic Responsivity of Novel MOS Nanostructures,” Journal of Nanophotonics 10(3), 036001 (2016).
409. T. Sirkis, S. Agdarov, Y. Beiderman, R. Rozenshtein, Y. Beiderman and Z. Zalevsky, “Emerging Technology Design: Smart Bio-Sensing Clothing,” Engineering & Technology Reference journal, pp. 1–5 (2016). doi:10.1049/etr.2016.0005
410. E. Cohen, D. Malka, A. Shemer, A. Shahmoon, Z. Zalevsky and M. London, “Neural networks within multi-core optic fibers,” Sci. Rep. 6, 29080, Nature Publishing Group (2016).
411. A. Shahmoon, J. Strauss, H. Zafri, M. Schmidt and Z. Zalevsky, “High Resolution Fabrication of Interconnection Lines using Picosecond Laser and Controlled Deposition of Gold Nanoparticles,” Physics procedia 83, 188-193 (2016).
412. F. Tenner, S. Ramoser, M. Dobler, Z. Zalevsky and M. Schmidt, “Optical Measurement of the Connection State in Laser Brazing,” Physics procedia 83, 1233-1243 (2016).
413. T. Ilovitsh, B. Jalali, M. H. Asghari and Z. Zalevsky, “Phase stretch transform for super-resolution localization microscopy,” Biomedical Optics Express 7(10), 4198-4209 (2016).
414. M. Aviv Shalev, Y. Rivenson, A. Meiri and Z. Zalevsky, “Phase retrieval deburring for imaging of an high scattering object within a low scattering biological tissue,“ Journal of Biomed. Opt. 21 (9), 096008 (September 16, 2016);
415. Y. Danan, T. Ilovitsh, Y. Ramon, D. Malka, D. Liu and Z. Zalevsky, ”Silicon coated gold nanoparticles nanoscopy,” Journal of Nanophotonics 10(3), 036015-036015 (2016).
416. A. Ilovitsh, G. Rand, S. Levavi and Z. Zalevsky, “Time multiplexing based geometrical aberrations correction,” Opt. Lett. 41, 4257-4260 (2016).
417. J. Á. Picazo-Bueno, Z. Zalevsky, J. García, C. Ferreira and V. Micó, “Spatially-multiplexed interferometric microscopy (SMIM) with partially coherent illumination,” J. Biomed. Opt. 21(10), 106007 (2016).
418. Y. Mandel, Y. Kapeliner, T. Arens, N. Farah, A. Zlotnik, S. Ben-Yaish and Z. Zalevsky, “Head mounted DMD based projection system for natural and prosthetic visual stimulation in freely moving rats,” Sci. Rep. 6, 34873, Nature Publishing Group (2016).
419. A. Vegerhof, M. Motei, A. Rudinzky, D. Malka, R. Popovtzer and Z. Zalevsky, “Thermal therapy with Magnetic Nano Particles for Cell Destruction,” Biomedical Optics Express 7(11), 4581-4594 (2016).
420. A. Ilovitsh, P. Polak, Z. Zalevsky and O. Shefi, “Selective inactivation of enzymes conjugated to nanoparticles using tuned laser illumination,” Cytometry: Part A 91(8), 767-774, doi: 10.1002/cyto.a.23005 (2016).
421. V. Mico, I. Moreno, Z. Zalevsky and C. Ferreira, “A new key based on tilted lenses for optical encryption,” Appl. Opt. 56, A115-A125 (2016).
422. T. Sirkis, Y. Beiderman, S. Agdarov, Y. Beiderman and Z. Zalevsky, “Monitoring blood vital bio signs using secondary speckle patterns,” Opt. Exp. 24, 27899-27909 (2016).
423. T. Ram-Cohen, R. Alimi, E. Weiss and Z. Zalevsky, “Characterization and Detection of an Oscillating Magnetic Dipole Signals,” Measurement Science and Technology Journal 28(4) (2017).
424. A. Vegerhof, E. Barnoy, M. Motiei, D. Malka, Y. Dannan, Z. Zalevsky and R. Popovtzer, “Targeted Magnetic Nanoparticles for Mechanical Lysis of Tumor Cells by Low-Amplitude Alternating Magnetic Field,” Materials 9(11), 943 (2016).

425. H. Pinhas, Y. Danan, M. Sinvani, M. Danino and Z. Zalevsky, “Experimental characterization towards an in-fibre integrated silicon slab based all-optical modulator,” Journal of the European Optical Society (JEOS): Rapid Publications 13(1), 1-9 (2017).
426. T. Ilovitsh, A. Ilovitsh, O. Wagner and Z. Zalevsky, “Super resolved nanoscopy using Brownian motion of fluorescently labeled gold nanoparticles,” Appl. Opt. 56(5), 1365-1369 (2017). Selected also as a paper in the Virtual Journal for Biomedical Optics (VJBO), Vol. 12, Iss. 4, April 28, 2017.
427. T. Sirkis, Y. Beiderman, S. Agdarov, Y. Beiderman and Z. Zalevsky, “Fiber sensor for non-contact estimation of vital bio-signs,” Opt. Commun. 391, 63-67 (2017).
428. A. Rudnitsky, S. Agdarov, K. Gulitsky and Z. Zalevsky, “Silicon based mechanic-photonic wavelength converter for infrared photo-detection,” Opt. Commun. 392, 114-118 (2017). Featured by Advances in Engineering as a key scientific article contributing to research excellence in science and engineering (invited articles are less than 0.1% of the whole published literature).
https://advanceseng.com/electrical-engineering/silicon-mechanic-photonic-wavelength-converter-infrared-photo-detection/
429. Y. Mandelbaum, A. Zev, A. Chelly, Z. Zalevsky and A. Karsenty, “Study of the Photo- and Thermo-Activation Mechanisms in Nanoscale SOI Modulator," Journal of Sensors 2017, Article ID 9581976, (2017).
430. J. Á. Picazo-Bueno, Z. Zalevsky, J. García and V. Micó, “Superresolved spatially-multiplexed interferometric microscopy,” Opt. Lett. 42(5), 927-930 (2017). Selected also as a paper in the Virtual Journal for Biomedical Optics (VJBO), Vol. 12, Iss. 5, May 18, 2017.
431. Y. Danan, I. Yariv, Z. Zalevsky and M. Sinvani, “Improved margins detection of regions enriched with gold nanoparticles inside biological phantom,” Materials 10, 203 (2017).
432. M. Cohen, Y. Abulafia, R. Shavit and Z. Zalevsky, “Secondary Electron Imaging of Light at the Nanoscale,” ACS Nano 11(3), 3274-3281 (2017).
433. A. Meiri, E. M. Strohm, M. C Kolios and Z. Zalevsky, “Spatial interference encoding patterns based photoacoustic microscopy,” Opt. Commun. 401, 23-28 (2017).
434. A. Meiri, C. G. Ebeling, J. Martineau, Z. Zalevsky, J. M. Gerton and R. Menon, “Interference Based Localization of Single Emitters,” Opt. Exp. 25, 17174-17191 (2017).
435. P. Catrysse, K. Irsch, B. Javidi, P. Chrysanthe, M. Testorf and Z. Zalevsky, “Modern imaging: introduction to the feature issue,” Applied Optics 56(9), MI1-MI2 (2017). Top downloads in March, April 2017.
436. J. Bar Magen Numhauser and Z. Zalevsky, “Frequency modulated continuous wave RADAR for objects mapping in enclosed spaces using smartphones and Arduino components,” 3D Research Journal 8(2), Article 129 (2017).
437. M. Cohen, Y. Abulafia, D. Lev, A. Lewis, R. Shavit and Z. Zalevsky, “Wireless Communication with Nanoplasmonic Data Carriers: Macroscale Propagation of Nanophotonic Plasmon Polaritons Probed by Near Field Nanoimaging,” Nano Lett. 17(9), 5181-5186 (2017), doi: 10.1021/acs.nanolett.7b00266. Selected to be on the cover page of Nano Lett. journal.
438. S. Asraf, Y. Sintov and Z. Zalevsky, “Novel Configuration for Enhanced and Compact All-Fiber Faraday Rotator with Matched Birefringence,” Opt. Exp. 25(16), 18643-18655 (2017).
439. Y. Danan, D. Malka, N. Ozana and Z. Zalevsky, “Nanostructures with periodic heating–cooling cycles for photoacoustic imaging using continuous-wave illumination,” Journal of Nanophotonics 21(1), paper 012507 (2018).
440. D. Malka, E. Cohen and Z. Zalevsky, “Design of 4x1 Power Beam Combiner based on Multi Core Photonic Crystal Fiber,” Applied Sciences 7(7), 695-703 (2017).
441. V. Kleiner, A. Rudnitsky and Z. Zalevsky, “Direct phase and amplitude digitalization based on free-space interferometry," Journal of Optics (JOPT) 19(12) (2017).
442. D. Malka, A. Vegerhof, E. Cohen, M. Rayhshtat, A. Libenson, M. Aviv Shalev and Z. Zalevsky, “Improved diagnostic process of multiple sclerosis using automated detection and selection process in magnetic resonance imaging,” Applied Sciences 7(8), 831 (2017).
443. I. Alexeev, J. Wua, M. Karga, Z. Zalevsky and M. Schmidt, “Determination of laser beam focus position based on secondary speckles pattern analysis,” Appl. Opt. 56(26), 7413-7418 (2017).
444. A. Bennett, T. Sirkis, Y. Beiderman, S. Agdarov, Y. Beiderman and Z. Zalevsky, “Approach to breast cancer early detection via tracking of secondary speckle patterns reflected from the skin with artificial intradermal impurity,” Biomedical Opt. Exp. 8(12), 5359 (2017).
445. T. Frumkin, A. Ishaaya and Z. Zalevsky, “Multi-Taper high efficiency coupler that overcomes coupling misalignment errors,” J. of Nano Photonics 12(01), 1 (2018).
446. O. Wagner, A. Pandya, Y. Shemla, H. Pinhas, I. Schelkanova, A. Shahmoon, Y. Mandel, A. Douplik and Z. Zalevsky, “Non-labelled lens-less micro-endoscopic approach for cellular imaging through highly scattering media,” Bioscience Reports 38(1), (2018). **Invited paper**.

447. Y. Mandelbaum, I. Gadasi, A. Chelly, Z. Zalevsky and A. Karsenty, “Small Signals’ Study of Thermal Induced Current in Nanoscale SOI Sensor," Journal of Sensors Vol. 2017, Article ID 1961734, 9 pages (2017).
448. Y. Danan, A. Schwarz, M. Sinvani and Z. Zalevsky, “Sensitivity enhanced photo-thermal borders detection in bio-phantoms enriched with gold nanoparticles,” Advanced Materials Letters 9(7), 471-475 (2018).
449. H. Pinhas, D. Malka, Y. Danan, M. Sinvani and Z. Zalevsky, “Design of fiber-integrated tunable thermo-optic C-band filter based on coated silicon slab,” Journal of the European Optical Society-Rapid Publications 13:32 (2017).
450. A. Shapira, A. Sterkin, M. Fried, O. Yehezkel, Z. Zalevsky and U. Polat, “Increased gamma band activity for lateral interactions in humans,” PLoS ONE 12(12), e0187520 (2017). https://doi.org/10.1371/journal.pone.0187520.
451. H. Zafri, J. Azougi, O. Girshevitz, Z. Zalevsky and D. Zitoun, “Electron-Beam Patterning for Writing of Positively-Charged Gold Colloidal Nanoparticles,” Journal of Nanoparticle Research 20, 34 (2018).
452. I. Gabay, A. Shemer, A. Schwartz and Z. Zalevsky, “2D Mono detection spatially super-resolved microwave imaging for Radar applications,” Applied Optics 57, B114-B121 (2018).
453. T. Yeminy, D. Sadot and Z. Zalevsky, “Analysis of photonic noise generated due to Kerr nonlinearity in silicon ring resonators,” Opt. Exp. 26(1), 284-297 (2018).
454. M. Golberg, J. Ruiz-Rivas, S. Polani, Y. Beiderman and Z. Zalevsky, “Large scale clinical validation of non-contact and continuous extraction of blood pressure via multi-point defocused photonic imaging,” Applied Optics 5797, B45-B51 (2018). **This paper was highlighted as an Editor's Pick (serve to highlight articles with excellent scientific quality and are representative of the work taking place in a specific field)**.
455. I. Gabay, M. Danino and Z. Zalevsky, “Radio Frequency Echo Mapping with Cellular Devices,” Scientific Phone Apps and Mobile Devices 4(1) (2018). https://doi.org/10.1186/s41070-018-0020-x
456. E. Wohlgemuth, Y. Yoffe, T. Yeminy, Z. Zalevsky and D. Sadot, “Demonstration of Coherent Stealthy and Encrypted Transmission for Data Center Interconnection,” Opt. Exp. 26, 7638-7645 (2018).
457. Z. Zalevsky, M. R. Arnison, B. Javidi and M. Testorf, "Imaging and applied optics: introduction to the feature issue," Appl. Opt. 57, IAO1-IAO2 (2018).
458. D. Dahan, A. Yaacobi, E. Pinsky and Z. Zalevsky, “Spatial super-resolution of colored images by micro mirrors," Journal of Optics (JOPT) 20, 065704 (2018).
459. O. Fogel, E. Benjamin, S. Krylov, Z. Kotler and Z. Zalevsky, “3D Printing of Functional Metallic Microstructures and its Implementation in Electrothermal Actuator,” Additive Manufacturing 21, 307-311 (2018).
460. N. Ozana, R. Talman, A. Shemer, A. Schwartz, S. Polani, R. Califa, Y. Beiderman, J. Ruiz-Rivas, J. García and Z. Zalevsky, “Remote Photonic Sensing of Glucose Concentration via Analysis of Time Varied Speckle Patterns,” Advanced Materials Letters 9(9), 624-628 (2018).
461. M. Shergei, Y. Beiderman, J. García and Z. Zalevsky, “Rounding noise effects’ reduction for estimated movement of speckle patterns,” Opt. Exp. 26(19), 24663-24677 (2018).
462. N. Ozana, R. Bauer, K. Ashkenazy, N. Sasson, A. Schwarz, A. Shemer and Z. Zalevsky, “Demonstration of a Speckle Based Sensing with Pulse Doppler Radar for Vibrations Detection,” Sensors 18(5) (2018). doi: 10.3390/s18051409
463. S. Asraf, T. Yeminy, D. Sadot and Z. Zalevsky, “Proof of Concept for Ultrahigh Resolution Photonic Spectral Processor,” Opt. Exp. 26(19), 25013-25019 (2018).
464. N. Ozana, D. Sagiv, N. Lipschitz-Tayar, A. Schwarz, A. Shemer, M. Wolf and Z. Zalevsky, “Remote optical sensing in otolaryngology: middle ear effusion detection,” Opt. Exp. 26(13), 16187-16199 (2018).
465. O. Fogel, S. Cohen, Z. Kotler and Z. Zalevsky, “Mechanical properties of 3D metallic microstructures printed by laser induced forward transfer,” Physics procedia 74, 285-289 (2018).
466. H. Pinhas, O. Wagner, Y. Danan, M. Danino, Z. Zalevsky and M. Sinvani, “Plasma dispersion effect based super-resolved imaging in silicon,” Opt. Exp. 26, 25370-25380 (2018).
467. H. Pinhas, A. Shemer, O. Wagner, Y. Danan, Y. Fleger, Y. Ramon, M. Danino, M. Sinvani and Z. Zalevsky, “Concatenated silicon etalon tunable filter for hyperspectral imaging in the near IR,” Opt. Eng. 57(11), 115101 (2018). https://doi.org/10.1117/1.OE.57.11.115101
468. A. Bennett, Ye. Beiderman, S. Agdarov, Ya. Beiderman, N. Ozana, M. Belkin, and Z. Zalevsky, “Intraocular pressure remote photonic bio-monitoring based on temporally encoded external sound wave stimulation,” Journal of Biomed. Opt. 23(11), 117001 (2018).
469. E. Wohlgemuth, Y. Yoffe, T. Teminy, Z. Zalevsky and D. Sadot, “Photonic-Layer Encryption and Steganography over IM/DD communication system,” Opt. Exp. 26(25), 32691-32703 (2018).

470. R. Dadabayev, N. Shabairou, Z. Zalevsky and D. Malka, “A Visible Light RGB Wavelength Demultiplexer Based on Silicon-Nitride Multicore PCF,” Journal of Optics and Laser Technology 111(JUN):411-416 (2018). DOI: 10.1016/j.optlastec.2018.10.016
471. N. Shabairou, E. Cohen, O. Wagner, D. Malka and Z. Zalevsky, “Color image identification and reconstruction using artificial neural networks on multi-mode fiber images, towards an all optic design,” Opt. Lett. 43(22), 5603-5606 (2018).
472. A. Schwarz, N. Ozana, R. Califa, A. Shemer and Z. Zalevsky, “Coherent Elastographic Tomography via Time Multiplexing,” Quantum Electronics Journal 49(1), 35-42 (2019) (**Invited paper**).
473. T. Yeminy, Z. Zalevsky and D. Sadot, “Signal-Dependent Pump to Probe Noise Transfer Due to Kerr Nonlinearity in Silicon Ring Resonators,” JOSA B 36(2) 194-199 (2019).
474. **V. Mico, J. Zheng, J. Garcia, Z. Zalevsky and P. Gao, “Resolution enhancement in quantitative phase microscopy: a review,” Advances in Optics and Photonics 11(1), 135-214 (2019). Selected to be one of View Top Downloads for May, June 2019.**
475. C. Abraham, N. Farah, L. Gerbi-Zarfati, Y. Harpaz, Z. Zalvesky and Y. Mandel, “Active photonic sensing for super-resolved reading performance in simulated prosthetic vision,” Biomedical Optics Express 10(3) 1081-1096 (2019).
476. **B. Lengenfelder, F. Mehari, M. Hohmann, M. Heinlein, E. Chelales, M. Waldner, F. Klämpfl, Z. Zalevsky and M. Schmidt, “Remote photoacoustic sensing using speckle-analysis,” Sci. Rep. 9, Nature Publishing Group, Article number: 1057 (2019).**
477. J. Bar-Magen Numhauser and Z. Zalevsky, “Remote objects detection and mapping using Radio Frequency with a Nexus 5X Smartphone,” Scientific Phone Apps and Mobile Devices Journal 5(2) (2019).
478. **O. Wagner, M. Schultz, E. Edri, R. Meir, E. Barnoy, A. Meiri, H. Shpaisman, E. Sloutskin and Z. Zalevsky, “Imaging of nanoparticle dynamics in live and apoptotic cells using temporally-modulated polarization,” Sci. Rep., Nature Publishing Group 9, Article number: 1650 (2019).**
479. V. Trivedi, S. Mahajan, M. Joglekar, V. Chhaniwal, Z. Zalevsky, B. Javidi, A. Anand, “3D printed hand-held refractometer based on laser speckle correlation,” Optics and Lasers in Engineering 118, 7-13 (2019). https://doi.org/10.1016/j.optlaseng.2019.01.007
480. O. Fogel, G. Bernstein Toker, G. Cohen-Taguri, P. Gergaud, F. Gaillard, Z. Kotler and Z. Zalevsky, “An investigation of the influence of thermal process on the electrical conductivity of LIFT printed Cu structures,” Journal of Physics D: Applied Physics 52, 285303 (2019).
481. M. Benyamin, H. Genish, R. Califa, N. Ozana, A. Schwartz and Z. Zalevsky, “Non-contact photoacoustic imaging using laser speckle contrast analysis,” Opt. Lett. 44(12) 3110-3113 (2019).
482. D. Malka, B. Adler Berke, Y. Tischler and Z. Zalevsky, “Improving Raman Spectra of Pure Silicon Using Super-Resolved Method,” Journal of Optics 21, 075801 (2019).
483. D. Fixler, C. Tzur and Z. Zalevsky, “Genetic Algorithms Based Design for Metal-Enhanced Fluorescent Nanostructures,” Materials 12(11), 1766 (2019). DOI: 10.3390/ma12111766
484. Y. Zabari, S. Asraf, N. Ozana, N. Shabairou and Z. Zalevsky, “Optical tissue probing: Human skin hydration detection by speckle patterns analysis,” Biomedical Optics Express 10(9), 4874-4883 (2019).
485. D. Dahan, A. Yaacobi, G. Aharonovich, E. Pinsky and Z. Zalevsky, “Broadband Field of View Expansion Using a Pair of Digital Micromirror Devices,” JOSA A 36, 1631-1641 (2019).
486. N. Ozana, J. A. Noah, X. Zhang, Y. Ono, J. Hirsch and Z. Zalevsky, “Remote photonic sensing of cerebral hemodynamic changes via temporal spatial analysis of acoustic vibrations" Journal of Biophotonics 13(2):e201900201 (2019), DOI: 10.1002/jbio.201900201.
487. **A. Sanjeev, Y. Kapellner, N. Shabairou, E. Gur, M. Sinvani and Z. Zalevsky, “Non-Invasive Imaging Through Scattering Medium by Using a Reverse Response Wavefront Shaping Technique,” Sci. Rep., Nature Publishing Group 9(1), 1-11 (2019).**
488. B. Lengenfelder, F. Mehari, M. Hohmann, C. Löhr, M. J. Waldner, M. Schmidt, Z. Zalevsky and F. Klämpfl, “Contact-free endoscopic photoacoustic sensing using speckle-analysis,” Journal of Biophotonics 12(12), e201900130 (2019).
489. **M. Karelits, Y. Mandelbaum, Z. Zalevsky and A. Karsenty, “Time-Spectral based Polarization-Encoding for Spatial-Temporal Super-Resolved NSOM Readout," Sci. Rep., Nature Publishing Group 9, Article number: 13089 (2019).**
490. J. Belhassen, A. Frisch, Y. Kapellner, Z. Zalevsky and A. Karsenty, “V-groove shaped silicon-on-insulator photo-polarized activated modulator (SOIP2AM): A polarizing transistor,” JOSA A 37, 46-55 (2020).
491. D. Gotthilf Nezri, A. Zlotnik and Z. Zalevsky, “Passive optical device for nystagmus correction and ophthalmic resolution enhancement,” Appl. Opt. 59, 484-491 (2020).

492. A. Bennett, E. Davidovitch, Y. Beiderman, S. Agadarov, Y. Beiderman, A. Moshkovitz, U. Polat and Z. Zalevsky, “Corneal thickness measurement by secondary speckles tracking and image processing using machine-learning algorithms,” Journal of Biomedical Optics 24(12), 126001 (2019).
493. Z. Kalyzhner, O. Levitas, F. Kalichman, R. Jacobson and Z. Zalevsky, “Photonic human identification based on deep learning of back scattered laser speckle patterns,” Opt. Exp. 27, 36002-36010 (2019).
494. J. Belhassen, Z. Zalevsky and A. Karsenty, “Optical Polarization Sensitive Ultra-Fast Switching and Photo-Electrical Device,” Nanomaterials *9*(12), 1743 (2019). https://doi.org/10.3390/nano9121743
495. M. Karelits, E. Lozitsky, A. Chelly, Z. Zalevsky and A. Karsenty, “Advanced surface probing using dual-mode NSOM-AFM silicon-based photo-sensor,” Nanomaterials 9(12), 1792 (2019).
496. O. Herman, O. Wagner, N. Shabaitou and Z. Zalevsky, “Time multiplexed super resolution of multicore fiber endoscope using multimode fiber illumination patterns,” Optical Fiber Technology (2020). **Invited paper**.
497. S. Asraf, B. Lengenfelder, M. Schmidt and Z. Zalevsky, “Remote Speckle-Based Measurements of backward Brillouin Acoustic Vibrations in Optical Fibers,” Applied Sciences (2020).
498. O. Wagner, E. Edri, P. Hadikahani, H. Shpaisman, Z. Zalevsky and D. Psaltis, “Microfluidic-based linear-optics label-free imager,” Lab on a Chip (2020).
499. N. Gorodesky, S. Cohen, M. Altman, O. Fogel, G. Cohen-Taguri, Y. Fleger, Z. Kotler and Z. Zalevsky, “Concurrent formation of metallic glass during laser forward transfer 3D printing,” Advanced Functional Materials 30, 2001260 (2020). https://doi.org/10.1002/adfm.202001260
500. A. Bennett, Ye. Beiderman, S. Agdarov, Ya. Beiderman, R. Hendel, B. Straussman and Z. Zalevsky, “Monitoring of vital bio-signs by analysis of speckle patterns in fabric-integrated multimode optical fiber sensor,” Opt. Exp. 28(14), 20830-20844 (2020).
501. A. Sanjeev, N. Shabairou, A. Attar, D. Scheberbaum, Y. Kapellner, M. Sinvani and Z. Zalevsky, “Generation and Manipulation of Superoscillatory Hotspots Using Virtual Fourier Filtering and CTF Shaping,” Sci. Rep., Nature Publishing Group 10(1), 4755 (2020). doi: 10.1038/s41598-020-61674-z
502. D. Duadi, N. Ozana, N. Shabairou, M. Wolf, Z. Zalevsky and A. Primov-Fever, “Non-contact optical sensing of vocal fold vibrations by secondary speckle patterns,” Opt. Exp. 28(14), 20040-20050 (2020).
503. Z. Shemesh, G. Chaimovich, L. Gino, N. Ozana, J. Nylk, K. Dholakia and Z. Zalevsky, “Reducing data acquisition for light-sheet microscopy by extrapolation between imaged planes,” Journal of Biophotonics 13(7), e202000035 (2020).
504. G. Chen, S. Asraf and Z. Zalevsky, “Super Resolved Space-Dependent Sensing of Temporal Signals by Space Multiplexing,” Applied Optics 59 (14), 4234-4239 (2020).
505. N. Shabairou, B. Lengenfelder, M. Hohmann, F. Klämpfl, M. Schmidt and Z. Zalevsky, “All-optical, an ultra-thin endoscopic photoacoustic sensor using multi-mode fiber,” Sci. Rep., Nature Publishing Group 10, Article number: 9142 (2020). Editor choice for November 2021.
506. A. Schwarz, A. Shemer, Y. Danan, R. Bar-Shalom, H. Avraham, A. Zlotnik and Z. Zalevsky, “Gamma Radiation Imaging System via Variable and Time Multiplexed Pinholes Arrays,” Sensors (biomedical sensors section) 2020, 20, 3013 (2020); doi:10.3390/s20113013
507. M. Karelits, Z. Zalevsky and A. Karsenty, “Nano Polarimetry: Enhanced AFM-NSOM Triple-Mode Polarimeter Tip,” Sci. Rep., Nature Publishing Group 10, 16201 (2020). https://doi.org/10.1038/s41598-020-72483-9
508. M. Golberg, R. Califa, J. Garcia and Z. Zalevsky, “Analyzing the requirements of Camera's parameters for enhanced sensing of flow dynamics,” Engineering Research Express 2(3), id.035032, 10 pp (2020).
509. Y. Mandelbaum, R. Mottes, Z. Zalevsky, D. Zitoun and A. Karsenty, “Design of Surface Enhanced Raman Scattering (SERS) Nanosensor Array,” Sensors *20*(18), 5123 (2020). https://doi.org/10.3390/s20185123. **Invited paper**.
510. H. Zafrir, S. Barbosa, E. Levintal, N. Weisbrod, Y. Ben Horin and Z. Zalevsky, “The impact of atmospheric and tectonic constraints on Rn-222 and CO2 flow in geological porous media - a dozen-year research summary,” Frontiers in Earth Science, Section Geochemistry, doi: 10.3389/feart.2020.559298 (2020).
511. Z. Wang, X. Dong, S. Zhou, X. Zheng and Z. Zalevsky, “Ultra-Narrow Bandwidth Graphene Quantum Dots for Super Resolved Spectral and Spatial Sensing,” NPG Asia Materials 13, Article number: 5 (2021). https://doi.org/10.1038/s41427-020-00269-6
512. I. Orr, M. Cohen and Z. Zalevsky, "High resolution RADAR free-space segmentation using weakly supervised learning" Nature Machine Intelligence 3, pages 239–246 (2021). 10.1038/s42256-020-00288-6
513. S. Asraf, M. Fridman and Z. Zalevsky, “Fibers-based Temporal Super-Resolved Imaging,” Sci. Rep., Nature Publishing Group 10, Article number: 17750 (2020).

514. Y. Danan, D. Avraham and Z. Zalevsky, “Reduction in irradiation dose in aperture coded enhanced computed tomography imager using super- resolution techniques,” Sensors (Biosensors section), *20*(22), 6551 (2020).
515. H. Lupa Yitzhak, Y. Tzabari Kelman, A. Moskovenko, E. Zhovnerchuk and Z. Zalevsky, ”Emotion recognition using speckle patterns analysis and k-nearest neighbors classification,” Journal of Optics 23(1), 015302 (2020).
516. Y. Tzabari Kelman, H. Lupa, N. Shabairou, S. Finder and Z. Zalevsky, “Multi-spectral optimization for tissue probing using machine learning,” IEEE photonics 13(1) 10.1109/JPHOT.2020.3048015 (2021).
517. H. Lupa Yitzhak, M. Wolf, N. Ozana, Y. Tzabari Kelman and Z. Zalevsky, “Optical analysis of facial nerve degeneration in Bell's palsy,” OSA Continuum 4, 1155-1161 (2021).
518. K. Wen, Y. Ma, M. Liu, J. Li, Z. Zalevsky, J. Zheng, “Transmission Structured Illumination Microscopy for Quantitative Phase and Scattering Imaging,” Frontiers in Physics, section Optics and Photonics 8, 2020 (2021). https://doi.org/10.3389/fphy.2020.630350
519. M. Benyamin, H. Genish, R. Califa, L. Wolbromsky, M. Ganani, Z. Wang, S. Zhou, X. Zheng and Z. Zalevsky, “Autoencoder based blind source separation for photoacoustic resolution enhancement,” Sci. Rep., Nature Pub. Group 20(1) (2020). Doi: 10.1038/s41598-020-78310-5
520. Z. Kalyuzhner, S. Agdarov, A. Bennett, Y. Beiderman and Z. Zalevsky, “Remote photonic sensing of blood oxygen saturation via tracking of anomalies in micro-saccades patterns,” Opt. Exp. 29, 3386-3394 (2021).
521. G. Chen, A. Sanjeev, V. Trivedi, J. Garcia, R. Rubio and Z. Zalevsky, “Time multiplexing super-resolved imaging without a priori knowing the spatial distribution of the encoding structured illumination,” Opt. Exp. 29, 5798-5807 (2021).
522. J. Linden, S. Cohen, Y. Berg, Z. Kotler and Z. Zalevsky, “Influence of Nanosecond Pulse Bursts at High Repetition Rates on Ablation Process,” Journal of Laser Micro/Nanoengineering (JLMN) 16, No. 1 (2021).
523. Y. Mandelbaum, R. Mottes, Z. Zalevsky, D. Zitoun and A. Karsenty, “Review of Shape, Material and Excitation Wavelength Effects on Field Enhancement in SERS Advanced Tips,” Nanomaterials 11(1), 237 (2021). https://doi.org/10.3390/nano11010237. The paper was **selected as Editor’s Choice**.
524. M. Benyamin, H. Genish, R. Califa, N. Ozana, B. Lengenfelder, F. Klampfl and Z. Zalevsky, “Ultra-fast remote photoacoustic imaging with nonscanning speckle-based setup,” OSA Continuum 4, 1135-1142 (2021).
525. S. Asraf, M. Sprem and Z. Zalevsky, “Fiber Based All-Optical IIR Filter Tuned Via Stimulated Brillouin Scattering,” OSA Continuum 4, 1170-1178 (2021).
526. N. Gorodesky, S. Sedghani-Cohen, O. Fogel, A. Silber, M. Tkachev, Z. Kotler and Z. Zalevsky, “Improving Compactness of 3D Metallic Microstructures Printed by Laser-Induced Forward Transfer,” Crystals 11(3), 291 (2021). https://doi.org/10.3390/cryst11030291
527. B. Lengenfelder, M. Hohmann, M. Späth, D. Scherbaum, M. Weiß, S. J. Rupitsch, M. Schmidt, Z. Zalevsky, F. Klämpfl, “Remote Photoacoustic Sensing Using Single Speckle Analysis by an Ultra-Fast Four Quadrant Photo-Detector,” Sensors 21(6),2109 (2021).
528. O. Havakuk, B. Sadeh, I. Merdler, Z. Zalevsky, S. Polani and Y. Arbel, “Validation of a Novel Contact-Free Heart and Respiratory Rate Monitor,” Journal of Medical Engineering & Technology (IJMT) 45(5), 344-350 (2021). doi: 10.1080/03091902.2021.1905896.
529. Z. Zalevsky, “Advanced surface modification of ophthalmic lenses for visual problems correction,” Video article; Vid. Proc. Adv. Mater., Volume 2, Article ID 2102114 (2021).
https://www.proceedings.iaamonline.org/article/vpoam-2021-02114
https://www.proceedings.iaamonline.org/articles/fullArticle-pdf/vpoam-2021-02114
530. D. Gotthilf-Nezri, Y. S. Bonneh and Z. Zalevsky, “A Passive Optical Device to Treat Age-Related Macular Degeneration and its Cognitive Perception Aspects,” OSA Continuum 4, 1533-1544 (2021).
531. D. Fixler and Z. Zalevsky, “"Comment on ‘Rapid Image Reconstruction of Structured Illumination Microscopy Directly in the Spatial Domain’ and more about Point Spread Function Shaping for Enhanced Imaging Resolution,” comment in IEEE photonics 13(2) 9600204 (2021).
532. N. Ozana and Z. Zalevsky, “Prospective on remote photonic bio-sensing and diagnosis,” Applied Physics Letters (APL) 118, 240503 (2021); https://doi.org/10.1063/5.0043865 (**Invited paper**).
533. J. Zheng, K. Wen, Z. Gao, Z. Zalevsky, P. Gao, “Digital Micromirror Device Based Ptychographic Phase Microscopy,” Optics Communications 498, 127218 (2021).
534. I. Orr, M. Cohen, H. Damari and Z. Zalevsky, “Coherent, super resolved radar beamforming using self-supervised learning,” Science Robotics, Science publications 6(61) (2021). DOI: 10.1126/scirobotics.abk0431
535. J. Linden, S. Cohen, Y. Berg, I. Peled, Z. Kotler and Z. Zalevsky, “High-Speed Temporal and Spatial Beam-Shaping Combining Active and Passive Elements,” Opt. Exp. 29, 31229-31239 (2021).

536. O. Carmi, A. Gross, N. Ivzan, L. La Franca, N. Farah, Z. Zalevsky and Y. Mandel, “Evaluation and Optimization of methods for generating high-resolution retinotopic maps using visual cortex voltage-sensitive dye imaging,” Frontiers in Cellular Neuroscience, section Cellular Neurophysiology 15, 2021 (2021). https://doi.org/10.3389/fncel.2021.713538
537. I. Orr, H. Damari, M. Halachmi, M. Raifel, K. Twizer, M. Cohen and Z. Zalevsky, “Effects of lidar and radar resolution on DNN based vehicle detection,” JOSA A 38(10), B29-B36 (2021).
538. K. Wen, Z. Gao, X. Fang, M. Liu, J. Zheng, Y. Ma, Z. Zalevsky and P. Gao, “Structured Illumination Microscopy with Partially Coherent Illumination for Phase and Fluorescenct Imaging,” Opt. Exp. 29, 33679-33693 (2021).
539. N. Gorodesky, S. Sedghani-Cohen, O. Fogel, M. Altman, G. Cohen-Taguri, Z. Kotler and Z. Zalevsky, “Printed Cu-Ag Phases Using Laser Induced Forward Transfer,” Advanced engineering materials 24(4), 2100952 (2021). https://doi.org/10.1002/adem.202100952
540. Z. Zalevsky, G. S. Buller, T. Chen, M. Cohen, and R. Barton-Grimley, "Light detection and ranging (lidar): introduction," J. Opt. Soc. Am. A 38, LID1-LID2 (2021). **View Top Downloads from November 2021, December 2021, January 2022**.
541. Y. Rodal, A. Shemer, A. Schwarz, N. Ozana, H. Zafrir and Z. Zalevsky, “The usage of fiber optics as underground deployable radon gas detector,” OSA Continuum 4, 3026-3038 (2021).
542. V. Trivedi, S. Mahajan, M. Joglekar, N. Joshi, V. Chhaniwal, S. Kumar Dubey, Z. Zalevsky, B. Javidi and A. Anand, “Opto-mechanical magnetometer based on laser speckle correlation,” Measurement 189(15), 110490 (2022).
543. Z. Kalyuzhner, S. Agdarov, I. Orr, Y. Beiderman, A. Bennett and Z. Zalevsky, “Remote photonic detection of human senses based secondary speckle patterns,” Sci. Rep., Nature Publishing Group 12, 519 (2022). https://doi.org/10.1038/s41598-021-04558-0.
544. S. Yederman and Z. Zalevsky, “Analysis and Simulation of Optical Spectral Phase Encoding using an Array of Fabri-Perot Interferometers and Code Division Multiplexing,” OSA Continuum 1, 113-125 (2022).
545. G. Otis, M. Benyamin, Y. Mastai and Z. Zalevsky, “Photoacoustic Measurement of Localized Optical Dichroism in Chiral Crystals,” Chemical Communications journal (RSC) 58,84-87 (2022).
546. B. Sadeh, I. Merdler, S. Sadon, L. Lupu, A. Borohovitz, E. Ghantous, P. Taieb, Y. Granot, O. Havakuk, O. Goldstein, A. Pe’er, G. Kogan, J. Calderón Soriano, R. Rubio-Oliver, J. Ruiz-Rivas, M. Shergei, Y. Beiderman, Z. Zalevsky, J. Garcia-Monreal, M. Shatsky, Y. Arbel and S. Polani, “A Novel Contact-Free Atrial Fibrillation Monitor- A pilot Study,” The European Heart Journal-Digital Health 3(1), 105–113 (2022). https://doi.org/10.1093/ehjdh/ztab108
547. D. Beitner, I. Carmeli, Z. Zalevsky, S. Richter and H. Suchowski, “Coupled Molecular Emitters in Superstructures Interact with Plasmonic Nanoparticles,” Advanced Photonics Research 3(5) 2100334 (2022).
548. D. Glukhov, Z. Zalevsky and A. Karsenty, “Picosecond Pulsed Laser Illumination: An Ultimate Solution for Photonic vs. Thermal Processes’ Contest in SOI Photo-Activated Modulator,” Sci. Rep., Nature Publishing Group 12, Article number: 1547 (2022).
549. A. Halevi, N. Farah, N. Ozana, S. Cohen, A. Shoval, O. Shefi, Y. Mandel and Z. Zalevsky, “Remote photonic sensing of action potential in mammalian nerves cells via histogram-based analysis of temporal spatial acoustic vibrations,” Opt. Express 30, 15512-15523 (2022).
550. R. Shahmoon, Y. Tamir, Ye. Beiderman, S. Agdarov, Ya. Beiderman and Z. Zalevsky, “Analysis of swallowing in infants and adults using speckle pattern analysis,” Sci. Rep., Nature Publishing Group 12, Article #3847 (2022).
551. E. Danan, N. Shabairou, Y. Danan and Z. Zalevsky, “Signal-to-Noise-Ratio Improvement for Multiple Pinhole Imaging Using Supervised Encoder-Decoder Convolutional Neural Network Architecture,” Photonics 9(2), 69 (2022). https://doi.org/10.3390/photonics9020069.
552. A. Chandra Mandal, T. Sarkar, Z. Zalevsky and R. Kumar Singh, “Structured transmittance illumination coherence holography,” Sci. Rep., Nature Publishing Group 12, 4564 (2022). https://doi.org/10.1038/s41598-022-08603-4
553. N. Shabairou, M. Tiferet, Z. Zalevsky and M. Sinvani, “Dynamics of Laser Induced Tunable Focusing in Silicon,” Sci. Rep., Nature Publishing Group 12(1) (2022). 10.1038/s41598-022-10112-3
554. M. Laufer and Z. Zalevsky, “Enhanced field of view multiplexing super-resolution incorporating geometric super-resolution by time multiplexing sub-pixeling,” JOSA A 39, 600-609 (2022).
555. D. Glukhov, A. Z. Levi, Z. Zalevsky and A. Karsenty, “Energy Hot Spots Distribution on Groove Surface, Elucidated by Hybrid Optical Model in Illuminated SOI Photo -Polarized- Activated Modulator,” Applied Surface Science 588, 152845 (2022).

556. A. Sanjeev, V. Trivedi and Z. Zalevsky, "Optical Reciprocity Induced Wavefront Shaping for Axial and Lateral Shifting of Focus Through a Scattering Medium," Sci. Rep., Nature Publishing Group 12, 6387 (2022). https://doi.org/10.1038/s41598-022-10378-7

557. Y. Ma, J. Zheng, M. Liu, Z. Zalevsky and P. Gao, "High Spatio-Temporal Resolution Condenser-free Quantitative Phase Contrast Microscopy," Frontiers Physics 10 (2022). https://doi.org/10.3389/fphy.2022.892529

558. M. Golberg, R. Califa, S. Polani, O. Goldstein, A. Zailer, M. Niska and Z. Zalevsky, "Analysis of peripheral arterial disease (PAD) patients by laser speckle measurement techniques," Opt. Exp. 30, 18189-18198 (2022).

559. M. Benyamin and Z. Zalevsky, "All Optical Speckle Contrast based Vibration Sensor for Photoacoustic Signal Detection," Sensors 22(9), 3250 (2022).

560. J. Zheng, X. Fang, K. Wen, J. Li, Y. Ma, M. Liu, S. An, J. Li, Z. Zalevsky and P. Gao, "Large-field lattice structured illumination microscopy," Opt. Express 30, 27951-27966 (2022).

561. Z. Zalevsky, S. Elkabetz, A. Rudnitsky, O. Herman, A. Meiri and A. Shahmoon, "Imaging through scattering media by 3D spatial filtering embedded into micro-endoscope," Surgical Endoscopy Journal (2022). https://doi.org/10.1007/s00464-022-09511-4

562. D. Pal, S. Agadarov, R. Shahmoon, Ye. Beiderman, N. Avraham, Y. Eisenbach, Ya. Beiderman, A. Kumar and Z. Zalevsky, "Non-invasive blood glucose sensing by machine learning of optic fiber-based speckle pattern variation," Journal of Biomedical Optics 27(9), 097001 (2022).

563. **D. Duadi, N. Shabairou, A. Primov-Fever and Z. Zalevsky, "Non-contact optical in-vivo sensing of cilia motion by analyzing secondary speckle patterns," Sci. Rep., Nature Publishing Group 12, 16614 (2022).**

564. J. Linden, A. Hoch, A. Levy, I. Sakae, G. Bernstein Toker, O. Fogel, M. Hod and Z. Zalevsky, "Enhanced throughput and clean Laser drilling with Sacrificial Polymer Layer," Optical Materials Express 12, 4682-4690 (2022).

565. V. Trivedi, A. Sanjeev and Z. Zalevsky, "Designing an optical phase element for field of view enhancement by using wavelength multiplexing," Optics Continuum 2, 856-864 (2023).

566. N. Lhiyani, A. Sanjeev, A. Mor, Ye. Beiderman, J. Garcia and Z. Zalevsky, "Towards in-vivo detection of Amyloid Beta and Tau in human CSF using Machine Learning based Raman Spectroscopy," Optics Continuum 2, 847-855 (2023). **Selected as Top Downloads paper from April 2023**.

567. I. Merdler, A. Hochstadt, E. Ghantous, L. Lupu, A. Borohovitz, D. Zahler, P. Taieb, B. Sadeh, Z. Zalevsky, J. Garcia-Monreal, M. Shergei, M. Shatsky, Y. Beck, S. Polani and Y. Arbel, "A Contact-Free Optical Device for the Detection of Pulmonary Congestion—A Pilot Study," Biosensors 12(10), 833 (2022).

568. A. Sanjeev, V. Trivedi, A. Sterkin, D. Smadja and Z. Zalevsky, "Enhanced Ablation of Cornea Dopped with Fluorescein Dye using Visible Wavelength Laser," ACS Omega 8, 16, 14365–14370 (2023). https://doi.org/10.1021/acsomega.2c05541

569. D. Calili, Ye. Biederman, S. Agdarov, Ya. Biederman and Z. Zalevsky, "Optical sensor for remote estimation of CO2 concentration in blood stream," Optics Express (accepted).

570. J. Belhassen, D. Glukhov, M. Karelits, Z. Zalevsky and A. Karsenty, "Nano-Apertures vs. Nano-Barriers: Surface Scanning through Obstacles and Super-Resolution in AFM-NSOM Dual-Mode," Nano-Structures & Nano-Objects 33, 100933 (2023).

571. J. Belhassen, S. Glass, G. A. Stanciu, D. E. Tranca, E. Teblum, Z. Zalevsky, S. G. Stanciu and A. Karsenty, "Towards Augmenting Tip-Enhanced Nanoscopy with Optically Resolved Scanning Probe Tips," Advanced Photonics Nexus 2(2), 026002 (2023).

572. O. Ben David, Ye. Beiderman, S. Agdarov, Ya. Beiderman and Z. Zalevsky, "Remote sensing of human skin temperature by AI speckle pattern analysis," Optics Continuum 2(6),1401-1415 (2023). **Selected as Top Downloads paper from June 2023.**

573. J. Linden, N. Melech, I. Sakaev, O. Fogel, S. Krylov, D. Nutman, Z. Zalevsky and M. Sirota, "Femtosecond laser fabrication of piezoelectrically actuated crystalline quartz MEMS resonators," Microsyst Nanoeng 9, 38 (2023). Nature Publishing Group, https://doi.org/10.1038/s41378-023-00511-5

574. X. Fang, K. Wen, S. An, J. Zheng, J. Li, Z. Zalevsky and P. Gao, "A reconstruction algorithm using 2N+1 raw 2 images for structured illumination microscopy," J. Opt. Soc. Am. A 40, 765-773 (2023).

575. K. Zhuo, Y. Wang, Y. Ma, S. An, Z. Zalevsky, J. Zheng and P. Gao, "Partially Coherent Illumination Quantitative Phase Contrast Microscopy," Photonics (accepted).

576. A. Sanjeev, D. Glukhov, R. Rafeeka, A. Karsenty and Z. Zalevsky, "Near-field Projection Optical Microscope (NPOM): A New Approach to Nanoscale Super-Resolved Imaging," Sci. Rep., Nature Publishing Group (accepted).

577. I. Carmeli, I. Tanriover, T. Malavath, C. Carmeli, M. Cohen, Y. Abulafia, O. Girshevitz, S. Richter, K. Aydin and Z. Zalevsky, "Metal Nanoparticle/Photosystem I Protein Hybrids Coupled to Micro-Antennae Affords Biologically and Electronically-Controlled Localized Surface Plasmons Resonance: Implications for Fast Data Processing," ACS Applied Nano Materials 6, 14, 13668-13676 (2023).

578. M. Dixit, A. Chandra Mandal, M. Rathor, Z. Zalevsky and R. Kumar Singh, "Randomness assisted in-line holography with deep learning," Sci. Rep., Nature Publishing Group 13(1) (2023).

579. D. Pal, A. Kumar, N. Avraham, Y. Eisenbach, Ye. Beiderman, S. Agdarov, Ya. Beiderman and Z. Zalevsky, "Noninvasive blood glucose sensing by secondary speckle pattern AI analyses," J. of Biomedical Optics 28(8):087001 (2023). doi: 10.1117/1.JBO.28.8.087001

580. G. Shpun, N. Farah, Y. Chemla, A. Markus, D. Gerber, Z. Zalevsky and Y. Mandel, "Optimizing the Fabrication of a 3D high-resolution implant for neural stimulation," J Biol Eng. 24;17(1):55 (2023). doi: 10.1186/s13036-023-00370-8. PMID: 37620951; PMCID: PMC10463680.

581. T. Raviv, N. Shbero, A. Rotiman, A. Sanjeev, V. Trivedi, M. Sinvani and Z. Zalevsky, "Optical Memory Based on Scattering from Gold Nano Particles," ACS Applied Optical Materials 1(9), 1559-1565 (2023).

582. X. Liu, X. Fang, Y. Lei, J. Li, S. An, J. Zheng, Y. Ma, H. Ma, Z. Zalevsky and P. Gao, "Super-resolution reconstruction of structured illumination microscopy based on pixel reassignment," Applied Physics Letters 123, 131111 (2023). https://doi.org/10.1063/5.0162381

583. J. Philosof, Ye. Beiderman, S. Agdarov, Ya. Beiderman and Z. Zalevsky, "Optical multimode fiber-based pipe leakage sensor using speckle pattern analysis," Sensors 2023, 23, 8634 (2023). https://doi.org/10.3390/s23208634

584. V. Vorobev, D. Weidmann, S. Agdarov, Ya. Beiderman, N. Shabairou, M. Benyamin, F. Klämpfl, M. Schmidt, D. Gorin and Z. Zalevsky, "Full-optical Photoacoustic Imaging Using Speckle Analysis and Resolution Enhancement by Orthogonal Pump Patterns Projection," Sci. Rep., Nature Publishing Group, 13, 18081 (2023). https://doi.org/10.1038/s41598-023-45490-9

585. R. Liu, K. Wen, J. Li, Y. Ma, J. Zheng, S. An, J. Min, Z. Zalevsky, B. Yao and P. Gao, "Multi-harmonic structured illumination based optical diffraction tomography," Appl. Opt. 62, 9199-9206 (2023).

586. Astratov, V. N., Sahel, Y. B., Eldar, Y. C., Huang, L., Ozcan, A., Zheludev, N., Zhao, J., Burns, Z., Liu, Z., Narimanov, E., Goswami, N., Popescu, G., Pfitzner, E., Kukura, P., Hsiao, Y.-T., Hsieh, C.-L., Abbey, B., Diaspro, A., LeGratiet, A., Bianchini, P., Shaked, N. T., Simon, B., Verrier, N., Debailleul, M., Haeberlé, O., Wang, S., Liu, M., Bai, Y., Cheng, J.-X., Kariman, B. S., Fujita, K., Sinvani, M., Zalevsky, Z., Li, X., Huang, G.-J., Chu, S.-W., Tzang, O., Hershkovitz, D., Cheshnovsky, O., Huttunen, M. J., Stanciu, S. G., Smolyaninova, V. N., Smolyaninov, I. I., Leonhardt, U., Sahebdivan, S., Wang, Z., Luk'yanchuk, B., Wu, L., Maslov, A. V., Jin, B., Simovski, C. R., Perrin, S., Montgomery, P., Lecler, S., "Roadmap on Label-Free Super-Resolution Imaging," Laser and Photonics Reviews 2023, 2200029. https://doi.org/10.1002/lpor.202200029

587. Z. Zalevsky, J. Benois-Pineau, L. Boucheron, A. Gotchev, W. G. Kropatsch and A. C. Loui, "Journal of Electronic Imaging (JEI) Updates Research Topic Categories," Journal of Electronic Imaging 32(6), 060101 (2023). https://doi.org/10.1117/1.JEI.32.6.060101

588. S. Elkabetz, O. Herman, A. Meiri, A. Shahmoon and Z. Zalevsky, "Integration of high-resolution imaging through scattering medium into a disposable micro-endoscope via projection of 2D spots-array," Sci. Rep., Nature Publishing Group 13, 19774 (2023). https://doi.org/10.1038/s41598-023-46657-0

589. B. Kusnetz, J. Belhassen, D. E. Tranca, S. G. Stanciu, S.-R. Anton, Z. Zalevsky, G. A. Stanciu, A. Karsenty, "Generic Arrays of Surface-positioned and Shallow-buried Gold Multi-shapes as Reference Samples to benchmark near-field microscopes. Part 1: Applications in s-SNOM depth imaging," Results in Physics (RINP) 56, 107318 (2024).

590. Z. Kalyuzhner, S. Agdarov, Ye. Beiderman, A. Bennet, Ya. Beiderman and Z. Zalevsky, "Remote and low-cost intraocular pressure monitoring by deep learning of speckle patterns," J. of Biomedical Optics 29(3), 037003 (2024).

591. N. Shabairou, Z. Zalevsky and M. Sinvani, "Laser beam self-focusing in silicon at absorbed wavelength by a vortex beam in the same wavelength," ACS Omega (accepted).

592. R. Rubio, J. García, Z. Zalevsky, J. Á. Picazo-Bueno and V. Mico,"Cepstrum-based interferometric microscopy (CIM) for quantitative phase imaging," Journal of Optics and Laser Technology (accepted).

593. S. R. Anton, N. Shabairou, S. G. Stanciu, G. A. Stanciu and Z. Zalevsky, "Enhanced Imaging with Binary Circular Dammann Fresnel Zone Plate," Opt. Exp. (accepted).

594. I. Pires, I. S. Garcia, J. Vieira, Z. Zalevsky, C. Calaza, F. S. Alves and R. A. Dias, “High-Frequency Grating-Based Microelectromechanical Systems Actuator,” Proceedings 2024, 97, 155 (2024). https://doi.org/10.3390/proceedings2024097155
595. R. I. Sedmik, A. Urech, Z. Zalevsky, I. Carmeli, “Efficient Reduction of Casimir Forces by Self-Assembled Bio-Molecular Thin Films,” Adv. Mater. Interfaces 2400365 (2024). https://doi.org/10.1002/admi.202400365
596. O. Shteinberg, S. Agdarov, Ya. Beiderman, Y. Bonneh, I. Ziv and Z. Zalevsky, “Microsaccades tracking by secondary speckle pattern analysis,” Journal of Biophotonics e202400184 (2024). https://doi.org/10.1002/jbio.202400184
597. G. Shpun, A. Markus, N. Farah, Z. Zalevsky and Y. Mandel, “Adhesion of Retinal Cells to Gold Surfaces by Biomimetic Molecules," Frontiers in Cell and Developmental Biology, section Molecular and Cellular Pathology (accepted).
598. K. Aflalo, P. Gao, V. Trivedi, A. Sanjeev and Z. Zalevsky, “Optical Super-Resolution Imaging: A Review and Perspective,” Optics and Lasers in Engineering (accepted). (**Invited paper).**
599. Y. Mandelbaum, M. Tkachev, A. Sanjeev, Z. Zalevsky, D. Zitoun, A. Karsenty, “Tips vs. Holes: ×10 Higher Scattering in FIB-made Plasmonic Nanoscale Arrays for Spectral Imaging,” ACS Omega (2024). DOI: 10.1021/acsomega.4c04775
600. A. Ashkenazy, N. Shabairou, A. Stefanov, P. Gao, D. Fixler, E. Cohen, Z. Zalevsky, “All-optical, computation-free time-multiplexing super-resolved imaging based on speckle illumination,” Opt. Lett. (accepted).
601. T. Raviv, Z. Kalyuzhner and Z. Zalevsky, “Machine Learning Models for Noval Optical Memory Approach,” ACS Omega (accepted).
602. E. Israeli, G. Chen and Z. Zalevsky, “Usage of time multiplexing super resolution for imaging through scattering medium,” Opt. Exp. 33, 8410-8421 (2025).
603. D. Duadi, A. Yosovich, M. Beiderman, S. Agdarov, N. Ozana, Ye. Beiderman, Z. Zalevsky, “Remote sensing of alcohol consumption using machine learning speckle pattern analysis,” J. of Biomedical Optics 30(3) 037001 (4 March 2025) https://doi.org/10.1117/1.JBO.30.3.037001
604. I. Propp, M. Beiderman, S. Agdarov, Ya. Beiderman, M. Blum and Z. Zalevsky, “Sensing dog brain reactions to smell by AI speckle pattern analysis,” J. Biophotonics, 18: e202400501 (2025). https://doi.org/10.1002/jbio.202400501
605. Z. Zalevsky, “Fiber-based wearable sensors for bio-medical monitoring,” Opto-Electronic Advances journal (accepted).
606. A. Yosovich, S. Agdarov, Ya. Beiderman, Ye. Beiderman and Z. Zalevsky, “Speckle pattern analysis with deep learning for low-cost stroke detection: a phantom-based feasibility study,” J. of Biomedical Optics 30(5), 056003 (2025). https://doi.org/10.1117/1.JBO.30.5.056003
607. T. Karmakar, A. Chandra Mandal, P. Agrawal, Z. Zalevsky and R. Kumar Singh, “Modulating incoherence for phase recovery with single-pixel intensity correlation,” Journal Optics and Laser Technology (accepted).
608. N. Segal, Z. Kalyuzhner, S. Agdarov, Ya. Beiderman, Ye. Beiderman and Z. Zalevsky, “AI-Powered Remote Monitoring of Brain Responses to Clear and Incomprehensible Speech via Speckle Pattern Analysis,” J. of Biomedical Optics 30(6), 067001 (2025).
609. M. Zadok, Z. Zalevsky and B. Milgrom, “AI-Based Enhancing of xBn MWIR Thermal Camera Performance at 180 Kelvin,” sensors 25(10), 3200 (2025).
610. H. Suo, J. Chen, H. Jiang, L. Yu, K. Wen, S. An, P. Gao, J. Zheng, Z. Zalevsky, and P. Gao, “Fluorescence Lifetime-Based Line-Scanning FRET-FCCS for Simultaneous Analysis of Protein Binding and Diffusion on Membranes,” ACS Photonics12 (11), 6448-6457 (2025). DOI: 10.1021/acsphotonics.5c01996
611. K. Aflalo and Z. Zalevsky, “Penetrating Barriers: Microwave-Based Remote Sensing and Reconstruction of Audio Signals Through Walls,” IEEE Journal of Microwaves (accepted).
612. S. Apsel, S. Tziony, Z. Zalevsky, M. Yemini and N. Ozana, “Homodyne and Heterodyne Rolling Shutter Laser Speckle Acoustic Sensing in Bio-Photonics,” Opt. Exp. (accepted).
613. G. B. Aminov and Z. Zalevsky, “Advanced RCS Measurements Processing using Multi-Basis Dictionary Framework,” IEEE Transactions on Radar Systems (accepted).
614. N. Farah, A. Markus, G. Shpun, Y. Chemla, E. Lasnoy, T. Azrad-Leibovich, Z. Zalevsky and Y. Mandel, “Towards high-acuity vision restoration: Hybrid retinal prosthesis composed of a high-density multielectrode array integrated with glutamatergic cells,” Adv. Funct. Mater.35(45), e12621 (2025). https://doi.org/10.1002/adfm.202512621
615. S. G. Stanciu, S. R. Anton, D. E. Tranca, G. A. Stanciu, B. Ionescu, Z. Zalevksy, B. Kusnetz, J. Belhassen, A. Karsenty and G. Cincotti, “Diffraction-Induced Artifacts in Scattering-Type Scanning Near-Field Optical Microscopy Due to Lateral and Longitudinal Inhomogeneities,” JOLT (accepted).

616. D. Duadi, O. Frige, A. Tzroya, N. Ozana, Z. Zalevsky and A. Primov-Fever, “Non-contact optical sensing of vocal fold paralysis using speckle pattern analysis,” Biomed. Opt. Exp. (accepted)
617. **Z. Kalyuzhner, S. Agdarov, Ya. Beiderman, Ye. Beiderman and Z. Zalevsky, “Visual Cortex Speckle Imaging for Shape Recognition,” Sci. Rep., Nature Publishing Group, 15, 42690 (2025). https://doi.org/10.1038/s41598-025-26723-5**
618. **L. Tobaly, E. Yaniv, Z. Zalevsky, “Integrating GAN-Based Machine Learning with Nonlinear Kalman Filtering for Enhanced State Estimation,” Sci. Rep., Nature Publishing Group (accepted)**.
619. S. Elkabetz and Z. Zalevsky, “Increasing resolution transmission through imaging multi-core fiber via code mask multiplexing,” JOLT (accepted).
620. L. Tobaly and Z. Zalevsky, “AI-Driven Prediction of Scholarly Article Influence," IEEE Access (accepted).
621. Y. Long YK, R. Min, K. Xiao, Z. Wang, L. Liu, Y. Sun, X. Li, Z. Li and Z. Zalevsky, “Decoding subject-invariant emotional information from cardiac signals detected by photonic sensing system,” Opto-Electron Technol 1, 250010 (2025). DOI: 10.29026/oet.2025.250010
622. H. Suo, J. Zhou, Y. Lu, J. Chen, J. Zheng, S. An, K. Wen, X. Wang, T. Li, Z. Zalevsky and P. Gao “Synergistic microscopic platform for probing 1 molecular interaction on mitochondria-2 lysosome contact membrane,” Biomedical Optics Express (accepted).
623. Y. Krapovnytskyi, S. Agdarov, Ya. Beiderman, D. Spirito, R. Halachmy, Ye. Beiderman and Z. Zalevsky, “Photonic spatio-temporal directional data transmission based on speckle pattern analysis,” Optics Continuum (accepted).
624. L. Tobaly and Z. Zalevsky, “AI-Driven Decision-Oriented Scholarly Influence Forecasting with Calibrated Confidence and Abstention,” IEEE Access (accepted).
625. T. Karmakar, P. Agrawal, Z. Zalevsky, R. Kumar Singh, “Active illumination for holographic imaging through a scatterer,” Results in Optics (accepted).
626. S. Elkabetz, Z. Zalevsky, “Phase-reduced sensitivity imaging through a thin Diffuser,” Optics Communications (accepted).
627. **L. Tobaly, E. Yaniv, Z. Zalevsky, “CAT-GAN-UKF: Category-Aware Online Adaptive Unscented Kalman Filtering for Multi-Sensor Multi-Object State Estimation,” Sci. Rep., Nature Publishing Group (accepted)**.
628. **T. Karmakar, Satish, Sarita, Z. Zalevsky and R. Kumar Singh, “3D imaging and microscopy by a single-pixel correlation holography,” JPhys Photonics (Journal of Physics: Photonics - IOP Publishing) (accepted)**.
629. S. Moshe and Z. Zalevsky, “System Level Modeling of Parabolic Solar Dish-Stirling Units with Explicit Loss Partitioning under Variable-Charge Control,” Applied Sciences (accepted).
630. **A. Yosovich, A. Sdobnov, A. Doronin, A. Bykov, I. Meglinski4 and Z. Zalevsky, “Decoding Orbital Angular Momentum in Turbid Tissue-like Scattering Medium via Fourier-Domain Deep Learning,” Sci. Rep., Nature Publishing Group (accepted)**.
631. **N. Segal, M. Bar, D. Rubinstein, S. Agdarov, Ya. Beiderman, Ye. Beiderman and Z. Zalevsky, “Remote Optical Decoding of Inner Speech in Broca’s Area via AI-based Speckle Pattern Analysis,” JPhys Photonics (Journal of Physics: Photonics - IOP Publishing) (accepted)**.
632. **S. Stanciu, S. Anton, D. E. Tranca, G. A. Stanciu, B. Ionescu, R. Hristu, Z. Zalevsky, M. Popescu, B. Kusnetz, J. Belhassen, D. Pierotti, A. Karsenty, G. Cincotti, “Inferring Topography-Correlated Synthetic s-SNOM Contrast from AFM Data,” PhotoniX (accepted)**.

Extended Conference and Refereed Proceedings

1. D. Mendlovic, Z. Zalevsky and N. Konforti, "High performance optical processor with incoherent output," SPIE of the 9th Meeting of Optical Engineering in Israel, SPIE Vol. 2426, 9th Meeting on Optical Engineering in Israel, Tel-Aviv, 286-294 (1995).
2. Z. Zalevsky, D. Mendlovic and C. Ferreira, "Invariant Pattern Recognition Filter based on the Wavelet Transform," SPIE proc. of the Latino-American conference, Vol. 2730, 2nd Ibero-American Meeting on Optics, Mexico, .275-283 (1996).
3. D. Mendlovic, R. G. Dorsch, Z. Zalevsky and C. Ferreira, "Optical implementation of the 2-D Radon-Wigner transform," SPIE Proc. of the Latino-American conference, Vol. 2730, 2nd Ibero-American Meeting on Optics, Mexico, 257-266 (1996).
4. Z. Zalevsky, D. Mendlovic, E. Marom, Y. Bitran and H. Ozaktas, "Partial coherence imaging and the fractional Fourier transform," Status report on the fractional Fourier transform, Tel Aviv Uni. (1995).

5. R. Dorsch, W. Singer, J. Moisel, A. Lohmann, D. Mendlovic and Z. Zalevsky, "Continuous fractional Fourier transformer based on graded index (GRIN) media: Experimental results," Status report on The fractional Fourier transform, Tel Aviv Uni. (1995).
6. Z. Zalevsky, D. Mendlovic and J. Garcia, "2-D Wavelet transform using the lambda multiplexing technique," Proceedings of ICO 17 meeting, SPIE Vol. 2778, Taejon, Korea (1996).
7. D. Mendlovic and Z. Zalevsky, "The generalized temporal-spatial Wigner distribution function and its properties," Proceedings of ICO 17 meeting, SPIE Vol. 2778, Taejon, Korea (1996).
8. D. Mendlovic, J. Garcia, Z. Zalevsky, E. Marom, D. Mas, C. Ferreira and A. W. Lohmann, "DOE based wavelength multiplexing system for a single mode image transmission," SPIE Vol. 3110, 10th Meeting on Optical Engineering in Israel, Jerusalem, 442-450 (1997).
9. Z. Zalevsky, D. Mendlovic, G. Shabtay and E. Marom, "Beam shaping using diffractive optical elements and its use for array illumination and clock distribution," Proceedings of the 19th Convention of Electrical and Electronics Engineers in Israel, IEEE, Jerusalem (1996).
10. D. Mendlovic, U. Levy, G. Shabtay, Z. Zalevsky and E. Marom, "Encoding technique for the design of zero order (on axis) Fraunhofer computer generated holograms", Proceedings of the conference on diffractive optics, Savonlinna, Finland, 170-171 (1997).
11. A. W. Lohmann, D. Mendlovic and Z. Zalevsky, "Dammann gratings used for super resolution experiments," Proceedings of the conference on diffractive optics, Savonlinna, Finland, 2-5 (1997).
12. E. Marom, D. Mendlovic and Z. Zalevsky, "Various approaches for optical implementation of the Wavelet transform," Proceedings of Romopto, SPIE Vol. 3405, ROMOPTO '97: Fifth Conference on Optics, 363-374 (1998).
13. D. Mendlovic, A. Shemer, Z. Zalevsky and E. Marom, "Novel approaches in morphological correlations," Romopto conference proceedings, SPIE Vol. 3405, ROMOPTO '97: Fifth Conference on Optics, 418-424 (1997).
14. A. Blank and Z. Zalevsky, "Applications of the fractional Fourier transform in Radar imaging," Proceedings of AMTA, Boston Massachusetts, pp. 450-455 (1997).
15. A. W. Lohmann, D. Mendlovic and Z. Zalevsky, "Fractionalizations of integral transformations in optics," Workshop on transforms and filter banks for signal processing, proceeding Tampere University of Technology, Finland (Feb. 1998).
16. A. W. Lohmann, D. Mendlovic and Z. Zalevsky, "Isomorphism of the Wigner distribution function and the canonical ABCD integral transformation," SPIE Vol. 3482, International Optical Design Conference 1998, Kona, Hawaii, 99-102 (1998).
17. G. Tidhar and Z. Zalevsky, "Performance evaluation methodology of missile warning and IRST systems," SPIE Vol. 3436, Infrared Technology and applications XXIV, 891-902 (1998).
18. Z. Zalevsky, D. Mendlovic and A. W. Lohmann, "New super resolution techniques," Far and Near Field Optics- Physics and Information Processing, SPIE Vol. 3467, Far- and Near-Field Optics: Physics and Information Processing, San Diego, 68-75 (1998).
19. D. Mendlovic, Z. Zalevsky and A. W. Lohmann, "SW adaptation -fundamentals and examples," Far and Near Field Optics- Physics and Information Processing, SPIE Vol. 3467, Far- and Near-Field Optics: Physics and Information Processing, San Diego, 58-67 (1998).
20. D. Mendlovic and Z. Zalevsky, "Generalized super resolution approach based on the degrees of freedom hyperspace adaptation," NATO-Mediterranean Dialogue Advanced Research Workshop on: Unconventional Optical Elements for Information Storage, Processing and Communications, Israel, 39-49 (1998).
21. D. Mendlovic, Z. Zalevsky and A. W. Lohmann, "Near field microscopy for medical applications using 2-D pipette scan," Three dimensional and multidimensional microscopy: image acquisition and processing VI, SPIE Vol. 3605, Three-Dimensional and Multidimensional Microscopy: Image Acquisition and Processing VI, San Jose, 21-30 (1999).
22. Z. Zalevsky, D. Mendlovic and S. Mendlovic, "Hybrid electrical/optical low-cost advanced image processing system for pathology diagnostic," SPIE Vol. 3603, System and technologies for clinical diagnostics and drug discovery II, San Jose, 49-60 (1999).
23. Z. Zalevsky and D. Mendlovic, "Geometrical super resolution in fixed or vibrating platforms using sensor masking," Aerospace/Defense Sensing, Simulations and Controls, SPIE Vol. 3715, Optical Pattern Recognition X, Orlando, 335-345 (1999).
24. Z. Zalevsky, S. Lashansky, A. Goldman and T. Fridlander, "A model for predicting the visual detection range of a target in a cluttered environment," Aerospace/Defense Sensing, Simulations and Controls, SPIE Vol. 3716, Visual Information Processing VIII, Orlando, 194-205 (1999).
25. Z. Zalevsky, Y. Bregman and H. Zafrir, "Super resolution magnetic robotic system for wide coverage real time UXO detection," SPIE Vol. 3710, Detection and remediation technologies for mines and mine like targets IV conference, Orlando, 131-141 (1999).

26. Y. Bregman, H. Zafrir and Z. Zalevsky, “Handheld magnetic system for standoff real time mine and UXO detection,” Proceedings of Euro-Conference on sensor systems and signal processing technologies applied of mines and unexploded ordinance, Empoli (Firenze), Italy, 121-126 (1999).
27. D. Mendlovic, Z. Zalevsky, U. Levy, G. Shabtay, N. Konforti and E. Marom, "Novel algorithm for obtaining real time 3-D position super resolution estimation of point targets," Aerospace/Defense Sensing, Simulations and Controls, SPIE Vol. 3715, Optical Pattern Recognition X, Orlando, 207-214 (1999).
28. Z. Zalesvky, E. Gur and D. Mendlovic, "Switching architecture iterative optimization using fuzzy logic techniques," Aerospace/Defense Sensing, Simulations and Controls, SPIE Vol. 3714, Enabling Photonic Technologies for Aerospace Applications, Orlando, 71-79 (1999).
29. Z. Zalevsky, D. Mendlovic, E. Rivlin and S. Rotman, "Contrasted statistical processing algorithm for obtaining improved target detection performances in an IR cluttered environment," SPIE Proc., Vol. 3808, Applications of Digital Image Processing XXII, Colorado U.S.A, 801-812 (1999).
30. Z. Zalevsky, "Applications of the fractional Fourier transform to correlation, feature extraction and pattern recognition," Proc. of the IEEE- EURASIP Workshop on Nonlinear signal and image processing (NSIP'99), Antalya, Turkey, 579-584 (1999).
31. G. Shabtay, U. Levy, D. Mendlovic, Z. Zalevsky and E. Marom, "Optimal 3-D beam forming," Proc. of the 18 ICO meeting, SPIE Vol. 3749, San Francisco U.S.A, 8-9 (1999).
32. Z. Zalevsky, D. Mendlovic, A. W. Lohmann and G. Shabtay, "A Novel approach for exceeding the resolving power of optical systems," Proc. of the 18th ICO meeting, SPIE Vol. 3749, San Francisco U.S.A, 576-577 (1999).
33. A. Shemer, D. Mendlovic, Z. Zalevsky, A. W. Lohmann, J. Garcia and E. Marom, "Time multiplexing super resolution optical system with computer decoding," Proc. of the 18 ICO meeting, SPIE Vol. 3749, San Francisco U.S.A, 787-789 (1999).
34. Z. Zalevsky, A. Blank, “Iterative information retrieval algorithm for RADAR applications,” Proceedings of AMTA, California, 185-190 (1999).
35. Z. Zalevsky, D. Mendlovic and N. Shamir, "Satellites network with improved ground-observation resolution," Proc. of the 40th Israeli annual conference on aerospace science, 318-326 (2000).
36. J. J. Esteve-Taboada, J. Garcia, C. Ferreira, D. Mendlovic and Z. Zalevsky, “White light multiplexing of wavelet components,” SPIE Proc., Vol. 4089, Optics in Computing 2000, 842-851 (2000).
37. A. Shemer, D. Mendlovic, Z. Zalevsky and E. Marom, “Superresolving optical system using time multiplexing computer decoding and image processing,” SPIE Proc., Vol. 4089, Optics in Computing 2000, 96-103 (2000).
38. E. Gur, Z. Zalevsky and E. Marom, “Multistage binary optical processing,” SPIE Proc., Vol. 4089, Optics in Computing 2000, 225-231 (2000).
39. D. Mendlovic and Z. Zalevsky, “Fractional Fourier transform in information optics,” SPIE Proc., Vol. 3831, Sixth International Conference on Education and Training in Optics and Photonics, 381-385 (2000).
40. D. Mendlovic, Z. Zalevsky and E. Gur, “Optical implementation of fuzzy-logic-based controllers,” SPIE Proc. Vol. 4120, Applications and Science of Neural Networks, Fuzzy Systems, and Evolutionary Computation III, 86-100 (2000).
41. Z. Zalevsky and S. Lashansky, "Modeling and Simulation for Multiple Infra-Red Background," Annals of the Israel Physical Society, Vol. 14, 274-284 (2000).
42. Z. Zalevsky, "Modeling possible defocus and vibration distortions of Infra-Red images," Proc. of the 21st IEEE Convention of the Electrical and Electronic Engineers in Israel, 463-467 (2000).
43. R. Appelman, Z. Zalevsky, D. Mendlovic and G. Shabtay, "Hybrid optical-RF system for generating an improved linear frequency modulated pulses for radar applications," Proc. of IEEE 2000 International Radar conference, Washington D.C., U.S.A, 775-780 (2000).
44. Z. Zalevsky and E. Bashan, “A thermo-radiometric model for characterizing the infra-red thermal-temporal behavior of objects observed from space,” Proc. of AIAA 2000-5219, AIAA Space 2000 Conference, Long Beach, CA, Sep. 19-21 (2000).
45. D. Sazbon, E. Rivlin, Z. Zalevsky and D. Mendlovic, “Optical transformations in visual navigation,” Proceedings of the 15th International Conf. on Pattern Recognition (ICPR), Spain (2000).
46. Z. Zalevsky, A. Blank, B. Chizi and O. Maimon, “Required initial inventory estimation for obtaining desired steady state availability,” 11th industrial engineering and management conference, IE & M 2000, pp. 48-52, Beer Sheva.
47. D. Mendlovic and Z. Zalevsky, “Transformations in optics: novel approaches, applications and implementations,” IPC 2000 Taiwan, 184-186 (2000).
48. Z. Zalevsky, S. Lashansky and N. Saad, “Launching position estimation for ballistic trajectories,” Israeli Test and Experiments Association (ITEA) (Classified).

49. H. Zafrir, N. Salomonski. Y. Bregman, B. Ginzburg, D. Lehman, Z. Zalevsky and M. Baram, “Marine magnetic system for high resolution and real time detection and mapping of ferrous submerged sunken vessels and aircraft,” Proceedings of UXO Forum, New Orleans (2001).
50. D. Mendlovic, G. Shabtay, Z. Zalevsky, E. Marom, U. Levy, N. Konforti, J. Garcia and E. Goldenberg, “From computer generated holograms towards partially coherent optical signal processors,” Optical Processing and Computing, Florida, SPIE Vol. 4392 Optical Processing and Computing: A Tribute to Adolf Lohmann, 22-37 (2001).
51. Z. Zalevsky and A. Goldman, “Spectral and spectral-spatial modeling and optimization of target detection in visible cluttered environment,” SPIE Vol. 4388, Visual Information Processing X, Florida, 267-274 (2001).
52. E. Sherman and Z. Zalevsky, “Optimization sequential IR point detection,” SPIE Proc., Vol. 4370 Targets and Backgrounds VII, Florida, 20-24 (2001).
53. B. Chizi, E. Gur, Z. Zalevsky and O. Maimon, "Using clustering for improving system investigation," Proc. of the 12th industrial engineering and management conference, IE & M 2002, pp. 27-32, Tel-Aviv.
54. Z. Zalevsky and A. Goldman, “Sea scene statistics in the infra red spectral region,” Proc. of the 22nd Convention on Electrical and Electronics Engineers in Israel (2002), pp. 299, IEEE Conference Publications.
55. Z. Zalevsky G. Shabtay, D. Mendlovic, A. Shemer, V. Eckhouse, R. Appelman and U. Levy, “Evolution of ultra fast all-optical free space switches,” SPIE Proc., Vol. 4907, Optical switching and optical interconnection II, 84-92 (Shanghai Oct. 2002).
56. Z. Zalevsky, G. Shabtay, E. Marom, D. Mendlovic and R. Appelman, “Tunable spectral monitoring devices,” SPIE Proc., Vol. 4909, Network design and management, 128-133 (Shanghai Oct. 2002).
57. Z. Zalevsky, R. Appelman, D. Mendlovic, J. Vertman, “Integrating VOA and multicast capabilities into the optical switch,” SPIE Proc., Vol. 4909, Network design and management, 134-145 (Shanghai Oct. 2002).
58. Z. Zalevsky, G. Shabtay, R. Appelman and A. Shemer, “Ultra fast all optical free space switches,” Proc. of International conference on optical internet and switching, pp. 331-333 (Korea July 2002).
59. Z. Zalevsky, G. Shabtay, R. Appelman, U. Levy and A. Shemer, “Solid Free Space Optical Fast Switches,” Proc. of the International conference on optical communication and networking (ICOCN), pp. 131-134 (Singapore Nov. 2002).
60. Z. Zalevsky and D. Mendlovic, “Novel Device for Optical Spectroscopy Used for Multi-Spectral Sensing and Bio-Chemical Sniffing,” International Symposium on Photonics in Measurement, Aachen, Germany (2002).
61. Z. Zalevsky and S. Lashansky, “Optimization of spectral bandwidth for a missile launch detector,” SPIE Vol. 4745, Technologies, Systems, and Architectures for Trans-National Defense, 130-135 (2002).
62. Z. Zalevsky, S. Lashansky and N. Saad, “Technique for estimating the launching position of a ballistic trajectory,” SPIE Vol. 4745, Technologies, Systems, and Architectures for Trans-National Defense, 86-94 (2002).
63. O. Berman and Z. Zalevsky, “Acoustic intrusion detection and positioning system,” SPIE Vol. 4743, Unattended Ground Sensor Technologies and Applications IV, 42-49 (2002).
64. Z. Zalevsky, S. Lashansky and N. Saad, "Launching position estimation of a ballistic trajectory," Proc. of AIAA-2002-5490, 9th AIAA/ISSMO Symposium on multidisciplinary analysis and optimization, Atlanta, Georgia, Sep. 4-6 (2002).
65. D. Mendlovic, Z. Zalevsky and E. Gur, “Modular optical systems for nonlinear data processing and manipulation,” SPIE Vol. 4929, Optical Information Processing Technology, 10-25 (2002).
66. Z. Zalevsky, D. Mendlovic and J. Solomon, “Spatial code division multiplexing in optical data processing,” SPIE Vol. 4929, Optical Information Processing Technology, 86-95 (2002).
67. E. Gur, Z. Zalevsky, D. Elkind and D. Mendlovic, “Phase only filter solution based on fuzzy logic for the defocus problem,” SPIE Vol. 4787, Applications and Science of Neural Networks, Fuzzy Systems, and Evolutionary Computation V, 250-258 (2002).
68. Z. Zalevsky, E. Gur and D. Mendlovic, “CPU and memory allocation optimization using fuzzy logic,” SPIE Vol. 4787, Applications and Science of Neural Networks, Fuzzy Systems, and Evolutionary Computation V, 259-266 (2002).
69. I. Stainvas, Z. Zalevsky, D. Mendlovic and N. Intrator, “Improving classification of neural networks by reducing lens aperture,” SPIE Vol. 4787, Applications and Science of Neural Networks, Fuzzy Systems, and Evolutionary Computation V, 267-276 (2002).
70. V. Eckhouse, Z. Zalevsky and D. Mendlovic, “Dynamic sub wavelength encryption,” SPIE Vol. 4793, Mathematics of Data/Image Coding, Compression, and Encryption V with Applications, 293-300 (2003).
71. Z. Zalevsky, Y. Kapellner, E. Sabo and S. Kapellner, “Virtual display with low power consuming portable micro projector,” SPIE Vol. 5002, Projection Displays IX, 154-163 (2003).

72. Z. Zalevsky and V. Eckhouse, “Chromatic mode dispersion monitoring device,” SPIE Proc., Vol. 5246, Active and Passive Optical Components for WDM Communications III,54-57 (2003).
73. Z. Zalevsky and V. Eckhouse, “Polarization mode dispersion cancellation using periodic polarization modulation,” SPIE Proc., Vol. 5246, Active and Passive Optical Components for WDM Communications III, 713-719 (2003).
74. E. Marom, E. B. Eliezer, L. P. Yaroslavsky and Z. Zalevsky, “Two methods for increasing the depth of focus of imaging systems,” SPIE Vol. 5227, Advanced Topics in Optoelectronics, Microelectronics, and Nanotechnologies, 8-15 (2003).
75. Z. Zalevsky, E. Gur, D. Elkind and D. Mendlovic, “Solving the out of focus OTF reduction using a phase only filter andf fuzzy logic reasoning,” SPIE Vol. 4829, 19th Congress of the International Commission for Optics: Optics for the Quality of Life, 1090-1091 (2003).
76. E. B. Eliezer, Z. Zalevsky, E. Marom and N. Konforti, “All optical extended focus imaging system,” SPIE Vol 4829, 19th Congress of the International Commission for Optics: Optics for the Quality of Life, 194-195 (2003).
77. E. Gur, D. Mendlovic and Z. Zalevsky, “Optical generation of fuzzy based rules in a dual input environment,” SPIE Vol. 4829, 19th Congress of the International Commission for Optics: Optics for the Quality of Life, 409-410 (2003).
78. J. Solomon, Z. Zalevsky, D. Mendlovic and J. Garcia, “Optical filter multiplexing using spatial code division approach,” SPIE Vol. 4829, 19th Congress of the International Commission for Optics: Optics for the Quality of Life, 450-452 (2003).
79. Z. Zalevsky, R. Appelman, G. Shabtay, D. Mendlovic and J. Vertman, “Variable optical attenuation functionality for laser welding, laser range finder and LIDAR applications,” SPIE Vol. 5240, Laser Radar Technology for Remote Sensing, 223-229 (2004).
80. Z. Zalevsky and V. Eckhouse, “Eye diagram extraction using low rate electronics,” Proc. NFOEC 2003.
81. Z. Zalevsky, V. Eckhouse, D. Abrahams and D. Mendlovic, “Periodic polarization modulation for OSNR monitoring,” Proc. OFS 2003.
82. R. Appelman and Z. Zalevsky, "Q-Switching in Fibre Lasers," Euro Photonics, p.46 (July 2003).
83. O. Shalitin, G. Shabtay and Z. Zalevsky, "Future wave in optical network monitoring," Lightwave Web (July 2003).
84. G. Begelman, E. Gur, E. Rivlin, M. Rudzsky and Z. Zalevsky, "Cell nuclei segmentation using fuzzy logic engine," Int. Conference on Image Processing (ICIP), 2937-2940 (2004).
85. Z. Zalevsky, D. Goldring and D. Mendlovic, "Increased optical transmission ranges throughout bandwidth compression," SPIE Vol. 5281, Optical Transmission, Switching, and Subsystems, 736-740 (2004).
86. Z. Zalevsky, "All-optical longitudinal super resolutoin," IPCom, 000033073D (2004).
87. Z. Zalevsky, A. Shemer, V. Eckhouse, D. Mendlovic and S. Zach, "Compact RF-photonic configuration for highly resolved and ultrafast extraction of carrier and information of RADAR signal," Proceedings of the 11th IEEE International Conference on Electronics, Circuits and Systems (ICECS), 475-478, (2004).
88. N. Shamir, Z. Zalevsky and D. Mendlovic, "Blind Source Images Separation Based on Optical Fractional Fourier Transform Autocorrelation Width," Proceeding of the 7th International Conference on Optoelectronics, Fiber Optics and Photonics, India (Dec. 2004).
89. D. Sazbon, E. Rivlin and Z. Zalevsky, "Qualitative Range Extraction for Preplanned Scene Partitioning Using Laser Beam Coding," Proceeding of the IEEE Intl. Conf. on Image Analysis and Processing (ICIAP), Italy, 2005; Lecture Notes in Computer Science (LNCS) 3617, 320-327 (2005).
90. C Ferreira, V Mico, Z Zalevsky, P Garcia Martinez, J Garcia, "Super resolution by using tilted wave illumination," SPIE Vol. 5972 Advanced Topics in Optoelectronics, Microelectronics, and Nanotechnologies II (2005).
91. V. Mico, Z. Zalevsky, P. Garcia-Martinez and J. Garcia, "Superresolucion en formacio de imagenes interferometrica," Proc. of the Spanish conference of the physical society, Ourense, Galicia, Spain, 671-672 (Sept. 2005).
92. J. Garcia, Z. Zalevsky, P. Garcia-Martinez and C. Ferreira, "Analysis de objectos tridimensionales usando tecnicas de proyexxion speckle," Proc. of the Spanish conference of the physical society, Ourense, Galicia, Spain, 673-674 (Sept. 2005).
93. Z. Zalevsky, A. Shemer, and D. Mendlovic, "Nano-Second Fast Tunable and Reconfigurable RF-Photonic Spectrum Analyzer," Proc. of Frontiers in Optics, OSA Technical Digest Series (Optical Society of America, 2005), paper FWO2.
94. Z. Zalevsky, A. Zlotnik and A. Shemer, "Single snap-shot double field optical zoom and axially super resolved imaging system," SPIE Vol. 6196, Photonics in Multimedia, Strasbourg (April 2006).
95. Z. Zalevsky, A. Zlotnik and A. Shemer, "Axial All-Optical Super Resolved Imaging," Proceeding of ICIS, pp. 14-17, Rochester (May 2006).

96. D. Goldring, Z. Zalevsky and D. Mendlovic, “Photorefractive All-Optical Wavelength Converter for Optics Communication,” SPIE Proc. Vol. 6393, Nanophotonics for Communication: Materials, Devices, and Systems III, Boston (October 2006).
97. Z. Zalevsky, H. Ozaktas and A. Kutay, "Fractional Fourier transform- exceeding the classical concepts of signal's manipulation," Proceeding of ICO Meeting, St. Petersburg (Sep. 2006).
98. E. Gur and Z. Zalevsky, "Iterative Single-Image Digital Super-Resolution Using Partial High-Resolution Data," Proceeding of IAENG, World Congress of Engineering, UK, pp. 630-634 (2007).
99. Z. Zalevsky, "Photonic transistors in silicon," Technologies, 306, pp. 192 -196 (February 2007).
100. Z. Zalevsky, S. Rozental and M. Meller, "Super Resolved Imaging by Turbulence Encoding," Proceedings of the International workshop on Information Optics, 291-292, Iceland (July 2007).
101. J. Garcia, V. Mico, Z. Zalevsky, P. G. Martinez and C. Ferreira, "Resolution and field of view improvement using information coding," Proceedings of the International workshop on Information Optics, 177- 184, Iceland (July 2007).
102. D. Sylman, Z. Zalevsky, V. Mico, C. Ferreira and J. Garcia, "Two-Dimensional Temporal Coherence Coding for Super Resolved Imaging through Single Mode Fiber," Proceedings of the Ibero-American conference on optics, 1135-1140, Campinas, Brazil (October 2007).
103. Z. Zalevsky, O. Margalit, E. Vexberg, R. Pearl, and J. Garcia, "Using Partial Coherence and Digital Holography for 3-D Imaging and Profile Extraction," Proc. of Digital Holography and Three-Dimensional Imaging, OSA Technical Digest (CD) (Optical Society of America, 2008), paper DMA6.
104. V. Mico, Z. Zalevsky and J. Garcia, "Superresolution microscopy using common-path phase-shifting interferometry," SPIE Vol. 7000, Optical and Digital Image Processing, Photonics Europe, Strasbourg, France (April 2008).
105. A. Zlotnik, S. Ben Yaish, O. Yehezkel, M. Belkin, and Z. Zalevsky, "Thin films as spectacles and contact lenses for aberration-corrected vision via brain adaptation to contrast," Journal of Vision 8(6), 263 (2008).
106. S. Ben Yaish, A. Zlotnik, O. Yehezkel, M. Belkin and Z. Zalevsky, "Omni-focal refractive correction lens: A potential substitute for bi/multi-focal lenses," Invest. Ophthalmol. Vis. Sci. (IOVS) 49(13), 1798 (2008).
107. O. Yehezkel, S. Ben-Yaish, A. Zlotnik, M. Belkin and Z. Zalevsky, "A Novel Myopia Correcting Lens Which Reduces the Need for Accommodation for Near Vision Tasks," Invest. Ophthalmol. Vis. Sci. (IOVS) 49(13), 1799 (2008).
108. J. Garcia, Z. Zalevsky, P. Garcia-Martinez, C. Ferreira, M. Teicher and Y. Beiderman, "Projection of speckle patterns for 3D sensing," Journal of Physics: Conference series, 139, 012026 (June 2008).
109. J. Garcia, V. Mico, D. Cojoc, E. Shpilman and Z. Zalevsky, Full field of view super-resolution imaging via two static masks," Journal of Physics: Conference series, 139, 012024 (June 2008).
110. I. Baron, S. Levy, A. Chelly, Z. Zalevsky, O. Limon, S. Dun, T. Lu and I. Shlimak, "Electronic devices based upon Germanium nano-crystals with durability to strong neutron irradiation," SPIE Proc. 7095, Nanophotonics and Macrophotonics for Space Environments II (2008).
111. O. Limon, L. Businaro, A. Gerardino, L. Bitton, A. Fyidman and Z. Zalevsky, "Fabrication of Electro Optical Nano Modulator on Silicon Chip," Proc. 34th Micro and Nano Engineering Conference (MNE), pp. 138 (September 2008).
112. S. Ben Yaish, A. Zlotnik, I. Raveh, O. Yehezkel, M. Belkin, K. Lahav and Z. Zalevsky, "Omni-focal refractive focus correction technology as a substitute for bi/multi-focal intraocular lenses, contact lenses, and spectacles," SPIE Proc. 7163, Ophthalmic Technologies XIX (2009).
113. M. Parshin and Z. Zalevsky, "Optimized features allocation technique for improved automated alignment of wafers," SPIE Proc. 7251, Image Processing: Machine Vision Applications II (2009).
114. Z. Zalevsky, S. Ben Yaish, A. Zlotnik, I. Raveh, O. Yehezkel, K. Lahav-Yacuel and M. Belkin, "Omni refractive correction lens-A new solution for presbyopia," Cataract and Ref. Surgery Today Europe, 52-54 (January 2009). Selected as one out of top 5 articles from January 2009: http://bmctoday.net/crstodayeurope/2009/01/insert/
115. Z. Zalevsky, "New techniques to perform imaging with improved resolution," Technologies 336, 112-114 (Feb. 2009).
116. V. Mico, E. Valero, Z. Zalevsky and J. Garcia, "Three dimensional shape measurement by means of depth-to-coherence coding of the object shape," SPIE Proc. 7389, Optical Measurement Systems for Industrial Inspection VI (2009).
117. D. Fixler, A. Schwarz, J. Garcia and Z. Zalevsky, "Lensless microscope using wavelength multiplexing," SPIE Proc. 7365, Bioengineered and Bioinspired Systems IV (2009).
118. Z. Zalevsky, A. Shahmoon, O. Limon, Y. Abraham, L. Businaro, A. Gerardino, L. Bitton and A. Frydman, "Modulators and sensors based upon particle trapping," Proceeding of SMONP, pp. 65-66 (June 2009).

119. A. V. Butenko, V. Sandomirsky, R. Kahatabi, Z. Dashevsky, V. Kasiyan, Z. Zalevsky and Y. Schlesinger, "Experimental and Theoretical Investigation of the Barrier Pyroelectric Effect in a Quantum Paraelectric Semiconductor," arXiv:0808.1475v1, Condensed Matter (August 2008).
120. E. Gur, Y. Weizman and Z. Zalevsky, "Improving failure analysis navigation using optical super resolved imaging," IEEE proceedings of the 16th IEEE international symposium on the physical and failure analysis of integrated circuits (2009).
121. A. Rudnitsky, M. Nathan, M. Nazarathi, B. Larom, A. Martucci, L. Businaro, A. Gerardino and Z. Zalevsky, "Micro scale photonic integrated all-optical logic gate," Proc. 35th Micro and Nano Engineering Conference (MNE), O-NANO-20 (September 2009).
122. Z. Zalevsky, Y. Abraham, O. Limon, L. Bitton and A. Frydman, "Trapped particle based all-optical nano modulator and sensor," Proc. 35th Micro and Nano Engineering Conference (MNE), O-NANO-3 (September 2009).
123. A. Shahmoon, O. Limon, O. Girshevitz, Y. Fleger, H. V. Demir and Z. Zalevsky, "Tunable nano devices fabricated by controlled deposition of gold nanoparticles via focused ion beam," Proc. 35th Micro and Nano Engineering Conference (MNE), P-NANO-88 (September 2009).
124. S. Buhbut, A. Zaban, A. Rudnitsky, M. Rosenbluh and Z. Zalevsky "Polarizing and spectrally selective photonic device based upon dielectric nano rods," Proc. 35th Micro and Nano Engineering Conference (MNE), P-NANO-89 (September 2009).
125. H. Duadi and Z. Zalevsky, "Improved design of quantized phase-only masks for patterns projection," SPIE Proc. 7329, Three-Dimensional Imaging, Visualization, and Display (2009).
126. A. Borkowski, Z. Zalevsky and B. Javidi, "Nonperiodic spatial masking for geometrical super resolved imaging," SPIE Proc. 7329, Three-Dimensional Imaging, Visualization, and Display (2009).
127. M. Paturzo, P. Ferraro, A. Zlotnik and Z. Zalevsky, “Incoherent optical spatial image processing,” Lecture Notes in Computer Science (LNCS), Springer, 5882, 86-94 (2009).
128. Z. Zalevsky, S. Zach and M. Tur, “A Novel Photonic Rotman-Lens Design for Radar Phased Array Antennas,” Proc. of the International IEEE Conf. on Microwaves, Communications, Antennas and Electronic Systems, COMCAS (Nov. 2009).
129. Z. Zalevsky, A. Rudnitsky and S. Zach, “Photonic Configuration for Spectrally and Directionally Tunable Tera-Hertz Radiation Source,” Proc. of the International IEEE Conf. on Microwaves, Communications, Anntenas and Electronic Systems, COMCAS (Nov. 2009).
130. S. Zach, Z. Zalevsky and A. Shemer, “RF Systems Approach Based on Photonics Architecture,” Proc. of the International IEEE Conf. on Microwaves, Communications, Antennas and Electronic Systems, COMCAS (Nov. 2009).
131. M. Shragay and Z. Zalevsky, “Small dimensions large impact,” Galileo Vol. 123, 56-63 (Fall 2009).
132. S. Levy, I. Shlimak, A. Chelly, Z. Zalevsky and T. Lu, "Influence of Ge nanocrystals and radiation defects on C-V characteristics in Si-MOS structures," arXiv:0909.3235.
133. D. Sylman, Z. Zalevsky, V. Micó and J. García, "Super-Resolved Imaging based upon Spatial Depolarization of Light," Journal of Physics: Conference Series, Proc. of the International Workshop on Information Optics (WIO), 206, 012008 (2010).
134. A. Zlotnik, I. Raveh, S. Ben Yaish, O. Yehezkel, M. Belkin and Z. Zalevsky, “Extended Depth of Focus Intra-Ocular Lens: A Solution for Presbyopia and Astigmatism,” SPIE Proc. 7550, Ophthalmic Technologies XX (BIOS Jan. 2010).
135. S. Ben Yaish, A. Zlotnik, O. Yehezkel, K. Lahav-Yacouel, M. Belkin and Z. Zalevsky, “Non-toric extended depth of focus contact lenses for astigmatism and presbyopia correction,” SPIE Proc. 7550, Ophthalmic Technologies XX (BIOS Jan. 2010).
136. A. Zlotnik, Y. Abraham, L. Liraz, I. Abdulhalim and Z. Zalevsky, “Improved Extended Depth of Focus Full Field Spectral Domain Optical Coherence Tomography,” Proc. of the Conference on Laser Electro-Optics: Applications, OSA Technical Digest (CD) (Optical Society of America, 2010), paper AMA5.
137. Z. Zalevsky, “Wigner based Phase Space as a Tool to Analyze Super Resolved Imaging Configurations,” Proceedings of the 28th Progress In Electro-magnetic Research Symposium (PIERS), PIERS Online, Vol. 6, No. 7, pp. 625-631 (2010).
138. A. Zlotnik, S. Ben Yaish, O. Yehezkel, M. Belkin and Z. Zalevsky, “Extended depth of focus spectacles for full visual field presbyopia correction via brain adaptation,” Journal of Vision 10(7), 1383 (2010).
139. O. Yehezkel, A. Zlotnik, S. Ben Yaish, I. Raveh, M. Belkin and Z. Zalevsky, “Discrepancy Between Eye Models and Clinical Testing in Recognizing Defocused Targets,” Invest. Ophthalmol. Vis. Sci. (IOVS) 51(13), 1818 (2010).
140. A. Zlotnik, Y. Abraham, L. Liraz, I. Abdulhalim and Z. Zalevsky, “Improved Extended Depth of Focus Full Field Spectral Domain Optical Coherence Tomography,” Proc. of CLEO conference, San Jose (May 2010).

141. T. Yeminy, D. Sadot and Z. Zalevsky, “Narrowband Information Encryption Using Frequency and Phase Cipher,” Proceedings of the IEEE 26-th Convention of Electrical and Electronics Engineers in Israel, IEEEI (November 2010), pp. 77-80.
142. E. Gur, Z. Zalevsky and B. Javidi, “Super resolved remote sensing by fusion of multi spectral and spatial data,” Proc. of ISPRS TC VII Symposium – 100 Years ISPRS, ISPRS, Vol. XXXVIII, Part 7B, pp. 255-258, Austria (July 5–7, 2010).
143. A. Shahmoon and Z. Zalevsky, "Magneto-optic in-fiber micro modulator,” Proc. of the 36th Micro and Nano Engineering Conference (MNE), P-NANO-113 (September 2010), Genoa, Italy.
144. H. Duadi, P. Livshits, E. Gur, A. Inberg, Y. Shacham-Diamand, A. Weiss and Z. Zalevsky, “ULSI Copper and Silver Interconnect Microstructure Based Image Enhancement Algorithm,” Proc. of the Advanced Metallization Committee (AMC), (October 2010), Albany, NY, USA.
145. Z. Zalevsky, H. Slovin and A. Shahmoon, “Biomedical super resolved imaging using special micro-probe,” Proc. of ISABEL 2010, (the 3nd International Symposium on Applied Sciences in Biomedical and Communication Technologies), November 2010, Rome, Italy.
146. E. Gur and Z. Zalevsky, “Manipulating Multistage Interconnection Networks Using Fundamental Arrangements,” arXiv:1012.5597.
147. D. Fixler, A. Gur and Z. Zalevsky, “Superresolution saturated structured illumination microscopy system: theoretical aspects and real life,” Proc. of SPIE Conference 7905, Single Molecule Spectroscopy and Imaging IV, 790513 (2011).
148. Z. Zalevsky and J. Solomon, “Optical method and system for enhancing image resolution,” Patents and Designs Journal No. 12/2010, pp. 229 (December 30, 2010).
149. Z. Zalevsky, “Exceeding the Diffraction and the Geometric Limits of Imaging Systems: A Review,” Lecture Notes in Computer Science (LNCS), Springer, Vol. 6748, pp. 119–130, (2011).
150. A. Rudnitsky, A. Shahmoon, M. Nathan, M. Nazarathy, B. Larom, A. Martucci, L. Businaro, A. Gerardino and Z. Zalevsky, “Integrated Photonic Micro Logic Gate,” Lecture Notes in Computer Science (LNCS), Springer, Vol. 6748, pp. 1–9, (2011).
151. Z. Zalevsky, “Wigner based Analysis of Geometric Related Resolution Degradation and Geometric Super Resolution Configuration,” Proceedings of the Progress In Electro-magnetic Research Symposium (PIERS), PIERS Online, Vol. 7, No. 5, pp. 451-455 (2011).
152. Z. Zalevsky, “The laser era and the optical revolution,” Scientific American-Israel, 16-17 (2011).
153. Z. Zalevsky, Y. Beiderman and S. Lashansky, “Upgraded Configuration of Photonic Passive and Active Means for Improved Ballistic Missiles Interception Capabilities,” Proc. of the 7th international conference on missile defense (May 2011), San Sebastian, Spain.
154. Z. Zalevsky, A. Borkowski, E. Marom, B. Javidi, Y. Beiderman, V. Micó and J. García, “Recent advances in the field of super resolved imaging and sensing,” Proc. of SPIE Conference 8082, Optical Measurement Systems for Industrial Inspection VII (2011).
155. L. Camacho, V. Micó, Z. Zalevsky and J. García, “Phase extraction in microscopy using tunable defocusing by means of a SLM,” Proc. of SPIE Conference 8082, Optical Measurement Systems for Industrial Inspection VII (2011).
156. V. Micó, L. Granero, Z. Zalevsky and J. García, “Synthetic aperture engineering for super-resolved microscopy in digital lensless Fourier holography,” Proc. of SPIE Conference 8082, Optical Measurement Systems for Industrial Inspection VII (2011).
157. Z. Zalevsky, Y. Beiderman and S. Lashansky, “Upgraded Configuration of Photonic Passive and Active Means for Improved Ballistic Missiles Interception Capabilities,” Proc. of the 7th international conference on missile defense (May 2011), San Sebastian, Spain.
158. Z. Zalevsky, O. Fixler, V. Micó, J. García and B. Javidi, “Phase Microscopy and Geometric Super Resolved Imaging based upon Spatial Light Modulator,” Proc. of the International Workshop on Information Optics (WIO), Castellón, Spain (June 2011). IEEE Xplore Conference Publications (2011).
159. L. Granero, Z. Zalevsky and V. Mico, “Resolution and field of view improvement in digital holography using a VCSEL source array,” Proc. of the International Workshop on Information Optics (WIO), Castellón, Spain (June 2011). IEEE Xplore Conference Publications (2011).
160. A. Calabuig, V. Mico, Z. Zalevsky, C. Ferreira and J. Garcia, “Superesolution in digital holographic microscopy,” Proc. of the International Workshop on Information Optics (WIO), Castellón, Spain (June 2011). IEEE Xplore Conference Publications (2011).
161. Z. Zalevsky, O. Fixler, A. Gur, D. Fixler, V. Micó and J. Garcia, “Recent Advances in Diffraction and Geometry Related Super Resolution Approaches,” Proc. of the OSA Topical meeting, Toronto, Canada (July 2011), paper ITuA1.
162. Z. Zalevsky, A. Gur, R. Aharoni, V. G. Kutchoukov, Y. Garini, Y. Beiderman, V. Micó and J. García, “Novel Approaches for Near and Far Field Super Resolved Imaging,” Proc. of SPIE Conference 8011,

22nd Congress of the International Commission for Optics: Light for the Development of the World, 80116M-1 -- 80116M-11 (2011).

163. A. Inberg, P. Livshits, Z. Zalevsky, D. Malka, Y. Fleger and Y. Shacham-Diamand, “Thin Silver Films Electroless Deposition on Gold Nanoparticles Catalyst for Micro and Nanoelectronics,” Proc. of the Advanced Metallization Committee (AMC), (October 2011), San Diego, USA.
164. A. Shahmoon, A. Meiri, P. Livshits and Z. Zalevsky, “Nanoparticles and Plasmon Resonance Based Probe for Failure Analysis of ULSI Microchips and Electrical Characterizations of Metallic Interconnects,” Proc. of the Advanced Metallization Committee (AMC), (October 2011), San Diego, USA.
165. P. Livshits, A. Inberg, Y. Shacham-Diamand, D. Malka, Y. Fleger and Z. Zalevsky, “The Precipitation of Gold Nanoparticles Serving as Catalyst on Insulating Substrates for Metallic Ultra-Thin Film Deposition,” Proc. of the Advanced Metallization Committee (AMC), (October 2011), San Diego, USA.
166. A. Inberg, P. Livshits, Z. Zalevsky, D. Malka, Y. Fleger and Y. Shacham-Diamand, “Electroless Deposition of Silver Thin Films on Gold Nanoparticles for Micro and Nanoelectronics Applications,” Proc. of the 37th Micro and Nano Engineering Conference (MNE), (September 2011), Berlin, Germany.
167. D. Elbaz, A. Shahmoon, S. Buhbut, B. Z. Kupfer, A. Zaban and Z. Zalevsky, “Optical fiber based nanorods for generating radially polarized field,” Proc. of the 37th Micro and Nano Engineering Conference (MNE), (September 2011), Berlin, Germany.
168. A. Shahmoon, O. Limon, Z. Zalevsky, L. Businaro, G. Ciascab and A. Gerardino, “Enhanced electro-optic Bragg modulator based on plasma dispersion effect in Silicon,” Proc. of the 37th Micro and Nano Engineering Conference (MNE), (September 2011), Berlin, Germany.
169. V. Sheinman, A. Rudnitsky, T. Rakhmanbek and Z. Zalevsky, “Multifunctional Implantable Pill for Biomedical Treatment,” Proceedings of the 4th International Symposium on Applied Sciences in Biomedical and Communication Technologies (ISABEL 2011), paper 74, Published by ACM, New York (2011).
170. Z. Zalevsky, S. Avraham, M. Haning, S. Zach and M. Tur, “Construction of Photonic Rotman-Lens Module for Radar Phased Array Antennas,” Proc. of the International IEEE Conf. on Microwaves, Communications, Antennas and Electronic Systems, COMCAS (Nov. 2011).
171. A. Schwarz, Y. Sanhedrai and Z. Zalevsky, “Digital Camera Sensing and its Image Disruption with Controlled Radio-Frequency Reception/Transmission,” Proc. of the International IEEE Conf. on Microwaves, Communications, Antennas and Electronic Systems, COMCAS (Nov. 2011).
172. Y. Reznick, E. Banin, A. Lipovsky, R. Lubart and Z. Zalevsky, ”Laser based enhancement of susceptibility of bacteria to antibiotic,” Proc. of SPIE Conf. 8224, Biophotonics and Immune Responses VII (Feb. 2012).
173. D. Fixler and Z. Zalevsky, “Depolarization of light in biological tissues: affect the polarization state by flow and estimation of flow rates,” Prof. of SPIE Conf. 8221, Optical Interactions with Tissue and Cells XXIII (Feb. 2012).
174. Y. Beiderman, A. Skaat, M. Belkin, R.-P. Tornow, V. Mico, J. Garcia and Z. Zalevsky, “Optical remote continuous sensing of intraocular pressure variations” Proc. of SPIE Conf. 8209, Ophthalmic Technologies XXII (March 2012).
175. Z. Zalevsky and M. Belkin, “Coherence of light and generation of speckle patterns in photobiology and photomedicine,” Proc. of SPIE Conf. 8211, Mechanisms for Low-Light Therapy VII (March 2012).
176. M. Belkin, G. Elani, E. Azoulay, D. Ilani, Y. Beiderman and Z. Zalevsky, “Electro-Mechanical Tactile Corneal Stimulation System for Vision Substitution,” Invest. Ophthalmol. Vis. Sci. (IOVS) 53(14), 327 (2012).
177. Z. Zalevsky, I. Margalit, Y. Beiderman, A. Skaat, M. Belkin, R.-P. Tornow, V. Mico and J. Garcia, “Remote and Continuous Monitoring of Intraocular Pressure Using Novel Photonic Principle,” Invest. Ophthalmol. Vis. Sci. (IOVS) 53(14), 1972 (2012).
178. A. Shahmoon, A. Douplik, Z. Zalevsky, “Multicore-fiber microendoscope as a potential tool for intravascular laser surgery guidance”, Proceedings of Conference of Laser Surgery and Medicine 2012 (CLSM 2012), April 26-27, 2012, Yokohama, Japan, pp. 60-61 (2012).
179. V. Micó, J. García, Z. Zalevsky and B. Javidi, “Spatial light modulator-based phase-shifting Gabor holography,” Proc. of SPIE Conf. 8384, Three-Dimensional Imaging, Visualization, and Display 2012 838404 (May 2012).
180. E. Gur and Z. Zalevsky, “Retrieval of Rashi Semi-Cursive Handwriting via Fuzzy Logic” Proceedings of the 13 International Conference on Frontiers in Handwriting Recognition (ICFHR-2012), pp. 354-359, Bari, Italy (Sep. 2012).
181. Z. Zalevsky and J. Garcia, “Laser based simultaneous remote biomedical monitoring,” Lasers in Medicine & Biology, BioPhotonik 3, 1-5 (2012).

182. Z. Zelevsky and J. Garcia, “Simultaneous remote monitoring of biomedical parameters via laser speckle patterns,” Photonik International, 18–20 (2012).
183. A. Meiri, Z. Zalevsky, E. Gur, J. Garcia, V. Mico and B. Javidi, “On Axis Holography by Random Particles Encoding,” Proc. of the International Workshop on Information Optics (WIO), Quebec City, Canada (August 2012). IEEE Xplore Conference Publications (2012).
184. D. Cojoc, S. Finaurini, P. Livshits, E. Gur, A. Shapira, V. Mico and Z. Zalevsky, “Speckle based sensing device for fast detection of malaria,” OSA Technical Digest, Imaging Systems and Applications (ISA) 2012, paper IM4C.4
185. A. Meiri, A. Shahmoon and Z. Zalevsky, “Optically reconfigurable structures based on surface enhanced Raman scattering in nanorods,” Proc. of the 38th Micro and Nano Engineering Conference (MNE), (September 2012), Toulouse, France.
186. Z. Zalevsky, A. Shenhav, Z. Brodie, Y. Beiderman, J. Garcia, and V. Mico, "Optical remote sensor for alcohol concentration in blood," in Frontiers in Optics Conference, OSA Technical Digest 2012, paper FTu4E.5.
187. Z. Zalevsky, D. Sylman and H. J. Caulfield, “Quantum Optical Transient Encryption and Processing,” Lecture Notes on Computer Science (LNCS), Vol. 7715, 1–6 (2013).
188. T. Frumkin, A. Meiri and Z. Zalevsky, “Nanophotonic Viterbi decoding,” Proc. of IEEE 27th convention of Electrical & Electronics Engineers in Israel (IEEEI), Nov. 2012.
189. E. Avrahamov, N. Shavit and Z. Zalevsky, “Estimation of True Radiance and Sub Pixel Position of Saturated Point Targets,” Proc. SPIE 8643, Advances in Display Technologies III, 86430J (March 1, 2013).
190. J. Garcia, V. Micó, M. Sanz-Sabater, Y. Beiderman and Z. Zalevsky, “Visualization of deformation by secondary speckle sensing,” Proc. SPIE. 8792, Optical Methods for Inspection, Characterization, and Imaging of Biomaterials 87920A (April 9, 2013).
191. A. Meiri, E. Gur, J. Garcia, V. Micó, B. Javidi and Z. Zalevsky, “Usage of moving nanoparticles for improved holographic recording,” Proc. SPIE. 8738, Three-Dimensional Imaging, Visualization, and Display 2013 873808 (May 17, 2013).
192. A. Zlotnik, Z. Afik, I. Layani and Z. Zalevsky, “Using digital mirror devices and compressive imaging framework to achieve geometric superresolution and field of view extension,” Proc. SPIE 8618, Emerging Digital Micromirror Device Based Systems and Applications V, 86180K (March 8, 2013).
193. S. Levy, I. Shlimak, A. Chelly and Z. Zalevsky, “C-V characteristics of Si-MOS structures with Ge nanocrystals,” Proc. of the 21st Int. Symp. On Nanostructures: Physics and Technology, Saint Petersburg, Russia (June 24–28, 2013).
194. Z. Zalevsky, A. Meiri, E. Gur, V. Micó, J. Garcia and B. Javidi, “Resolution Enhancement and Orders Separation in On-axis Nanoparticles based Digital Holography,” OSA Technical Digest, Digital Holography and Three-Dimensional Imaging (DH) 2013 paper: DTh1A.1
195. Z. Zalevsky, A. Borkowski, N. Cohen, Z. Hadas, E. Marom, and B. Javidi, "Two dimensional geometric super resolved approach," in Imaging and Applied Optics, J. Christou and D. Miller, eds., OSA Technical Digest (online) (Optical Society of America, 2013), paper IW2E.2.
196. V. Micó and Z. Zalevsky, "Holography and Superresolution," in Imaging and Applied Optics, J. Christou and D. Miller, eds., OSA Technical Digest (online) (Optical Society of America, 2013), paper IM1E.3.
197. S. Cohen and Z. Zalevsky, “Usage of Amplitude, Phase and Polarization Readout for Sub-Pixel Resolution in RADAR Images,” Proc. of the International IEEE Conf. on Microwaves, Communications, Antennas and Electronic Systems, COMCAS, Tel-Aviv, Israel (October 2013).
198. B. Javidi, M. Cho, I. Moon, A. Anand, M. M. Coral, A. Stern, A. Mahalanobis and Z. Zalevsky, “3D Imaging and Visualization: An Overview of Recent Advances,” Proc. of the International Workshop on Information Optics (WIO), Canary Islands, Spain (July 2013). IEEE Xplore Conference Publications (2013).
199. T. Ilovitsh, A. Meiri, C. Ebeling, R. Menon, J. M. Gerton, E. M. Jorgensen and Z. Zalevsky, “Image Processing for Super-Resolution Localization in Fluorescence Microscopy,” Proc. of the International Workshop on Information Optics (WIO), Canary Islands, Spain (July 2013). IEEE Xplore Conference Publications (2013).
200. A. Rudnitsky, D. Elbaz and Z. Zalevsky, “Preliminary fabrication and characterization of low-leakage hybrid coaxial cable,” Proc. SPIE 8900, Millimetre Wave and Terahertz Sensors and Technology VI, 89000S (October 18, 2013).
201. Z. Zalevsky, A. Ilovitsh and Y. Beiderman, “Usage of cornea and sclera back reflected images captured in security cameras for forensic and card games applications,” Proc. SPIE. 8901, Optics and Photonics for Counterterrorism, Crime Fighting and Defence IX; and Optical Materials and Biomaterials in Security and Defence Systems Technology X 89010I (October 16, 2013).

202. S. Cohen and Z. Zalevsky, “Experimental extraction of sub-pixel resolution in RADAR images via amplitude, phase and polarization readouts,” SPIE Proceedings Vol. 8891, SAR Image Analysis, Modeling, and Techniques XIII 88910O (October 17, 2013).
203. זאב זלבסקי, “2013 סיכום פיתוחי הטכנולוגיה של שנת: מדע בדיוני בהתהוות,” http://www.nrg.co.il/online/13/ART2/539/606.html
204. M. Cohen, Z. Zalevsky, S. Pocoví-Martínez, A. Shahmoon and J. Perez-Prieto, “Thermally controlled photocatalytic coalescence of functionalized gold nanoparticles,” Proc. SPIE 9126, Nanophotonics V, 912611 (2 May 2014).
205. M. Cohen, R. Shavit, Y. Abulafia and Z. Zalevsky, “Nanoplasmonic Phased Array Superlens with Extended Depth of Focus,” Proc. of CLEO Conference, California (June 2014), paper: JTu4A.135.
206. I. Carmeli, M. Cohen, O. Hieflero, I. Liliach, Z. Zalevsky, V. Mujica and S. Richeter, “Space Quantization of Light Transmission by Strong Coupling of Plasmonic Cavity Modes with Photosynthetic Complexes,” arXiv:1404.3532.
207. A. Borkowski, E. Marom, and Z. Zalevsky, “Axial Scanning Geometric Super Resolved Imager,” Proc. of the International Workshop on Information Optics (WIO), (July 2014). IEEE Xplore Conference Publications (2014).
208. A. Meiri, R. Menon, and Z. Zalevsky, “Interferometric Localization Microscopy,” Digital Holography and Three-Dimensional Imaging (DH) 2014 paper: JTh1C.6
209. A. Borkowski, E. Marom, and Z. Zalevsky, “Axial Scanning and Phase Retrieval based Geometric Super Resolved Imager,” Imaging Systems and Applications (ISA) 2014 paper: IW2C.4
210. Z. Zalevsky, I. Margalith, N. Ozana, Y. Beiderman, M. Kunin, J. Garcia, and V. Mico, “Remote optical sensor of blood coagulation, oximetry and dehydration,” Imaging Systems and Applications (ISA) 2014 paper: IM4C.6
211. Z. Zalevsky and D. Fixler, “Non Labeled Tumor Detection via Polarization and Spectral Properties of Gold Nanoparticles,” Imaging Systems and Applications (ISA) 2014 paper: IM3C.4
212. A. Schwarz, A. Shemer, and Z. Zalevsky, “Nuclear 3D Gamma and X-Ray Imaging using Variable Pinholes Array System,” Imaging Systems and Applications (ISA) 2014 paper: IM3C.2
213. Z. Zalevsky, Y. Beiderman, M. Belkin, and Y. Rotenstreich, “Imaging via Tactile Spatial Stimulation of the Cornea,’ Imaging Systems and Applications (ISA) 2014 paper: IM3C.7
214. Z. Zalevsky, Y. Beiderman, D. Goldring, V. Mico, M. Sanz and J. Garcia, “Laser based sensing, fabrication and data handling technologies,” Proc. of LANE conference, Fürth, Germany (Sep. 2014), http://www.lane-conference.org/industrial-contributions.html
215. Z. Zalevsky, R. Menon and A. Rudnitsky, “Collimated Backlight for Displays and Micro-Projectors,” Proc. of the 28th Convention of Electrical and Electronics Engineers in Israel (Dec. 2014).
216. D. Malka, M. Cohen, J. Turkiewicz and Z. Zalevsky, “Optical Micro-Multi-Racetrack Resonator Filter Based on SOI Waveguides,” Proc. of the 28th Convention of Electrical and Electronics Engineers in Israel (Dec. 2014).
217. D. Malka, Y. Sintov and Z. Zalevsky, “Design of a 1x4 Silicon Wavelength Demultiplexer Based on Multimode Interference Coupler in a Slot Waveguide Structures,” Proc. of the 28th Convention of Electrical and Electronics Engineers in Israel (Dec. 2014).
218. A. Shemer, A. Schwarz, E. Gur, E. Cohen and Z. Zalevsky, “Image nonlinearity and non-uniformity corrections using Papoulis - Gerchberg algorithm in gamma imaging systems,” Journal of Physics: Conference Series 605, 012010 (2015).
219. A. Schwarz, A. Shemer, J. Wang, B. Javidi and Z. Zalevsky, “Super resolved imaging via variable pinholes array and time multiplexed object's coding,” Journal of Physics: Conference Series 605, 012009 (2015).
220. Z. Zalevsky, I. Raveh, O. Limon, S. ben Yaish, K. Lahav Yacouel, R. Doron and A. Zlotnik, “Clinical trials of interference-based extended depth of focus intra ocular lens design,” Proc. of SPIE, Vol. 9307, Ophthalmic Technologies XXV, 93070S (March 4, 2015).
221. Z. Zalevsky, Y. Beiderman, Y. Rotenstreich and M. Belkin, “Cornea based imaging via its tactile spatial stimulation,” Proc. of SPIE 9307, Ophthalmic Technologies XXV, 93071T (March 4, 2015).
222. Y. Mandel, T. Arens-Arad, N. Farah, A. Zlotnik and Z. Zalevsky, “Head mounted DMD for visual stimulation in freely moving rats: A novel tool for visual neuroscience research,” Proc. of SPIE 9376, Emerging Digital Micromirror Device Based Systems and Applications VII, 93760B (March 10, 2015).
223. A. Meiri, C. Ebeling, J. Martineau, Z. Zalevsky, J. Gerton, and R. Menon, "Sub-Nanometer Particle Tracking by Point-Spread-Function Spatial Modulation," in Optics in the Life Sciences, OSA Technical Digest (online) (Optical Society of America, 2015), paper NM2C.3.
224. Z. Zalevsky, T. Ilovitsh, Y. Danan, A. Meiri, and C. G. Ebeling, "New Directions in Super Resolved Imaging," in Imaging and Applied Optics 2015, OSA Technical Digest (online) (Optical Society of America, 2015), paper JW3A.1.

225. Z. Zalevsky and D. Gotthilf Nezri, "Passive optical device for nystagmus correction and resolution enhancement," in Imaging and Applied Optics 2015, OSA Technical Digest (online) (Optical Society of America, 2015), paper IM4A.3.
226. Z. Zalevsky, D. Gotthilf Nezri, and A. Zlotnik, "Spectacles and contact lens based solution for age-related macular degeneration," in Imaging and Applied Optics 2015, OSA Technical Digest (online) (Optical Society of America, 2015), paper IM4A.4.
227. A. Meiri, C. Ebeling, J. Martineau, Z. Zalevsky, J. Gerton, and R. Menon, "Self-Interference of Coherent and Incoherent Signals for Sub-Nanometer Localization of Single Emitters," in Imaging and Applied Optics 2015, OSA Technical Digest (online) (Optical Society of America, 2015), paper JW3A.3.
228. A. Meiri, C. Ebeling, J. Martineau, Z. Zalevsky, J. Gerton and R. Menon, "Improvement in In-Plane Localization Precision of Nanoparticles Using Interference Analysis," pap. JW2A.88, Proc. of CLEO (May 2015).
229. V. Micó, C. Ferreira, Z. Zalevsky and J. García, "Off-axis digital holographic microscopy by updating a regular upright microscope," Proc. SPIE. 9529, Optical Methods for Inspection, Characterization, and Imaging of Biomaterials II, 95290A. (June, 2015).
230. S. Mahajan, V. Trivedi, V. Chhaniwal, M. Prajapati, Z. Zalevsky, B. Javidi and A. Anand, "Measurement of concentration of sugar in solutions with laser speckle decorrelation," Proc. SPIE. 9525, Optical Measurement Systems for Industrial Inspection IX, 95253H. (June, 2015).
231. L. Granero, V. Micó, Z. Zalevsky, J. García and B. Javidi, "Improving the resolution in phase-shifting Gabor holography by CCD shift," Proc. SPIE. 9525, Optical Measurement Systems for Industrial Inspection IX, 95253U. (June, 2015).
232. H. Pinhas, L. Bidani, O. Baharav, M. Sinvani, M. Danino and Z. Zalevsky, "All optical modulator based on silicon resonator," Proc. SPIE Vol 9609, Infrared Sensors, Devices, and Applications V, 96090L (Aug. 2015).
233. A. Zev, A. Chelly, A. Karsenty and Z. Zalevsky, "Development, Simulation and Characterization of Nanoscale Silicon On Insulator Photo-Activated Modulator (SOIPAM) Hybrid Device", 2015 International Conference on Optical MEMS and Nanophotonics (OMN) Proceedings, IEEE Photonics Society, Jerusalem, 2-6 Aug. 2015.
234. Z. Zalevsky, Tali Ilovitsh, A. Ilovitsh and Y. Beiderman, "Remote Photonic Remote photonic nano-vibrations sensing and nanoparticles based nanoscopy," Proc. of IEEE Photonics Conference (IPC), 462-463 (2015).
235. V. Trivedi, S. Mahajan, P. Vora, N. Patel, V. Chhaniwal, Z. Zalevsky, B. Javidi, A. Anand, "Compact and low cost polarimeter based on laser speckle de-correlation," Proc. of the National Laser Symposium (NLS 24), India (Dec. 2015).
236. M. Mizrahi, E. Holdengreber, E. Farber and Z. Zalevsky, "Frequency multiplexing spatial super-resolved sensing for RADAR applications," Proc. of the International IEEE Conf. on Microwaves, Communications, Antennas and Electronic Systems, COMCAS (Nov. 2015).
237. Z. Zalevsky, "Time Manipulation of Magnetic and Metallic Nanoparticles for Enhanced Imaging," Nano World Vol. 1(2) magazine, pp.20-22 (Feb. 2016).
238. Z. Zalevsky, A. Rudnitsky, V. Sheinman, A. Tzoy, A. Toktosunov and A. Adashov, "Home-use cancer detecting plaster", SPIE Proceedings 9694: Optical Methods for Tumor Treatment and Detection: Mechanisms and Techniques in Photodynamic Therapy XXV (2016).
239. T. Ilovitsh, Y. Danan, R. Meir, A. Meiri, and Z. Zalevsky, "Temporally flickering nanoparticles for compound cellular imaging and super resolution," SPIE Proc. 9721: Nanoscale Imaging, Sensing, and Actuation for Biomedical Applications XIII (2016).
240. N. Ozana, Y. Beiderman, A. Anand, B. Javidi, J. García and Z. Zalevsky, "Non-contact optical sensor for detection of glucose concentration using a magneto-optic effect," SPIE Proc. 9721: Nanoscale Imaging, Sensing, and Actuation for Biomedical Applications XIII (2016).
241. Y. Danan, T. Ilovitsh, D. Liu, H. Pinhas, M. Sinvani, Y. Ramon, J. Azougi, A. Douplik and Z. Zalevsky, "Plasma dispersion effect assisted nanoscopy based on tuning of absorption and scattering resonances of nanoparticles," SPIE Proc. 9721: Nanoscale Imaging, Sensing, and Actuation for Biomedical Applications XIII (2016).
242. T. Ilovitsh, A. Weiss, A. Meiri, C. G. Ebeling, A. Amiel, H. Katz, B. Mannasse-Green and Z. Zalevsky, "Modified K-factor image decomposition for three-dimensional super resolution microscopy," Proc. SPIE. 9713, Three-Dimensional and Multidimensional Microscopy: Image Acquisition and Processing XXIII (2016).
243. T. Ilovitsh, A. Ilovitsh, A. Weiss, R. Meir and Z. Zalevsky, "Three-dimensional imaging using phase retrieval with two focus planes," Proc. SPIE. 9713, Three-Dimensional and Multidimensional Microscopy: Image Acquisition and Processing XXIII (2016).

244. A. Ilovitsh, V. Micó and Z. Zalevsky, “Super resolved optical system using circular gratings for objects with finite sizes,” Proc. SPIE. 9716, Optical Methods in Developmental Biology IV (2016).
245. A. Ilovitsh, T, Ilovitsh, E. Preter, N. Levanon and Z. Zalevsky, “Time multiplexing super resolution using a 2D Barker-based array,” Proc. SPIE. 9716, Optical Methods in Developmental Biology IV (2016).
246. A. Schwarz, A. Zlotnik, Y. Kapellner Rabinovitz, H. Pinhas, A. Shemer and Z. Zalevsky, “Computational imaging expansion from visible to infrared and to THz systems,” Proc. SPIE. 9761, Emerging Digital Micromirror Device Based Systems and Applications VIII (2016).
247. N. Ozana, Y. Bishitz, Y. Beiderman, J. García and Z. Zalevsky, “Remote optical configuration of pigmented lesion detection and diagnosis of bone fractures,” SPIE Proc. 9689: Photonic Therapeutics and Diagnostics XII (2016).
248. B. Lengenfelder, F. Mehari, L. Hoppe, F. Klämpfl, F. Tenner, Z. Zalevsky, and M. Schmidt, "Remote photoacoustic tomography using speckle sensing with a high-speed camera," in *Biomedical Optics 2016*, OSA Technical Digest (online) (Optical Society of America, 2016), paper JM3A.16.
249. Z. Zalevsky, “Time manipulation of magnetic and metallic nanoparticles for enhanced imaging,” Nano world, pp. 20-22, Feb. 2016 issue.
250. L. Granero, V. Micó, C. Ferreira, Z. Zalevsky and J. García, “Superresolution imaging system by color-coded tilted-beam illumination in digital in-line holographic microscopy,” Proc. SPIE. 9896, Optics, Photonics and Digital Technologies for Imaging Applications IV, 98960E (April 2016).
251. V. Mico, J. A. Picazo-Bueno, Z. Zalevsky; J. Garcia and C. Ferreira, “Slightly off-axis holography with partially coherent illumination implemented into a standard microscope,” Proc SPIE. 9896, Optics, Photonics and Digital Technologies for Imaging Applications IV, 98960C (April 2016).
252. A. Schwarz, J. Wang, A. Shemer, Z. Zalevsky and B. Javidi, “Time multiplexed pinhole array based lensless three-dimensional imager,” SPIE Proc. Vol. 9867, Three-Dimensional Imaging, Visualization, and Display 2016, Baltimore (April 2016).
253. Y. Danan, N. Ozana, and Z. Zalevsky, "Self periodically heated-cooled nanostructure for photoacoustic imaging with CW illumination," in *Imaging and Applied Optics 2016*, (Optical Society of America, 2016), paper IW5F.2.
254. O. Wagner, M. Schultz, Y. Ramon, E. Sloutskin, and Z. Zalevsky, "Active-scan linear-optics nanoscopy using optically trapped particles," in *Imaging and Applied Optics 2016*, OSA Technical Digest (online) (Optical Society of America, 2016), paper CM3D.5.
255. A. Schwarz, A. Shemer, R. Bar-Shalom, H. Avraham, N. Ozana, H. Pinhas, and Z. Zalevsky, "Time Multiplexed Pinholes Array Based Imaging in the Gamma and X-ray Spectral Range," in *Imaging and Applied Optics 2016*, OSA Technical Digest (online) (Optical Society of America, 2016), paper CM2B.1.
256. J. Bar Magen Numhauser and Z. Zalevsky, "Usage of iPhone for 3D and Through-walls Objects Mapping," in *Imaging and Applied Optics 2016*, OSA Technical Digest (online) (Optical Society of America, 2016), paper TW5A.3.
257. A. Shahmoon, J. Strauss, H. Hazan, M. Schmidt and Z. Zalevsky, “Usage of Picosecond Laser and Controlled Deposition of Gold Nanoparticles for Fabrication of Photonic and Electronic Nanostructures,” Proceedings of the 34th Israeli Conference of Mechanical Engineering Faculty of Mechanical Engineering, Technion, Israel (Nov. 2016).
258. Y. Danan, T. Ilovitsh, D. Malka, D. Liu and Z. Zalevsky, “Super-resolved imager with nanometric resolution based on silicon coated gold nanoparticles,” Proc. of the 15th Workshop on Information Optics (WIO), IEEE Xplore Conference Publications (2016).
259. D. Malka, Y. Danan and Z. Zalevsky, “Slot Silicon-Gallium Nitride Waveguide Realizing 1x4 Optical Power Splitter,” The Proc. of the IEEE International Conference on the Science of Electrical Engineering (ICSEE) (2016).
260. F. Tenner, A. Schramm, M. Söhle, M. Regensburger, E. Wirthmann, Z. Zalevsky and M. Schmidt, “Towards a multi-sensor system for the diagnosis of neurological disorders,” Proc. of the IEEE International Conference on Advanced Intelligent Mechatronics (AIM), IEEE Conference Publications, Pages: 495 – 500 (2016).
261. A. Meiri, E. M. Strohm, M. C. Kolios, and Z. Zalevsky, “Spatial interference encoding patterns based super resolved photoacoustic microscopy,” SPIE Proceedings Volume 10064, Photons Plus Ultrasound: Imaging and Sensing 2017 (2017).
262. M. Golberg, S. Polani, N. Ozana, Y. Beiderman, J. Garcia, J. Ruiz-Rivas Onses, M. Sanz Sabater, M. Shatsky and Z. Zalevsky, “Remote optical stethoscope and optomyography sensing device,” SPIE Proceedings Volume 10077, Nanoscale Imaging, Sensing, and Actuation for Biomedical Applications XIV (2017).
263. T. Sirkis, Y. Beiderman, S. Agdarov, Y. Beiderman and Z. Zalevsky, “Blood pulse wave velocity and pressure sensing via fiber based and free space based optical sensors,” SPIE Proceedings Volume 10077, Nanoscale Imaging, Sensing, and Actuation for Biomedical Applications XIV (2017).

264. E. Cohen, D. Malka, A. Shemer, A. Shahmoon, M. London and Z. Zalevsky, “Micro mirrors based coupling of light to multi-core fiber realizing in-fiber photonic neural network processor,” SPIE Proceedings Volume 10117, Emerging Digital Micromirror Device Based Systems and Applications IX (2017).
265. B. Lengenfelder, F. Mehari, Y. Tang, F. Klämpfl, Z. Zalevsky and M. Schmidt, “Towards non-contact photo-acoustic endoscopy using speckle pattern analysis,” SPIE Proceedings Volume 10064, Photons Plus Ultrasound: Imaging and Sensing 2017 (2017).
266. T. Ilovitsh, A. Ilovitsh, O. Wagner and Z. Zalevsky, “Time multiplexing super-resolution nanoscopy based on the Brownian motion of gold nanoparticles,” SPIE Proceedings Volume 10077, Nanoscale Imaging, Sensing, and Actuation for Biomedical Applications XIV (2017).
267. A. Schwarz, A. Shemer, N. Ozana, J. Garcia, and Z. Zalevsky, “Augmentative Alternative Communication using Eyelid Movement Remote Detection by Speckle Patterns Tracking System for Amyotrophic Lateral Sclerosis Disease,” Optics in the Life Sciences Congress proceedings, OSA Technical Digest (online) (Optical Society of America, 2017), paper JTu4A.31.
268. N. Shabairou, H. Pinhas, A. Schwarz, Z. Zalevsky and A. Shemer, “Lens-less imaging using variable and wavelength multiplexed pinhole array,” Optics in the Life Sciences Congress proceedings, OSA Technical Digest (online) (Optical Society of America, 2017), paper JTu4A.30.
269. A. Schwarz, A. Shemer, N. Ozana, R. Califa, J. García, and Z. Zalevsky, "Laser Vibrometer Interferometry for Speckle Patterns Tracking Systems," Proc. of CLEO (*Conference on Lasers and Electro-Optics)*, OSA Technical Digest (online) (Optical Society of America, 2017), paper JW2A.1.
270. A. Schwarz, A. Shemer, N. Ozana, R. Califa, J. García, and Z. Zalevsky, "An Optical Remote Sensor for Fingerprint Identification using Speckle Pattern," Proc. of CLEO (*Conference on Lasers and Electro-Optics)*, OSA Technical Digest (online) (Optical Society of America, 2017), paper ATu3C.5.
271. H. Pinhas, Y. Danan, M. Sinvani, M. Danino and Z. Zalevsky, “STED like microscopy based on plasma dispersion effect in silicon,” Prof. of *Imaging and Applied Optics 2017 (3D, AIO, COSI, IS, MATH, pcAOP)*, OSA Technical Digest (online) (Optical Society of America, 2017), paper CTh3B.5.
272. Z. Zalevsky, Y. Danan, and R. Menon, "Super resolved computational photo-lithography recording based upon multiple exposures and self-assembled nano-structures," Prof. of *Imaging and Applied Optics 2017 (3D, AIO, COSI, IS, MATH, pcAOP)*, OSA Technical Digest (online) (Optical Society of America, 2017), paper CW4B.2.
273. V. Micó, J. Ángel Picazo-Bueno, Z. Zalevsky, J. García and C. Ferreira, “Superresolution imaging in spatially multiplexed interferometric microscopy by using time multiplexing,” Proc. SPIE 10329, Optical Measurement Systems for Industrial Inspection X, 103294C (June 26, 2017);
274. O. Wagner, M. Schultz, A. Meiri, E. Edri, R. Meir, E. Sloutskin and Z. Zalevsky, "Label free microscopy with enhanced localization performance based upon temporally modulated polarization," Proc. of the *19th International Conference on Transparent Optical Networks (ICTON)*, Girona, Spain, 2017, pp. 1-4.
275. E. Wohlgemuth, T. Yeminy, Z. Zalevsky and D. Sadot, “Experimental Demonstration of Encryption and Steganography in Optical Fiber Communications,” Proc. of the *European Conference on Optical Communication (ECOC 2017)*, Gothenburg, Sweden (Sept. 17 – 21).
276. O. Wagner and Z. Zalevsky, “Synthesis of 3-D amplitude distribution through layer of discrete scatterers for photo-acoustic excitation,” Proc. of the International Workshop on Information Optics (WIO), Interlaken, Switzerland (July 2017). IEEE Xplore Conference Publications (2017).
277. F. Tenner, M. Regensburger, A. Schramm, M. Söhle, K. Schwarzkopf, Z. Zalevsky and M. Schmidt, “Evaluation of a Laser-Based Sensor for the Diagnosis of Neurological Disorders,” Proc. of the 39th Annual International Conference of the IEEE Engineering in Medicine & Biology Society (EMBC'17), JeJu Island, S. Korea (July 2017). IEEE Xplore Conference Publications (2017).
278. N. Ozana, R. Califa, A. Schwarz, N. Lipschitz-Tayar, M. Wolf, and Z. Zalevsky, “Remote Optical Sensor for Detection of Middle Ear Effusion,” Proc. of the *2017 European Conference on Lasers and Electro-Optics (CLEO)- European Quantum Electronics Conference*, Munich, Germany (June 2017).
279. Y. Danan, Z. Zalevsky and M. Sinvani, “Improved edge detection of regions enriched with gold nanorods inside biological phantom,” Proc. of the *2017 European Conference on Lasers and Electro-Optics (CLEO)- European Quantum Electronics Conference*, Munich, Germany (June 2017).
280. Z. Zalevsky, “The Laser,” Technology section of Haaretz journal, p. 10 (Oct 26th 2017).
281. S. Benichou, S. Zach, M. Danino and Z. Zalevsky, “Optically Implemented Synchronized Low Frequency Sampling Methodology for Filtering and Recovery of Noise Embedded Narrow Band Signals,” Proc. of the International IEEE Conf. on Microwaves, Communications, Antennas and Electronic Systems, COMCAS, Tel-Aviv, Israel (Nov. 2017).
282. V. Trivedi, S. Mahajan, B. Pathak, V. Chhaniwal, Z. Zalevsky, B. Javidi, A. Anand, “Laser Speckle Based Refractometer,” Proc. of the National Laser Symposium (NLS 26), India (Dec. 2017).

283. J. Azougi, Y. Ramon, L. Businaro, G. Ciasca, A. Gerardino, Z. Zalevsky, “Silicon single mode waveguide modulator based upon switchable Bragg reflector,” Proc. SPIE 10537, Silicon Photonics XIII, 1053718 (Jan. 2018).
284. A. Bennett, T. Sirkis, Ye. Beiderman, S. Agdarov, Ya. Beiderman and Z. Zalevsky, “Breast cancer early detection via tracking of skin back-scattered secondary speckle patterns,” Proc. SPIE 10506, Nanoscale Imaging, Sensing, and Actuation for Biomedical Applications XV, 1050603 (Feb. 2018).
285. A. Meiri and Z. Zalevsky, “Boolean processing by cascaded all-optical devices via intra-bit phase encoding,” Proc. SPIE 10537, Silicon Photonics XIII, 105371A (Feb. 2018).
286. H. Pinhas, D. Malka, Y. Danan, M. Sinvani and Z. Zalevsky, “Design of tunable thermo-optic C-band filter based on coated silicon slab,” Proc. SPIE 10526, Physics and Simulation of Optoelectronic Devices XXVI, 105261T (Feb. 2018).
287. Z. Zalevsky, “Remote Noninvasive Sensor Monitors Multiple Bioparameters,” BioPhotonics Vol. 25(3), April 2018.
288. R. Califa, M. Golberg, A. Schwarz, N. Ozana, Z. Markman, J. García, A. Shemer and Z. Zalevsky, “All Optical Real Time Method for Laser Speckle Pattern Tracking of Non-Contact Biomedical Parameters,” Proc. of *Biomedical Optics Congress 2018 (Microscopy/Translational/Brain/OTS)*, OSA Technical Digest (Optical Society of America, 2018), paper JW3A.23.
289. T. Yeminy, E. Wohlgemuth, D. Sadot and Z. Zalevsky, “Optical Cryptography for Cyber Secured and Stealthy Fiber-Optic Communication Transmission,” In: Dinur I., Dolev S., Lodha S. (eds) Cyber Security Cryptography and Machine Learning. CSCML 2018. Lecture Notes in Computer Science (LNCS), vol 10879. Springer, Cham, **Invited paper**.
290. M. Golberg, R. Califa, S. Polani, J. García-Monreal, and Z. Zalevsky, "In Depth Flow Inspection based on Spatial Analysis of Dynamic Laser Speckle," in *Conference on Lasers and Electro-Optics*, OSA Technical Digest (online) (Optical Society of America, 2018), paper JTu2A.101.
291. O. Wagner, A. Pandya, Y. Chemla, H. Pinhas, I. Schelkanova, A. Shahmoon, Y. Mandel, A. Douplik, and Z. Zalevsky, "Lens-less Micro-endoscopy through highly scattering media," in *Conference on Lasers and Electro-Optics*, OSA Technical Digest (online) (Optical Society of America, 2018), paper JTu2A.107.
292. N. Ozana, A. Primov-Fever, A. Bennet, M. Wolf, and Z. Zalevsky, "Remote Photonic Sensing of Vocal Cords Vibrations," in *Conference on Lasers and Electro-Optics*, OSA Technical Digest (online) (Optical Society of America, 2018), paper AM4P.3.
293. N. Ozana, H. Genish, A. Schwartz, S. Polani, J. García, Z. Zalevsky, and R. Califa, "Remote Sensing of Photoplethysmogram using Multi Spot Illumination," in *Imaging and Applied Optics 2018 (3D, AO, AIO, COSI, DH, IS, LACSEA, LS&C, MATH, pcAOP)*, OSA Technical Digest (Optical Society of America, 2018), paper CTh3C.3.
294. Z. Zalevsky, “Usage of lasers for remote diagnosis of diseases,” Proc. of the 2018 International Conference Laser Optics (ICLO), pp 452 (2018). IEEE Xplore Conference Publications (2018).
295. B. Lengenfelder, S. Asraf, N. Ozana, M. Späth, M. Schmidt and Z. Zalevsky, “Remote detection of Brillouin radial acoustic modes in an optical fiber using speckle-sensing,” Proc. of the 26th Optical Fiber Sensors (OFS) conference, OSA Technical Digest (Optical Society of America, 2018), paper WF67.
296. E. Wohlgemuth, Y. Yoffe, T. Yeminy, Z. Zalevsky and D. Sadot, “Low Cost PAM-4 IM/DD Photonic-Layer Secured Communication for DCI Based on Phase Mask,” Proc. of the European Conference on Optical Communication (ECOC 2018), Roma, Italy (Sept. 2018).
297. O. Fogel, Z. Kotler and Z. Zalevsky, “Towards 3D digital printing of micro-electromechanical systems,” Printing for Fabrication 2018 conf. Proceeding, pp. 186-188, Dresden, Germany (Sept. 2018).
298. I. Gabay, A. Shemer, A. Schwarz, M. Mizrahi, E. Holdengreber, E. Farber and Z. Zalevsky, “Microwave Superresolving Imaging Configurations,” Proc. of the IEEE Radio and Antenna Days of the Indian Ocean (RADIO) international conference, pp 495-496, Mauritius (Oct. 2018).
299. H. Brestel, Z. Zalevsky and A. Karsenty, “Enhanced Optical Tunable Excited Capacitor (EOTEC) for Faster Responsivity,” Proc. of the 2018 ICSEE International Conference on the Science of Electrical Engineering, Eilat (Dec. 2018).
300. H. Genish, N. Ozana and Z. Zalevsky, “Speckle based sensing of chemicals by an acoustic excitation in aqueous solutions,” Proc. of SPIE Conf. 10895, Frontiers in Biological Detection: From Nanosensors to Systems XI, SPIE Photonics West, San Francisco, USA (Feb. 2019).
301. S. Buchsbaum, Y. Keshet, N. Ozana and Z. Zalevsky, “Photonic bio-sensor based on multiclass support vector machine with a reject option,” Proc. of SPIE conf. 10871, Multimodal Biomedical Imaging XIV, SPIE Photonics West, San Francisco, USA (Feb. 2019).
302. M. Tiferet, H. Pinhas, O. Wagner, Y. Danan, M. Danino, Z. Zalevsky and M. Sinvani, “Plasma dispersion effect based super-resolved imaging in silicon,” Proc. of SPIE Conf. 10891, Nanoscale Imaging,

Sensing, and Actuation for Biomedical Applications XVI, SPIE Photonics West, San Francisco, USA (Feb. 2019).

303. A. Sanjeev, Y. Kapellner Rabinovitz, N. Shabairou, E. Gur and Z. Zalevsky, “Non-contact optical wavefront shaping for focusing light and high-resolution imaging inside and behind biological scattering medium,” Proc. of SPIE Conf. 10932, Emerging Digital Micromirror Device Based Systems and Applications XI, SPIE Photonics West, San Francisco, USA (Feb. 2019).
304. G. Rachamim, M. Ritenberg, R. Jelinek and Z. Zalevsky, “Tunable prism based upon novel piezoelectric nanoparticle/sol-gel design used for active solar cells concentrators,” Proc. of SPIE Conf. 10913, Physics, Simulation, and Photonic Engineering of Photovoltaic Devices VIII, SPIE Photonics West, San Francisco, USA (Feb. 2019).
305. A. Schwarz, N. Ozana, A. Shemer, R. Califa, H. Genish and Z. Zalevsky, “Elasticity and Depth Measurement using Both Secondary Speckle and Time Multiplexing Interference,” Proceedings of Photoptics 2019, The 7th International Conference on Photonics, Optics and Laser Technology, pp. 255-262, Prague, Czech Republic (Feb. 2019).
306. T. Yeminy, S. Asraf, D. Sadot, and Z. Zalevsky, "Flexible Photonic Spectral Shaping at Ultrahigh Resolution of 125MHz," in *Optical Fiber Communication Conference (OFC) 2019*, OSA Technical Digest (Optical Society of America, 2019), paper W2A.7.
307. H. Genish, M. Binyamin, A. Schwarz, N. Ozana, Z. Zalevsky, and R. Califa, "Improved Non-contact Optical Monitoring of Blood Pulsation in IR using Laser Speckle Contrast Analysis," in *Biophotonics Congress: Optics in the Life Sciences Congress 2019 (BODA, BRAIN, NTM, OMA, OMP)*, OSA Technical Digest (Optical Society of America, 2019), paper JT4A.51 (April 2019).
308. M. Benyamin, H. Genish, R. Califa, N. Ozana, A. Schwartz, and Z. Zalevsky, "Remote Detection of Photoacoustic Signals using Time Varying Speckle Patterns," in *Biophotonics Congress: Optics in the Life Sciences Congress 2019 (BODA,BRAIN,NTM,OMA,OMP)*, OSA Technical Digest (Optical Society of America, 2019), paper DT1B.7 (April 2019).
309. O. Wagner, A. Shahmoon and Z. Zalevsky, “Imaging Through Blood Super-Resolution Based Flexible Microendoscope,” Proc. of SAGES conf., Surg. Endosc. 33, S305 (2019).
310. M. Benyamin, H. Genish, R. Califa, N. Ozana, A. Schwartz and Z. Zalevsky, “Photoacoustic Pulse Width Measurement using Speckle Contrast Analysis,” CLEO: Applications and Technology, Paper# ATh3K.5 (2019).
311. N. Ozana, J. Noah, X. Zhang, Y. Ono, J. Hirsch and Z. Zalevsky, “Remote Photonic Sensing of Cerebral Hemodynamics via Spatial-Temporal Analysis of Back-Scattered Laser Light,” CLEO: Science and Innovations, Paper# JTu2A.120 (2019).
312. N. Ozana, Z. Markman, R. Califa and Z. Zalevsky, “Improving the Temporal Resolution of Speckle based Remote Phonocardiogram Sensing via Laser Modulation,” CLEO: Science and Innovations, Paper# JTu2A.8 (2019).
313. M. Golberg, R. Califa, S. Polani, J. Garcia and Z. Zalevsky, “In Depth Flow Inspection Using Dynamic Laser Speckle Temporal Statistics,” bioRxiv 680330; doi: https://doi.org/10.1101/680330
314. M. Tiferet, Z. Zalevsky, and M. Sinvani, "Sharper and Dipper Laser Beam Shaping for Super-Resolved Imaging in Silicon," in *Imaging and Applied Optics 2019 (COSI, IS, MATH, pcAOP)*, OSA Technical Digest (Optical Society of America, 2019), paper JTh3D.6.
315. A. Schwarz, I. Gabay, N. Ozana, Z. Zalevsky, and A. Shemer, "RF Cross Section Imaging and Range Detection," in *Imaging and Applied Optics 2019 (COSI, IS, MATH, pcAOP)*, OSA Technical Digest (Optical Society of America, 2019), paper IW3B.4.
316. B. Lengenfelder, K. Schwarzkopf, N. Oetter, F. Mehari, E. Eschner, F. Klämpfl, F. Stelzle, M. Kesting, Z. Zalevsky, M. Schmidt, “Acoustic differentiation of dental soft and hard tissues using remote speckle-analysis during Er:YAG ablation,” Proc. of the European Conference on Biomedical Optics (ECBO), Conf. 1107, SPIE Vol. 11077, Opto-Acoustic Methods and Applications in Biophotonics, Munich (2019).
317. B. Lengenfelder, S. Funk, M. Hohmann, M. Späth, F. Klämpfl, F. Stelzle, Z. Zalevsky, M. Schmidt, “Remote speckle-sensing for improved differentiation between different types of tissues,” Proc. of the European Conference on Biomedical Optics (ECBO), Conf. 1107, SPIE Vol. 11077, Opto-Acoustic Methods and Applications in Biophotonics, Munich (2019).
318. B. Lengenfelder, M. Hohmann, F. Klämpfl, A. Zam, M. Weiß, S. J. Rupitsch, Z. Zalevsky, M. Schmidt, “Model for the description of remote photoacoustic sensing using speckle-analysis,” Proc. of the European Conference on Biomedical Optics (ECBO), Conf. 1107, SPIE Vol. 11077, Opto-Acoustic Methods and Applications in Biophotonics, Munich (2019).
319. O. Wagner and Z. Zalevsky, “Resolution and depth of focus enhanced imaging in label-free micro-endoscopy and nanoscopy,” Proc. of the International Conference on Optics and Electro-Optics (ICOL-2019), Dehradun, India (Oct. 2019).

320. H. Zafrir, U. Malik, E. Levintal, N. Weisbrod, Y. Ben Horin, Z. Zalevsky and N. Inbar, “Radon and CO2 in deep, as a proxy for pre-seismic research,” 15th International Conference on Gas Geochemistry ICGG15, Palermo & Milazzo, Italy (October 2019). Edited by F. Italiano, C.G. Caruso, and R. Celi. Misc. INGV, 49: 1338. ISSN 1590-2595, 2019.
321. M. Tiferet, N. Shabairou, Z. Zalevsky, M. Sinvani, “Sharper and dipper laser beam shaping for super-resolved imaging in silicon,” Proc. of SPIE conf. 11254, Nanoscale Imaging, Sensing, and Actuation for Biomedical Applications XVII, 1125407 (Feb. 2020).
322. A. Halevi, S. Cohen, N. Farah, A. Shoval, O. Shefi, Y. Mandel, Z. Zalevsky, N. Ozana, “Remote optical sensing of neuronal tissue vibrations during regeneration,” Proc. of SPIE conf. 11254, Nanoscale Imaging, Sensing, and Actuation for Biomedical Applications XVII, 112540I (Feb. 2020).
323. A. Bennet, R. Hendel, B. Straussman, Y. Beiderman, S. Agdarov and Z. Zalevsky, “Fiber-integrated fabric for non-tight contact bio-sensing of vital signs,” Proc. of SPIE conf. 11258, Frontiers in Biological Detection: From Nanosensors to Systems XII, 112580D (Feb. 2020).
324. Z. Zalevsky, “Enhanced non-contact and continuous sensing of periodic bio-signs: Laser encoded illumination for extending sensor’s temporal bandwidth,” Proc. of SPIE conf. 11254, Nanoscale Imaging, Sensing, and Actuation for Biomedical Applications XVII, 112540S (Feb. 2020).
325. U. Hanuka, Y. Zigman, M. Tiferet, Z. Zalevsky, M. Sinvani, “Optical waveguide on silicon made by zone melting method,” Proc. of SPIE conf. 11267, Laser Applications in Microelectronic and Optoelectronic Manufacturing (LAMOM) XXV, (Feb. 2020). http://dx.doi.org/10.1117/12.2545949
326. M. Benyamin, H. Genish, R. Califa, N. Ozana, A. Schwarz and Z. Zalevsky "Remote thermal sensing of tissues based upon analysis of time-changing back-scattered speckle patterns", Proc. SPIE 11363, Tissue Optics and Photonics, 113631E (2 April 2020);
327. B. Lengenfelder, H. Jarkas, N. Shabairou, M. Hohmann, M. Schmidt and Z. Zalevsky and F. Klämpfl, “Remote photoacoustic tomography using diode-array and speckle-analysis,” Proc. SPIE 11363, Tissue Optics and Photonics, 1136308 (2 April 2020);
328. B. Lengenfelder, M. Hohmann, M. Röhm, M. Schmidt, A. Zam, Z. Zalevsky and F. Klämpfl, “Image reconstruction for remote photoacoustic tomography using speckle-analysis,” Proc. SPIE 11363, Tissue Optics and Photonics, 113631F (2 April 2020).
329. H. Genish, L. Wolbromsky, M. Benyamin, R. Califa and Z. Zalevsky, “Speckle Based Sensing using Incoherent Thermal Light Source,” Proc. of CLEO (Conference on Lasers and Electro-Optics), CLEO: Applications and Technology, Paper# ATh3K.4 (May 2020).
330. A. Schwarz, N. Ozana, A. Semer, R. Califa, H. Genish and Z. Zalevsky, “Photonic non-contact tomographic & volumetric tissue probing,” in *Biophotonics Congress: Biomedical Optics 2020 (Translational, Microscopy, OCT, OTS, BRAIN)*, OSA Technical Digest (Optical Society of America, 2020), paper SM3D.1.
331. A. Bennett, Ye. Beiderman, S. Agdarov, Ya. Beiderman, R. Hendel, B. Straussman and Z. Zalevsky, “Monitoring of vital bio-signs by multimode speckle based optical fiber sensor,” in *Biophotonics Congress: Biomedical Optics 2020 (Translational, Microscopy, OCT, OTS, BRAIN)*, OSA Technical Digest (Optical Society of America, 2020), paper TW4B.5.
332. N. Shabairou, M. Tiferet, Z. Zalevsky and M. Sinvani, “Laser-Induced Focusing for Silicon nanoscopy,” Proc. of OSA FiO conf. 2020, paper #FTu8B.6 (Sep. 2020).
333. N. Shabairou, M. Tiferet, Z. Zalevsky and M. Sinvani, “Novel Beam Shaping Based All Optical Measurement Method for Free Charge Carriers Dynamics in Silicon,” Proc. of OSA FiO conf. 2020, paper #JTu1A.17 (Sep. 2020).
334. M. Golberg, R. Califa, S. Polani, O. Goldstein, A. Zailer, M. Niska, and Z. Zalevsky, “Assessment of tissue perfusion in the lower limbs using dynamic laser speckle,” Proc. SPIE conf. 11641, Dynamics and Fluctuations in Biomedical Photonics XVIII, SPIE Photonics West, San Francisco, USA (March 2021).
335. S. Asraf, M. Šprem and Z. Zalevsky, “Stimulated Brillouin scattering tunable fiber based all-optical filter,” Proc. SPIE conf. 11682, Dynamics and Fluctuations in Biomedical Photonics XVIII, SPIE Photonics West, San Francisco, USA (March 2021).
336. H. Lupa Yitzhak, R. Rubio Oliver, J. Garcia Monreal and Z. Zalevsky, “Respiratory phase detection from optical phonocardiography characteristics,” Proc. SPIE conf. 11621, Dynamics and Fluctuations in Biomedical Photonics XVIII, SPIE Photonics West, San Francisco, USA (March 2021).
337. Z. Zalevsky, “Optical data processing: Past, present and future,” TapeOut Magazine, 10th of April 2022 (in Hebrew),
https://chiportal.co.il/%d7%a2%d7%99%d7%91%d7%95%d7%93-%d7%9e%d7%99%d7%93%d7%a2-%d7%90%d7%95%d7%a4%d7%98%d7%99-%d7%a2%d7%91%d7%a8-%d7%94%d7%95%d7%95%d7%94-%d7%95%d7%a2%d7%aa%d7%99%d7%93/

338. M. Yevnin, E. Cohen, T. Yanir and Z. Zalevsky, “Fiber based generic photonic computing unit,” Proc. of CLEO (*Conference on Lasers and Electro-Optics)*, (Optica Publishing Group, 2022), Paper# STu5P.3.
339. D. Beitner, I. Carmeli, Z. Zalevsky, S. Richter, and H. Suchowski, "Studying the interaction of J-aggregates with plasmonic nanoparticles using hyperspectral microscopy," Proc. of CLEO (*Conference on Lasers and Electro-Optics)*, (Optica Publishing Group, 2022), paper FW5I.7.
340. N. Shabairou, Z. Zalevsky, and M. Sinvani, "Laser-Induced Tunable Focusing in Semiconductors," in *Imaging and Applied Optics Congress 2022 (3D, AOA, COSI, ISA, pcAOP)*, Technical Digest Series (Optica Publishing Group, 2022), paper IW1C.4.
341. H. Zafrir, S. Barbosa, D. Ilzycer, G. Haquin, N. Weisbrod, Z. Zalevsky, “Recovery of pre-seismic gas flow anomalous signals at deep boreholes as a proxy for investigating tectonic activity,” Proc. of the 2022 Sustainable Industrial Processing Summit and Exhibition Vol. 13, pp. 73-95: Virk Intl. Symp. Physics, Technology & Interdisciplinary Research. Edited by: F. Kongoli, A. Bhattacharya, A. Pandey, F. Quattrocchi, L. Sajo-Bohus, R. Pullar, G. Sandhu, S. Singh. FLOGEN, 2022.
342. A. C. Mandal, Manisha, A. Phatak, Z. Zalevsky, R. K. Singh, “Reconstructing complex field through opaque scattering layer with structured light illumination,” arXiv:2205.09677v1 [physics.optics] (2022), https://doi.org/10.48550/arXiv.2205.09677
343. T. Frumkin, A. Ishaaya and Z. Zalevsky, “High Efficiency Multi-Taper Coupler based Optical Modulator,” Proc. SPIE 12415, Physics and Simulation of Optoelectronic Devices XXXI, 124150Q (10 March 2023); doi: 10.1117/12.2654635.
344. O. Wagner, A. Shahmoon and Z. Zalevsky, “Wavelengths encoded illumination for resolution enhancement and imaging beyond scattering medium,” Proc. SPIE 12394, Nanoscale Imaging, Sensing, & Actuation for Biomedical Apps. XX; 1239402 (2023). https://doi.org/10.1117/12.2649518
345. M. Yevnin, A. Harel, O. Arbel-Arenfrid, Z. Zalevsky and E. Cohen, “Incoherent Fiber-based Optical Neuromorphic Computing Circuit,” in *Optical Fiber Communication Conference (OFC) 2023*, OSA Technical Digest (Optical Society of America, 2023), paper M2J.6
346. O. Meshulam, N. Ozana, D. Scheffer, S. Zach and Z. Zalevsky, ”Microwave-based remote bio-sensing behind walls,” Proc. of 23rd International Conference on Transparent Optical Networks (ICTON), Romania, IEEE publication (July 2023).
347. I. Gabay and Z. Zalevsky, “2D Mono detection spatially super-resolved microwave imaging for Radar applications,” Proc. of PIERS 2023, Czech Republic, IEEE publication (July 2023).
348. E. Gur and Z. Zalevsky, "CPU and Memory Allocation Optimization using Fuzzy Logic Based Clustering," Proc. of the 2023 IEEE 18th Conference on Industrial Electronics and Applications (ICIEA), Ningbo, China, 2023, pp. 1821-1826, doi: 10.1109/ICIEA58696.2023.10241904
349. N. Shabairou, Z. Zalevsky, and M. Sinvani, "Plasma Dispersion Induced Self-Focusing of a Vortex Laser Beam in Silicon", Imaging and Applied Optics Congress, (Optica, 2023), paper JM1B.4
350. M. Benyamin, N. Ozana, and Z. Zalevsky, "Remote Biophotonics High Frequency Acoustic Vibrations Monitoring using Rolling Shutter and Speckle Analysis," in *Optica Imaging Congress (3D, COSI, DH, FLatOptics, IS, pcAOP)*, Technical Digest Series (Optica Publishing Group, 2023), paper IM3E.1.
351. S. Apsel, V. Tarle, M. Yemini, Z. Zalevsky, N. Ozana, “Rolling-shutter laser speckle analysis in bio-photonics,” Proceedings Volume 13006, Biomedical Spectroscopy, Microscopy, and Imaging III; 130060U (2024) https://doi.org/10.1117/12.3001702
352. I. Carmeli, V. Mujica, G. Leitus, P. Shechter, Z. Zalevsky, S. Richter, “Emerging non-local quantum phenomena in a classical system of organo-metallic microparticles,” arXiv:2412.17553
353. I. Carmeli, V. Mujica, P. Shekhter and Z. Zalevsky, “Emerging Non-Local Quantum Time Correlation Phenomena In A Classical System of Organo-Metallic Microparticles,” Available at SSRN archive: https://ssrn.com/abstract=5090406 or http://dx.doi.org/10.2139/ssrn.5090406. was listed on SSRN as Top Downloads list on June 2025 for: Atomic & Molecular Physics eJournal.
354. D. E. Tranca, S. G. Stanciu, R. Hristu, Y. Schatzberg, Z. Zalevsky, B. Kusnetz, A. Karsenty, C. K. Banica, G. A. Stanciu, “Imaging artefacts in scattering-type scanning near field optical microscopy arising from optical diffraction effects and contrast-active sub-surface features,” arXiv:2502.06242. https://doi.org/10.48550/arXiv.2502.06242
355. S. G. Stanciu, S. R. Anton, D. E. Tranca, G. A. Stanciu, B. Lonescu, Z. Zalevsky, B. Kusnetz, J. Belhassen, A. Karsenty and G. Cincotti, “Inferring scattering-type Scanning Near-Field Optical Microscopy Data from Atomic Force Microscopy Images,” arXiv:2504.02982. https://doi.org/10.48550/arXiv.2504.02982
356. A. Ashkenazy, N. Shabairou, A. Stefanov, P. Gao, D. Fixler, Eli Cohen, Z. Zalevsky, “All-optical, computation-free time-multiplexing super-resolved imaging based on speckle illumination,” Proceedings Volume 13335, Nanoscale Imaging, Sensing, and Actuation for Biomedical Applications XXII; 1333506 (2025); https://doi.org/10.1117/12.3040040

357. M. J. L. F. Rodrigues, I. Garcia, Z. Zalevsky, R. Dias, F. Alves, D. Aguiam, “Quadrature optical interferometry-based in-plane displacement measurement of a MEMS grating,” Proceedings Volume 13373, Photonic Instrumentation Engineering XII; 1337305 (2025) https://doi.org/10.1117/12.3042893
358. V. Mico, J. Zheng, J. Garcia, Z. Zalevsky, P. Gao, “Resolution enhancement in quantitative phase microscopy: a review,” arXiv:2501.09548 [physics.optics], https://doi.org/10.48550/arXiv.2501.09548
359. A. Sanjeev, E. Israeli, G. Chen, J. Garcia, Z. Zalevsky, "Three-dimensional bio-imaging of objects behind scattering medium," Proc. SPIE 13465, Three-Dimensional Imaging, Visualization, and Display 2025, 1346502 (29 May 2025); https://doi.org/10.1117/12.3052228
360. Y. Mandelbaum, M. Tkachev, A. Sanjeev, Z. Zalevsky, D. Zitoun, A. Karsenty, “Tips vs. holes: ×10 higher scattering in FIB-made plasmonic nanoscale arrays for spectral imaging,” Proc. SPIE 13899, Advanced Fabrication Technologies for Micro/Nano Optics and Photonics XIX; 138990K (2026); https://doi.org/10.1117/12.3082113
361. ליאור טובלי, איל יניב, זאב זלבסקי, "בינה מלאכותית לניהול סיכונים בזמן אמת: אי-ודאות נלמדת כמגשר בין מודלים הסתברותיים להחלטות עסקיות," תאוריה ופרקטיקה בניהול, יוני 2026 , גיליון מס׳ 1.

Presentations

1. D. Mendlovic, Z. Zalevsky and N. Konforti, "Joint transform correlator with incoherent light," OSA 1994 Annual Meeting, Dallas, Texas, U.S.A (1994).
2. D. Mendlovic, Z. Zalevsky and N. Konforti, "High performance joint transform correlator," 9th Meeting of Optical Engineering in Israel, Tel-Aviv (1994).
3. D. Mendlovic, R. G. Dorsch, Z. Zalevsky and C. Ferreira, "Optical illustration of a varied fractional Fourier transform order and the Radon-Wigner chart," Workshop on Diffractive Optics, Prague, Czech Republic (1995).
4. D. Mendlovic, R. G. Dorsch, Z. Zalevsky and C. Ferreira, "Optical illustration of a varied fractional Fourier transform order and the Radon-Wigner chart," Latino-American conference, Mexico (1995).
5. Z. Zalevsky, D. Mendlovic and C. Ferreira, "Spectral Wavelet transformed composite filters for rotation, scale and shift invariant pattern recognition," Latino-American conference, Mexico (1995).
6. J. Garcia, C. Ferreira, D. Mendlovic and Z. Zalevsky, "Anamorphic Fractional correlation," Latino-American conference, Mexico (1995).
7. Z. Zalevsky and D. Mendlovic, "Wavelet filter for invariant pattern recognition," OSA Annual Meeting, Portland, Oregon, U.S.A (1995).
8. Z. Zalevsky, D. Mendlovic, H. M. Ozaktas and A. W. Lohmann, "Fractional Fourier transform for incoherent light," OSA Annual Meeting, Portland, Oregon, U.S.A (1995).
9. D. Mendlovic, Z. Zalevsky, H. M. Ozaktas and A. W. Lohmann, "Phase-space representation based on fractional Fourier transform," OSA Annual Meeting, Portland, Oregon, U.S.A (1995).
10. M. F. Erden, Z. Zalevsky, D. Mendlovic and H. M. Ozactas, "Applications of the fractional Fourier transform to partially coherent systems," OSA Annual Meeting, Portland, Oregon, U.S.A (1995).
11. A. W. Lohmann, D. Mendlovic and Z. Zalevsky, "Synthesis of pattern recognition filters for fractional Fourier processing with incoherent light," OSA Annual Meeting, Portland, Oregon, U.S.A (1995).
12. Z. Zalevsky, D. Mendlovic and J. Garcia, "2-D Wavelet transform using the lambda multiplexing technique," ICO 17 meeting, Taejon, Korea (1996).
13. D. Mendlovic and Z. Zalevsky, "The generalized temporal-spatial Wigner distribution function and its properties," ICO 17 meeting, Taejon, Korea (1996).
14. D. Mendlovic, E. Marom, Z. Zalevsky and G. Shabtay, "Beam shaping using diffractive optical elements and its use for array illumination and clock distribution," Workshop on Non conventional optics, Tel-Aviv Univ. (1996).
15. A. W. Lohmann, D. Mendlovic and Z. Zalevsky, "Fractional transformations in optics," 10th Meeting on Optical Engineering in Israel, Jerusalem (1997), **Invited talk (1)**.
16. D. Mendlovic, G. Shabtay, U. Levy, Z. Zalevsky and E. Marom, "Phase plates for complex beam generation," 10th Meeting on Optical Engineering in Israel, Jerusalem (1997).
17. G. Shabtay, H. Inbar, E. Marom, Z. Zalevsky and D. Mendlovic, "Generalized Wiener filter with balance between noise robustness and discrimination," 10th Meeting on Optical Engineering in Israel, Jerusalem (1997).
18. Z. Zalevsky and D. Mendlovic, "The on axis continuous white light Wavelet transform," 10th Meeting on Optical Engineering in Israel, Jerusalem (1997).
19. D. Mendlovic, Z. Zalevsky, E. Marom, J. Garcia, D. Mas, C. Ferreira and A. W. Lohmann, "2-D Wavelength multiplexing system for a single byte image transmission," 10th Meeting on Optical Engineering in Israel, Jerusalem (1997).

20. C. Ferreira, P. Garcia-Martinez, D. Mas, J. Garcia, E. Marom, D. Mendlovic and Z. Zalevsky, "Morphological correlation: Applications in optical pattern recognition," 10th Meeting on Optical Engineering in Israel, Jerusalem (1997).
21. Z. Zalevsky, D. Mendlovic, G. Shabtay and E. Marom, "Beam shaping using diffractive optical elements and its use for array illumination and clock distribution," The 19th Convention of Electrical and Electronics Engineers in Israel, IEEE, Jerusalem (Nov. 1996).
22. D. Mendlovic, A. W. Lohmann and Z. Zalevsky, "Going beyond Abbe's limit of resolution," URSI meeting in Holon, (1996), **Invited talk (2).**
23. Z. Zalevsky, D. Mendlovic and A. Blank, "An analogous electrical-chemical model for simulations of chemical kinetic reactions and its applications," The 62nd Meeting of the Israeli Chemical Society, (Feb. 1997).
24. D. Mendlovic, U. Levy, G. Shabtay, Z. Zalevsky and E. Marom, "Encoding technique for the design of zero order (on axis) Fraunhofer computer generated holograms", Diffractive optics, Savonlinna, Finland (1997).
25. A. W. Lohmann, D. Mendlovic and Z. Zalevsky, "Dammann gratings used for super resolution experiments," Diffractive optics, Savonlinna, Finland (1997), **Invited talk (3)**.
26. E. Marom, D. Mendlovic and Z. Zalevsky, "Various approaches for optical implementation of the Wavelet transform," Romopto, (1997), **Invited talk (4)**.
27. D. Mendlovic, A. Shemer, Z. Zalevsky and E. Marom, "Novel approaches in morphological correlations," Romopto, (1997).
28. Z. Zalevsky, "New trends in improving the resolution ability of fine objects," Gordon research conference on OSP and holography, Meridan NH, U.S.A (1997).
29. A. Blank and Z. Zalevsky, "Applications of the fractional Fourier transform in Radar imaging," AMTA, Boston Massachusetts (1997).
30. A. Blank and Z. Zalevsky, "Applications of the fractional Fourier transform in Radar imaging," URSI, Israel (1997).
31. D. Mendlovic, G. Shabtay, Z. Zalevsky and A. W. Lohmann, "Triple correlation: optoelectronics implementation and properties," OII'98, China, (1998), **Invited talk (5)**.
32. D. Mendlovic, A. Shemer, Z. Zalevsky and E. Marom, "Novel approaches in morphological correlations," OII'98, China, (1998).
33. A. W. Lohmann, D. Mendlovic and Z. Zalevsky, "Fractionalizations of integral transformations in optics," Tampere University of Technology, Finland (Feb. 1998).
34. D. Mendlovic, Z. Zalevsky and A. W. Lohmann, "SW adaptation- fundamentals and examples," San Diego (1998), **Invited talk (6)**.
35. Z. Zalevsky, D. Mendlovic and A. W. Lohmann, "New super resolution techniques," San Diego (1998).
36. G. Tidhar and Z. Zalevsky, "Performance evaluation methodology of missile warning and IRST systems," San Diego (1998).
37. A. W. Lohmann, D. Mendlovic and Z. Zalevsky, "Isomorphism of the Wigner distribution function and the canonical ABCD integral transformation," Kona, Hawaii (1998).
38. D. Mendlovic and Z. Zalevsky, "Generalized super resolution approach based on the degrees of freedom hyperspace adaptation," NATO-Mediterranean Dialogue Advanced Research Workshop on: Unconventional Optical Elements for Information Storage, Processing and Communications, Israel (1998), **Invited talk (7)**.
39. D. Mendlovic, Z. Zalevsky and A. W. Lohmann, "Near field microscopy for medical applications using 2-D pipette scan," International Biomedical Optics Symposium, San Jose, U.S.A (1999).
40. D. Mendlovic, Z. Zalevsky and S. Mendlovic, "Hybrid electrical/optical low-cost advanced image processing system for pathology diagnostic," International Biomedical Optics Symposium, San Jose, U.S.A (1999).
41. Z. Zalevsky, S. Lashansky, T. Fridlander and A. Goldman, "A model for predicting the visual detection range of a target in a cluttered environment," Aerospace/Defense Sensing, Simulations and Controls, Orlando U.S.A (1999).
42. Z. Zalevsky, Y. Bregman and H. Zafrir, "Super resolution magnetic robotic system for wide coverage real time UXO detection," Aerospace/Defense Sensing, Simulations and Controls, Orlando U.S.A (1999).
43. D. Mendlovic and Z. Zalesvky, "Geometrical super resolution in fixed vibrating platforms using sensor masking," Aerospace/Defense Sensing, Simulations and Controls, Orlando U.S.A (1999).
44. D. Mendlovic, Z. Zalevsky, U. Levy, G. Shabtay, N. Konforti and E. Marom, "Novel algorithm for obtaining real time 3-D position super resolution estimation of point targets," Aerospace/Defense Sensing, Simulations and Controls, Orlando U.S.A (1999).

45. Z. Zalesvky, E. Gur and D. Mendlovic, "Switching architecture iterative optimization using fuzzy logic techniques," Aerospace/Defense Sensing, Simulations and Controls, Orlando U.S.A (1999).
46. H. Zafrir, Y. Bregman and Z. Zalevsky, "Real time marine magnetic system for UXO high resolution detection and mapping in shallow water," Marelec 99- 2nd international conference on marine electromagnetics, Ensieta, Brest, France (1999).
47. Y. Bregman, H. Zafrir and Z. Zalevsky, "Handheld magnetic system for standoff real time mine and UXO detection," Mine identification novelties euro-conference, Firenze, Italy (1999).
48. Z. Zalevsky, "Applications of the fractional Fourier transform to correlation, feature extraction and pattern recognition," Nonlinear signal and image processing, Antalya, Turkey (1999), **Invited talk (8)**.
49. Z. Zalevsky, D. Mendlovic, E. Rivlin and S. Rotman, "Improved target detection performances in IR cluttered environment using the contrasted statistical processing approach," Optical science, engineering and instrumentation, Colorado U.S.A (1999).
50. G. Shabtay, U. Levy, D. Mendlovic, Z. Zalevsky and E. Marom, "Optimal 3-D beam forming," ICO meeting, San Francisco U.S.A (1999).
51. Z. Zalevsky, D. Mendlovic, A. W. Lohmann and G. Shabtay, "A Novel approach for exceeding the resolving power of optical systems," ICO meeting, San Francisco U.S.A (1999).
52. A. Shemer, D. Mendlovic, Z. Zalevsky, A. W. Lohmann, J. Garcia and E. Marom, "Time multiplexing super resolution optical system with computer decoding," ICO meeting, San Francisco U.S.A (1999).
53. D. Mendlovic, G. Shabtay, U. Levy, Z. Zalevsky and E. Marom, "Optimal 3-D beam forming," Education and training in optics and photonics (ETOP 99), Cancun, Mexico (1999).
54. G. Shabtay, D. Mendlovic, Z. Zalevsky and U. Levy, "Optimal 3-D beam forming," EOS Topical Meeting on Diffractive Optics, DO 99, Jena (1999).
55. Z. Zalevsky and A. Blank, "Iterative information retrieval algorithm for Radar applications," AMTA, Canada (1999).
56. Z. Zalevsky and S. Lashansky, "Simulation of IR background," 11th international meeting on electro-optics and micro-electronics in Israel (1999).
57. Z. Zalevsky, D. Mendlovic and N. Shamir, "Satellites network with improved ground-observation resolution," 40th Israeli annual conference on aerospace science (2000).
58. Z. Zalevsky, "Modeling possible defocus and vibration distortions of Infra-Red images," The 21st IEEE Convention of the Electrical and Electronic Engineers in Israel (2000).
59. R. Appelman, Z. Zalevsky, D. Mendlovic and G. Shabtay, "Hybrid optical-RF system for generating an improved linear frequency modulated pulses for radar applications," IEEE 2000 International Radar conference, Washington D.C., U.S.A (2000).
60. D. Mendlovic, Z. Zalevsky and E. Gur, "Optical implementation of fuzzy logic based controllers," San Diego 2000, **invited talk (9)**.
61. A. Shemer, D. Mendlovic, Z. Zalevsky and E. Marom, "Super resolving optical system using time multiplexing computer decoding and image processing," OSA meeting in Quebec (2000).
62. E. Gur, Z. Zalevsky and D. Mendlovic, "Multi stage binary optical processing," OSA meeting in Quebec (2000).
63. D. Sazbon, E. Rivlin, Z. Zalevsky and D. Mendlovic, “Optical transformations in visual navigation,” The 15th International Conf. on Pattern Recognition (ICPR), Spain (2000).
64. D. Mendlovic and Z. Zalevsky, “Transformations in optics: novel approaches, applications and implementations,” IPC 2000 Taiwan (2000), **invited talk (10)**.
65. H. Zafrir, N. Salomonski. Y. Bregman, B. Ginzburg, D. Lehman, Z. Zalevsky and M. Baram, “Marine magnetic system for high resolution and real time detection and mapping of ferrous submerged sunken vessels and aircraft,” UXO Forum, New Orleans (2001).
66. D. Mendlovic, G. Shabtay, Z. Zalevsky, E. Marom, U. Levy, N. Konforti, J. Garcia and E. Goldenberg, “From computer generated holograms towards partially coherent optical signal processors,” Aerospace/Defense Sensing, Simulations and Controls, Orlando U.S.A (2001), **invited talk (11)**.
67. Z. Zalevsky and A. Goldman, “Spectral and spectral-spatial modeling and optimization of target detection in visible cluttered environment,” Aerospace/Defense Sensing, Simulations and Controls, Orlando U.S.A (2001).
68. E. Sherman and Z. Zalevsky, “Optimization sequential IR point detection,” Aerospace/Defense Sensing, Simulations and Controls, Orlando U.S.A (2001).
69. Z. Zalevsky G. Shabtay, D. Mendlovic, A. Shemer, V. Eckhouse, R. Appelman and U. Levy, “Evolution of ultra fast all-optical free space switches,” SPIE conf. on Optical switching and optical interconnection II (Shanghai Oct. 2002).
70. Z. Zalevsky, G. Shabtay, E. Marom, D. Mendlovic and R. Appelman, “Tunable spectral monitoring devices,” SPIE conf. on Network design and management (Shanghai Oct. 2002).

71. Z. Zalevsky, R. Appelman, D. Mendlovic, J. Vertman, “Integrating VOA and multicast capabilities into the optical switch,” SPIE conf. on Network design and management (Shanghai Oct. 2002).
72. D. Mendlovic, Z. Zalevsky and E. Gur, “Modular Optical Systems for Nonlinear Data Processing and Manipulation,” Photonic Asia conference (Shanghai Oct. 2002), **invited talk (12)**.
73. D. Mendlovic, Z. Zalevsky and J. Solomon, “Spatial Code Division Multiplexing in Optical Data Processing” Photonic Asia conference (Shanghai Oct. 2002), **invited talk (13)**.
74. Z. Zalevsky, G. Shabtay, R. Appelman and A. Shemer, “Ultra fast all optical free space switches,” International conference on optical internet and switching (Korea July 2002).
75. Z. Zalevsky, G. Shabtay, R. Appelman, U. Levy and A. Shemer, “Solid Free Space Optical Fast Switches,” International conference on optical communication and networking (ICOCN) (Singapore Nov. 2002).
76. U. Levy, Z. Zalevsky, G. Shabtay and A. Shemer, “All optical switches,” OSA conference (San Diego, 2002).
77. Z. Zalevsky, E. Gur, D. Elkind and D. Mendlovic, “Solving the out of focus OTF reduction using a phase only filter and fuzzy logic reasoning,” ICO meeting (Italy, 2002).
78. E. B. Eliezer, Z. Zalevsky, E. Marom and N. Konforti, “All optical extended focus imaging system,” ICO meeting (Italy, 2002).
79. E. Gur, D. Mendlovic and Z. Zalevsky, “Optical generation of fuzzy based rules in a dual input environment,” ICO meeting (Italy, 2002).
80. J. Solomon, Z. Zalevsky, D. Mendlovic and J. Garcia, “Optical filter multiplexing using spatial code division approach,” ICO meeting (Italy, 2002).
81. Z. Zalevsky, "Ultra Fast Multi Functional All-Optical Switches," Israel Optics Communication (IOCC), (Tel-Aviv, 2003).
82. Z. Zalevsky and V. Eckhouse, "Polarization-Mode Dispersion Cancellation Using Periodic Polarization Modulation," ICO meeting (Finland, 2003).
83. E. Gur, Z. Zalevsky and D. Mendlovic, E. Marom, "Polarization Control Using Three 1-D Retarders And Fuzzy Logic Reasoning," ICO meeting (Finland, 2003).
84. D. Goldring, Z. Zalevsky and D. Mendlovic, "Enlargement of the Information Capacity in Optic Fiber Channels Using Non-Orthogonal Polarization Coding," ICO meeting (Finland, 2003).
85. Z. Zalevsky and S. Lashansky, “Optimization of spectral bandwidth for a missile launch detector,” SPIE Aeorspace meeting in Florida, USA, 2002.
86. Z. Zalevsky, S. Lashansky and N. Saad, “Technique for estimating the launching position of a ballistic trajectory,” SPIE Aerospace meeting in Florida, USA, 2002.
87. O. Berman and Z. Zalevsky, “Acoustic intrusion detection and positioning system,” SPIE Aerospace meeting in Florida, USA, 2002.
88. D. Mendlovic, Z. Zalevsky and E. Gur, “Modular optical systems for nonlinear data processing and manipulation,” SPIE Asia pacific conference on optical communications (APOC) meeting in Shanghai, China, 2002.
89. Z. Zalevsky, D. Mendlovic and J. Solomon, “Spatial code division multiplexing in optical data processing,” SPIE Asia pacific conference on optical communications (APOC) meeting in Shanghai, China, 2002.
90. E. Gur, Z. Zalevsky, D. Elkind and D. Mendlovic, “Phase only filter solution based on fuzzy logic for the defocus problem,” SPIE annual meeting in Seattle, USA, 2002.
91. Z. Zalevsky, E. Gur and D. Mendlovic, “CPU and memory allocation optimization using fuzzy logic,” SPIE annual meeting in Seattle, USA, 2002.
92. I. Stainvas, Z. Zalevsky, D. Mendlovic and N. Intrator, “Improving classification of neural networks by reducing lens aperture,” SPIE annual meeting in Seattle, USA, 2002.
93. V. Eckhouse, Z. Zalevsky and D. Mendlovic, “Dynamic sub wavelength encryption,” SPIE annual meeting in Seattle, USA, 2002.
94. E. Marom, E. B. Eliezer, L. P. Yaroslavsky and Z. Zalevsky, “Two methods for increasing the depth of focus of imaging systems,” ATOM Int. Conference, Bucharest, Romania, 2002.
95. Z. Zalevsky, Y. Kapellner, E. Sabo and S. Kapellner, “Virtual display with low power consuming portable micro projector,” SPIE meeting on electronic imaging, Santa Clara, California, USA, 2003.
96. Z. Zalevsky and V. Eckhouse, “Chromatic mode dispersion monitoring device,” SPIE meeting in Internet, Performance & Control of Network Systems (ITCOM), Florida, USA, 2003.
97. Z. Zalevsky and V. Eckhouse, “Polarization mode dispersion cancellation using periodic polarization modulation,” SPIE meeting in Internet, Performance & Control of Network Systems (ITCOM), Florida, USA, 2003.
98. Z. Zalevsky and V. Eckhouse, “Eye diagram extraction using low rate electronics,” National Fiber Optic Engineers Conference (NFOEC), Italy 2003.

99. Z. Zalevsky, V. Eckhouse, D. Abrahams and D. Mendlovic, “Periodic polarization modulation for OSNR monitoring,” International conference on Optical Fiber Sensors (OFS) 2003.
100. Z. Zalevsky, R. Appelman, G. Shabtay, D. Mendlovic and J. Vertman, “Variable optical attenuation functionality for laser welding, laser range finder and LIDAR applications,” SPIE conference on on remote sensing in Barcelona, Spain, 2003.
101. G. Begelman, E. Gur, E. Rivlin, M. Rudzsky and Z. Zalevsky, "Cell nuclei segmentation using fuzzy logic engine," Int. Conference on Image Processing (ICIP), 2004.
102. N. Shamir, Z. Zalevsky and D. Mendlovic, "Blind Source Images Separation Based on Optical Fractional Fourier Transform Autocorrelation Width," 7th International Conference on Optoelectronics, Fiber Optics and Photonics, India (Dec. 2004).
103. Z. Zalevsky, A. Shemer, V. Eckhouse, D. Mendlovic and S. Zach, "Compact RF-photonic configuration for highly resolved and ultrafast extraction of carrier and information of RADAR signal," 11th IEEE International Conference on Electronics, Circuits and Systems, Tel-Aviv (13-15 Dec. 2004).
104. D. Sazbon, E. Rivlin and Z. Zalevsky, "Qualitative Range Extraction for Preplanned Scene Partitioning Using Laser Beam Coding," IEEE Intl. Conf. on Image Analysis and Processing (ICIAP), Italy (2005).
105. Z. Zalevsky, A. Shemer and D. Mendlovic, "Nano-Second Fast Tunable and Reconfigurable RF-Photonic Spectrum Analyzer," OSA Annual meeting in Tucson Arizona, USA (Oct. 2005).
106. V. Mico, Z. Zalevsky, P. Garcia-Martinez and J. Garcia, "Superresolucion en formacio de imagenes interferometrica," Proc. of the Spanish conference of the physical society, Ourense, Galicia, Spain, 671-672 (Sept. 2005).
107. J. Garcia, Z. Zalevsky, P. Garcia-Martinez and C. Ferreira, "Analysis de objectos tridimensionales usando tecnicas de proyexxion speckle," Proc. of the Spanish conference of the physical society, Ourense, Galicia, Spain, 673-674 (Sept. 2005).
108. C Ferreira, V Mico, Z Zalevsky, P Garcia Martinez, J Garcia, "Super resolution by using tilted wave illumination," SPIE conf. Bucharest (August 2005).
109. Z. Zalevsky, "Wavelength coded optical spectrum analyzer for photonics detection of RF signals," 20th IEEE S-AP/MTT Joint Chapter Symposium, RF Photonics session, Herzelia, Israel (May 2006), **Invited talk (14).**
110. Z. Zalevsky, "Generation of tunable directional Tera-Hertz radiation using non linear optics," 20th IEEE S-AP/MTT Joint Chapter Symposium, RF Photonics session, Herzelia, Israel (May 2006), **Invited talk (15).**
111. Z. Zalevsky, "Tunable and directional Tera-Hertz radiation source," 2nd conference on THz and Mm-waves Technology and Applications (TMTA), the college of Judea and Samaria, Israel (May 2006).
112. Z. Zalevsky, A. Zlotnik and A. Shemer, "Single snap-shot double field optical zoom and axially super resolved imaging system," SPIE conf. Strasbourg, France (April 2006), **Invited talk (16)**.
113. Z. Zalevsky, A. Zlotnik and A. Shemer, "Axial All-Optical Super Resolved Imaging," ICIS conf., Rochester, USA (May 2006), **Invited talk (17)**.
114. D. Goldring, Z. Zalevsky and D. Mendlovic, “Photorefractive All-Optical Wavelength Converter for Optics Communication,” SPIE, Boston (October 2006).
115. Z. Zalevsky, H. Ozaktas and A. Kutay, "Fractional Fourier transform- exceeding the classical concepts of signal's manipulation," ICO Meeting, St. Petersburg (Sep. 2006), **Invited talk (18)**.
116. E. Gur and Z. Zalevsky, " Iterative Single-Image Digital Super-Resolution Using Partial High-Resolution Data," WCE 2007, UK (2007).
117. R. Aharoni, L. Klein, D. Vaknin and Z. Zalevsky, "In-Fiber Microphones for Speech Detection," 11th Meeting on Optical Engineering in Israel, Tel-Aviv (March 2007).
118. O. Limon, A. Rudnitsky, M. Nathan, L. Businaro, D. Cojoc, A. Gerardino and Z. Zalevsky, "Nano Photonic All-Optical Transistor on Silicon Chip," 11th Meeting on Optical Engineering in Israel, Tel-Aviv (March 2007).
119. O. Limon and Z. Zalevsky, "Nano Photonic Opto-Electronic Transistor and XOR Gate on Silicon Chip," 11th Meeting on Optical Engineering in Israel, Tel-Aviv (March 2007).
120. D. Abraham, A. Chelli, Y. Shappir, M. Rosenbluh and Z. Zalevsky, "Semiconductor-Oxide-Semiconductor Photo-Activated Transistor," 11th Meeting on Optical Engineering in Israel, Tel-Aviv (March 2007).
121. Z. Zalevsky, "Nano-photonic transistors from silicon," The 1st Turkish-Israeli meeting on Nano-Photonics, Bar Ilan University, (March 2007)**, Invited talk (19)**.
122. V. Mico, Z. Zalevsky and J. García, "Superresolution microscopy by synthetic aperture generation," Focus on Microscopy 2007, Valencia, Spain (April 2007).
123. Z. Zalevsky, S. Ben Yaish, O. Yehezkel and M. Belkin, "Novel Spectacles for Aberration Corrected Vision: for Myopia, accommodative insufficiency and Astigmatism," Children Vision Research, UK (July 2007).

124. J. Garcia, V. Mico, Z. Zalevsky, P. G. Martinez and C. Ferreira, "Resolution and field of view improvement using information coding," International Workshop on Information Optics, Iceland (July 2007), **Invited talk (20).**
125. Z. Zalevsky, S. Rozental and M. Meller, "Super Resolved Imaging by Turbulence Encoding," International Workshop on Information Optics, Iceland (July 2007).
126. D. Sylman, Z. Zalevsky, V. Mico, C. Ferreira and J. Garcia, "Two-Dimensional Temporal Coherence Coding for Super Resolved Imaging through Single Mode Fiber," Ibero-American conference on optics, Campinas, Brazil (October 2007).
127. Z. Zalevsky, O. Limon, D. Abraham, A. Chelly, Y. Shappir, M. Rosenbluh, L. Businaro, D. Cojoc and A. Gerardino, "Photonic transistors in silicon," 2nd Topical Meeting of the European Optical Society (EOS) on Optical Microsystems, Capri, Italy (September 2007), **Invited talk (21)**.
128. Z. Zalevsky, A. Zlotnik and S. Ben Yaish, "Axially and transversally super resolved imaging," 2nd Topical Meeting of the European Optical Society (EOS) on Optical Microsystems, Capri, Italy (September 2007).
129. M. Prasciolu, D. Cojoc, A. Carpentiero, L. Businaro, E. Di Fabrizio B. Kaulich, S.Cabrini, J. Garcia and Z. Zalevsky, "Focused X-ray vortices with high topological charge," Topical meeting of the European Optical Society (EOS) on diffractive optics, Barcelona, Spain (November 2007).
130. Z. Zalevsky, "Photonic devices and modules for data processing, analyzing and monitoring in optics communication links," Advanced Communication Center (ACC), Tel-Aviv (Dec. 2007), **Invited talk (22)**.
131. Z. Zalevsky, O. Margalit, E. Vexberg, R. Pearl and J. Garcia, "Using Partial Coherence and Digital Holography for 3D Imaging and Profile Extraction," OSA topical meeting, St. Petersburg, Florida (March 2008), **Invited talk (23)**.
132. S. Ben Yaish, A. Zlotnik, O. Yehezkel, M. Belkin and Z. Zalevsky, "Novel aberration correction lens for myopia, presbyopia and Astigmatism," Annual Meeting of the Israel Society for Vision & Eye Research annual Meeting Neve Ilan (March 2008).
133. Z. Zalevsky, O. Yehezkel, S. Ben-Yaish, A. Zlotnik and M. Belkin, "Near vision reduced need of accommodation via special myopia correcting lenses," Annual Meeting of the Israel Society for Vision & Eye Research, Neve Ilan, Israel (March 2008).
134. I. Abdulhalim, Z. Zalevsky and E. Rivlin, "Methods for Improving the Image Quality of Low Coherence Optical Microscopy for Biomedical Applications," ILEOS, Bar-Ilan Univ., Ramat-Gan (March 2008).
135. O. Yehezkel, S. Ben-Yaish, A. Zlotnik, M. Belkin and Z. Zalevsky, "A Novel Myopia Correcting Lens Which Reduces the Need for Accommodation for Near Vision Tasks," The Association for Research in Vision and Ophthalmology (ARVO), Florida, USA, (April 2008); ARVO Meeting Abstracts April 11, 2008 49:1799.
136. S. Ben Yaish, A. Zlotnik, O. Yehezkel, M. Belkin and Z. Zalevsky, "Omni-focal refractive correction lens: A potential substitute for bi/multi-focal lenses," The Association for Research in Vision and Ophthalmology (ARVO), Florida, USA (April 2008); ARVO Meeting Abstracts April 11, 2008 49:1798.
137. V. Mico, Z. Zalevsky and J. Garcia, "Superresolution microscopy using common-path phase-shifting interferometry," Photonics Europe, Strasbourg, France (April 2008).
138. A. Zlotnik, S. Ben Yaish, O. Yehezkel, M. Belkin and Z. Zalevsky, "Thin films as spectacles and contact lenses for aberration corrected vision via brain contrast adaptation," Vision Science Society (VSS) Conference, Florida, USA (May 2008).
139. A. Schwarz, A. Weiss, D. Fixler, J. Garcia, V. Mico and Z. Zalevsky, "Lensless Microscope Using Wavelength Multiplexing," the 42nd Annual Scientific Meeting of the Israeli Society for Microscopy, 29 May, Technion (2008).
140. J. Garcia, Z. Zalevsky, P. Garcia-Martinez, C. Ferreira, M. Teicher and Y. Beiderman, "Projection of speckle patterns for 3D sensing," International Workshop on Information Optics (WIO), Annecy, France (June 2008), **Invited talk (24)**.
141. J. Garcia, V. Mico, D. Cojoc, E. Shpilman and Z. Zalevsky, "Full field of view super-resolution imaging via two static masks," International Workshop on Information Optics (WIO), Annecy, France (June 2008), **Invited talk (25)**.
142. I. Baron, S. Levy, A. Chelly, O. Limon, Z. Zalevsky and I. Shlimak, "Electronic Devices based upon Germanium Nano-Crystals with Inviolability to Strong Neutron Irradiation," SPIE Conference on Nano- and Macrophotonics for Space Environments, San Diego, USA (August 2008), **Invited talk (26)**.
143. Z. Zalevsky, I. Raveh, O. Yehezkel, S. Ben Yaish, A. Zlotnik and M. Belkin, " Omni-Focal Refractive Correction Lens: New Solution for Presbyopia," (ISOP) Internationalo Society Of Presbyopia, Berlin (September 2008), **Invited talk (27).**
144. I. Raveh, O. Yehezkel, S. Ben Yaish, A. Zlotnik, M. Belkin and Z. Zalevsky, "Intraocular lenses with axially continuous extended depth of focus: A novel design," ESCRS (European Society of Cataract and Refractive Surgery), Berlin (September 2008).

145. Z. Zalevsky, O. Limon, Y. Abraham, L. Businaro, A. Gerardino, L. Bitton, A. Frydman, "Non conventional nano photonic modulators on silicon chips," 1st Mediterranean conference on nano photonics (Medi Nano), Istanbul (October 2008), **Invited talk (28)**.
146. O. Limon, L. Businaro, A. Gerardino, L. Bitton, A. Fyidman and Z. Zalevsky, "Fabrication of Electro Optical Nano Modulator on Silicon Chip," 34th Micro and Nano Engineering Conference (MNE), Athens (September 2008).
147. D. Abraham, Z. Zalevsky, A. Chelly and J. Shappir, "Vertically positioned silicon on insulator photo-activated modulator," 27th Annual conference of the Israeli Vacuum Society (IVS), Herzelia, Israel (October 2008).
148. Y. Abraham, O. Limon, A. Frydman, L. Bitton and Z. Zalevsky, "Nano particles shifting via non-conventional nano photonic waveguide," 27th Annual conference of the Israeli Vacuum Society (IVS), Herzelia, Israel (October 2008).
149. M. Parshin and Z. Zalevsky, "Optimized Features Allocation Technique for Improved Automated Alignment of Wafers," Electronic Imaging, SPIE, San Jose (January 2009).
150. S. Ben Yaish, A. Zlotnik, I. Raveh, O. Yehezkel, M. Belkin, K. Lahav and Z. Zalevsky, "Omni-focal refractive focus correction technology as a substitute for bi/multi-focal IOL, contact lenses and spectacles," BIOS, SPIE, San Jose (January 2009).
151. Z. Zalevsky, S. Ben Yaish, A. Zlotnik, I. Raveh, O. Yehezkel, K. Lahav and M. Belkin, "Extended Depth of Focus by Lens Aperture Interference for Presbyopic, Myopic and Astigmatism Correction," Refractive and Wavefront Summit - ARI/WFC Alicante (March 2009), **Invited talk (29)**.
152. Z. Zalevsky, "Super-resolved imaging for defense applications," 12th Meeting on Optical Engineering in Israel, Tel-Aviv (March 2009), OASIS, **Invited talk (30)**.
153. L. Leraz, Y. Abraham, I. Abdulhalim and Z. Zalevsky, "Optical Coherence Tomography System with Extended Depth of Focus," 12th Meeting on Optical Engineering in Israel, Tel-Aviv (March 2009).
154. S. Levy, I. Baron, I. Shlimak, A. Chelly, Z. Zalevsky and T. Lu, "Electric Properties of a MOS Structure Contaiing Nano-Crystalline Ge Embedded in a Thick SiO2 Film," The International Nano Technology Conference, Jerusalem, Israel (March 2009).
155. Z. Zalevsky, "Nano photonic devices on a silicon chip," The first International Nano Technology Conference, Jerusalem, Israel (March 2009), **Invited talk (31)**.
156. A. Borkowski, Z. Zalevsky and B. Javidi, "Geometrical Super Resolved Imaging Using Non periodic Spatial Masking," SPIE meeting, Orlando, Florida (April 2009), **Invited talk (32)**.
157. H. Duadi, E. Gordon, G. A. Bittan, A. Loven, S. Negry and Z. Zalevsky, "Improved 3-D and Range Estimation via Inter-Planar Interpolation of Projected Axially Varied Patterns," SPIE meeting, Orlando, Florida (April 2009).
158. Z. Zalevsky, “Optimized perception of light for defense applications,” Military Technologies conference, Airport Avenue, Israel (May 2009), **Invited talk (33)**.
159. Z. Zalevsky, "Nano-Photonics for Improved Biomedical Sensing," Bio-Med, Tel-Aviv (June 2009), **Invited talk (34)**.
160. Z. Zalevsky, A. Shahmoon, O. Limon, Y. Abraham, L. Businaro, A. Gerardino, L. Bitton and A. Frydman, "Modulators and sensors based upon particle trapping," SMONP 2009, Melbourne, Australia (June 2009), **Invited talk (35)**.
161. S. Levy, I. Shlimak, A. Chelly, Z. Zalevsky and T. Lu, "Neutron-Transmutation-Doping of Ge nanocrystals imbedded in Si-MOS structures: C-V characteristics," 25th international conference on defects in semiconductors (ICDS-25), St. Petersburg, Russia (July 2009).
162. V. Moco, E. Valero, Z. Zalevsky and J. Garcia, "Three dimensional shape measurement by means of depth-to-coherence coding of the object shape," SPIE Meeting, Munich, Germany (June 2009).
163. D. Fixler, A. Schwarz, J. Garcia and Z. Zalevsky, "Lensless microscope using wavelength multiplexing," SPIE Meeting, Germany (May 2009), **Invited talk (36)**.
164. A. Sagiv and Z. Zalevsky, "Multi functional microprobe for medical applications," Medical Technology Innovation forum, Tuttlingen, Germany (June 2009).
165. E. Gur, Y. Weizman and Z. Zalevsky, "Improving failure analysis navigation using optical super resolved imaging," 16th IEEE international symposium on the physical and failure analysis of integrated circuits (IPFA), Suzhou, China (July 2009).
166. Z. Zalevsky, D. Sylman, V. Micó and J. García, "Super-Resolved Imaging based upon Spatial Depolarization of Light," International Workshop on Information Optics (WIO), Paris (July 2009) **Invited talk (37)**.
167. Y. Beiderman, A. Amsel, Y. Tzadka, D. Fixler, V. Mico, J. Garcia and Z. Zalevsky, "Two Dimensional Real-Time Mapping of Cardiac Muscle Cells Movement," High and Super Resolution Imaging (SHRI) conference in Lipica, Slovenia (September 2009).

168. A. Gur, R. Aharoni, Z. Zalevsky, Y. Garini, V. Mico and J. Garcia, "Lensless Superresolved Microscopy based on Sub-Wavelength Non-Periodic Holes Array Plate," High and Super Resolution Imaging (SHRI) conference in Lipica, Slovenia (September 2009) **Invited talk (38)**.
169. Z. Zalevsky, "Super Resolved Photonic Sensing," ICO meeting, Delphi, Greece (October 2009) **Plenary talk (39) .**
170. Z. Zalevsky, A. Shahmoon, O. Limon, O. Girshevitz, Y. Fleger, H. V. Demir, S. Buhbut, A. Zaban, A. Rudnitsky and M. Rosenbluh, "Polarizing and spectrally selective photonic passive and tunable devices based upon dielectric nano rods and golden particles," Mediterranean Nano Photonics 2 (MediNano-2) conference, Atenns, Greece (October 2009) **Invited talk (40)**.
171. A. Rudnitsky, M. Nathan, M. Nazarathi, B. Larom, A. Martucci, L. Businaro, A. Gerardino and Z. Zalevsky, "Micro scale photonic integrated all-optical logic gate," 35th Micro and Nano Engineering Conference (MNE), O-NANO-20, Netherland (September 2009).
172. Z. Zalevsky, Y. Abraham, O. Limon, L. Bitton and A. Frydman, "Trapped particle based all-optical nano modulator and sensor," 35th Micro and Nano Engineering Conference (MNE), O-NANO-3, Netherland (September 2009).
173. A. Shahmoon, O. Limon, O. Girshevitz, Y. Fleger, H. V. Demir and Z. Zalevsky, "Tunable nano devices fabricated by controlled deposition of gold nano particles via focused ion beam," 35th Micro and Nano Engineering Conference (MNE), P-NANO-88, Netherland (September 2009).
174. S. Buhbut, A. Zaban, A. Rudnitsky, M. Rosenbluh and Z. Zalevsky "Polarizing and spectrally selective photonic device based upon dielectric nano rods," 35th Micro and Nano Engineering Conference (MNE), P-NANO-89, Netherland (September 2009).
175. R. Aharoni, M. Sinvani, M. Azoulay, A. Chelly and Z. Zalevsky, “All-optical fiber-integrated silicon based modulator,” The annual meeting of the Israeli Vacu Society (IVS), Herzelia, Israel (Oct. 2009).
176. Z. Zalevsky, S. Ben Yaish, A. Zlotnik, I. Raveh, O. Yehezkel and M. Belkin, “Tilting and Decentration Indifferent Intra-Ocular Lens Optics,” Meeting of the American Academy of Ophthalmology (AAO), San Francisco, USA (Oct. 2009).
177. S. Ben Yaish, A. Zlotnik, O. Yehezkel, M. Belkin and Z. Zalevsky, “Non-Toric Extended Depth of Focus Contact Lenses for Astigmatism and Presbyopia Correction,” Meeting of the American Academy of Ophthalmology (AAO), San Francisco, USA (Oct. 2009).
178. M. Paturzo, P. Ferraro, A. Zlotnik and Z. Zalevsky, “Incoherent optical spatial image processing,” 2nd International workshop on optical supercomputing (OSC), Bertinoto, Italy (Nov. 2009).
179. S. Levy, I. Shlimak, A. Chelly, Z. Zalevsky, D. H. Dressler and T. Lu, "Influence of a strong neutron irradiation on the size and spatial distribution of Ge nanocrystals embedded in SiO2 matrix," The 55th meeting of the Israeli Physics Society (IPS), Ramat-Gan, Israel (Dec. 2009).
180. A. Gur, R. Aharoni, Z. Zalevsky, V. G. Kutchoukov, V. Mico, J. Garcia and Y. Garini, “Fully lensless microscopy based on sub wavelength non periodic holes array plate,” The 55th meeting of the Israeli Physics Society (IPS), Ramat-Gan, Israel (Dec. 2009).
181. R. Aharoni, M. Sinvani, M. Azoulay, A. Chelly and Z. Zalevsky, “All-optical fiber-integrated silicon based modulator,” The 55th meeting of the Israeli Physics Society (IPS), Ramat-Gan, Israel (Dec. 2009).
182. R. Aharoni, M. Sinvani, M. Azoulay, A. Chelly and Z. Zalevsky, “Silicon processing for all-optical fiber-integrated modulator,” The 14th Israel Materials Engineering Conference (IMEC-14), Tel-Aviv, Israel (Dec. 2009).
183. Z. Zalevsky, S. Zach and M. Tur, “A Novel Photonic Rotman-Lens Design for Radar Phased Array Antennas,” The International IEEE Conf. on Microwaves, Communications, Antennas and Electronic Systems, COMCAS (Nov. 2009).
184. Z. Zalevsky, A. Rudnitsky and S. Zach, “Photonic Configuration for Spectrally and Directionally Tunable Tera-Hertz Radiation Source,” The International IEEE Conf. on Microwaves, Communications, Antennas and Electronic Systems, COMCAS (Nov. 2009).
185. A. Zlotnik, I. Raveh, S. Ben Yaish, O. Yehezkel, M. Belkin and Z. Zalevsk, “Extended Depth of Focus Intra-Ocular Lens: A Solution for Presbyopia and Astigmatism,” BIOS 2010 (Feb. 2010).
186. S. Ben Yaish, A. Zlotnik, O. Yehezkel, K. Lahav-Yacouel, M. Belkin and Z. Zalevsky, “Non-toric extended depth of focus contact lenses for astigmatism and presbyopia correction,” BIOS 2010 (Feb. 2010).
187. D. Sylman and Z. Zalevsky,”Usage of Coherence and Polarization for Super Resolved Imaging,” Conference of the Israeli electro-optical engineering association (SEEEI), Afeka College, Tel-Aviv (November 2009), **Invited talk (41)**.
188. Z. Zalevsky, A. Shahmoon, O. Limon, O. Girshevitz, Y. Fleger, H. V. Demir, S. Buhbut, A. Zaban, A. Rudnitsky and M. Rosenbluh, “Photonic tunable and passive devices based upon golden particles and dielectric nano rods,” Meta- and Bio/Nano Materials, Beth Hatefutsoth, Tel-Aviv, Israel (2-4 November 2009) **Invited talk (42).**

189. O. Yehezkel, A. Zlotnik, S. Ben Yaish, I. Raveh, M. Belkin and Z. Zalevsky, “Discrepancy Between Eye Models and Clinical Testing in Recognizing Defocused Targets,” ARVO Meeting Abstracts April 11, 2010 51:1818.
190. S. Ben Yaish, A. Zlotnik, O. Yehezkel, M. Belkin and Z. Zalevsky, “Extended depth of focus spectacles for full field of view presbyopia correction via brain adaptation,” Vision Science Society (VSS) Conference, Florida, USA (May 2010).
191. A. Zlotnik, Y. Abraham, L. Liraz, I. Abdulhalim and Z. Zalevsky, “Improved Extended Depth of Focus Full Field Spectral Domain Optical Coherence Tomography,” CLEO conference, San Jose (May 2010).
192. Z. Zalevsky, “Wigner based Phase Space as a Tool to Analyze Super Resolved Imaging Configurations,” 28th Progress In Electro-magnetic Research Symposium (PIERS), Cambridge, USA (5-8 July 2010) **Invited talk (43)**.
193. Z. Zalevsky, “Super resolved imaging and sensing,” 3rd Summer School of Opto-Informatics, Maynooth, Ireland (22-24 June 2010) **Invited talk (44)**.
194. Z. Zalevsky, “Active and passive nanophotonic devices for information processing,” Optronics 2010, Exhibition center, Tel-Aviv, Israel (16.3.2010) **Keynote talk (45)**.
195. Z. Zalevsky, "Multi-Functional Bio-Medical Microprobe," Bio-Med, Tel-Aviv (June 2010), **Invited talk (46)**.
196. Z. Zalevsky, “Remote Super Resolved Imaging,” Technologies for Remote Sensing, Detection and Imaging, Ariel University Center of Samaria (June 2010), **Invited talk (47)**.
197. Z. Zalevsky, A. Shahmoon, “Sub-Micron Particle based Structures as Reconfigurable Photonic Devices Controllable by External Photonic and Magnetic Fields,” 7th International Workshop on Functional and Nanostructured Materials (FNMA’2010), Malta (July 2010) **Invited talk (48)**.
198. Z. Zalevsky, A. Shahmoon, R. Aharoni and M. Sinvani, “Fiber-integrated photonic modulation,” MediNano-3, Belgrade (October 2010) **Invited talk (49)**.
199. Z. Zalevsky, H. Slovin and A. Shahmoon, “Novel nano-pipette for imaging of deep cortical layers,” Nanomedicine 2010, October 2010, Beijing, China **Invited talk (50)**.
200. Z. Zalevsky, H. Slovin and A. Shahmoon, “Biomedical super resolved imaging using special micro-probe,” ISABEL 2010, (the 3nd International Symposium on Applied Sciences in Biomedical and Communication Technologies), November 2010, Rome, Italy, **Invited talk (51)**.
201. A. Shahmoon and Z. Zalevsky, "Magneto-optic in-fiber micro modulator,” 36th Micro and Nano Engineering Conference (MNE), (September 2010), Genoa, Italy.
202. E. Gur, Z. Zalevsky and B. Javidi, “Super resolved remote sensing by fusion of multi spectral and spatial data,” ISPRS Technical Commission VII Symposium, Vienna, July (2010).
203. T. Yeminy, D. Sadot and Z. Zalevsky, “Narrowband Information Encryption Using Frequency and Phase Cipher,” IEEE 26-th Convention of Electrical and Electronics Engineers in Israel (IEEEI), (November 2010), Eilat, Israel.
204. H. Duadi, P. Livshits, E. Gur, A. Inberg, Y. Shacham-Diamand, A. Weiss and Z. Zalevsky, “ULSI Copper and Silver Interconnect Microstructure Based Image Enhancement Algorithm,” Advanced Metallization Committee (AMC), (October 2010), Albany, NY, USA.
205. R. Aharoni, M. Sinvani and Z. Zalevsky, “All-Optical Fiber-Integrated Silicon based Modulator,” The 2nd International Nano Technilogy Conference, Jerusalem, Israel (March 2010).
206. C. Ferreira, V. Mico, J. Garcia, D. Sylman and Z. Zalevsky, “Two dimensional superresolution and field of view improvement using axial temporal coherence coding,” 7th Ibero-Amrican conference, RIAO-Optilas (September 2010), Lima, Peru, **Invited talk (52)**.
207. Z. Zalevsky, “Exceeding the diffraction and the geometric limits of imaging systems,” **Keynote Tutorial**, Conference on Optical Super Computing (OSC), November 2010, Bertanuro, Italy. **Keynote talk (53).**
208. Z. Zalevsky, A. Rudnitsky, A. Shahmoon, M. Nathan, M. Nazarathy, B. Larom, A. Martucci, L. Businaro and A. Gerardino, “Integrated Photonic Micro Logic Gate,” Conference on Optical Super Computing (OSC), November 2010, Bertanuro, Italy.
209. Z. Zalevsky, Y. Beiderman, A. Amsel, A. Fridman, V. Mico and J. Garcia, “Speckle based Technique for Remote Measuring of Breathing and Heart Beating from Cornea Reflections,” The Association for Research in Vision and Ophthalmology (ARVO)- Asia, January 2011, Singapore.
210. A. Shemer, M. Tur, A. Boag, H. Kleinman, S. Zach and Z. Zalevsky, “Mono-Detection Spatially Super Resolved RF Imaging for RADAR Application,” Mediterranean photonic conference, Eilat Israel, Nov. 29-Dec. 1 (2010).
211. D. Fixler, A. Gur and Z. Zalevsky, “Superresolution saturated structured illumination microscopy system: theoretical aspects and real life,” SPIE Conference 7905, Single Molecule Spectroscopy and Imaging IV, Photonic West (Feb. 2011).
212. Z. Zalevsky, “Super resolved photonic sensing,” ICTP Winter College on Optics (Feb. 2011), **Invited talk (54).**

213. Z. Zalevsky, “Wigner based Analysis of Geometric Related Resolution Degradation and Geometric Super Resolution Configuration,” Progress In Electro-magnetic Research Symposium (PIERS) in Marrakesh, Morocco (2011) **Invited talk (55).**
214. Z. Zalevsky, O. Fixler, V. Micó, J. García and B. Javidi, “Usage of Spatial Light Modulation in Phase-Shifting Gabor Holographic Microscopy and in Geometric Super Resolved Imaging Configurations,” 13th Meeting on Optical Engineering in Israel, Tel-Aviv (March 2011), OASIS, **Invited talk (56)**.
215. R. Aharoni, M. Sinvani, M. Azoulay, A. Chelly and Z. Zalevsky, “Experimental Characterization of Photonic Fiber-Integrated Modulator,” 13th Meeting on Optical Engineering in Israel, Tel-Aviv (March 2011), OASIS.
216. Z. Zalevsky, A. Borkowski, E. Marom, B. Javidi, Y. Beiderman, V. Micó and J. García, “Recent advances in the field of super resolved imaging and sensing,” SPIE Europe meeting, Conference 8082, Optical Measurement Systems for Industrial Inspection VII, Munich, Germany (May 2011), **Invited talk (57)**.
217. L. Camacho, V. Micó, Z. Zalevsky and J. García, “Phase extraction in microscopy using tunable defocusing by means of a SLM,” SPIE Europe meeting, Conference 8082, Optical Measurement Systems for Industrial Inspection VII, Munich, Germany (May 2011).
218. V. Micó, L. Granero, Z. Zalevsky and J. García, “Synthetic aperture engineering for super-resolved microscopy in digital lensless Fourier holography,” SPIE Europe meeting, Conference 8082, Optical Measurement Systems for Industrial Inspection VII, Munich, Germany (May 2011).
219. Z. Zalevsky, O. Fixler, A. Gur, D. Fixler, V. Micó and J. Garcia, “Recent Advances in Diffraction and Geometry Related Super Resolution Approaches,” OSA IS Topical meeting, Toronto, Canada (July 2011), **Invited talk (58)**.
220. Z. Zalevsky, Y. Beiderman, V. Micó and J. García, “Novel approaches for near and far field super resolved imaging,” 22nd General Congress of the International Commission for Optics (ICO22), August 2011, Mexico, Puebla, **Invited talk (59)**.
221. Z. Zalevsky, “Silicon Nanophotonic Passive and Dynamic Devices,” Nano technology conference, Wohl center, Ramat-Gan (April 2011), **Invited talk (60)**.
222. Y. Reznick, E. Banin and Z. Zalevsky, “Direct laser light enhancement of the susceptibility of bacteria to gentamicin,” Israel Society for Microbiology (ISM), Annual meeting, Wohl center, Ramat-Gan (April 2011).
223. Z. Zalevsky, O. Fixler, V. Micó, J. García and B. Javidi, “Phase Microscopy and Geometric Super Resolved Imaging based upon Spatial Light Modulator,” International Workshop on Information Optics (WIO), Castellón, Spain (June 2011), **Invited talk (61)**.
224. L. Granero, Z. Zalevsky and V. Mico, “Resolution and field of view improvement in digital holography using a VCSEL source array,” International Workshop on Information Optics (WIO), Castellón, Spain (June 2011).
225. A. Calabuig, V. Mico, Z. Zalevsky, C. Ferreira and J. Garcia, “Superesolution in digital holographic microscopy,” International Workshop on Information Optics (WIO), Castellón, Spain (June 2011).
226. Z. Zalevsky, “Usage of cornea for biomedical sensing and for vision,” Bio-Med, Tel-Aviv (May 2011), **Invited talk (62)**.
227. A. Shahmoon, H. Slovin and Z. Zalevsky, “Biomedical Super Resolved Endo/Micro Scope,” The 45th Annual Scientific Meeting of Israeli Society for Microscopy, May 25-26th, at Kibbutz Hagoshrim, Israel, **Invited talk** following achievements in the Lev Margulis prize competition. **(63)**
228. Z. Zalevsky, Y. Beiderman and S. Lashansky, “Upgraded Configuration of Photonic Passive and Active Means for Improved Ballistic Missiles Interception Capabilities,” 7th international conference on missile defense (May 2011), San Sebastian, Spain.
229. Z. Zalevsky, “Optical solutions for civil and military applications,” Nanotechnology and mechanical engineering seminar, Royal beach hotel, Eilat, Israel (June 2011), **Plenary talk (64)**.
230. Z. Zalevsky, “Nanoparticles implantation-based holograms,” Collaborative Conference on 3D & Materials Research (3DMR), Korea (July 2011), **Invited talk (65)**.
231. Z. Zalevsky, Y. Beiderman and S. Lashansky, “Photonic Passive and Active Means for Improved Ballistic Missiles Interception Capabilities,” 2nd Israeli Multinational Missile Defense Conference (July 2011), Tel-Aviv, Israel.
232. Z. Zalevsky, “Micro and Nano Photonic Devices on Silicon Chips,” Annual conference of the Israeli Optical Engineering Chapter annual conference, Holon Institute of Technology (July 2011), **Invited talk (66)**.
233. Z. Zalevsky, “Super-Resolved Photonic Imaging and Sensing,” Annual conference of the Israeli Optical Engineering Chapter annual conference, Holon Institute of Technology (July 2011), **Plenary talk (67)**.

234. A. Inberg, P. Livshits, Z. Zalevsky, D. Malka, Y. Fleger and Y. Shacham-Diamand, “Thin Silver Films Electroless Deposition on Gold Nanoparticles Catalyst for Micro and Nanoelectronics,” Advanced Metallization Committee (AMC), (October 2011), San Diego, USA.
235. A. Shahmoon, A. Meiri, P. Livshits and Z. Zalevsky, “Nanoparticles and Plasmon Resonance Based Probe for Failure Analysis of ULSI Microchips and Electrical Characterizations of Metallic Interconnects,” Advanced Metallization Committee (AMC), (October 2011), San Diego, USA.
236. P. Livshits, A. Inberg, Y. Shacham-Diamand, D. Malka, Y. Fleger and Z. Zalevsky, “The Precipitation of Gold Nanoparticles Serving as Catalyst on Insulating Substrates for Metallic Ultra-Thin Film Deposition,” Advanced Metallization Committee (AMC), (October 2011), San Diego, USA.
237. A. Inberg, P. Livshits, Z. Zalevsky, D. Malka, Y. Fleger and Y. Shacham-Diamand, “Electroless Deposition of Silver Thin Films on Gold Nanoparticles for Micro and Nanoelectronics Applications,” 37th Micro and Nano Engineering Conference (MNE), (September 2011), Berlin, Germany.
238. D. Elbaz, A. Shahmoon, S. Buhbut, B. Z. Kupfer, A. Zaban and Z. Zalevsky, “Optical fiber based nanorods for generating radially polarized field,” 37th Micro and Nano Engineering Conference (MNE), (September 2011), Berlin, Germany.
239. A. Shahmoon, O. Limon, Z. Zalevsky, L. Businaro, G. Ciascab and A. Gerardino, “Enhanced electro-optic Bragg modulator based on plasma dispersion effect in Silicon,” 37th Micro and Nano Engineering Conference (MNE), (September 2011), Berlin, Germany.
240. Z. Zalevsky, “Silicon nano-modulators,” MediNano-4, Rome (October 2011) **Invited talk (68)**.
241. V. Sheinman, A. Rudnitsky, T. Rakhmanbek and Z. Zalevsky, “Multifunctional Implantable Pill for Biomedical Treatment,” ISABEL 2011, (the 4th International Symposium on Applied Sciences in Biomedical and Communication Technologies), Barcelona, Spain, (October 2011) **Invited talk (69)**.
242. Z. Zalevsky, “Super Resolved Image Processing and its Application to Microscopy,” Regional Workshop on Opto-fluidics and Optical Manipulation, Cape Coast, Ghana (November 2011), **Invited talk (70).**
243. Z. Zalevsky, “Metamaterials, micro/nano photonic and plasmonic devices on silicon chips,” Metamaterials workshop, HUJI Israel (November 2011), **Invited talk (71)**.
244. Z. Zalevsky, S. Avraham, M. Haning, S. Zach and M. Tur, “Construction of Photonic Rotman-Lens Module for Radar Phased Array Antennas,” The International IEEE Conf. on Microwaves, Communications, Antennas and Electronic Systems, COMCAS (Nov. 2011).
245. A. Schwarz, Y. Sanhedrai and Z. Zalevsky, “Digital Camera Sensing and its Image Disruption with Controlled Radio-Frequency Reception/Transmission,” The International IEEE Conf. on Microwaves, Communications, Antennas and Electronic Systems, COMCAS (Nov. 2011).
246. Z. Zalevsky, “Super-resolved near field and remote sensing,” The Thirteenth Israeli Mini-Workshop in Applied and Computational Mathematics (December 2011) **Invited talk (72).**
247. I. Margalit, Y. Beiderman, A. Skaat, M. Belkin, R.-P. Tornow, V. Mico, J. Garcia and Z. Zalevsky, “A new principle for remote continuous monitoring of intraocular pressure variations,” SPIE BiOS conference, Conference 8209, Ophthalmic Technologies XXII, San Francisco, USA (January 2012).
248. Z. Zalevsky and M. Belkin, “Coherence and speckle in photomedicine and photobiology,” SPIE BiOS conference, Conference 8211, Mechanisms for Low-Light Therapy VII, San Francisco, USA (January 2012).
249. D. Fixler and Z. Zalevsky, “Depolarization of light in biological tissues: affect the polarization state by flow and estimation of flow rates,” SPIE BiOS conference, Conference 8221, Optical Interactions with Tissue and Cells XXIII, San Francisco, USA (January 2012).
250. Y. Reznick, E. Banin, A. Lipovsky, R. Lubart and Z. Zalevsky, “Direct laser light enhancement of susceptibility of bacteria to gentamicin antibiotic,” SPIE BiOS conference, Conference 8224, Biophotonics and Immune Responses VII, San Francisco, USA (January 2012).
251. A. Inberg, P. Livshits, Z. Zalevsky, D. Malka, and Y. Shacham-Diamand, “Electroless Deposition of Silver Ultra-Thin Films on Gold Nanoparticles for Micro and Nanoelectronics Applications,” The 15th Israel Materials Engineering Conference (IMEC-15), Dead sea, Israel (March 2012).
252. Z. Zalevsky, I. Margalit, Y. Beiderman, A. Skaat, M. Belkin, R.-P. Tornow, V. Mico and J. Garcia, “Photonic Mean for Remote and Continuous Monitoring of Intraocular Pressure,” Israeli Society for Vision and Eye Research (ISVER), Tel-Aviv, Israel (March 2012).
253. A. Douplik, B. C. Wilson and Z. Zalevsky, “Spectral imaging microendoscopy in ducts and vessels,” SPIE Photonics Europe, Conference 8427, Biophotonics: Photonic Solutions for Better Health Care, Brussels Belgium (April 2012) **Invited talk (73)**.
254. V. Micó, J. García, Z. Zalevsky and B. Javidi, “Spatial Light Modulator based Phase-Shifting Gabor Holography,” SPIE Defense, Security, and Sensing conference, Conference 8384, Three-Dimensional Imaging, Visualization, and Display, Baltimore, Maryland, USA (April 2012) **Invited talk (74)**.

255. A. Ilovitsh, S. Zach and Z. Zalevsky, “Superresolved imaging of static ground targets using satellite platform,” The annual conference of the Optical engineering chapter of the Society of Electrical and Electronic Engineering in Israel, Bar-Ilan Univ., Ramat-Gan (March 2012).
256. R. Aharoni, O. Baharav, L. Bidani, D. Elbaz, M. Sinvani and Z. Zalevsky, “Laser based tapering rig for realization of in-fiber devices and its implementation for fiber integrated all-optical silicon modulator,” The annual conference of the Optical engineering chapter of the Society of Electrical and Electronic Engineering in Israel, Bar-Ilan Univ., Ramat-Gan (March 2012) **Invited talk (75)**.
257. S. Paz, D. Sylman, S. Ben-Yaish, A. Zlotnik and Z. Zalevsky, “Extending the depth of focus in tomography systems aiming to image glass lattices,” The annual conference of the Optical engineering chapter of the Society of Electrical and Electronic Engineering in Israel, Bar-Ilan Univ., Ramat-Gan (March 2012).
258. O. Baharav, L. Bidany, M. Sinvani and Z. Zalevsky, “Remote Sensing of Free Charges in Silicon ICs by Backside Illumination,” The annual conference of the Optical engineering chapter of the Society of Electrical and Electronic Engineering in Israel, Bar-Ilan Univ., Ramat-Gan (March 2012).
259. P. Polak, O. Shefi and Z. Zalevsky, “Gold nanoparticles for biosensing of DNA mutations,” The annual conference of the Optical engineering chapter of the Society of Electrical and Electronic Engineering in Israel, Bar-Ilan Univ., Ramat-Gan (March 2012).
260. A. Meiri, S. Tzur, Y. Cohen, O. Bass, A. Fish and Z. Zalevsky, “Multi-layer photonic logic gate integrated into microelectronic chip,” The annual conference of the Optical engineering chapter of the Society of Electrical and Electronic Engineering in Israel, Bar-Ilan Univ., Ramat-Gan (March 2012).
261. Z. Zalevsky, “Nanophotonic Devices and Elements for Temporal Data Manipulation and for Super Resolved Sensing/Imaging,” NanoIsrael, Tel-Aviv (March 2012) **Plenary talk (76)**.
262. A. Shahmoon. A. Douplik and Z. Zalevsky, “Multicore-Fiber Microendoscope as a Potential Tool for Intravascular Laser Surgery Guidance,” Conference on Laser Surgery and Medicine 2012, Japan (April 2012).
263. Z. Zalevsky, “The wonders of nanotechnology,” The first education conference of the ministry of education, Nazareth, Israel (May 2012) **Keynote talk (77).**
264. M. Belkin, G. Elani, E. Azoulay, D. Ilani, Y. Beiderman and Z. Zalevsky, “Electro-Mechanical Tactile Corneal Stimulation System for Vision Substitution,” The Association for Research in Vision and Ophthalmology (ARVO), Florida, USA, (May 2012); ARVO Meeting Abstracts March 26, 2012 53:327.
265. I. Margalit, Y. Beiderman, A. Skaat, M. Belkin, R.-P. Tornow, V. Mico, J. Garcia and Z. Zalevsky, “Remote and Continuous Monitoring of Intraocular Pressure Using Novel Photonic Principle,” The Association for Research in Vision and Ophthalmology (ARVO), Florida, USA, (May 2012); ARVO Meeting Abstracts March 26, 2012 53:1972.
266. I. Margalit, Y. Beiderman, A. Skaat, M. Belkin, R.-P. Tornow, V. Mico, J. Garcia and Z. Zalevsky, “Remote and Continuous Monitoring of Intraocular Pressure Using Novel Photonic Principle,” Research day, Tel-Ha-Shomer hospital, May 2012.
267. D. Cojoc, S. Finaurini, P. Livshits, E. Gur, A. Shapira, V. Mico and Z. Zalevsky, “Secondary speckle sensing microscopy for fast detection of malaria,” Optics Within Life Sciences (OWLS), Genoa, Italy, July 2012.
268. D. Cojoc, S. Finaurini, P. Livshits, E. Gur, A. Shapira, V. Mico and Z. Zalevsky, “Speckle based sensing device for fast detection of malaria,” OSA Technical Digest, Imaging Systems and Applications (ISA), Monterey, June 2012.
269. A. Douplik, W. L. Leong, A. M. Easson, S. Done, B. C. Wilson, A. Shahmoon and Z. Zalevsky, “Microendoscopic spectral imaging as a tool for small ductual diagnostics: preliminary experience,” Workshop on Optical Microscopy in Life Sciences, June 26-27, 2012, Wuhan National Laboratory for Optoelectronics, Wuhan, China (June 2012) **Invited talk (78).**
270. Z. Zalevsky, “High-resolution optical imaging and metrology,” HoloMet 2012, Utsunomiya, Japan (July 2012) **Invited talk (79).**
271. Z. Zalevsky, A. Meiri, E. Gur, J. Garcia, V. Micó and B. Javidi, "On-axis holographic high performance 3D imaging using time multiplexing particles encoding," International Workshop on Information Optics (WIO), Quebec, Canada (August 2012), **Invited talk (80)**.
272. A. Meiri, Z. Zalevsky, E. Gur, J. Garcia, V. Mico and B. Javidi, “On Axis Holography by Random Particles Encoding,” The International Workshop on Information Optics (WIO), Quebec City, Canada (August 2012).
273. A. Shenhav, Z. Brodie, Y. Beiderman, J. Garcia, V. Mico and Z. Zalevsky, “Optical remote sensor for alcohol concentration in blood,” Frontiers in Optics/Laser Science XXVIII (FiO/LS) meeting of Optical Society of America (OSA), Rochester USA (October 2012) **Invited talk (81).**

274. A. Meiri, A. Shahmoon and Z. Zalevsky, “Optically reconfigurable structures based on surface enhanced Raman scattering in nanorods,” 38th Micro and Nano Engineering Conference (MNE), (September 2012), Toulouse, France.
275. A. Shahmoon, A. Douplik and Z. Zalevsky, “Micro-size multi-core fiber as an imaging tool for internal organ examination,” LANE 7th international conference on photonic technologies, Furth, Germany (November 2012).
276. Z. Zalevsky, “Optical devices and schemes in communication links,” 27th Convention of IEEE, Eilat, Israel (November 2012) **Invited talk (82).**
277. A. Ilovitsh, S. Zach and Z. Zalevsky, “Contour super resolved imaging of static ground targets using satellite platform,” 27th Convention of IEEE, Eilat, Israel (November 2012)
278. A. Shahmoon, J. Strauss, H. Hazan, I. Alexeev, A. Douplik, M. Schmidt and Z. Zalevsky, “High Resolution Fabrication of Interconnection Lines using Picosecond Laser and Controlled Deposition of Gold Nanoparticles,” 30th Annual conference of the Israeli Vacuum Society (IVS), Herzelia, Israel (October 2012).
279. A. Douplik, M. Hohmann, A. Shahmoon, A. Zam, Z. Zalevsky, M. Schmidt, and H. Schaaf, “Microendoscopy of small ducts as a potential tool for guiding and monitoring intruductual biopsy and therapy,” SPIE BIOS conf. of Advanced Biomedical and Clinical Diagnostic Systems XI, Conference 8572 (Feb. 2013).
280. R. Lubart, E. Banin, A. Lipovsky, Z. Zalevsky and Y. Reznick, “Green light enhances the susceptibility of bacteria to gentamicin antibiotic,” International Academy for Laser Medicine and Surgery (IALMS), Laser Florence 2012, 26th Congress Laser Medicine, Firenze, Italy (Nov. 2012); **Plenary lecture (83)**.
281. M. Cohen, R. Shavit and Z. Zalevsky, “Towards Integrated Nanoplasmonic Logic Circuitry" Dwek School on Nanoplasmonics, Weizmann Institute, Israel (Dec. 2012).
282. M. Cohen, O. Bass, A. Meiri, R. Shavit, A. Fish and Z. Zalevsky, “Nanoplasmonic and Multi Layer Nanophotonic Logic XOR Gate,” MediNano-5, Barcelona, Spain (Nov. 2012).
283. C. G. Ebeling, A. Meiri, R. Menon, E. M. Jorgensen, Z. Zalevsky and J. M. Gerton, “Super resolved photoactivated localization microscopy,” SPIE biophotonics meeting, Tel-Aviv, Israel (Dec. 2012). **Invited talk (84).**
284. P. Polak, O. Shefi and Z. Zalevsky, “Gold nanoparticles-based biosensing of single nucleotide DNA mutations,” SPIE biophotonics meeting, Tel-Aviv, Israel (Dec. 2012).
285. Z. Zalevsky, “Super resolved holographic configurations,” OSA topical meeting on Digital holography and 3D imaging, Hawaii (April 2013) **Invited talk (85).**
286. E. Avrahamov, N. Shavit and Z. Zalevsky, “Estimation of True Radiance and Sub Pixel Position of Saturated Point Targets,” SPIE conf. on Advances in Display Technologies III, OPTO, San Francisco (February 2013).
287. Z. Zalevsky and A. Zlotnik, “Super resolved and field of view enhanced DLP based remote imaging configurations,” SPIE conf. on Emerging Digital Micromirror Device Based Systems and Applications V, MOEMS-MEMS, San Francisco (February 2013) **Invited talk (86)**.
288. Y. Beiderman and Z. Zalevsky, “Fiber based remote speech sensing and reconstruction,” Beijing International Forum on Science and Technology-City Safety Seminar, Beijing city, China (Nov. 2012) **Invited talk (87)**.
289. Z. Zalevsky, S. Ben Yais, A. Zlotnik, O. Limon, K. Lahav, R. Doron and M. Belkin, “Extended depth of focus contact lens for presbyopia,” ICLOSA – Israeli Contct Lens and Ocular Surface Association, School of medicine, Tel-Aviv Univ., Israel (Dec. 2012) **Invited talk (88)**.
290. Z. Zalevsky, “Photonic devices for biomedical sensing and treating,” The 14th Internatoinal meeting on Optical Engineering and Science in Israel, 4th OASIS meeting (Feb. 2013) **Invited talk (89)**.
291. Z. Zalevsky, S. Ben Yais, A. Zlotnik, O. Limon, K. Lahav, R. Doron and M. Belkin, “Performance enhanced multifocal RGP contact lenses” Contract Lens Practice- The Next Decade, Opthometry association, Hadasa Jerusalem (March 2013) **Invited talk (90)**.
292. S. Ben Yais, A. Zlotnik, O. Limon, K. Lahav, R. Doron, M. Belkin and Z. Zalevsky, “Multi focal RGP contact lens with reduced halo,” The 33rd annual meeting of the Israeli Society for Vision and Eye Research (ISVER), Airport city, Israel (March 2013).
293. V. Chhaniwal, A. Anand, S. Mahajan, V. Trivedi, Z. Zalevsky and B. Javidi, “Measurement of low polarization rotations using speckle correlation,” SPIE optical metrology meeting, Munich, Germany (May 2013).
294. F. Tenner, C. Brock, R. Hohenstein, Z. Zalevsky and M. Schmidt, “Remote optical detection of the fusion state in laser deep penetration welding,” LiM 2013– Lasers in Manufacturing, Germany (May 2013).
295. R. Jelinek, S. Richter and Z. Zalevsky, “Self-assembled Au NP Architectures for Opto-electronic Applications,” Materials Research Society (MRS) Spring Meeting, San Francisco, US (April 2013).

296. M. Golberg, D. Fixler, A. Shainberg, S. Zlochiver, V. Micó, J. Garcia, Y. Beiderman and Z. Zalevsky, “Lensless speckle based configuration for simultaneous in vitro inspection of mechanical contractions of cardiac myocyte cells,” SPIE optical metrology meeting, Munich, Germany (May 2013) **Invited talk (91)**.
297. J. Garcia, V. Micó, M. Sanz-Sabater, Y. Beiderman and Z. Zalevsky, “Visualization of deformation by secondary speckle sensing,” SPIE optical metrology meeting, Munich, Germany (May 2013).
298. Z. Zalevsky, A, Meiri, E. Gur, J. Garcia, V. Micó and B. Javidi, “Usage of moving nanoparticles for improving holography performance,” SPIE conf. on Three-Dimensional Imaging, Visualization, and Display 2013, Baltimore (May 2013) **Invited talk (92)**.
299. Z. Zalevsky, G. Elani, E. Azoulay, D. Ilani, Y. Beiderman and M. Belkin, “Non Invasive Ophthalmic Tactile Stimulation Device for Sensory Vision Substitution,” IATI-BioMed, Tel-Aviv (June 2013). **On-line voting selected oral presentation.** The conference had new and innovative conference format in which 250 abstracts receiving the most online votes will form the backbone of the conference.
300. S. Levy, I. Shlimak, A. Chelly and Z. Zalevsky, “C-V characteristics of Si-MOS structures with Ge nanocrystals,” 21st Int. Symp. On Nanostructures: Physics and Technology, Saint Petersburg, Russia (June 24–28, 2013).
301. Z. Zalevsky, A. Borkowski, N. Cohen, Z. Hadas, E. Marom, and B. Javidi, "Two dimensional geometric super resolved approach," OSA Technical Digest in Imaging and Applied Optics (June 2013).
302. V. Micó and Z. Zalevsky, "Holography and Superresolution," OSA Technical Digest in Imaging and Applied Optics, Washington DC, USA (June 2013) **Invited talk (93)**.
303. C. G. Ebeling, A. Meiri, R. Menon, E. M. Jorgensen, J. M. Gerton, T. Ilovitsh and Z. Zalevsky, “Super resolved configurations in microscopy,” International Workshop on Information Optics (WIO), Canary Islands, Spain (July 2013) **Invited talk (94)**.
304. A. Shahmoon, H. Hazan and Z. Zalevsky, “Usage of Focused Ion Beam and Scanning Electron Microscope for Fabrication of Self Aligned Nanostructures,” East meeting of Energy Materials and Nanotechnology (EMN), FIB Nanostructures, Beijing, China (September 2013) **Invited talk (95)**.
305. S. Finaurini, P. Livshits, E. Gur, A. Shapira, V. Mico, Z. Zalevsky and D. Cojoc, “Speckle Sensing Microscopy for Fast Detection of Malaria,” FisMat 2013 Conference in Milan (9-13 September 2013) **Invited talk (96)**.
306. Z. Zalevsky, J. Garcia and M. Belkin, “Non invasive and continuous measurement of blood pulse pressure and PPG of blood veins at the retina for earoy detection of AMD,” 13th EURETINA Congress, Hamburg, Germany (26-29 September 2013). Presentation given as one of the finalists in the technological innovation session for the EURETINA innovation prize of 2013.
307. S. Cohen and Z. Zalevsky, “Usage of Amplitude, Phase and Polarization Readout for Sub-Pixel Resolution in RADAR Images,” The International IEEE Conf. on Microwaves, Communications, Antennas and Electronic Systems, COMCAS, Tel-Aviv, Israel (October 2013).
308. S. Cohen and Z. Zalevsky, “Experimental extraction of sub-pixel resolution in RADAR images via amplitude, phase and polarization readouts,” SPIE meeting 8891, SAR Image Analysis, Modeling, and Techniques XIII, Dresden, Germnay (spetember 2013).
309. A. Rudnitsky, D. Elbaz and Z. Zalevsky, “Preliminary fabrication and characterization of low-leakage hybrid coaxial cable,” SPIE 8900 meeting, Millimetre Wave and Terahertz Sensors and Technology VI, 89000S (October 18, 2013).
310. Z. Zalevsky, A. Ilovitsh and Y. Beiderman, “Usage of cornea and sclera back reflected images captured in security cameras for forensic and card games applications,” Proc. SPIE. 8901, Optics and Photonics for Counterterrorism, Crime Fighting and Defence IX; and Optical Materials and Biomaterials in Security and Defence Systems Technology X 89010I (October 16, 2013).
311. A. Meiri, A. Shahmoon and Z. Zalevsky, “Reconfigurable photonic structures based on surface enhanced Raman scattering in nanorods,” MediNano-6, Lyon, France (Oct. 2013).
312. A. Vegerhof, R. Popovtzer and Z. Zalevsky, “Manipulating magnetic nano-particles for bio-medicince applications,” The 2nd conference of the Israel Society for Biotechnology Engineering (ISBE), Dan hotel, Tel-Aviv, Israel (December 2013).
313. Z. Zalevsky, “Noncontact and Continuous Photo-Biomedical Sensing,” Samsung technological innovation forum at SAIT Tech Fair, Seoul, Korea, 5-6 November 2013. **Keynote talk (97)**.
314. Z. Zalevsky, “Novel approaches for fast, continuous and non contact biomedical diagnostics,” 21st International SAOT Workshop on Optical in Medicine, Nov. 25-26, Erlangen, Germany. **Invited talk (98)**.
315. A. Schwarz, A. Shemer, A. Zlotnik and Z. Zalevsky, “High Resolution and Energetically Efficient Lensless Imaging System Based Upon Time Varied Pinholes Array,” SPIE conf. on Emerging Digital Micromirror Device Based Systems and Applications VI, MOEMS-MEMS, San Francisco (Feb. 2014) **Invited talk (99)**.

316. Z. Zalevsky, “Photonic sensing- diagnostics at the speed of light,” Google X in Mountain View (Feb. 2014) **Invited talk (100)**.
317. Z. Zalevsky, “Remote engineered super resolved imaging,” Optical engineering 2014, Ort Hermelin College, Nataniya, Israel (26 Feb., 2014) **Invited talk (101)**.
318. D. Malka and Z. Zalevsky, “Multicore Photonic Crystal Fiber Based 1x16 Intensity Splitters/Couplers,” Optical engineering 2014, Ort Hermelin College, Nataniya, Israel (26 Feb., 2014).
319. Z. Zalevsky, “Novel non or minimally invasive photonic tools for bio-medical diagnostic and monitoring,” Lahat 5th Lasers and E-O seminar, Tel-Aviv, Israel (March 25, 2014) **Invited talk (102).**
320. A. Vegerhof, R. Popovtzer and Z. Zalevsky, “Manipulating magnetic nano-particles for bio-medicince applications,” The 4th international nanotechnology conference and exhibition, Tel-aviv, Israel (24-25 March, 2014).
321. Z. Zalevsky, Y. Beiderman, I. Margalith, N. Ozana, M. Sanz, V. Mico and J. Garcia, “Multifunctional biosensing wearable watch,” Golden Nuggets, The 4th international nanotechnology conference and exhibition, Tel-aviv, Israel (24-25 March, 2014) **Invited talk (103).**
322. M. Cohen, Z. Zalevsky, S. Pocoví-Martínez, A. Shahmoon and J. Perez-Prieto, “Thermally controlled photocatalytic coalescence of functionalized gold nanoparticles,” Molecular Nanoplasmonics, SPIE Photonics Europe 2014, Belguim (April 2014).
323. Z. Zalevsky, “Photonic healthcare monitoring,” 5th US-Turkey Advanced Study Institute on Global Healthcare, Antaliya, Turkey (June 2014), **Plenary talk (104).**
324. M. Cohen, R. Shavit, Y. Abulafia and Z. Zalevsky, “Nanoplasmonic Phased Array Superlens with Extended Depth of Focus,” CLEO Conference, California (June 2014), paper: JTu4A.135.
325. A. Meiri, R. Menon, and Z. Zalevsky, “Interferometric Localization Microscopy,” Digital Holography and Three-Dimensional Imaging (DH) 2014 paper: JTh1C.6
326. A. Borkowski, E. Marom, and Z. Zalevsky, “Axial Scanning and Phase Retrieval based Geometric Super Resolved Imager,’ Imaging Systems and Applications (ISA) 2014 paper: IW2C.4
327. Z. Zalevsky, I. Margalith, N. Ozana, Y. Beiderman, M. Kunin, J. Garcia, and V. Mico, “Remote optical sensor of blood coagulation, oximetry and dehydration,” Imaging Systems and Applications (ISA) 2014 paper: IM4C.6
328. Z. Zalevsky and D. Fixler, “Non Labeled Tumor Detection via Polarization and Spectral Properties of Gold Nanoparticles,” Imaging Systems and Applications (ISA) 2014 paper: IM3C.4
329. A. Schwarz, A. Shemer, and Z. Zalevsky, “Nuclear 3D Gamma and X-Ray Imaging using Variable Pinholes Array System,” Imaging Systems and Applications (ISA) 2014 paper: IM3C.2
330. Z. Zalevsky, Y. Beiderman, M. Belkin, and Y. Rotenstreich, “Imaging via Tactile Spatial Stimulation of the Cornea,’ Imaging Systems and Applications (ISA) 2014 paper: IM3C.7
331. A. Borkowski, E. Marom, and Z. Zalevsky, “Axial Scanning Geometric Super Resolved Imager,” International Workshop on Information Optics (WIO), Neuchatel, Switzerland (July 2014) **Invited talk (105)**.
332. Z. Zalevsky, A. Borkowski, E. Marom and B. Javidi, “Geometric super resolved imaging approaches overcoming pixels based non ideal spatial sampling,” ICO-23 meeting, Santiago de Compostela, Spain (August 2014) **Invited talk (106).**
333. A. Shemer, A. Schwarz and Z. Zalevsky, “Super resolved imaging via variable pinholes array and time multiplexed object’s coding,” ICO-23 meeting, Santiago de Compostela, Spain (August 2014).
334. A. Shemer, A. Schwarz, E. Gur, E. Cohen and Z. Zalevsky, “Image nonlinearity and non-uniformity corrections using Papoulis - Gerchberg algorithm in gamma imaging systems,” ICO-23 meeting, Santiago de Compostela, Spain (August 2014).
335. D. Malka, G. Berkovic, Y. Tischler and Z. Zalevsky, “Demonstration of Super-resolved Raman Spectra of Toluene and Toluene-Chlorobenzene Mixture,” The XXIV International conference on Raman spectroscopy (ICORS 2014), Jena, Germany (August 2014).
336. Y. Beiderman, I. Halachmi and Z. Zalevsky, “A novel approach for remote monitoring of heart beat rate, respiratory rate and chewing activity in cows,” DairyCare Conference, Copenhagen, Denmark (August 2014). The joint oral presentation was chosen to receive **Travel Funding for Younger Scientists** which was given to Y. Beiderman to Attend the Conference.
337. Z. Zalevsky, “Biomedical movement sensing and imaging,” Workship on Biomedical Optical Imaging and Laser Manipulations, Tel-Aviv (Sep. 2014) **Invited talk (107).**
338. Z. Zalevsky, “Laser based sensing, fabrication and data handling technologies,” LANE conference, Fürth, Germany (Sep. 2014), **Keynote talk (108).**
339. Z. Zalevsky, “Tutorial on ophthalmic imaging using diffractive optics,” EOSAM 2014, Berlin, Germany (Sep. 2014), **Keynote/tutorial talk (109).**

340. D. Malka, Y. Sintov and Z. Zalevsky, “Design of a 1x4 Silicon Wavelength Demultiplexer Based on Multimode Interference Coupler in a Slot Waveguide Structures,” 28th Convention of Electrical and Electronics Engineers in Israel, Eilat (Dec. 2014).
341. Z. Zalevsky, R. Menon and A. Rudnitsky, “Collimated Backlight for Displays and Micro-Projectors,” 28th Convention of Electrical and Electronics Engineers in Israel, Eilat (Dec. 2014).
342. D. Malka, M. Cohen, J. Turkiewicz and Z. Zalevsky, “Optical Micro-Multi-Racetrack Resonator Filter Based on SOI Waveguides,” 28th Convention of Electrical and Electronics Engineers in Israel, Eilat (Dec. 2014).
343. Z. Zalevsky, D. Malka, G. Berkovic, Y. Tischler, Y. Hammer and A. Dror-Ehre, “Raman Spectra based Super Resolved Detection of Chemicals,” ISR Analytica, the 18th Annual Meeting of the Israeli Analytical Chemistry Society, Tel-Aviv, Israel (January 2015), **Keynote talk (110).**
344. A. Shahmoon and Z. Zalevsky, “Revolution in the field of micro endoscopy,” iNNOVEX 2015, Airport city, Israel (Feb. 2015). **Selected for oral presentation** in the track of Preventative Medicine and brain research (30% of acceptance rate).
345. Z. Zalevsky, “Nano imaging,” Xin Center International Winter School on Nano-Photonics, Tel-Aviv, Israel (Feb. 2015), **Invited talk (111).**
346. M. Cohen, Y. Abulafia and Z. Zalevsky “Electrical Excitation and Imaging of Optical Nanoplasmons,” Royal Society of Chemistry (RSC) conference, Nanoplasmonics: Faraday Discussion, London (Feb. 2015).
347. Z. Zalevsky, I. Raveh, O. Limon, S. ben Yaish, K. Lahav Yacouel, R. Doron and A. Zlotnik, “Clinical trials of interference-based extended depth of focus intra ocular lens design,” SPIE, Photonics West, Ophthalmic Technologies XXV (March 4, 2015).
348. Z. Zalevsky, Y. Beiderman, Y. Rotenstreich and M. Belkin, “Cornea based imaging via its tactile spatial stimulation,” SPIE, Photonics West, Ophthalmic Technologies XXV (March 4, 2015).
349. Y. Mandel, T. Arens-Arad, N. Farah, A. Zlotnik and Z. Zalevsky, “Head mounted DMD for visual stimulation in freely moving rats: A novel tool for visual neuroscience research,” SPIE, Photonics West, Emerging Digital Micromirror Device Based Systems and Applications VII, 93760B (March 10, 2015).
350. Z. Zalevsky, A. Zlotnik, Y. Kapellner, A. Shemer, A. Schwarz “Computational Imaging in Infra-Red and THz Systems,” The 15th Internatoinal meeting on Optical Engineering and Science in Israel, 5th OASIS meeting, Tel-Aviv (March. 2015) **Invited talk (112)**.
351. Y. Sintov, S. Goldring, S. Pearl, E. Lebiush, M. Lebendik, B. Sfez, D. Malka and Z. Zalevsky, “A Robust All-Fiber Q-Switched 1micron Yb3+ Fiber Laser,” The 15th Internatoinal meeting on Optical Engineering and Science in Israel, 5th OASIS meeting, Tel-Aviv (March. 2015).
352. A. Ilovitsh and Z. Zalevsky, “Super Resolved Passive Imaging of Remote Moving Object on Top of Sparse Unknown Background,” The 15th Internatoinal meeting on Optical Engineering and Science in Israel, 5th OASIS meeting, Tel-Aviv (March. 2015).
353. A. Ilovitsh, E. Preter, N. Levanon and Z. Zalevsky, "Time multiplexing super resolution using Barker-based array,” The 15th Internatoinal meeting on Optical Engineering and Science in Israel, 5th OASIS meeting, Tel-Aviv (March. 2015).
354. T. Yeminy, D. Sadot, and Z. Zalevsky, “All-Optical Silicon-Photonic Modulation Format Conversion,” The 15th Internatoinal meeting on Optical Engineering and Science in Israel, 5th OASIS meeting, Tel-Aviv (March. 2015).
355. T. Ilovitsh, A. Ilovitsh, J. Sheridan and Z. Zalevsky, “Optical Realization of the Radon Transform,” The 15th Internatoinal meeting on Optical Engineering and Science in Israel, 5th OASIS meeting, Tel-Aviv (March. 2015). **This poster won the best poster paper award**.
356. T. Ilovitsh, Y. Danan, R. Meir, A. Meiri and Z. Zalevsky, “Cellular imaging using temporally flickering nanoparticles,” The 15th Internatoinal meeting on Optical Engineering and Science in Israel, 5th OASIS meeting, Tel-Aviv (March. 2015).
357. A. Karsenty, Z. Zalevsky and A. Chelly, “Electro-optical nano devices based on Silicon for optical communication: A Mix of opportunities for the Industry,” The 15th Internatoinal meeting on Optical Engineering and Science in Israel, 5th OASIS meeting, Tel-Aviv (March. 2015).
358. M. Aviv (Shalev), Y. Rivenson and Z. Zalevsky, “Digital resampling diversity phase retrieval using single magnitude image,” The 15th Internatoinal meeting on Optical Engineering and Science in Israel, 5th OASIS meeting, Tel-Aviv (March. 2015).
359. D. Malka, Y. Sintov and Z, Zalevsky, “PCF based 1x2 Wavelengths Dumeltiplexer with Inherent In-Fiber Amplification,” The 15th Internatoinal meeting on Optical Engineering and Science in Israel, 5th OASIS meeting, Tel-Aviv (March. 2015).
360. A. Meiri, C. Ebeling, J. Martineau, J. Gerton, Z. Zalevsky and R. Menon, “Sub Nanometer Localization Precision of Nanoparticles by Point-Spread-Function Modulation,” The 15th Internatoinal meeting on Optical Engineering and Science in Israel, 5th OASIS meeting, Tel-Aviv (March. 2015).

361. Z. Zalevsky, Y. Beiderman, Y. Rotenstreich and M. Belkin, “Experimental Quantification of Corneal Tactile Spatial Responsivity for Vision Substitution,” Israeli Society for Vision and Eye Research (ISVER), Airport city, Israel (March 2015).
362. Z. Zalevsky, “Imaging, Sensing and Vision into the Future,” Workshop of the Israeli Ministry of Science and Technology regarding the future of optical research, Tel-Aviv, Israel (March 2015), **Invited talk (113).**
363. D. Malka, G. Berkovic, Y. Tischler and Z. Zalevsky, “Super-resolved Raman Spectroscopy of Liquids for Improving Water Quality,” The annual meeting of the Israeli water association, Ramat-Gan, Israel (March 2015).
364. A. Meiri, C. Ebeling, J. Martineau, Z. Zalevsky, J. Gerton, and R. Menon, "Sub-Nanometer Particle Tracking by Point-Spread-Function Spatial Modulation," in Optics in the Life Sciences, OSA Technical Digest, Vancouver, Canada (April 2015).
365. Z. Zalevsky, “The implementation of nanotechnology for nano devices and for bio-sensing,” Nanotechnology from academia to industry meeting, Holon Institute of Technology, Holon, Israel (April 2015) **Outstanding young scientist invited talk (114).**
366. Z. Zalevsky, “Super resolved photonic sensing,” International Optical Seminar OS-2015 in St. Petersburg, Russia (May 2015) **Plenary talk (115).**
367. Z. Zalevsky, “Extended depth of focus lenses for ophthalmology,” International Optical Seminar OS-2015 in St. Petersburg, Russia (May 2015) **Invited talk (116).**
368. A. Meiri, C. Ebeling, J. Martineau, Z. Zalevsky, J. Gerton and R. Menon, “Improvement in In-Plane Localization Precision of Nanoparticles Using Interference Analysis,” pap. JW2A.88, CLEO, San Jose, USA (May 2015).
369. Z. Zalevsky, “Nano particles based nanoscopy,” Frontiers in super resolution microscopy: bio-imaging and beyond, Sde Boker, Israel (May 2015) **Invited talk (117).**
370. T. Yeminy, D. Sadot and Z. Zalevsky, “All-Optical Silicon-Photonic Constellation Conversion,” CLEO/Europe-EQEC Conference, Munich, Germany (June 2015).
371. Z. Zalevsky, T. Ilovitsh, Y. Danan, A. Meiri, and C. G. Ebeling, "New Directions in Super Resolved Imaging," in Imaging and Applied Optics 2015, OSA Technical Digest, Arlington, USA (June 2015), **Invited talk (118)**.
372. Z. Zalevsky and D. Gotthilf Nezri, "Passive optical device for nystagmus correction and resolution enhancement," in Imaging and Applied Optics 2015, OSA Technical Digest, Arlington, USA (June 2015).
373. Z. Zalevsky, D. Gotthilf Nezri, and A. Zlotnik, "Spectacles and contact lens based solution for age-related macular degeneration," in Imaging and Applied Optics 2015, OSA Technical Digest, , Arlington, USA (June 2015).
374. A. Meiri, C. Ebeling, J. Martineau, Z. Zalevsky, J. Gerton, and R. Menon, "Self-Interference of Coherent and Incoherent Signals for Sub-Nanometer Localization of Single Emitters," in Imaging and Applied Optics 2015, OSA Technical Digest, , Arlington, USA (June 2015).
375. M. Cohen, Y. Abulafia and Z. Zalevsky, “Strong Electron - Plasmon Interaction in Scanning Electron Microscopy,” The 7th International Conference on Surface Plasmon Photonics (SPP7), (June 2015), Jerusalem.
376. A. Dror-Ehre, Y. Hammer and Z. Zalevsky, “The next generation of continuous, real time and on-line monitoring of residual chemicals and drug substances in food,” The 14th international conference of the Isralei food industry, Food in the new ear 2015 (June 2015), Ramat-Gan, Israel.
377. Z. Zalevsky, “Photonic ear for remote detection and diagnostic of diseases,” The 1st Convention of Electrical & Electronics engineering Students in Israel (IEEEI) (June 2015), Bar Ilan Univ., Israel, **Keynote talk (119)**.
378. V. Micó, C. Ferreira, Z. Zalevsky and J. García, “Off-axis digital holographic microscopy by updating a regular upright microscope,” SPIE conf. 9529, Optical Methods for Inspection, Characterization, and Imaging of Biomaterials II, Munich, Germany (June, 2015).
379. S. Mahajan, V. Trivedi, V. Chhaniwal, M. Prajapati, Z. Zalevsky, B. Javidi and A. Anand, “Measurement of concentration of sugar in solutions with laser speckle decorrelation,” SPIE conf. 9525, Optical Measurement Systems for Industrial Inspection IX, Munich, Germany (June, 2015).
380. L. Granero, V. Micó, Z. Zalevsky, J. García and B. Javidi, “Improving the resolution in phase-shifting Gabor holography by CCD shift,” SPIE conf. 9525, Optical Measurement Systems for Industrial Inspection IX, Munich, Germany (June, 2015).
381. H. Pinhas, L. Bidani, O. Baharav, M. Sinvani, M. Danino and Z. Zalevsky, “All optical modulator based on silicon resonator,” SPIE conf. on Infrared Sensors, Devices, and Applications V, 96090L (Aug. 2015).

382. A. Karsenty, A. Zev, A. Chelly and Z. Zalevsky, “Development, simulation and characterization of nanoscale silicon on insulator photo-activated modulator (SOIPAM) hybrid device,” IEEE Optical MEMS and Nanophotonics 2015, Israel (August 2015).
383. Z. Zalevsky, “Unified Biometric Sensor Embedded in Fabrics,” The IEEE Standards Association (IEEE-SA), IEEE Internet of Things (IoT) conference, Israel (August 2015).
384. Z. Zalevsky, “The era of entrepreneurship and innovation in electro-optics,” Mexican Optics and Photonics Meeting (MOPM) 2015, Leon, Mexico (Sep. 2015), **Plenary talk (120)**.
385. Z. Zalevsky, Y. Beiderman and J. Garcia, “Remote photonic sensing of diseases,” Mexican Optics and Photonics Meeting (MOPM) 2015, Leon, Mexico (Sep. 2015), **Invited talk (121)**.
386. Z. Zalevsky, “Usage of nanoparticles for data manipulation and for biomedical sensing and treatment,” Nanosmat, Manchester, UK (Sep. 2015). **Invited Outstanding Young Scientist Award Winning Lecture (122).**
387. Z. Zalevsky, Y. Beiderman, J. Garcia and A. Shahmoon, “Photonics non- and minimally-invasive diagnosis and therapy of diseases,” Saratov Fall Meeting (SFM) 2015, Symposium on Optics & Biophotonics III, **internet invited lecture** (Sep. 2015). **(123)**
388. C. Ferreira, O. Wagner, A. Schwarz, A. Shemer, J. García and Z. Zalevsky, “Superresolucion obtenida mediante proyeccion de patrones de speckle desconocidos y diferentes longitudes de onda,” Triennial meeting of the Spanish Optical Society (SEDOPTICA). Salamanca Spain (Sep. 2015).
389. Z. Zalevsky, Tali Ilovitsh, Asaf Ilovitsh and Yevgeny Beiderman, “Remote Photonic Bio-Sensing and Super Resolved Imaging,” IEEE Photonics Conference (IPC) meeting in Reston, Verginia (Oct. 2015). **Invited talk (124)**.
390. Z. Zalevsky, Y. Hammer and A. Dror-Ehre, “Super Spectra- Revolutionizing the world of food and water quality monitoring,” Cleanvest Summit 2015, **Selected oral presentation** (Oct. 2015).
391. M. Mizrahi, E. Holdengreber, E. Farber and Z. Zalevsky, “Frequency multiplexing spatial super-resolved sensing for RADAR applications,” The International IEEE Conf. on Microwaves, Communications, Antennas and Electronic Systems, COMCAS (Nov. 2015).
392. Z. Zalevsky, “Photonic, ear for remote detection of diseases and, eye for super resolved imaging,” International **invited talk** given as part of the SPIE visiting lecturer program, IIST, Thiruvananthapuram, Kerala, India, Nov. 2015. **(125)**
393. Z. Zalevsky, “Noise isolated respiration sensing in helicopters,” 2015 Defense Innovation Challenge Showcase program, Austin TX, US (Dec. 2015). **Selected to showcase** (24% acceptance rate). The showcase space was released due to lack of traveling capability.
394. A. Vegerhof, R. Popovtzer and Z. Zalevsky, “Photonics biomedical mapping via manipulated magnetic nano particles,” The 3rd Conference of the Israel Society for Biotechnology Engineering (ISBE), Dan Panorama Hotel, Tel-Aviv, Israel (Dec. 2015).
395. V. Trivedi, S. Mahajan, P. Vora, N. Patel, V. Chhaniwal, Z. Zalevsky, B. Javidi, A. Anand, "Compact and low cost polarimeter based on laser speckle de-correlation", National Laser Symposium (NLS 24), India (Dec. 2015).
396. Z. Zalevsky, A. Zlotnik, Y. Kapellner Rabinovitz, A. Shemer and A. Schwarz, “Computational imaging expansion from visible to infrared and to THz systems,” SPIE conf. 9761 on Emerging Digital Micromirror Device Based Systems and Applications VIII, Photonic West, San Francisco (Feb. 2016), **Invited talk (126)**.
397. Y. Danan, T. Ilovitsh, D. Liu, H. Pinhas, M. Sinvani, Y. Ramon, J. Azougi, A. Douplik and Z. Zalevsky, “Plasma dispersion effect assisted nanoscopy based on tuning of absorption and scattering resonances of nanoparticles,” SPIE conf. 9721 on Nanoscale Imaging, Sensing, and Actuation for Biomedical Applications XIII, Photonics West, San Francisco (Feb. 2016), **Invited talk (127)**.
398. N. Ozana, Y. Bishitz, Y. Beiderman, J. García and Z. Zalevsky, “Remote optical configuration of pigmented lesion detection and diagnosis of bone fractures,” SPIE Conf. 9689A on Photonics in Dermatology and Plastic Surgery (Feb. 2016).
399. S. Ben Yaish and Z. Zalevsky, “Optical extended depth of focus lens design for children myopia control,” SPIE conf. 9693 on Ophthalmic Image Processing and Analysis (Feb. 2016).
400. Z. Zalevsky, A. Rudnitsky, V. Sheinman, A. Tzoy, A. Toktosunov and A. Adashov, “Home-use cancer detecting band aid,” SPIE conf. 9694 on Optical Methods for Tumor Treatment and Detection: Mechanisms and Techniques in Photodynamic Therapy XXV (Feb. 2016).
401. T. Ilovitsh, A. Ilovitsh, A. M. Weiss, R. Meir and Z. Zalevsky, “Three-dimensional imaging using phase retrieval with two focus planes,” SPIE conf. 9713 on Three-Dimensional and Multidimensional Microscopy: Image Acquisition and Processing XXIII (Feb. 2016).
402. T. Ilovitsh, A. M. Weiss, A. Meiri, C. G. Ebeling, A. Amiel, H. Katz, B. Mannasse Green, and Z. Zalevsky, “Modified K-factor image decomposition for three-dimensional super resolution microscopy,”

SPIE conf. 9713 on Three-Dimensional and Multidimensional Microscopy: Image Acquisition and Processing XXIII (Feb. 2016).

403. A. Ilovitsh, T. Ilovitsh, E. Preter, N. Levanon and Z. Zalevsky, “Time multiplexing super resolution using a 2D Barker-based array,” SPIE conf. 9716 on Optical Methods in Developmental Biology IV (Feb. 2016).
404. A. Ilovitsh, V. Mico and Z. Zalevsky, “Super resolved optical system using circular gratings for objects with finite sizes,” SPIE conf. 9716 on Optical Methods in Developmental Biology IV (Feb. 2016).
405. N. Ozana, Y. Beiderman, A. Anand, B. Javidi, J. García and Z. Zalevsky, “Non-contact optical sensor for detection of glucose concentration using a magneto-optic effect,” SPIE conf. 9721 on Nanoscale Imaging, Sensing, and Actuation for Biomedical Applications XIII, Photonics West, San Francisco (Feb. 2016).
406. T. Ilovitsh, Y. Danan, R. Meir, A. Meiri, and Z. Zalevsky, “Temporally flickering nanoparticles for compound cellular imaging and super resolution,” SPIE conf. 9721 on Nanoscale Imaging, Sensing, and Actuation for Biomedical Applications XIII, Photonics West, San Francisco (Feb. 2016).
407. Z. Zalevsky, “Silicon surface processing for realization of nanopaeticles based nano device,” 17th Israeli Materials Engineering Conference (IMEC17), Israel (Feb. 2016), **Invited talk (128).**
408. O. Wagner, A. Pandya, I. Schelkanova, A. Shahmoon, A. Douplik and Z. Zalevsky, “Minimal invasive micro endoscope imaging in scattering media environment,” NanoIsrael, Tel Aviv, Israel (Feb. 2016).
409. M. Cohen, Y. Abulafia and Z. Zalevsky, “Electrical Excitation and Imaging of Optical Nanoplasmons,” NanoIsrael, Tel Aviv, Israel (Feb. 2016).
410. D. Malka and Z. Zalevsky “Design of a 1×2 Silicon-Gallium Nitride Wavelength Demultiplexer based on Multimode Interference in Slot Waveguide Structures,” NanoIsrael, Tel Aviv, Israel (Feb. 2016).
411. A. Vegerhof, M. Motiei, A. Rudintzky, R. Popovtzer and Z. Zalevsky, “Thermal therapy with magnetic nano particles for cell destruction,” NanoIsrael, Tel Aviv, Israel (Feb. 2016).
412. L. Gerbi Zarfati, C. Abraham, Y. Harpaz, N. Farah, Z. Zalevsky, Y. Mandel, “Measurement and Improvement of Visual Acuity and Reading Capabilities in Simulated Prosthetic Vision with Active Sensing,” The 36th meeting of the Israeli Society of Vision and Eye Research (ISVER), Kfar Hamacabia, Israel (March 2016).
413. D. Gotthilf Nezri, A. Rudnitsky and Z. Zalevsky, “A Passive Optical Device for Nystagmus Correction and Resolution Enhancement,” The 36th meeting of the Israeli Society of Vision and Eye Research (ISVER), Kfar Hamacabia, Israel (March 2016).
414. Z. Zalevsky, “Super resolved and extended depth of focus concepts for remote and ophthalmic imaging systems,” 12th International Young Scientist conference on Developments in Optics and Communications 2016, Riga (March 2016) **Invited talk (129)**.
415. A. Schwarz, J. Wang, A. Shemer, Z. Zalevsky and B. Javidi, “Time multiplexed pinhole array based lensless three-dimensional imager,” SPIE SI116 conf. on Three-Dimensional Imaging, Visualization, and Display 2016, Baltimore (April 2016), **Invited talk (130)**.
416. B. Lengenfelder, F. Mehari, L. Hoppe, F. Klämpfl, F. Tenner, Z. Zalevsky, and M. Schmidt, "Remote photoacoustic tomography using speckle sensing with a high-speed camera," Optics and the Brain conf. 2016, Fort Lauderdale, Florida United States (April 2016).
417. L. Granero, V. Micó, C. Ferreira, Z. Zalevsky and J. García, “Superresolution imaging system by color-coded tilted-beam illumination in digital in-line holographic microscopy,” SPIE conf. 9896, Optics, Photonics and Digital Technologies for Imaging Applications IV, 98960E, Brussels, Belgium (April 2016).
418. V. Mco, J. A. Picazo-Bueno, Z. Zalevsky; J. Garcia and C. Ferreira, “Slightly off-axis holography with partially coherent illumination implemented into a standard microscope,” SPIE conf. 9896, Optics, Photonics and Digital Technologies for Imaging Applications IV, 98960C, Brussels, Belgium (April 2016).
419. Z. Zalevsky, “Usage of nanoparticles in nanoscopy and in biomedical sensing and therapy,” 2nd International Symposium Nanotechnology from Academy to Industry 2016 NTAI 2016, Holon Institute of Technology (May 2016) **Invited talk (131)**.
420. Z. Zalevsky, “Computational imaging for superior remote sensing,” Machine vision conference, NewTech exhibition, Israeli trade fairs center, Tel-Aviv (May 2016) **Keynote talk (132)**.
421. Z. Zalevsky, “Nanoparticles based optical nanoscopy,” Opto-Tech 2016, NewTech exhibition, Israeli trade fairs center, Tel-Aviv (May 2016) **Invited talk (133)**.
422. T. Ilovitsh, Y. Danan, R. Meir, N. Ozana, A. Meiri and Z. Zalevsky, “Nanoparticles based enhanced nanoscopy and photoacoustics,” MediNano-8 conference, Athens, Greeece (June 2016). **Invited talk (134)**.

423. Y. Danan, T. Ilovitsh, D. Malka, D. Liu and Z. Zalevsky, “Super-resolved imager with nanometric resolution based on silicon coated gold nanoparticles,” The 15th Workshop on Information Optics (WIO), Barcelona, Spain (July 2016). **Invited talk (135)**.
424. F. Tenner, A. Schramm, M. Söhle, M. Regensburger, E. Wirthmann, Z. Zalevsky and M. Schmidt, “Towards a multi-sensor system for the diagnosis of neurological disorders,” The IEEE International Conference on Advanced Intelligent Mechatronics (AIM), Banff, Alberta, Canada (July 2016).
425. Y. Danan, N. Ozana, and Z. Zalevsky, "Self periodically heated-cooled nanostructure for photoacoustic imaging with CW illumination," in Imaging and Applied Optics 2016, (Optical Society of America, 2016), Heidelberg, Germany (July 2016).
426. O. Wagner, M. Schultz, Y. Ramon, E. Sloutskin, and Z. Zalevsky, "Active-scan linear-optics nanoscopy using optically trapped particles," in Imaging and Applied Optics 2016 (Optical Society of America, 2016), Heidelberg, Germany (July 2016).
427. J. Bar Magen and Z. Zalevsky, “Usage of iPhone for 3D and through-walls objects mapping,” 3D Image Acquisition and Display: Technology, Perception and Applications, Heidelberg, Germany (July 2016), **Invited talk (136)**.
428. A. Schwarz, A. Shemer and Z. Zalevsky, “Time multiplexed pinhole array based imaging in the gamma range,” Computational Optical Sensing and Imaging (COSI), Heidelberg, Germany (July 2016), **Invited talk (137)**.
429. Z. Zalevsky, “The Era of Entrepreneurship and Innovation in Bio-Medical-Optics,” Life Sciences Baltic Conference, Vilnius, Lithuania (Sep. 2016).
430. A. Shahmoon, J. Strauss, H. Zafri, M. Schmidt and Z. Zalevsky, “High Resolution Fabrication of Interconnection Lines using Picosecond Laser and Controlled Deposition of Gold Nanoparticles,” LANE conf., Fürth, Germany (Sep. 2016).
431. F. Tenner, S. Ramoser, M. Dobler, Z. Zalevsky and M. Schmidt, “Optical Measurement of the Connection State in Laser Brazing,” LANE conf., Fürth, Germany (Sep. 2016).
432. T. Ilovitsh, A. Ilovitsh, Y. Danan and Z. Zalevsky, “Nanoparticles based Localization and Stimulated Plasma-Dispersion Nanoscopy,” The 10th national conference on photonics, Xian, China (Sep. 2016), **Plenary talk (138)**.
433. Z. Zalevsky, “Kinect and photonic 3D sensing– a step to the future,” Open Innovations, The 5th Moscow International Forum for Innovative Development, Moscow, Russia (Oct. 2016). **Keynote talk (139)**.
434. D. Malka, Y. Danan and Z. Zalevsky, “Slot Silicon-Gallium Nitride Waveguide Realizing 1x4 Optical Power Splitter,” IEEE International Conference on the Science of Electrical Engineering (ICSEE), Eilat, Israel (Nov. 2016).
435. Z. Zalevsky, “Angular momentum of light in biophotonic applications: Usage of orbital angular momentum for ranging and for super resolved imaging and of spin angular momentum for blood flow tracking and for glucose sensing,” 1st European workshop on biophotonics and optical angular momentum BIOAM-16, Paris, France (Nov. 2016), **Invited talk (140)**.
436. A. Shahmoon, J. Strauss, H. Hazan, M. Schmidt and Z. Zalevsky, “Usage of Picosecond Laser and Controlled Deposition of Gold Nanoparticles for Fabrication of Photonic and Electronic Nanostructures,” The 34th Israeli Conference of Mechanical Engineering Faculty of Mechanical Engineering, Technion, Israel (Nov. 2016).
437. A. Meiri, E. M. Strohm, M. C. Kolios, and Z. Zalevsky, “Spatial interference encoding patterns based super resolved photoacoustic microscopy,” SPIE conf. 10064, Photons Plus Ultrasound: Imaging and Sensing 2017, USA (Jan. 2017).
438. M. Golberg, S. Polani, N. Ozana, Y. Beiderman, J. Garcia, J. Ruiz-Rivas Onses, M. Sanz Sabater, M. Shatsky and Z. Zalevsky, “Remote optical stethoscope and optomyography sensing device,” SPIE conf. 10077, Nanoscale Imaging, Sensing, and Actuation for Biomedical Applications XIV, USA (Jan. 2017).
439. T. Sirkis, Y. Beiderman, S. Agdarov, Y. Beiderman and Z. Zalevsky, “Blood pulse wave velocity and pressure sensing via fiber based and free space based optical sensors,” SPIE conf. 10077, Nanoscale Imaging, Sensing, and Actuation for Biomedical Applications XIV, USA (Jan. 2017). **Invited talk (141).**
440. E. Cohen, D. Malka, A. Shemer, A. Shahmoon, M. London and Z. Zalevsky, “Micro mirrors-based coupling of light to multi-core fiber realizing in-fiber photonic neural network processor,” SPIE conf. 10117, Emerging Digital Micromirror Device Based Systems and Applications IX, USA (Jan. 2017).
441. B. Lengenfelder, F. Mehari, Y. Tang, F. Klämpfl, Z. Zalevsky and M. Schmidt, “Towards non-contact photo-acoustic endoscopy using speckle pattern analysis,” SPIE conf. 10064, Photons Plus Ultrasound: Imaging and Sensing 2017, USA (Jan. 2017).
442. T. Ilovitsh, A. Ilovitsh, O. Wagner and Z. Zalevsky, “Time multiplexing super-resolution nanoscopy based on the Brownian motion of gold nanoparticles,” SPIE conf. 10077, Nanoscale Imaging, Sensing, and Actuation for Biomedical Applications XIV, USA (Jan. 2017).

443. T. Ilovitsh, A. Ilovitsh, A. M. Weiss, R. Meir and Z. Zalevsky, “Phase retrieval and 3D imaging in gold nanoparticles-based fluorescence microscopy,” SPIE conf. 10074, Quantitative Phase Imaging III, USA (Jan. 2017), **Invited talk (142).**
444. M. Sinvani, Y. Danan, G. Marcus, D. Shallev and Z, Zalevsky, “Improved borders detection of areas enriched with gold nanoparticles inside biological phantom,” SPIE conf. 10077, Nanoscale Imaging, Sensing, and Actuation for Biomedical Applications XIV, USA (Jan. 2017).
445. A. Ilovitsh and Z. Zalevsky, “Extended depth of focus and aberration correction using time multiplexing,” SPIE conf. 10077, Nanoscale Imaging, Sensing, and Actuation for Biomedical Applications XIV, USA (Jan. 2017).
446. N. Gorodesky, N. Ozana, Y. Berg, O. Dolev, Y. Danan, Z. Kotler and Z. Zalevsky, “Non-Contact and Non-Disruptive Laser based Characterization of High Aspect Ratio Micro Structures,” The 16th Internatoinal meeting on Optical Engineering and Science in Israel, 6th OASIS meeting, Tel-Aviv (February 2017).
447. O. Fogel, Z. Zalevsky and Z. Kotler, “Towards 3D Digital Printing of Micro-electromechanical Systems,” The 16th Internatoinal meeting on Optical Engineering and Science in Israel, 6th OASIS meeting, Tel-Aviv (February 2017).
448. G. Rand, S. Levavi, A. Ilovitsh and Z. Zalevsky, “Usage of Time Multiplexing for Geometrical Aberration Corrections in Imaging Systems,” The 16th Internatoinal meeting on Optical Engineering and Science in Israel, 6th OASIS meeting, Tel-Aviv (February 2017).
449. N. Ozana, A. Schwarz, R. Califa, A. Shemer, S. Polani, J. Garcia and Z. Zalevsky, “Remote Glucose Sensing using Time varied Speckle Patterns,” The 16th International meeting on Optical Engineering and Science in Israel, 6th OASIS meeting, Tel-Aviv (February 2017). **This poster won the best poster paper award**.
450. Y. Danan, Y. Ramon, J. Azougi, A. Douplik and Z. Zalevsky, “Tuning and Decoupling the Light Scattering and Absorption Resonances in Nanostructures,” The 16th International meeting on Optical Engineering and Science in Israel, 6th OASIS meeting, Tel-Aviv (February 2017).
451. C. Tzur, D. Fixler and Z. Zalevsky, “Designing Metal Enhanced Fluorescent Nanostructures using Genetic Algorithms,” The 16th International meeting on Optical Engineering and Science in Israel, 6th OASIS meeting, Tel-Aviv (February 2017).
452. O. Wagner, M. Schultz, R. Nuri, E. Sloutskin and Z. Zalevsky, “Employment of Linear-optics Nanoscopy using Optical-tweezers on Biological Samples,” The 16th International meeting on Optical Engineering and Science in Israel, 6th OASIS meeting, Tel-Aviv (February 2017).
453. O. Wagner, A. Pandya, I. Schelkanova, A. Shahmoon, A. Douplik and Z. Zalevsky, “Improving Micro-endoscopy Imaging Resolution through Scattering Media,” The 16th Internatoinal meeting on Optical Engineering and Science in Israel, 6th OASIS meeting, Tel-Aviv (February 2017).
454. Z. Zalevsky, Y. Beiderman and J. Garcia, “Photonic ‘ear’ for remote biomedical conditions monitoring,” Conf. of the Israeli Society for Medical and Biological Engineering (ISMBE), Haifa (March 2017). **Invited talk (143).**
455. T. Arens-Arad, N. Farah, Z. Zalevsky and Y. Mandel, “Head-Mounted Projection System for Visual Stimulation and Cortical Recordings as a Novel Method for Studying Natural and Artificial Vision in Behaving Animals,” Conf. of the Israeli Society for Medical and Biological Engineering (ISMBE), Haifa (March 2017).
456. C. Abraham, N. Farah, Y. Harpaz, Z. Zalevsky and Y. Mandel, “Active Sensing for Enhancement of Reading Capabilities in Prosthetic Vision,” The 37th Annual Meeting of the Israeli Society for Vision and Eye Research (ISVER), Kfar Hamacabia, Israel (March 2017).
457. T. Arens-Arad, N. Farah, Z. Zalevsky and Y. Mandel, “Head-Mounted Projection System for Visual Stimulation and Cortical Recordings as a Novel Method for Studying Natural and Artificial Vision in Behaving Animals,” The 37th Annual Meeting of the Israeli Society for Vision and Eye Research (ISVER), Kfar Hamacabia, Israel (March 2017).
458. A. Shahmoon and Z. Zalevsky, “Multi Core Needle Endoscopy,” Society of American Gastrointestinal and endoscopic surgeons (SAGES), Houston, USA (March 2017).
459. A. Schwarz, A. Shemer, N. Ozana, J. Garcia, and Z. Zalevsky, “Augmentative Alternative Communication using Eyelid Movement Remote Detection by Speckle Patterns Tracking System for Amyotrophic Lateral Sclerosis Disease,” Optics in the Life Sciences Congress, San Diego, USA (April 2017).
460. H. Pinhas, N. Shabairou, A. Schwarz, E. Cohen, N. Ozana, Z. Zalevsky and A. Shemer, “Lens-less imaging using variable and wavelength multiplexed pinhole array,” Optics in the Life Sciences Congress, San Diego, USA (April 2017).

461. A. Schwarz, A. Shemer, N. Ozana, R. Califa, J. García, and Z. Zalevsky, "Laser Vibrometer Interferometry for Speckle Patterns Tracking Systems," CLEO (Conference on Lasers and Electro-Optics), OSA Technical Digest (online) (Optical Society of America, 2017), paper JW2A.1.
462. A. Schwarz, A. Shemer, N. Ozana, R. Califa, J. García, and Z. Zalevsky, "An Optical Remote Sensor for Fingerprint Identification using Speckle Pattern," CLEO (Conference on Lasers and Electro-Optics), OSA Technical Digest (online) (Optical Society of America, 2017), paper ATu3C.5.
463. N. Ozana, R. Califa, A. Schwarz, N. Lipschitz-Tayar, M. Wolf, and Z. Zalevsky, "Remote Optical Sensor for Detection of Middle Ear Effusion," *European Conference on Lasers and Electro-Optics (CLEO)-European Quantum Electronics Conference*, Munich, Germany (June 2017).
464. Y. Danan, Z. Zalevsky and M. Sinvani, "Improved edge detection of regions enriched with gold nanorods inside biological phantom," *European Conference on Lasers and Electro-Optics (CLEO)-European Quantum Electronics Conference*, Munich, Germany (June 2017).
465. Z. Zalevsky, "Hands free bio-sensor," TechConnect, World Innovation Conf. and Expo, Washington DC, USA (May 2017). **Global innovation award winning presentation**.
466. Z. Zalevsky, "Remote & contactless bio-sensing," MIXiii Biomed 2017, 16th National Life Sciences & Technology Week, Tel Aviv (May 2017), **Invited talk (144).**
467. Z. Zalevsky, "Academic entrepreneurship and commercialization in electro-optics," Optics & Photonics Days 2017, Oulu, Finland (May 2017), **Invited talk (145)**.
468. Z. Zalevsky, "Usage of light for remote and simultaneous "hearing" of many physiological parameters," Oulu Bio-imaging day, Oulu, Finland (June, 2017). **Keynote talk (146)**.
469. O. Wagner, M. Schultz, A. Meiri, E. Edri, R. Meir, E. Sloutskin and Z. Zalevsky, "Label free microscopy with enhanced localization performance based upon temporally modulated polarization," ICTON 2017 the 19th International Conference on Transparent Optical Networks, Girona, Spain (July 2017), **Invited talk (147).**
470. H. Pinhas, Y. Danan, M. Sinvani, M. Danino and Z. Zalevsky, "STED like microscopy based on plasma dispersion effect in silicon," in *Imaging and Applied Optics 2017 (3D, AIO, COSI, IS, MATH, pcAOP)*, OSA Technical Digest (online) (Optical Society of America, 2017), paper CTh3B.5.
471. Z. Zalevsky, Y. Danan, and R. Menon, "Super resolved computational photo-lithography recording based upon multiple exposures and self-assembled nano-structures," in *Imaging and Applied Optics 2017 (3D, AIO, COSI, IS, MATH, pcAOP)*, OSA Technical Digest (online) (Optical Society of America, 2017), paper CW4B.2.
472. V. Micó, J. Ángel Picazo-Bueno, Z. Zalevsky, J. García and C. Ferreira, "Superresolution imaging in spatially multiplexed interferometric microscopy by using time multiplexing," SPIE conf. 10329, Optical Measurement Systems for Industrial Inspection X, 103294C, Munich, Germany (June 26, 2017).
473. Z. Zalevsky, "Novel approaches in super-resolved near and far field imaging: Breaking Abbe's law of diffraction," OPTO 2017 conference, Warsaw, Poland (July 2017), **Plenary talk (148)**.
474. F. Tenner, M. Regensburger, A. Schramm, M. Söhle, K. Schwarzkopf, Z. Zalevsky and M. Schmidt, "Evaluation of a Laser-Based Sensor for the Diagnosis of Neurological Disorders," The 39th Annual International Conference of the IEEE Engineering in Medicine & Biology Society (EMBC'17), JeJu Island, S. Korea (July 2017).
475. Z. Zalevsky, "Nano-particles based novel schemes for super-resolved imaging, medical diagnosis & treatment," EAMC conf. Sweeden (Aug. 2017), **IAAM Scientists Medal Lecture (149)**.
476. Z. Zalevsky, "Translation of remote photons-based sensing into virtual tactile and hearing senses," Photonica 2017 conf., Belgrade, Serbia (Aug. 2017), **Tutorial talk (150).**
477. Z. Zalevsky, "Remote elastography sensing for bio-medical diagnosis," The 13th International Conference "Correlation Optics 2017", Chernivtsi, Ukraine (Sept. 2017), **Invited talk (151).**
478. Z. Zalevsky, "Label free super resolved nanoscopy," International School on Computational Microscopy 2017, Vietri Sul Mare, Italy (Sept. 2017), **Invited talk (152).**
479. E. Wohlgemuth, T. Yeminy, Z. Zalevsky and D. Sadot, "Experimental Demonstration of Encryption and Steganography in Optical Fiber Communications," European Conference on Optical Communication (ECOC 2017), Gothenburg, Sweden (Sept. 17 – 21).
480. D. Smadja, J. Lellouche, R. Ishay Ben, Y. Harel and Z. Zalevsky, "Nanodrops for restoring refractive errors," XXXV Congress of ESCRS (European Society of Cataract and Refractive Surgery), Lisbon, Portugal (Oct. 2017).
481. Z. Zalevsky, "Label free time multiplexing nanoscopy," IEEE Photonics Conference, Orlando (Oct. 2017), **Invited talk (153).**
482. Z. Zalevsky, "The power of light: From research to commercialization in electro-optics," Optics & Photonics in Sweden 2017 (OPS), Stockholm, Swedden (Oct. 2017), **Keynote talk (154).**
483. Z. Zalevsky, "Enterprenuership and biomedical sensing," Inspite Digital and Mobile Conference of Calcalist in Israel, Tel-Aviv, Israel (Oct. 2017), **Invited talk (155).**

484. S. Benichou, S. Zach, M. Danino and Z. Zalevsky, “Optically Implemented Synchronized Low Frequency Sampling Methodology for Filtering and Recovery of Noise Embedded Narrow Band Signals,” The International IEEE Conf. on Microwaves, Communications, Antennas and Electronic Systems, COMCAS, Tel-Aviv, Israel (Nov. 2017).
485. Z. Zalevsky, “Remote photonic diseases sensing: Early detection of breast cancer, melanoma and glaucoma,” ICAOP-2017 (International Conference on Advances in Optics and Photonics (XLI conference of the optical society of India), Hisar, India (Nov. 2017), **Plenary talk (156).**
486. V. Trivedi, S. Mahajan, V. Chhaniwal, Z. Zalevsky, B. Javidi, A. Anand, “Optical sensor for detection of Magnetic field using Speckle De-correlation technique”, International conference on Advanced in Optics and Photonics (ICAOP), Hisar, India (Nov. 2017).
487. V. Trivedi, S. Mahajan, B. Pathak, V. Chhaniwal, Z. Zalevsky, B. Javidi, A. Anand, “Laser Speckle Based Refractometer”, National Laser Symposium (NLS 26), India (Dec. 2017).
488. Z. Zalevsky, “Optcal technologies for remote bio-sensing,” TEDx (TED-like) talk, Wahl Center (Jan. 2018). https://www.youtube.com/watch?v=NAzhokvptSQ
489. A. Bennett, T. Sirkis, Ye. Beiderman, S. Agdarov, Ya. Beiderman and Z. Zalevsky, “Breast cancer early detection via tracking of skin back-scattered secondary speckle patterns,” SPIE Conf. 10506, Nanoscale Imaging, Sensing, and Actuation for Biomedical Applications XV, USA (Jan. 2018), **Keynote talk (157).**
490. E. Weintraub, B. Sachs, Y. Reznick, M. Sinvani, R. Lubart, E. Banin, Y. Beiderman and Z. Zalevsky, “Usage of light for enhanced sensing and treating of inflammations and infections,” SPIE Conf. 10479, Photonic Diagnosis and Treatment of Infections and Inflammatory Diseases, USA (Jan. 2018), **Invited talk (158).**
491. Z. Zalevsky, H. Pinhas, D. Malka, Y. Danan, M. Sinvani, “Design of tunable thermo-optic C-band filter based on coated silicon slab,” SPIE conf. 10526, USA (Jan. 2018).
492. A. Meiri and Z. Zalevsky, “Boolean processing by cascaded all-optical devices via intra-bit phase encoding,” SPIE conf. 10537, USA (Jan. 2018).
493. V. Kleiner, A. Rudnitsky, Z. Zalevsky, “All-optical direct phase and amplitude digitalization based on free-space interferometry,” SPIE conf. 10537, USA (Jan. 2018).
494. J. Azougi, Y. Ramon, L. Businaro, G. Ciasca, A. Gerardino, Z. Zalevsky, “Silicon single mode waveguide modulator based upon switchable Bragg reflector,” SPIE conf. 10537, USA (Jan. 2018).
495. Z. Zalevsky, N. Ozana, Y. Beiderman and J. Garcia, “Non-contact photonic sensor for detection of glucose concentration in blood stream,” Advanced Materials World Congress (AMWC) 2018, Singapore (Feb. 2018), **Plenary talk (159).**
496. N. Ozana, A. Noah, X. Zhang, Y. Ono, J. Hirsh and Z. Zalevsky, “Remote Photonic Sensing of Hemodynimics of Brain Activity,” Conf. of the Israeli Society for Medical and Biological Engineering (ISMBE), Haifa (Feb. 2018), **Invited talk (160).**
497. D. Smadja, M. Lellouche, M. Krauthammer, Y. Harel, A. Abulafia, D. Zadok and Z. Zalevsky, “Nano-drops for correcting refractive errors,” The 38th Annual Meeting of the Israeli Society for Vision and Eye Research (ISVER), Kfar Maccabiah (March 2018). **Received best presented research work award.**
498. D. Smadja, R. Krueger, A. Abulafia, D. Zadok and Z. Zalevsky, “SMART Intraocular Lens, a new concept of remotely activated presbyopic correction,” The 38th Annual Meeting of the Israeli Society for Vision and Eye Research (tactile), Kfar Maccabiah (March 2018).
499. Z. Zalevsky, “Temporal super resolution and extended depth of focus configurations,” Workshop on Light and Matter, Ariel Univ., Israel (March 2018), **Invited talk (161).**
500. Z. Zalevsky, “The power of light in bio-medical sensing,” 5th Athens Science Festival, Greece (April 2018), **Plenary talk (162).**
501. D. Smadja, J. P. Lellouche, Y. Harel, M. Krauthammer, R. Ben Ishay and Z. Zalevsky, “Use of Synthetic Nano-Drops for the Correction of Refractive Errors,” American Society for Cataract and Refractive Surgery (ASCRS), Washington DC, USA (April 2018).
502. Z. Zalevsky and A. Shahmoon, “Ultra-thin multi-functional endoscopy,” Society of American Gastrointestinal and endoscopic surgeons (SAGES), Seattle, USA (April 2018). **Podium presentation** (13 out of 200 submissions were selected for podium presentation at the emerging technologies session). https://www.youtube.com/watch?v=ytP8mmilZcs
503. Z. Zalevsky, “Photonic fiber based neural network processor- The new ear in data analysis,” ChipEx 2018, Israel trade fairs center, Tel-Aviv (May 2018). **Keynote talk (163)**.
504. R. Califa, M. Golberg, A. Schwarz, N. Ozana, Z. Markman, J. García, A. Shemer and Z. Zalevsky, “All Optical Real Time Method for Laser Speckle Pattern Tracking of Non-Contact Biomedical Parameters,” in Biomedical Optics Congress 2018 (Microscopy/Translational/Brain/OTS), OSA Technical Digest, Florida, USA (April 2018).
505. N. Ozana, A. Primov-Fever, M. Wolf and Z. Zalevsky, “Remote Photonic Sensing of Vocal Cords Vibrations,” CLEO (Conference on Lasers and Electro-Optics), San Jose, USA (May 2018).

506. M. Golberg, R. Califa, S. Polani, J. Garcia and Z. Zalevsky, “In Depth Flow Inspection based on Spatial Analysis of Dynamic Laser Speckle,” CLEO (Conference on Lasers and Electro-Optics), San Jose, USA (May 2018).
507. O. Wagner, A. Pandya, Y. Chemla, H. Pinhas, I. Schelkanova, A. Shahmoon, Y. Mandel, A. Douplik and Z. Zalevsky, “Lens-less Micro-endoscopy through highly scattering media,” CLEO (Conference on Lasers and Electro-Optics), San Jose, USA (May 2018).
508. N. Farah, C. Abraham, L. Gerbi, Z. Zalevsky and Y. Mandel, “Active sensing and reading performance in simulated prosthetic vision,” The Association for Research in Vision and Ophthalmology (ARVO), Hawaii, USA (May 2018). ARVO Meeting Abstracts 4565-A0094.
509. Z. Zalevsky, “Usage of lasers for remote diagnosis of diseases,” The 5th International Symposium on Lasers in Medicine and Biophotonics, within the18th International Conference on Laser Optics (ICLO) 2018, St. Petersburg, Russia (June 2018), **Plenary talk (164).**
510. A. Schwarz, A. Shemer and Z. Zalevsky, “Wavelength and Polarization Multiplexed Pinhole Array for Variable Coded Aperture,” SIAM (Society for Industrial and Applied Mathematics) conference on imaging science (IS18), Bologna, Italy (June 2018).
511. T. Yeminy, E. Wohlgemuth, D. Sadot and Z. Zalevsky, “Optical Cryptography for Cyber Secured and Stealthy Fiber-Optic Communication Transmission,” 2nd International Symposium on Cyber Security Cryptography and Machine Learning (CSCML 2018), Beer Sheva (June 2018). **Invited talk (165).**
512. N. Ozana, H. Genish, A. Schwartz, S. Polani, J. García, Z. Zalevsky, and R. Califa, "Remote Sensing of Photoplethysmogram using Multi Spot Illumination," in *Imaging and Applied Optics 2018 (3D, AO, AIO, COSI, DH, IS, LACSEA, LS&C, MATH, pcAOP)*, OSA Technical Digest (Optical Society of America, 2018), paper CTh3C.3 (June 2018).
513. O. Fogel, Z. Kotler and Z. Zalevsky, “3D Printing of Functional Metallic Microstructures and its Implementation in Electrothermal Actuator,” 19th International Symposium on Laser Precision Microfabrication, Edinburgh, UK (June 2018).
514. O. Wagner, A. Pandya, Y. Chemla, H. Pinhas, I. Schelkanova, A. Shahmoon, Y. Mandel, A. Douplik and Z. Zalevsky, “Minimally invasive micro-endoscopy for biomedical imaging in highly scattering media,” 52th Annua meeting of the Israeli Society for Microscopy (ISM), Israel (June 2018).
515. D. Smadja, Z. Zalevsky and J. P. Lellouche, “Nanotechnologies and Visual Correction, the next step?,” IIRSI (Indian Intraocular Implant and Refractive Surgery Convention), Chennai, India (July 2018). **The work received the IIRSI gold medal award**.
516. O. Fogel, S. Cohen, Z. Kotler and Z. Zalevsky, “Mechanical properties of 3D metallic microstructures printed by laser induced forward transfer,” 10th Conference on Photonic Technologies- LANE 2018, Fürth, Germany (Sep. 2018).
517. B. Lengenfelder, S. Asraf, N. Ozana, M. Späth, M. Schmidt and Z. Zalevsky, “Remote detection of Brillouin radial acoustic modes in an optical fiber using speckle-sensing,” the 26th Optical Fiber Sensors (OFS) conference, Lausanne, Switzerland (Sep. 2018).
518. O. Fogel, Z. Kotler and Z. Zalevsky, “Towards 3D Digital Printing of Micro-Electromechanical Systems,” Printing for Fabrication 2018, Dresden, Germany (Sep. 2018).
519. E. Wohlgemuth, Y. Yoffe, T. Yeminy, Z. Zalevsky and D. Sadot, “Low Cost PAM-4 IM/DD Photonic-Layer Secured Communication for DCI Based on Phase Mask,” European Conference on Optical Communication (ECOC 2018), Roma, Italy (Sept. 2018). **Oral presentation**.
520. Z. Zalevsky, “Super resolved and focal depth extended ophthalmology,” Saratov Fall Meeting (SFM’18), (Sep. 2018) **Invited talk (166)**.
521. G. Shpun, A. Shoval, N. Farah, Z. Zalevsky and Y. Mandel, “Local Plasmon Resonance in the service of neuronal activation - A novel method for sight restoration,” presented as poster at ISMBE 2018, NanoIL 2018 and Neural interface 2018, Jerusalem, Israel (Oct. 2018).
522. G. Shpun, I. Henn, Y. Chemla, N. Farah, Z. Zalevsky and Y. Mandel, “Photolithography & 3D Nano-printing Combination for 3D Vision Restoration Implant,” Neural interface 2018 conference, Jerusalem, Israel (Oct. 2018). **Best poster award given by Nano Letters**.
523. Y. Mandelbaum, A. Karsenty, D. Zitoun and Z. Zalevsky, “FEM Analysis and Application of Surface-Enhanced Raman Scattering (SERS) Nanostructure Substrate for Optical PH Sensor,” The 6th Nano Israel Conference, Jerusalem, Israel (Oct. 2018).
524. A. Sanjeev, Y. Kapellner, E. Gur and Z. Zalevsky, “Non-invasive Wavefront Shaping for Focusing Light Inside and Behind Biological Scattering Medium,” The 6th Nano Israel Conference, Jerusalem, Israel (Oct. 2018).
525. Z. Zalevsky, “Label free linear nanoscopy,” The 6th Nano Israel Conference, Jerusalem, Israel (Oct. 2018) **Invited talk (167)**.

526. E. Kolberg, Y. Beiderman, R. Talyosef, R. Amsalem, J. Garcia and Z. Zalevsky, "Robotic Platform for Automated Search and Rescue Missions of Humans", AI and Robotics in The Emergency and Disaster Management Conference, Tel Aviv, Israel (Oct. 2018).
527. I. Gabay, A. Shemer, A. Schwarz, M. Mizrahi, E. Holdengreber, E. Farber and Z. Zalevsky, "Microwave Superresolving Imaging Configurations," The IEEE Radio and Antenna Days of the Indian Ocean (RADIO) international conference, Mauritius (Oct. 2018).
528. Z. Zalevsky, "The Life-Cycle of an Invention: From an Academic Paper to a Product," Medical Device Research & Development Summit, Tel Aviv (Oct. 2018). **Keynote talk (168)**.
529. Z. Zalevsky, "Nano-particles and nano-technology for glucose detection in blood stream," 4th NANOSMAT-USA conf., Isla Grand Beach Resort South Padre Island, Texas, USA (Oct. 2018). **Keynote talk (169)**.
530. D. Avraham, Y. Danan and Z. Zalevsky, "Radiation Does Reduced 3D X-Ray Imager for Radiology," Israel Radiological Association Annual Meeting (ISRA) 2018 (Nov. 2018).
531. Z. Zalevsky, "Sight for the Visually Impaired: Cornea based Imaging via its Tactile Spatial Stimulation," Pitch in the Dark Startup Competition and conference, Jaffa (5th of Nov. 2018) **Keynote talk (170)**.
532. Y. Sabari, N. Ozana and Z. Zalevsky, "Optical configuration of skin hydration detection by temporal analysis of skin speckle patterns," The international conference on laser applications in life sciences (LALS), Ramat-Gan, Israel (Nov. 2018). **Won the best student poster award**.
533. N. Ozana, D. Duadi, O. Itzhak, A. Primov-Fever, A. Bennet, H. Lupa, M. Wolf, and Z. Zalevsky, "Remote optical sensing in otolaryngology," The international conference on laser applications in life sciences (LALS), Ramat-Gan, Israel (Nov. 2018).
534. H. Lupa, N. Ozana, M. Wolf and Z. Zalevsky, "Remote optical evaluation of facial nerve degeneration," The international conference on laser applications in life sciences (LALS), Ramat-Gan, Israel (Nov. 2018).
535. M. Benyamin, R. Califa, N. Ozana, A. Schwartz, Z. Zalevsky and H. Genish, "Remote Monitoring of Blood Pulsation with Infra-Red Illumination Compared to Electrocardiography," The international conference on laser applications in life sciences (LALS), Ramat-Gan, Israel (Nov. 2018).
536. M. Golberg, R. Califa, S. Polani, J. García-Monreal, and Z. Zalevsky, "In Depth Flow Inspection using Dynamic Laser Speckle spatial statistics," The international conference on laser applications in life sciences (LALS), Ramat-Gan, Israel (Nov. 2018).
537. A. Sanjeev, Y. Kepellner, N. Shabairou, E. Gur, and Z. Zalevsky, "High Resolution Imaging Inside and Behind the Biological Scattering Medium by Focusing Light Using a Non-Invasive Optical Wavefront Shaping Technique," The international conference on laser applications in life sciences (LALS), Ramat-Gan, Israel (Nov. 2018).
538. Z. Zalevsky, "Spatial-temporal analysis of back scattered light for remote bio-medical sensing and functional imaging of brain activity," SAOT Workshop on Functional Optical Imaging in Medical Engineering, Erlangen, Germany (Nov. 2018) **Invited talk (171)**.
539. H. Brestel, Z. Zalevsky and A. Karsenty, "Enhanced Optical Tunable Excited Capacitor (EOTEC) for Faster Responsivity," 2018 ICSEE International Conference on the Science of Electrical Engineering, Eilat (Dec. 2018).
540. Z. Zalevsky, "Optical Super Resolution and Extended Depth of Focus," Course SC1260, **Featured Course** delivered at SPIE Photonics West, San Francisco, USA (Feb. 2018).
541. H. Genish, N. Ozana and Z. Zalevsky, "Speckle based sensing of chemicals by an acoustic excitation in aqueous solutions," SPIE Conf. 10895, Frontiers in Biological Detection: From Nanosensors to Systems XI, SPIE Photonics West, San Francisco, USA (Feb. 2018) **Invited talk (172)**.
542. N. Ozana, A. Noah, X. Zhang, Y. Ono, J. Hirsch and Z. Zalevsky, "Label-free remote photonic sensing of blood vessels' hemodynamics and occlusion in the brain," SPIE conf. 10890, Label-free Biomedical Imaging and Sensing (LBIS), SPIE Photonics West, San Francisco, USA (Feb. 2018). **Invited talk (173).**
543. S. Buchsbaum, Y. Keshet, N. Ozana and Z. Zalevsky, "Photonic bio-sensor based on multiclass support vector machine with a reject option," SPIE conf. 10871, Multimodal Biomedical Imaging XIV, SPIE Photonics West, San Francisco, USA (Feb. 2018).
544. M. Tiferet, H. Pinhas, O. Wagner, Y. Danan, M. Danino, Z. Zalevsky and M. Sinvani, "Plasma dispersion effect based super-resolved imaging in silicon," Proc. of SPIE Conf. 10891, Nanoscale Imaging, Sensing, and Actuation for Biomedical Applications XVI, SPIE Photonics West, San Francisco, USA (Feb. 2019).
545. A. Sanjeev, Y. Kapellner Rabinovitz, N. Shabairou, E. Gur and Z. Zalevsky, "Non-contact optical wavefront shaping for focusing light and high-resolution imaging inside and behind biological scattering medium," SPIE Conf. 10932, Emerging Digital Micromirror Device Based Systems and Applications XI, SPIE Photonics West, San Francisco, USA (Feb. 2018).

546. H. Pinhas, A. Shemer, O. Wagner, Y. Danan, Y. Fleger, Y. Ramon, M. Danino, M. Sinvani and Z. Zalevsky, “Concatenated silicon etalon tunable filter for hyperspectral imaging in the near infrared,” SPIE Conf. 10923, Silicon Photonics XIV, SPIE Photonics West, San Francisco, USA (Feb. 2018).
547. G. Rachamim, M. Ritenberg, R. Jelinek and Z. Zalevsky, “Tunable prism based upon novel piezoelectric nanoparticle/sol-gel design used for active solar cells concentrators,” SPIE Conf. 10913, Physics, Simulation, and Photonic Engineering of Photovoltaic Devices VIII, SPIE Photonics West, San Francisco, USA (Feb. 2018).
548. A. Schwarz, N. Ozana, A. Semer, R. Califa, H. Genish and Z. Zalevsky, “Elasticity and Depth Measurement using Both Secondary Speckle and Time Multiplexing Interference,” Photoptics 2019, The 7th International Conference on Photonics, Optics and Laser Technology, Prague, Czech Republic (Feb. 2019).
549. D. Avraham, Y. Danan and Z. Zalevsky, “Radiation Does Reduced 3D X-Ray Imager for Radiology,” Poster C-1112, European Congress of Radiology (ECR) of the European Society of Radiology (ESR), Vienna, Austria (March 2019).
550. T. Yeminy, S. Asraf, D. Sadot and Z. Zalevsky, “Flexible Photonic Spectral Shaping at Ultrahigh Resolution of 125MHz,” Optical Fiber Communication Conference (OFC), San Diego, USA (March 2019).
551. Z. Zalevsky, Y. Beiderman, S. Agdarov and M. Belkin, “Tactile based imaging for the visually impaired,” The 39th Annual Meeting of the Israeli Society for Vision and Eye Research (ISVER), Kfar Maccabiah (March 2019).
552. H. Zafrir, U. Malik, E. Levintal, N. Weisbrod, Y. Ben Horin, Z. Zalevsky, N. Inbar, “Novel radon and CO2 monitoring technique in deep subsurface, as a proxy for investigating tectonic pre-seismic processes that occur before earthquakes,” meeting of the Israel Geological Society, Kfar Blum (March 2019).
553. H. Zafrir, U. Malik, E. Levintal, N. Weisbrod, Y. Ben Horin, Z. Zalevsky and N. Inbar, “Radon and CO2 in deep, as a proxy for pre-seismic research,” 15th International Conference on Gas Geochemistry ICGG15, Palermo & Milazzo, Italy (October 2019).
554. O. Wagner, A. Shahmoon and Z. Zalevsky, “Imaging Through Blood Super-Resolution Based Flexible Microendoscope,” Scientific session of the Society of American Gastrointestinal and endoscopic surgeons (SAGES), Baltimore, USA (April 2019).
555. R. Hendel, B. Straussman, Y. Beiderman, S. Agdarov and Z. Zalevsky, “In-fiber speckle-based interferometry for fabric integrated, non-contact bio-sensor of vital signs,” The 17th Internatoinal meeting on Optical Engineering and Science in Israel, 7th OASIS meeting, Tel-Aviv (April 2019), **Invited talk (174).**
556. J. Linden, Y. Berg, Z. Kotler and Z. Zalevsky, “Efficient Laser Drilling with Temporal Laser Pulse Shaping,” The 17th Internatoinal meeting on Optical Engineering and Science in Israel, 7th OASIS meeting, Tel-Aviv (April 2019).
557. H. Genish, M. Binyamin, A. Schwarz, N. Ozana, Z. Zalevsky, and R. Califa, "Improved Non-contact Optical Monitoring of Blood Pulsation in IR using Laser Speckle Contrast Analysis," in *Biophotonics Congress: Optics in the Life Sciences Congress 2019* (BODA, BRAIN, NTM, OMA, OMP), OSA (April 2019).
558. M. Benyamin, H. Genish, R. Califa, N. Ozana, A. Schwartz, and Z. Zalevsky, "Remote Detection of Photoacoustic Signals using Time Varying Speckle Patterns," in Biophotonics Congress: Optics in the Life Sciences Congress 2019 (BODA, BRAIN, NTM, OMA, OMP), OSA (April 2019).
559. Z. Zalevsky, “Usage of photonics in Cyber-Communication, in super-resolved imaging and nanoscopy, in remote bio-sensing and in advanced in-fiber computing,” the International Conference on Automation, Computational & Technology Management (ICACTM-2019), IEEE, London, UK (April 2019). **Prize lecture, Keynote talk (175).**
560. M. Benyamin, H. Genish, R. Califa, N. Ozana, A. Schwartz and Z. Zalevsky, “Photoacoustic Pulse Width Measurement using Speckle Contrast Analysis,” CLEO: Applications and Technology, Paper# ATh3K.5 (May 2019).
561. N. Ozana, J. Noah, X. Zhang, Y. Ono, J. Hirsch and Z. Zalevsky, “Remote Photonic Sensing of Cerebral Hemodynamics via Spatial-Temporal Analysis of Back-Scattered Laser Light,” CLEO: Science and Innovations, Paper# JTu2A.120 (May 2019).
562. N. Ozana, Z. Markman, R. Califa and Z. Zalevsky, “Improving the Temporal Resolution of Speckle based Remote Phonocardiogram Sensing via Laser Modulation,” CLEO: Science and Innovations, Paper# JTu2A.8 (May 2019).
563. O. Wagner, M. Schultz, E. Edri, R. Meir, E. Barnoy, A. Meiri, H. Shpaisman, E. Sloutskin and Z. Zalevsky, “Polarization-modulated lock-in imaging of non-spherical gold nanoparticle dynamics in live and apoptotic cells,” The 53rd Annual Meeting of the Israel Society for Microscopy, Tel Aviv (May 2019).

564. N. Shabairou, E. Cohen and Z. Zalevsky, “Fiber based Photonic-FPGA architecture and in-fiber computing,” The 8th Mediterranean Conference on Embedded Computing (MECO 2019), Budva, Montenegro (June 2019). **Keynote talk (176).**
565. Z. Zalevsky, “Light based Remote Infra through Ultra Sounds Extraction: Remote Photonic Bio-Sensing and Diseases Diagnosis,” International Workshop on Optoelectronic Perception (IWOP) 2019, Xian, China (June 2019). **Invited talk (177).**
566. I. Gabay, M. Danino and Z. Zalevsky, “Usage of Cellular Device for Mapping of Moving and Obscured Targets,“ PIERS 2019, Rome, Italy (June 2019).
567. A. Schwarz, N. Ozana, R. Califa, A. Shemer, H. Genish and Z. Zalevsky, “Secondary Speckles based Tomography and Tissue Probing,” SPIE Conf. OM105 on Optical Methods for Inspection, Characterization, and Imaging of Biomaterials IV, Munich (June 2019). **Keynote talk (178).**
568. B. Lengenfelder, K. Schwarzkopf, N. Oetter, F. Mehari, E. Eschner, F. Klämpfl, F. Stelzle, M. Kesting, Z. Zalevsky, M. Schmidt, “Acoustic differentiation of dental soft and hard tissues using remote speckle-analysis during Er:YAG ablation,” European Conference on Biomedical Optics (ECBO), Conf. 1107, Opto-Acoustic Methods and Applications in Biophotonics, Munich (June 2019).
569. B. Lengenfelder, S. Funk, M. Hohmann, M. Späth, F. Klämpfl, F. Stelzle, Z. Zalevsky, M. Schmidt, “Remote speckle-sensing for improved differentiation between different types of tissues,” European Conference on Biomedical Optics (ECBO), Conf. 1107, Opto-Acoustic Methods and Applications in Biophotonics, Munich (June 2019).
570. B. Lengenfelder, M. Hohmann, F. Klämpfl, A. Zam, M. Weiß, S. J. Rupitsch, Z. Zalevsky, M. Schmidt, “Model for the description of remote photoacoustic sensing using speckle-analysis,” European Conference on Biomedical Optics (ECBO), Conf. 1107, Opto-Acoustic Methods and Applications in Biophotonics, Munich (June 2019).
571. M. Tiferet, Z. Zalevsky, and M. Sinvani, "Sharper and Dipper Laser Beam Shaping for Super-Resolved Imaging in Silicon," Presented in Imaging and Applied Optics 2019 (COSI, IS, MATH, pcAOP), OSA Technical Digest (Optical Society of America, 2019), paper JTh3D.6.
572. A. Schwarz, I. Gabay, N. Ozana, Z. Zalevsky, and A. Shemer, "RF Cross Section Imaging and Range Detection," Presented in Imaging and Applied Optics 2019 (COSI, IS, MATH, pcAOP), OSA Technical Digest (Optical Society of America, 2019), paper IW3B.4.
573. N. Shabairou, E. Cohen and Z. Zalevsky, “Fiber based Photonic information processing unit,” the International 18th Workshop on Information Optics (WIO), Stockholm, Sweden (July 2019) **Invited talk (179).**
574. A. Karsenty, A. Chelly, M. Sinvani, H. Pinhas, O. Wagner, Y. Danan and Z. Zalevsky, “Label Free Super-Resolved Nanoscopy: PALM-Like, STED-Like and Hybrid AFM/NSOM,” 2019 21st International Conference on Transparent Optical Networks (ICTON), Agres, France (2019). **Invited talk (180).**
575. M. Cohen, Y. Abulafia, R. Shavit, A. Rudnitsky, S. Agdarov and Z. Zalevsky, “Nano-Structures and Plasmonic Nano-Antennas Based Devices for Photonic Sensing and Data Handling Applications,”2019 21st International Conference on Transparent Optical Networks (ICTON), Agres, France (2019). **Invited talk (181).**
576. N. Ozana and Z. Zalevsky, “Photonic data processing nano-circuitry,” 2nd International Conference on Semiconductors, Optoelectronics and Nanostructures (ICSON-2019), Barcelona (August 2019). **Plenary talk (182).**
577. Z. Zalevsky, “Breaking the limits of resolution and depth of focus in label-free micro-endoscopy and nanoscopy,” The 4th China-Israel Workshop on Nanoscience and Nanotechnology, Beijing, China (August 2019).
578. Z. Zalevsky, “Breaking the bounds of imaging in label-free nanoscopy, micro-endoscopy and ophthalmology,” The Iberoamerican Optics Meeting (RIAO) and the Latinamerican Meeting on Optics, Lasers and Applications (OPTILAS), Cancun, Mexico (Sep. 2019). **Plenary talk (183).**
579. Z. Zalevsky, “Through tissue non-invasive sensing and imaging,” Saratov Fall Meeting (SFM’19), (Sep. 2019) **Plenary talk (184).**
580. Z. Zalevsky, “Resolution and depth of focus enhanced imaging in label-free micro-endoscopy and nanoscopy,” International Conference on Optics and Electro-Optics (ICOL-2019), Dehradun, India (Oct. 2019). **Plenary talk (185).**
581. Z. Zalevsky, “Novel approaches for fast, continuous and non-contact diagnostics,” Chandigarh, India (Oct. 2019). **Plenary Inauguration talk (186).**
582. Z. Zalevsky, “Usage of adaptive optics and super resolution for imaging behind scattering medium,” The XII Workshop on Adaptive Optics for Industry and Medicine, Delft, The Netherlands (Oct. 2019). **Plenary talk (187).**
583. D. Avraham, Y. Danan and Z. Zalevsky, “Super-resolved 3-D X-RAY Imaging for Radiology,” Israel Radiological Association Annual Meeting (ISRA) 2019 (Oct. 2019).

584. N. Ozana, S. Cohen, A. Halevi, R. Rozenman, O. Shefi, Z. Zalevsky, “Remote optical sensing of neuronal tissue vibrations during regeneration,” SPIE conf. 11254, Nanoscale Imaging, Sensing, and Actuation for Biomedical Applications XVII, SPIE Photonics West, San Francisco, USA (Feb. 2020).
585. M. Sinvani, N. Shabairou, M. Tiferet, Z. Zalevsky, “Sharper and dipper laser beam shaping for super-resolved imaging in silicon,” SPIE conf. 11254, Nanoscale Imaging, Sensing, and Actuation for Biomedical Applications XVII, SPIE Photonics West, San Francisco, USA (Feb. 2020).
586. Z. Zalevsky, “Enhanced non-contact and continuous sensing of periodic bio-signs: Laser encoded illumination for extending sensor’s temporal bandwidth,” SPIE conf. 11254, Nanoscale Imaging, Sensing, and Actuation for Biomedical Applications XVII, SPIE Photonics West, San Francisco, USA (Feb. 2020). **Invited talk (188).**
587. A. Bennet, R. Hendel, B. Straussman, Y. Beiderman, S. Agdarov and Z. Zalevsky, “Fiber-integrated fabric for non-tight contact bio-sensing of vital signs,” SPIE conf. 11258, Frontiers in Biological Detection: From Nanosensors to Systems XII, SPIE Photonics West, San Francisco, USA (Feb. 2020). **Invited talk (189).**
588. U. Hanuka, Y. Zigman, M. Tiferet, Z. Zalevsky, M. Sinvani, “Optical waveguide on silicon made by zone melting method,” SPIE conf. 11267, Laser Applications in Microelectronic and Optoelectronic Manufacturing (LAMOM) XXV, SPIE Photonics West, San Francisco, USA (Feb. 2020).
589. Z. Zalevsky, “Super-resolved and extended depth of focus label-free imaging in microscopy, microendoscopy and photoacoustics,” Biophotonics 2020, Malta (Feb. 2020). **Invited talk (190).**
590. Y. Tzabari Kelman, H. Lupa, S. Asraf, N. Ozana, N. Shabairou and Z. Zalevsky, “Optical tissue probing based upon speckle patterns analysis during multispectral illumination and multifrequency stimulation,” Photoncs Europe, SPIE conf. 11363, Strasbourg, France (April 2020). **Invited talk (191).** DUE TO CORONA WAS PRESENTED IN DIGITAL FORUM
591. B. Lengenfelder, M. Hohmann, M. Röhm, A. Zam, M. Schmidt, Z. Zalevsky, and F. Klämpfl, “Image reconstruction for remote photoacoustic tomography using speckle analysis,” Photoncs Europe, SPIE conf. 11363, Strasbourg, France (April 2020). **Invited talk (192).** DUE TO CORONA WAS PRESENTED IN DIGITAL FORUM
592. B. Lengenfelder, H. Jarkas, N. Shabairou, M. Hohmann, M. Schmidt, Z. Zalevsky and F. Klämpfl, “Remote photoacoustic tomography using diode-array and speckle-analysis,” Photoncs Europe, SPIE conf. 11363, Strasbourg, France (April 2020). DUE TO CORONA WAS PRESENTED IN DIGITAL FORUM
593. M. Benyamin and Z. Zalevsky, “Super-resolved, direct and localized photoacoustic sensing configuration,” The international conference on laser applications in life sciences (LALS), Nancy, France (April 2020). **Invited talk (193).** POSTPONED to April 2022 due to covid.
594. Z. Zalevsky, “Novel prospects in optical data processing,” IEEE sponsored International Conference on Intelligent Engineering and Management (ICIEM), London (April 2020). **Prize lecture, Keynote talk (194).** DUE TO CORONA WAS PRESENTED IN DIGITAL FORUM
595. A. Schwarz, N. Ozana, A. Semer, R. Califa, H. Genish and Z. Zalevsky, “Photonic non-contact tomographic & volumetric tissue probing,” OSA Biophotonics, Fort Lauderdale, Florida, USA (April 2020). **Invited talk (195).** DUE TO CORONA WAS PRESENTED IN DIGITAL FORUM
596. H. Genish, L. Wolbromsky, M. Benyamin, R. Califa and Z. Zalevsky, “Speckle Based Sensing using Incoherent Thermal Light Source,” CLEO (Conference on Lasers and Electro-Optics), OSA Technical Digest (online) (Optical Society of America, May 2020). DUE TO CORONA WAS PRESENTED IN DIGITAL FORUM
597. Z. Zalevsky, “Usage of speckle based remote sensing for detection of Corona symptoms,” An International Webinar on Modern Trends in Experimental Research: Optics and Imaging in Healthcare, The Maharaja Sayajirao University of Baroda, Gujarat, INDIA (May 2020). **Keynote talk (196).**
598. Z. Zalevsky, “Super resolution and imaging through scattering medium via digital holography and quantitative phase imaging,” OSA Digital Holography and Three-dimensional Imaging conf., Vancouver, Canada (June 2020). **Tutorial talk (197).** DUE TO CORONA WAS PRESENTED IN DIGITAL FORUM.
599. Z. Zalevsky, “All Optical Data Processing,” International webinar on Intelligent Engineering and Management (ICIEM). **Amity Global Academic Excellence Award lecture (198)**. June (2020)
600. Z. Zalevsky, “Linear optics super resolution,” International Webinar on Advances in Optics and Photonics (Aug. 2020). **Keynote talk (199).**
601. Z. Zalevsky, “Breaking the bounds of imaging in label-free nanoscopy, micro-endoscopy and ophthalmology," Vebleo international Webinar on Materials Science, Engineering and Technology (Sep. 2020). **VSET Scientist Award Lecture (200)**.
602. N. Shabairou, M. Tiferet, Z. Zalevsky and M. Sinvani, “Laser-Induced Focusing for Silicon nanoscopy,” OSA FiO conf. 2020, paper #FTu8B.6 (Sep. 2020). DUE TO CORONA WAS PRESENTED IN DIGITAL FORUM.

603. N. Shabairou, M. Tiferet, Z. Zalevsky and M. Sinvani, “Novel Beam Shaping Based All Optical Measurement Method for Free Charge Carriers Dynamics in Silicon,” OSA FiO conf. 2020, paper #JTu1A.17 (Sep. 2020). DUE TO CORONA WAS PRESENTED IN DIGITAL FORUM.
604. A. Zailer, M. Golberg, R. Califa, S. Polani, O. Goldstein, O. Slavin, Z. Zalevsky and M. Nyska, “Nanometric sensation - an innovative method to identify soft tissue perfusion in diabetic patients,” Israeli Orthopedic Association (IOA) 40th Annual Meeting (Dec. 2020). DUE TO CORONA WAS PRESENTED IN DIGITAL FORUM.
605. Z. Zalevsky, “Breaking the bounds of imaging in micro-endoscopy, label-free nanoscopy and ophthalmology,” The 6th International conference on Nanophotonics and electronics, Webinar (March 2021) **Keynote talk (201).**
606. Z. Zalevsky, “Breaking the bounds of label-free imaging,” 14th International Conference on Optics, Photonics & Laser; Webinar (May 2021) **Keynote talk (202).**
Scientific tracks abstracts published at: Journal of Lasers, Optics & Photonics
https://www.hilarispublisher.com/proceedings/breaking-the-bounds-of-imaging-in-labelfree-nanoscopy-microendoscopy-and-ophthalmology-35159.html
607. M. Golberg, R. Califa, S. Polani, O. Goldstein, A. Zailer, M. Niska, and Z. Zalevsky, “Assessment of tissue perfusion in the lower limbs using dynamic laser speckle,” SPIE conf. 11641, Dynamics and Fluctuations in Biomedical Photonics XVIII, SPIE Photonics West, San Francisco, USA (March 2021). **Invited talk (203).**
608. S. Asraf, M. Šprem and Z. Zalevsky, “Stimulated Brillouin scattering tunable fiber based all-optical filter,” SPIE conf. 11682, Dynamics and Fluctuations in Biomedical Photonics XVIII, SPIE Photonics West, San Francisco, USA (March 2021).
609. H. Lupa Yitzhak, R. Rubio Oliver, J. Garcia Monreal and Z. Zalevsky, “Respiratory phase detection from optical phonocardiography characteristics,” SPIE conf. 11621, Dynamics and Fluctuations in Biomedical Photonics XVIII, SPIE Photonics West, San Francisco, USA (March 2021).
610. Z. Zalevsky, “Photonic means for failure analysis of integrated circuitry,” Micro2021: 8th International Conference on Microelectronics, Circuits and Systems, Kolkata, West Bengal, India (May 2021). **Keynote talk (204).** DUE TO CORONA WAS PRESENTED IN DIGITAL FORUM. **Lotfi Zadeh Memorial Award Lecture**.
611. Z. Zalevsky, “The power of light: the blooming era of applied photonics,” The international conference celebrating the international day of light, Beer Sheva, Israel (May 2021). **Keynote talk (205)**.
612. Z. Zalevsky, “Breaking the bounds of imaging in space and in time,” Photonics Ireland 2021, Dublin, Ireland. **Invited talk (206).** DUE TO CORONA WAS PRESENTED IN DIGITAL FORUM.
613. Z. Kalyuzhner, S. Agdarov, Y. Beiderman and Z. Zalevsky, “Temporal-Spatial Deep Leaning of Speckle Patterns for Improved Remote Bio-Medical Diagnosis,” Computational Optical Sensing and Imaging (COSI), Imaging and Applied Optics Congress of OSA, Vancouver (July 2021) **Invited talk (207).** DUE TO CORONA WAS PRESENTED IN DIGITAL FORUM.
614. Z. Zalevsky, “Contact Free Bio-Sensing and Diagnosis,” IVAM Hightech Summit, Innovation in sensor technology session, invited to present as **Finalist of the AMA Innovation Award** (August 2021). **Invited talk (208)**.
615. Z. Zalevsky, “The power of light: The era of entrepreneurship and innovation in optics,” KosICT technology festival. X edition, Prizren, Kosovo (Oct. 2021), **Keynote talk (209)**.
616. Z. Zalevsky, “Remote photonic sensing of hemodynamic brain activity,” 2021 International Workshop on Optoelectronic Perception (IWOP2021), Xidian University, Xi’an, China (Oct. 2021). **Invited talk (210)**. Presented on-line.
617. Z. Zalevsky, “Silicon-integratable tunable photonic nano-circuitry involving energetically efficient and hardware security architecture,” Israel Vacuum society (IVS) and Plasma Science and Applications (IPSTA) annual conference, Israel (Nov. 2021) **Keynote talk (211)**. Presented on-line.
618. Z. Zalevsky, “Superresolution: Breaking the bounds of imaging in microscopy,”2nd International Forum on Microscopy (IFM 2021), Guilin, China (Nov. 2021) **Plenary talk (212).** Presented on-line.
619. Z. Zalevsky, “Silicon-integratable tunable photonic nano-circuitry with enhanced connectivity,” Ariel Workshop on Functional photonics (Jan. 2022) **Invited talk (213)**.
620. G. Chen, A. Sanjeev, V. Trivedi, J. Garcia, R. Rubio and Z. Zalevsky, “Structured unknown-illumination based super-resolved label free imaging,” SPIE conf. BO509-27, SPIE Photonics West, San Francisco, USA (Jan. 2022). **Invited talk (214)**.
621. Z. Kalyuzhner, Y. Beiderman, S. Agdarov and Z. Zalevsky, “Wearable vs. contact-free photonic bio-sensors and their application to SARS-CoV-2 symptoms detection,” SPIE conf. BO604, Frontiers in Biological Detection: From Nanosensors to Systems XIV, SPIE Photonics West, San Francisco, USA (Jan. 2022). **Invited talk (215).**

622. A. Rudnitsky, A. Meiri, A. Shahmoon and Z. Zalevsky, “Imaging through scattering media by 3D spatial filtering embedded into micro-endoscope,” Society of American Gastrointestinal and endoscopic surgeons (SAGES), Denver, USA (March 2022). Selected for **podium presentation** in the scientific session. https://www.youtube.com/watch?v=-GaQ2t06wNI
623. Z. Zalevsky, “Usage of speckles analysis for remote skin probing and elastography,” SPIE Photonics Europe, Conf. 12147, Tissue optics and photonics II, Strasbourg, France (April 2022). **Invited talk (216)**.
624. Z. Zalevsky, “Remote photonic sensing of brain activity and senses,” NANOPHOTONICS 2022 conference, Porto, Portugal (April 2022). **Invited talk (217)**. Presented on-line.
625. Z. Zalevsky, “Photonic waveguiding based data processing approaches,” ChipEx conference, Tel-Aviv (May 2022). **Keynote talk (218)**.
626. Z. Zalevsky, “Photonic medicine: New paths in remote photonic bio-sensing and medical diagnosis,” CLEO conference, San Jose, USA (May 2022). **Invited talk (219)**.
627. M. Yevnin, E. Cohen, T. Yanir and Z. Zalevsky, “Fiber based generic photonic computing unit,” CLEO conference, San Jose, USA (May 2022).
628. D. Beitner, I. Carmeli, Z. Zalevsky, S. Richter, and H. Suchowski, "Studying the interaction of J-aggregates with plasmonic nanoparticles using hyperspectral microscopy," CLEO conference, San Jose, USA (May 2022).
629. D. Pal, S. Agdarov, R. Shahmoon, Ye. Beiderman, N. Avraham, Y. Eisenbach, Ya. Beiderman, A. Kumar and Z. Zalevsky, “Machine learning based non-invasive bloodstream glucose monitoring via multimode optical fiber sensor,” IEEE Melecon, Sicily, Italy (June 2022). **Invited talk (220)**
630. O. Fogel, Z. Kotler, A. Shahmoon and Z. Zalevsky, “Towards laser-based 3D printing of inter-connects and micro electro-mechanical systems,” 3D Printing and Additive Manufacturing, Copenhagen, Denmark (June 2022). Presented on-line. **Plenary talk (221)**.
631. D. Duadi, N. Shabairou, A. Primov-Fever and Z. Zalevsky, “Laser based non-contact optical in-vivo sensing of cilia motion,” International symposium on Fundamentals of Laser Assisted Micro– and Nanotechnologies (FLAMN-22); (June 2022). **Invited talk (222).**
632. Z. Zalevsky, “3D micro-endoscopy,” Imaging and Applied Optics Congress, Vancouver, Canada (July 2022). **Invited talk (223).**
633. N. Shabairou, Z. Zalevsky and M. Sinvani, “Laser-Induced Tunable Focusing in Semiconductors,” Imaging and Applied Optics Congress, Vancouver, Canada (July 2022).
634. Z. Zalevsky, “Lasers in the evolving world of biomedical sensing and diagnosis,” The 29th International Conference on Advanced Laser Technologies (ALT); (September 2022). **Invited talk (224)**.
635. Z. Zalevsky, “Photonics based AI-service: A trainable classifier that operates at 100 million tasks/sec,” Product focus session, European Conference on Optical Communication (ECOC 2022), Basel, Switzerland (Sept. 18 – 22, 2022).
636. Z. Zalevsky, “Breaking the laws of diffraction to obtain super resolved biomedical imaging,” Saratov Fall Meeting XXVI (SFM); (Sept. 2022). **Plenary talk (225).**
637. Z. Zalevsky, “Remote photonic medicine: Advances in remote photonic bio-sensing and medical diagnosis,” Nunamed conference, Nuuk, Greenland (Oct. 2022). **Invited talk (226)**.
638. Z. Zalevsky, “Breaking the resolution limits in imaging though scattering medium,” The 2nd International Computational Imaging Conference (CITA2022), Nanjing, China; (October 2022). **Plenary talk (227).**
639. M. Benyamin and Z. Zalevsky, “Spatially and temporally resolution-enhanced photoacoustic sensing,” 2022 International Workshop on Optoelectronic Perception (IWOP2022), Xian, China; (Nov. 2022). **Invited talk (228)**.
640. Z. Zalevsky, “Super resolved and extended depth of focus imaging methodology and its implementation in nanoscopy,” XLV OSI Symposium, Conference on Optics, Photonics and Quantum optics (COPaQ-2022), IIT Roorkee, India; (Nov. 2022). **Invited talk (229)**.
641. H. Zafrir, S. Barbosa, D. Ilzycer, G. Haquin, N. Weisbrod, Z. Zalevsky, “Recovery of pre-seismic gas flow anomalous signals at deep boreholes as a proxy for investigating tectonic activity,” SIPS 2021 - Virk International Symposium on Physics, Technology and Interdisciplinary Research, Thailand (Dec. 2022).
642. Z. Zalevsky, “Optical super-resolved imaging,” SPIE Conference 12378, Dynamics and Fluctuations in Biomedical Photonics XX, Photonics West, San Francisco, USA (Jan. 2023). **Keynote talk (230)**.
643. O. Wagner, A. Shahmoon and Z. Zalevsky, “Endoscope-integrated wavelength multiplexing super-resolved imaging based upon encoding patterns projection,” SPIE Conference 12394, Nanoscale Imaging, Sensing, and Actuation for Biomedical Applications XX, Photonics West, San Francisco, USA (Jan. 2023). **Invited talk (231)**.

644. T. Frumkin, A. A. Ishaaya and Z. Zalevsky, “High efficiency multi-taper coupler based optical modulator,” SPIE Conference 12415, Physics and Simulation of Optoelectronic Devices XXXI, Photonics West, San Francisco, USA (Jan. 2023).
645. Z. Zalevsky, “Manipulating light through nano- and micro-structures,” IVS-IPSTA 2023- 40TH Annual Conference, Israel (Feb. 2023). **Plenary talk (232)**. Presented as IVS Excellence Research Award Talk.
646. M. Yevnin, A. Harel, O. Arbel-Arenfrid, Z. Zalevsky and E. Cohen, “Incoherent Fiber-based Optical Neuromorphic Computing Circuit,” Optical Fiber Communication Conference (OFC), San Diego, USA (March 2023).
647. S. Elkabetz, O. Herman, A. Meiri, A. Shahmoon and Z. Zalevsky, “Micro endoscope-integrated holographic, through scattering media imager, realized by tunable projection of 2D spots array,” Society of American Gastrointestinal and endoscopic surgeons (SAGES), Montreal, Canada (April 2023).
648. A. Sanjeev and Z. Zalevsky, “Super resolved bio-medical imaging through scattering medium,” The XI Iberoamerican Optics Meeting (RIAO)/ XIV Latin-American Meeting on Optics, Lasers and Applications, Costa Rica (March 2023). **Keynote talk (233)**.
649. Z. Zalevsky, “Remote photonic medicine,” SPIE Optical Metrology conference, Munich, Germany (June 2023). **Plenary talk (234)**.
650. Z. Zalevsky, “Usage of photonics in remote medical diagnosis,” 23rd International Conference on Transparent Optical Networks (ICTON), Bucharest, Romania (July 2023). **Plenary talk (235).**
651. O. Meshulam, N. Ozana, D. Scheffer, S. Zach and Z. Zalevsky, ”Microwave-based remote bio-sensing behind walls,” 23rd International Conference on Transparent Optical Networks (ICTON), Bucharest, Romania (July 2023). **Invited talk (236).**
652. E. Israeli, A. Sanjeev, R. Salahudeen Rafeeka, G. Chen and Z. Zalevsky, “Super-resolved imaging behind scattering medium,” ICTON 2023 5th Anniversary Workshop on Label-Free Super-Resolution and Sensing (LFSRS), Bucharest, Romania (July 2023). **Invited talk (237)**,
653. I. Gabay and Z. Zalevsky, “2D Mono detection spatially super-resolved microwave imaging for Radar applications,” PIERS 2023, Czech Republic, Prague (July 2023).
654. N. Shabairou, Z. Zalevsky, and M. Sinvani, "Plasma Dispersion Induced Self-Focusing of a Vortex Laser Beam in Silicon", Imaging and Applied Optics Congress, (Optica, 2023), paper JM1B.4
655. G. Otis, M. Benyamin, Y. Mastai and Z. Zalevsky, “All-optical photoacoustic measurement of localized chirality in crystal suspensions,” Paper 12650-6, SPIE Conference 12650, Physical Chemistry of Semiconductor Materials and Interfaces XXII, San Diego, USA (Aug. 2023).
656. E. Gur and Z. Zalevsky, “CPU And Memory Allocation Optimization Using Fuzzy Logic Based Clustering,” the 18th IEEE Conference on Industrial Electronics and Applications (ICIEA 2023), Ningbo, China (August 2023).
657. Z. Zalevsky, “Breaking the bounds of photonic imaging,” 2023 International Workshop on Optoelectronic Perception (IWOP2023), Xian, China; (Sep. 2023). **Invited talk (238)**.
658. Z. Zalevsky, “Novel approaches for photo-acoustic sensing,” Saratov Fall Meeting XXVII (SFM); (Sept. 2023). **Invited talk (239)**.
659. I. E. Pires, I. Sofia Garcia, J. Vieira; Z. Zalevsky, C. Calaza F. S. Alves and R. A. Dias, “High-Frequency Grating-Based MEMS Actuator,” EuroSensors XXXV, Lecce, Italy (Sep. 2023).
660. Z. Zalevsky, “Machine learning assisted image processing for remote bio-medical sensing and diagnosis,” 12th International Conference on Computing, Communication and Sensor Networks, CCSN2023 (Oct. 2023). **Keynote talk (240)**.
661. Z. Zalevsky, “Remote photonic sensing of brain activity,” Special Symposium on Advances in Neurophotonics, 2023 IEEE Photonics Conference (IPC), Orlando, USA (Nov. 2023). **Tutorial talk (241).**
662. R. H. Shukrun, L. Epstein, H. Datz and Z. Zalevsky, “Embedded Radioactive Fragment Following a Radiological Dispersal Device Attack: Artifact Removal in Medical Imaging and Doses to Patient and Medical Team Using the ICRP Adult Reference Computational Phantoms,” 7th International Symposium on the System of Radiological Protection – ICRP2023, Tokyo, Japan (Nov. 2023). Presented on-line
663. Z. Zalevsky, “High resolution imaging through biologic turbid media using wavefront shaping and reciprocity principles,” 34th International SAOT Workshop on Optical Sensing in Turbid Media, Erlangen, Germany (Dec. 2023). **Invited talk (242)**.
664. M. Benyamin, Z. Zalevsky, “Spatially and temporally resolution enhanced, all-optical, localized, non-contact and photoacoustic imaging,” Conf. 12854, Label-free Biomedical Imaging and Sensing (LBIS), SPIE Photonics West, San Francisco, USA (Jan. 2024). **Invited talk (243)**.
665. A. Zailer, M. Golberg, R. Califa, S. Polani, O. Goldstein, O. Slavin, Z. Zalevsky and M. Nyska, “Nanometric sensation - an innovative method to identify soft tissue perfusion in diabetic patients,” Global Podiatry Summit, Iceland (March 2024).

666. D. Smadja, S. Sella and Z. Zalevsky, T. Batash, “Contribution of Corneal Epithelial Refractive Power Mapping for Understanding Unexpected Postoperative Refractive Surprise,” 2024 ASCRS ASOA Annual Meeting, Boston (Apr. 2024).
667. D. Pal, S. Agdarov, Ye. Beiderman, Ya. Beiderman and Z. Zalevsky, “Noninvasive photonic methodology for glucose sensing,” Paper 13010-36, SPIE Conf. 13010, Tissue Optics and Photonics III, Photonics Europe (Apr. 2024). **Invited talk (244)**.
668. S. Apsel, V. Tarle, M.I Yemini, Z. Zalevsky and N. Ozana, “Rolling-shutter laser speckle analysis in bio-photonics,” Paper 13006-55, SPIE Conf. 13006, Photonics Europe (Apr. 2024).
669. Z. Zalevsky, “Photonic Medicine,” Opto-Tech, The Annual Electro-Optics Conference, Tel-Aviv (May 2024). **Invited talk (245)**.
670. D. Duadi, A. Yosovich, M. Beiderman, D. Pal, S. Agdarov, Ye. Beiderman, Ya. Beiderman and Z. Zalevsky, “Noninvasive photonic sensing of chemicals in blood stream by using machine learning and artificial intelligence-based speckle pattern analysis,” the 32nd Annual International Laser Physics Workshop (LPHYS'24), São Carlos, Brazil (July 2024). **Invited talk (246)**.
671. J. Philosof, D. Pal, A. Bennett, Ye. Beiderman, S. Agdarov, Ya. Beiderman and Z. Zalevsky, “Fiber based photonic sensor for sensing of vital bio-signs and of glucose concentration in blood stream as well as for its usage in smart building related applications,” The 24th International Conference on Transparent Optical Networks ICTON 2024, Bari, Italy (July 2024). **Invited talk (247)**.
672. A. Ashkenazy, N. Shabairou, D. Fixler, E. Cohen and Z. Zalevsky, “Quantum-adapted all-optical time multiplexing super-resolved imaging,” The 24th International Conference on Transparent Optical Networks ICTON 2024, Bari, Italy (July 2024). **Invited talk (248)**.
673. J. Philosof, Ye. Beiderman, S. Agdarov, Ya. Beiderman and Z. Zalevsky, “Fiber-Based Water Pipe Leakage Sensor,” 1st Islands Congress, The Faroe Island, Torshavn (Sep. 2024).
674. D. Duadi, A. Yosovich, M. Beiderman, D. Pal, S. Agdarov, Ye. Beiderman, Ya. Beidermana and Z. Zalevsky, “Machine learning and artificial intelligence-based speckle pattern analysis for remote blood-chemicals detection,” The International Workshop on Optoelectronic Perception (IWOP2024), Xi’an, China (Sep. 2024). **Keynote talk (249)**.
675. N. Lhiyani, E. Adato, A. Sanjeev, Ye. Beiderman, J. Garcia and Z. Zalevsky, “Optical probing-based detection of Amyloid beta and Tau in human CSF using machine learning,” The 13th International Conference on Computing, Communication and Sensor Network (CCSN 2024), Kolkata, India (Sep. 2024). **Keynote talk (250)**. Online presentation.
676. Z. Zalevsky, “Super resolved and extended depth of focus imaging and their applications,” XLVII OSI Symposium, International Conference on Advances in Optics and Photonics Instrumentations (OPTOIn-2024), Chandigarh (Oct. 2024). **Plenary talk (251)**.
677. K. Schwartzman Oren, Y. Cohen, M. Beiderman, S. Agdarov, Ya. Beiderman and Z. Zalevsky, “Remote evaluation of plant water content by speckle pattern AI analysis,” SPIE conf. 13338 on Frontiers in Biological Detection: From Nanosensors to Systems XVII, Photonic West, San Francisco (Jan. 2025), **Invited talk (252).**
678. A. Ashkenazy, N. Shabairou, A. Stefanov, P. Gao, D. Fixler, E. Cohen and Z. Zalevsky, “All-optical, computation-free time-multiplexing super-resolved imaging based on speckle illumination,” SPIE conf. 13335 on Nanoscale Imaging, Sensing, and Actuation for Biomedical Applications XXII, Photonic West, San Francisco (Jan. 2025).
679. M. J. L. F. Rodrigues, I. S. Garcia, Z. Zalevsky, R. A. Dias, F. S. Alves, D. E. Aguiam, “Quadrature optical interferometry-based in-plane displacement measurement of a MEMS grating,” SPIE conf. 13373 on Photonic Instrumentation Engineering XII, Photonic West, San Francisco (Jan. 2025).
680. Y. Mandelbaum, M. Tkachev, A. Sanjeev, Z. Zalevsky, D. Zitoun, A. Karsenty, “Tips vs. Holes: ×10 Higher Scattering in FIB-made Plasmonic Nanoscale Arrays for Spectral Imaging,” 9th International Conference and Exhibition on Optics and Electro-Optics (OASIS), Tel-Aviv (March 2025).
681. A. Ashkenazy, N. Shabairou, A. Stefanov, P. Gao, D. Fixler, E. Cohen, Z. Zalevsky, ”All-optical, computation-free time-multiplexing super-resolved imaging based on speckle illumination,” 9th International Conference and Exhibition on Optics and Electro-Optics (OASIS), Tel-Aviv (March 2025).
682. A. Malran, A. Arcobi, N. Shabairou, Z. Zalevsky, M. Sinvani, “Plasma Dispersion Effect induced focusing of 775nm laser beam in silicon,” 9th International Conference and Exhibition on Optics and Electro-Optics (OASIS), Tel-Aviv (March 2025).
683. A. Laist, I. Desta, J. Belhassen, Z. Zalevsky, A. Karsenty, “Near-Field Super-Resolution Enhanced Sensing Method,” 9th International Conference and Exhibition on Optics and Electro-Optics (OASIS), Tel-Aviv (March 2025).
684. H. R. Shukrun, L. Epstein, I, Hershko, O. Breitman, M. Ben-Lulu, Z. Yungrais, O. Aviv, Y. Fried, Y. Oren, H. Datz and Z. Zalevsky, “Artifact Removal in Medical Imaging of Embedded Fragments Containing

Different Radioactive Materials," The 31st Conference of the Nuclear Societies in Israel, Haifa (March 2025).

685. H. R. Shukrun, H. Datz, Z. Zalevsky and L. Epstein, "Patient and Medical Team Doses from Embedded Radioactive Fragments in Radiological Dispersal Device Scenarios," The 31st Conference of the Nuclear Societies in Israel, Haifa (March 2025).
686. Z. Zalevsky, "Lasers for remote medical diagnosis," Annual International Conference on Optics, Photonics and Lasers (AICOPL 2025), Rome, Italy (March 2025). **Plenary talk (253).**
687. G. Otis, M. Benyamin, Y. Mastai and Z. Zalevsky, "Super-resolved localized all-optical photoacoustic sensing and its implementation for measurement of localized chirality in crystal suspensions," 17th French-Israeli Symposium on Nonlinear and Quantum Optics, Aussois, France (March 2025). **Oral presentation**.
688. N. Goldenberg-Cohen, B. Obeid, S. Richard, A. Kaufman, A. Zahavi, E. Adato, Z. Zalevsky, "Non-Invasive Identification of Alzheimer's Disease Through Ocular Analysis Utilizing Raman Spectroscopic Data Analysis," the North American NeuroOphthalmology Society (NANOS), 51st annual meeting, Tucson, USA (March 2025).
689. Z. Kalyuzhner and Z. Zalevsky, "Leveraging Machine Learning for Advanced Biomedical Imaging: Insights from Speckle Pattern Analysis," 14th Israel Machine Vision Conference (IMVC) 2025, Tel-Aviv (April 2025).
690. A. Sanjeev, E. Israeli, G. Chen, J. Garcia, Z. Zalevsky, "Three-dimensional bio-imaging of objects behind scattering medium," Proc. SPIE 13465, Three-Dimensional Imaging, Visualization, and Display 2025, Orlando (April 2025). **Keynote talk (254)**.
691. Z. Zalevsky and J. Garcia, "Laser technology for remote diagnosis of cardio-pulmonary diseases," Application Panels Laser World of Photonics 2025, Munich (June 2025). **Invited talk (255)**.
692. Z. Zalevsky and K. Aflalo, "Harnessing microwave radiation for remote and obscured biosensing," International Symposium Fundamentals of laser-assisted micro and nanotechnologies (FLAMN-25), Saint Petersburg, Russia (June 2025). **Invited talk (256)**.
693. A. Ashkenazy, N. Shabairou, A. Stefanov, P. Gao, D. Fixler, E. Cohen and Z. Zalevsky, "All-Optical, Quantum-Adapted, Time Multiplexing Super-Resolved Imaging by Object Illumination Through Scattering Medium," 19th Workshop on Information Optics (WIO 2025), Barcelona (July 2025). **Invited talk (257)**.
694. I. Propp, M. Beiderman, S. Agdarov, Y. Beiderman, M. Blum and Z. Zalevsky, "Artificial intelligence based photonic remote sensing of dog brain reactions to smell," SPIE Conference OP110, Emerging Topics in Artificial Intelligence (ETAI) 2025, San Diego (Aug. 2025).
695. E. Israeli, S. Elkabetz, A. Sanjeev, R. Salahudeen Rafeeka, G. Chen and Z. Zalevsky, "Super-resolved imaging of obscured objects," Photonica 2025, The International School and Conference on Photonics, Belgrade, Serbia (Aug. 2025). **Keynote talk (258)**.
696. K. Aflalo and Z. Zalevsky, "Microwave speckle patterns analysis for vital bio-signs monitoring through obstacles," Correlation Optics 2025, the 17th international conference on correlation optics, Ukraine (Sep. 2025). **Invited talk (259)**.
697. Z. Zalevsky, "Generic Photonic Computing for Enhanced Optics Communication," the 14th International Conference on Computing, Communication & Sensor Networks (CCSN-2025), New Delhi, India (Sep. 2025). **Invited talk (260)**.
698. K. Aflalo, Z. Zalevsky, "Machine learning for microwave radiation based remote and obscured bio-sensing," 2025 International Workshop on Optoelectronic Perception (IWOP2025), Xi'an, China (Sep. 2025). **Invited talk (261)**.
699. K. Aflalo, Z. Zalevsky, "Harnessing microwave radiation for remote detection of micro-vibrations and its usage for bio-sensing," The 13th Tel Aviv University Antenna Symposium, Tel-Aviv (Dec. 2025) **Invited talk (262)**.
700. O. Fogel, Z. Kotler and Z. Zalevsky, "Ion and laser beams induced printing of electro-mechanical micro devices," The Israeli Conference on Additive Manufacturing (ICAM), Kfar Maccabiah, Israel (Dec. 2025). **Keynote talk (263)**.
701. Z. Kalyuzhner, S. Agdarov, Ya. Beiderman, Ye. Beiderman, Z. Zalevsky, "Visual cortex shape recognition via remote speckle patterns artificial neural networks based processing," SPIE conference 13870, Photonic West, San Francisco (January 2026). **Invited talk (264)**.
702. Z. Zalevsky, "Plasmonic based probe for super-resolved mapping of bio-samples," SPIE conference 13869, Photonic West, San Francisco (January 2026). **Invited talk (265)**.
703. Y. Mandelbaum, M. Tkachev, A. Sanjeev, Z. Zalevsky, D. Zitoun, A. Karsenty, "Tips vs. holes: ×10 higher scattering in FIB-made plasmonic nanoscale arrays for spectral imaging," SPIE conference 13899, Photonic West, San Francisco (January 2026).

704. N. Segal, Z. Kalyuzhner, S. Agdarov, Ya. Beiderman, Ye. Beiderman, Z. Zalevsky, “Remote sensing of brain responses to clear/incomprehensible speech via AI based analysis of speckle patterns fluctuations and dynamics,” SPIE conference 13850, Photonic West, San Francisco (January 2026). **Invited talk (266)**.
705. Y. Tzabari Kelman, N. Ozana and Z. Zalevsky, “Optical non-contact speckle-based tissue probing: skin hydration and multi-spectral lesions detection,” Conf. 14098, Tissue Optics and Photonics IV, Strasbourg, France (April 2026). **Invited talk (267)**.
706. H. Zafrir, Y. Reuveni, A. Benkovitz, Z. Zalevsky, E. Levintal, N. Weisbrod, D. Ilzycer, “Validated temporal gradient-driven gas migration on Earth as the primary mechanism for repeatable methane fluctuations on Mars,” European Geosciences Union (EGU) General Assembly 2026, Vienna, Austria (May 2026).
707. E. Cohen, Y. Hayat, S. Hamphries and Z. Zalevsky, “Quasi all-optical fully connected neural network classifier,” Conference on Lasers and Electro-Optics (CLEO), Charlotte, North Carolina, USA (May 2026).
708. Z. Zalevsky, “Towards remote photonic brain computer interface,” The 22nd International Conference on Laser Optics (ICLO), St. Petersburg, Russia (June 2026). **Plenary talk (268)**.
709. N. Segal and Z. Zalevsky, “Adapting Long-Video Masked Autoencoders to High-Speed Optical Brain Imaging,” 15th Israel Machine Vision Conference (IMVC) 2026, Tel Aviv (June 2026).
710. O. Fogel, Z. Kotler and Z. Zalevsky, “3D Printing of Functional Metallic Nano and Micro-Structures,” 10th edition of the International Conference on Functional Nanomaterials and Nanodevices (NANOMAT 2026), Brno, Czech Republic (July 2026). **Plenary talk (269)**.
711. Y. Krapovnytskyi, S. Agdarov, Ya. Beiderman, D. Spirito, R. Halachmy, M. Beiderman and Z. Zalevsky, “Speckle Patterns Analysis based Spatial-Temporal Directional Information Transmission,” Optica Imaging Congress, Maastricht, The Netherlands (July 2026).
712. S. Elkabetz and Z. Zalevsky, “Phase-Reduced Sensitivity Imaging Through a Thin Diffuser,” Optica Imaging Congress, Maastricht, The Netherlands (July 2026).
713. L. Roth, E. Cohen and Z. Zalevsky, “Spatial Router for Transforming Time-Varying Images based on Erbium-Doped Multicore Fiber Amplifier,” Optica Imaging Congress, Maastricht, The Netherlands (July 2026).
714. G. Stern and Z. Zalevsky, “Passive Super-Resolved Contour Imaging of Moving Targets in Natural Surveillance Scenarios,” Optica Imaging Congress, Maastricht, The Netherlands (July 2026).

Issued Patents

1. D. Mendlovic, E. Marom, N. Konforti, Z. Zalevsky and G. Shabtay, "Zero Order Computer Generated Phase Only Holograms," Israel patent application No. 119380. US patent No. 6166833.
2. D. Mendlovic, E. Marom, N. Konforti, Z. Zalevsky and G. Shabtay, "Phase Only Filter for Generating an Arbitrary Illumination Pattern," Israel patent application No. 119341. US patent No. 5909312.
3. D. Mendlovic, Z. Zalevsky, N. Konforti, E. Marom, G. Shabtay, U. Levy and S. Karako "Super resolving imaging system," US patent No. 6344893.
4. D. Mendlovic, Z. Zalevsky, G. Shabtay, U. Levy, E. Marom and N. Konforti, "Synthesis of light beams," US patent No. 6343307.
5. Z. Zalevsky, N. Konforti, E. Goldenberg, G. Shabtay and Y. Miron, "Method and device for polarization-based all-optical switching," US patent No. 6807329.
6. D. Mendlovic and Z. Zalevsky, "A method and system for super resolution image capture using a mask," US patent No. 7003177; EU patent No. EP 1169847 B1; German patent No. DE 60043694 D1.
7. D. Mendlovic, E. Goldenberg, N. Konforti, Z. Zalevsky and A. Sariel, "Optical processing," US patent No. 7012749.
8. Z. Zalevsky, "Optical method and system for extended depth of focus," US patent No. 7061693; US patent No. 7365917; US patent No. 7859769; US patent No. 8192022; South Korean Patent No. 1165051; Japanese Patent Application No. 2007-526697; Singapure patent No. 129858; Russia patent No. 2436135; China patent No. ZL 200580027819.6
9. A. Sariel, D. Mendlovic, U. Efron, I. Raveh, G. Shabtay , Z. Zalevsky, G. Shabtay, U. Levy, N. Konforti, A. Shemer, D. Shklarsky "Image compression," US patent No. 7194139.
10. E. Ben-Eliezer, Z. Zalevsky, E. Marom, N. Konforti and D. Mendlovic, "All optical extended depth-of field imaging system," US patent No. 7158317.
11. Y. Kapellner, S. Kapellner, I. Pomerantz, Z. Zalevsky, and E. Sabo, “Image Projecting Device and Method,” US patent No. 7128420.
12. J. Garcia and Z. Zalevsky, "Range mapping using speckle decorrelation," US patent No. 7433024.

13. Z. Zalevsky and A. Zlotnik, “Imaging system and method for providing extended depth of focus, range extraction and super resolved imaging,” US patent No. 7646549 and US patent No. 8040604.
14. I. Sharon, Z. Zalevsky, G. Manor, Y. Kapellner, “Image projecting device and method,” US patent No. 7746559.
15. Z. Zalevsky and S. Ben Yaish, “All Optical System and Method for Providing Extended Depth of Focus of Imaging,” US patent No. 7777932; Israeli Patent Application No. 194782.
16. Z. Zalevsky, “Electronic device and a method of its fabrication,” US patent No. 7777929.
17. Z. Zalevsky and J. Solomon, “Optical method and system for enhancing image resolution,” US patent No. 7800683; Israeli patent No. 171853.
18. I Raveh and Z. Zalevsky, “Optical system and method for multi-range and dual-range imaging,” US patent No. 7812295.
19. Z. Zalevsky, “System and method for imaging with extended depth of focus and incoherent light,” US patent No. 7936522; EU patent application No. EP 2008143 B1; Israeli Patent Application No. 194783.
20. Z. Zalevsky, Y. Kapellner, I. Eyal and G. Manor; “Optical system and method for use in projection systems,” US patent No. 8009358.
21. A. Shpunt and Z. Zalevsky, “Depth-varying light fields for three dimensional sensing, US patent No. 8050461; US patent No. 8374397; China patent No. CN 101501442 B.
22. Z. Zalevsky, “An optical sub wavelength super resolution imaging system producing nanometric spatial resolution of a scanned subject,” US patent 8169695.
23. Z. Zalevsky and A. Zlotnik, “Method and System for Imaging with a Zoom,” US patent No. 8098949.
24. Z. Zalevsky, A. Rudnitsky and M. Natan, “All-optical devices and methods for data processing,” US patent No. 8155484.
25. Z. Zalevsky and O. Limon, “Optical apparatus with structure for liquid invariant performance,” US patent No. 8169716; US number 10031334; US patent No. 11079517, US patent No. 11802997; US patent No. 12313916
26. A. Shpunt and Z. Zalevsky, “Three-dimensional sensing using speckle patterns,” US patent No. 8390821.
27. Z. Zalevsky, A. Shpunt, A. Malzels and J. Garcia, “Method and system for object reconstruction,” US patent No. 8400494; US patent No. 9066084; US patent No. 9437006; US patent No. 9704249; US patent No. 10340280; US patent No. 10608002;
28. Z. Zalevsky, A. Zlotnik and I. Raveh, “Imaging method and system for imaging with extended depth of focus,” US patent No. 8531783.
29. E. Ben-Eliezer; E. Marom, N. Konforti and Z. Zalevsky, “Optical mask for all-optical extended depth-of-field for imaging systems under incoherent illumination,” US patent No. 8570655.
30. Z. Zalevsky and J. Garcia, “Motion detection system and method," US patent No. 8638991; Australian Patent No. 2008278642; South Korean Patent No. 10-2010-7004615; Israeli Patent Application No. 203262; Canadian Patent Application No. 2697625C; European Patent Application No. EP 2 183 543 B1
31. Z. Zalevsky and A. Rudnitsky, “Devices and methods for optical signal control,” US patent No. 8792159.
32. I. Abdulhalim and Z. Zalevsky, “High resolution extended depth of field optical coherence tomography,” US patent No. 8860948.
33. E. Gordon, Z. Zalevsky and H. Duadi, “Method and system for providing three-dimensional and range inter-planar estimation,” US patent No. 8908016; China patent CN102203551B; US patent No. 9501833.
34. Z. Zalevsky, A. Zlotnik and I. Raveh, “Imaging method and system with optimized extended depth of focus,” US patent No. 8913331; US patent No. 9429768.
35. Z. Zalevsky, A. Zlotnik, S. Ben-Yaish, O. Limon and I. Raveh, “Imaging with extended depth of focus for use with polychromatic light,” US patent No. 8955968; US patent No. 9500875.
36. A. Shpunt and Z. Zalevsky, “Pattern generation using a diffraction pattern that is a spatial Fourier transform of a random pattern,” US patent No. 9063283.
37. Z. Zalevsky, A. Zlotnik, I. Raveh, S. Ben-Yaish, O. Limon, O. Yehezkel and K. Lahav, “Imaging system with optimized extended depth of focus,” US patent No. 9134543; EU Patent No. 2534525; US patent No. 10175392; US patent No. 11199651, US patent No. 11802998; US patent No. 12259565,
38. Z. Zalevsky and M. Belkin, “Blind sight,” US patent No. 9199081,
39. Z. Zalevsky, A. Zlotnik, S. Ben-Yaish, O. Limon and I. Raveh, ”Multi-focal lens,” US patent No. 9239471; US patent No. 10078159; US patent No. 12282175.
40. D. Sadot, Z. Zalevsky and T. Yeminy, “Spectral and temporal stealthy fiber optic communication using sampling and phase encoding detection systems,” US patent No. 9288045; EP2735111A1.
41. Z. Zalevsky, A. Schwarz, A. Shemer, B. Javidi and J. Wang, “System and method for imaging with pinhole arrays,” US patent No. 9344700.

42. Z. Zalevsky, A. Shahmoon and H. Slovin, “Imaging system and method using multi core fiber,” Japanese patent 5989666, EU patent P-78705-EP.
43. T. Frumkin and Z. Zalevsky, “Multi-taper optical coupler,” US patent No. 9477043.
44. Z. Zalevsky and Y. Hammer, “Method and system for improving resolution of a spectrometer,” US patent No. 9513225.
45. Z. Zalevsky, J. Garcia, Y. Beiderman, I. Margalit, N. Ozana, N. Arbel, V. Mico, M. S. Sanz, Y. Bishitz and A. Shahmoon, “Method and system for non-invasively monitoring biological or biochemical parameters of individual,” US patent No. 9636041; Chinesse patent No. 201380041088.5; US patent No. 10398314; Chinese patent No. 201580011995.4; Japanese patent No. 2015-524904; Australian patent No. 2015212330
46. A. Shahmoon, A. Zlotnik D. Zigdon, S. Kremer and Z. Zalevsky, “Multicore fiber endoscopes,” US patent No. 9661986; Chinese patent No. ZL 2015800511620; Japanese patent No. 6794352; Chinese patent No. 2019104480763;
47. Z. Zalevsky, J. Garcia, V. Mico, M. Belkin, Y. Beiderman and I. Margalit, “Method and system for non-invasively monitoring biological or biochemical parameters of individual,” US patent No. 9668672; US patent No. 10390729; US patent No. 11129544;
48. A. Schwarz, Z. Zalevsky, Y. Beiderman, J. Garcia and A. Shemer, "Condition authentication based upon temporal-spatial analysis of vibrational responsivity," US patent No. 9916433.
49. D. Sadot, Z. Zalevsky and T. Yeminy, “All-optical silicon-photonic constellation conversion of amplitude-phase modulation formats,” US patent No. 9954620; EU patent 15845902.4
50. R. Menon, A. Rudnitsky and Z. Zalevsky, “Display backlight,” US patent No. 9958601.
51. Z. Zalevsky, A. Schwarz, A. Shemer, A. Zlotnik, “System and method for imaging with pinhole arrays,” US patent No. 10033996.
52. T. David and Z. Zalevsky, “Optical magnetic sensing system,” Israeli Patent No. 224958.
53. Y. Sintov and Z. Zalevsky, “Gas slab laser,” US patent No. 10186825.
54. A. Shahmoon and Z. Zalevsky, “Illumination sources for multicore fiber endoscopes,” US patent No. 10398294.
55. S. Ben-Yaish, A. Zlotnik, I. Raveh, O. Limon, O. Yehezkel, K. Lahav-Yacouel, M. Goldstein and Z. Zalevsky, “Toric ophthalmic lens having extended depth of focus,” US Patent No. 10394051.
56. I. Bachelet, H. Abu-Horowitz, E. Ben-Ishay, A. Yaniv, A. Munitz, A. Shapiro, A. Shemer and Z. Zalevsky, “Non-immunogenic and nuclease resistant nucleic acid origami devices and compositions thereof,” US Patent No. 10420842.
57. Z. Zalevsky, M. London, E. Cohen, A. Shemer and D. Malka, “Multi optically-coupled channels module and related methods of computation,” US Patent No. 10429580; US patent No. 10838139; Japanese Patent No. 6799835
58. R. Menon, J. Gerton, C. Ebeling, A. Meiri and Z. Zalevsky, “Coherent fluorescence super-resolution microscopy,” US patent No. 10585272.
59. Z. Zalevsky, R. Talman, Y. Beiderman, N. Ozana and J. Garcia, “System and method for monitoring glucose level,” US patent No. 10595755.
60. O. Limon, Z. Zalevsky, A. Zlotnik and S. Ben-Yaish, “Optical lens with halo reduction,” US patent No. 10656437; US patent No 11366337; US patent No 11841556; US patent No 12547018
61. Z. Zalevsky, J. Garcia, N. Ozana, R. Califa and A. Schwarz, “System and method for use in depth characterization of objects,” US patent No. 10724846.
62. Z. Zalevsky, Y. Beiderman, J. Garcia, M. Golberg, J. R. R. Onses, “System and method for blood pressure measurement,” US patent No. 10750956.
63. Z. Zalevsky and N. Ozana, “System and method for monitoring of objects with increased sensitivity,” US patent No. 10856739.
64. Z. Zalevsky and J. Garcia, “System and method for optical monitoring using symmetry condition of light field,” US patent No. 10861171.
65. Z. Zalevsky, J. Garcia, A. M. Schwarz and Y. Beiderman, “Optical transforming and modulated interference pattern of a moving object,” US patent No. 10883818.
66. D. Sadot, Z. Zalevsky, T. Yeminy and S. Asraf, “Ultrahigh resolution photonic spectral processor,” US patent No. 10914633.
67. Z. Zalevsky, R. Califa, Z. Markman and Y. Beiderman, “Sample inspection utilizing time modulated illumination,” US patent No. 10931881.
68. Z. Zalevsky and J. Garcia, “Vibration sensing system with wavelength encoding,” US patent No. 10989517.
69. A. Shahmoon and Z. Zalevsky, “Enhancing imaging by multicore fiber endoscopes,” US patent No. 1106118; US patent No. 11640027.

70. Z. Zalevsky and H. Goldenfeld, “System and method for use in remote sensing,” US patent No. 11085753.
71. Z. Zalevsky, A. Chelly and A. Karsenty, “Photodetector for scanning probe microscope,” US patent No. 11169176.
72. Z. Zalevsky, R. Califa, M. Golberg, Z. Markman, M. Shegei and Y. Beiderman, “System and method for monitoring a sample,” US patent No. 11202040;
73. Z. Zalevsky, O. Wagner and A. Shahmoon, “Spatial encoding system decoding system imaging system and methods thereof,” US patent No. 11284786; Israeli patent No. 285787; Japanese patent No. 7756566
74. Z. Zalevsky, J. Garcia and N. Ozana, “System and method for improved monitoring of a sample,” US patent No. 11406294.
75. Z. Zalevsky, M. Sinvani, M. Danino, H. Pinhas and O. Wagner, “Plasma dispersion effect based super-resolved imaging in silicon,” US patent No. 11506604.
76. Z. Zalevsky, S. Polani, M. Golberg and R. Califa, "A system and method for depth flow inspection,” European patent No. EP3790450B1, US patent No. 11957441
77. I. Schelkanova, A. Pandya, Z. Zalevsky and A. Douplik, “Spatial phase filter and illumination device for deep interrogation of strongly scattering media and uses thereof,” US patent No. 11675177
78. Z. Zalevsky, N. Ozana, J. Gacia, R. Califa, S. Polani, A. M. Schwarz and H. Genish, “System and method for use in photoplethysmography,” US patent No. 11737677
79. Z. Zalevsky, A. Bennett, Ye. Beiderman, S. Agdarov and Ya. Beiderman, “System and method for calculating a characteristic of a region of interest of an individual,” US patent No. 11800979
80. E. Cohen and Z. Zalevsky, “Wavelength multiplexing processor,” US patent No. 11838104; Israeli patent No. 291189
81. Z. Zalevsky, “System and method for imaging via scattering medium,” US patent No. 11867625
82. Z. Zalevsky, A. Shahmoon, A. Meiri and O. Herman, “Optical fiber from a single polymer,” US patent No. 11880061.
83. Z. Zalevsky and N. Ozana, “System and method for remote monitoring,” US patent No. 11977148.
84. E. Cohen, Z. Zalevsky, M. Yevnin, “Ultra-wide data band optical processor,” US patent No. 12001947.
85. Z. Zalevsky and E. Cohen, “Optical neural network unit and optical neural network configuration,” US patent No. 12061978; Israeli patent No. 277607; Japanese patent No. 2022-519171;
86. Z. Zalevsky, J. P. Lellouche, D. Smadja, Y. Harel and R. Ben Ishay, “System, method and material composition for use in correction of eye conditions,” US patent No. 12171692;
87. Z. Zalevsky and E. Cohen, “Optical neuron unit and network of the same,” Japanese patent No. 7649559
88. Z. Zalevsky and E. Cohen, “Optical quantum logic gates,” US patent No. 12386238;
89. Z. Zalevsky, A. Shahmoon, A. Meiri, O Herman, “Optical fiber from a single polymer,” US patent No. 12422612;
90. A. Shahmoon and Z. Zalevsky, “Endoscope with disposable part and method of use thereof,” Japanese patent No. 7756651
91. Z. Zalevsky, “High resolution imaging behind scattering medium,” US patent No. 12519918.
92. Z. Zalevsky and G. Chen, “Method and system for super-resolved imaging,” US patent No. 12536611.

Links to popular science journals writing articles on our work

- http://www.optoiq.com/index/display/article-display/314419/articles/laser-focus-world/volume-43/issue-12/world-news/vision-correcting-optics-thin-spectacles-tackle-presbyopia-and-astigmatism.html
- The outstanding research and discoveries in 2009, by Globes journal: http://www.globes.co.il/news/article.aspx?did=1000412463
- http://www.optoiq.com/index/photonics-technologies-applications/lfw-display/lfw-article-display/9000258645/articles/laser-focus-world/volume-46/issue-1/world-news/laser-speckle-imaging.html
- http://www.laserfocusworld.com/articles/2011/09/optical-skin-vibration.html
- http://www.newscientist.com/article/mg20827806.000-scratched-glasses-give-perfect-vision-for-any-eyesight.html
- http://www.popsci.com/technology/article/2010-10/engraved-lenses-give-perfect-vision-both-near-and-far-sighted-eyes
- http://www.jewishtribune.ca/TribuneV2/index.php?option=com_content&task=view&id=4885&Itemid=53
- http://www.israel21c.org/technology/a-revolution-in-glasses-is-underway

- http://www.geekosystem.com/scratched-eyeglasses-perfect-vision/
- http://www.fastcompany.com/1733273/opto-phone
- http://www.technologies.co.il/beta/Page.aspx?Id=1186
- http://www.israel21c.org/technology/israels-top-45-greatest-inventions-of-all-time
- http://jerusalemworldnews.com/2011/10/07/israels-top-45-greatest-inventions-of-all-time/
- http://www.jewishledger.com/2011/10/innovations-inc-israels-50-greatest-inventions/
- http://www.israelunitycoalition.org/news/?p=7238
- http://www.themarker.com/markets/1.524871
- http://www.spybusters.com/Laser_Beam_Eavesdropping.html
- www.techtime.co.il
- http://www.hayadan.org.il/zalevsky-won-prize-in-nano-2803128/
- http://zstore.zman.com/videos/2012/04/05/pribooor-1.mp4
- http://www.timesofisrael.com/serial-nano-inventor-recognized-for-his-work/
- http://spie.org/x86782.xml http://spie.org/newsroom http://spie.org/2406.xml
- http://www.osa.org/About_Osa/Newsroom/News_Releases/Releases/04.2012/Detecting-Malaria-Early.aspx
- http://finance.yahoo.com/news/detecting-malaria-early-save-lives-145000639.html
- http://phys.org/news/2012-04-malaria-early-optical-technique-rapid.html
- http://www.nature.com/nphoton/journal/v6/n6/full/nphoton.2012.137.html
- http://www.physicscentral.com/explore/action/detectingmalaria1.cfm
- SPIE TV: http://www.youtube.com/watch?v=J2kRgsLMvG4
- SPIE TV: http://www.youtube.com/watch?v=ZPH-qyzqrCk
- BIU: http://www.youtube.com/watch?v=6K4ncWwiDNg
- http://www.newjewishcongregation.org/israel_facts__contributions_to_world.aspx
- http://www.israeldefense.co.il/?CategoryID=760&ArticleID=4099
- http://www.nrg.co.il/online/1/ART2/438/091.html?hp=1&cat=351&loc=16
- http://www.israelnationalnews.com/News/News.aspx/165465
- http://www.jpost.com/Health/Article.aspx?id=304135
- http://knowledgestream.ru/ru/lectures/55
- http://bg.ru/medicine/zeev_zalevskij_na_rasstojanii_my_mozhem_izmerit_kr-17566/
- http://www.gazeta.ru/science/2013/03/27_a_5117397.shtml
- http://www.newjewishcongregation.org/israel_facts__contributions_to_world.aspx
- http://www.haaretz.com/news/national/israeli-scientists-develop-bionic-eye-for-people-born-blind.premium-1.526953
- http://www.haaretz.co.il/news/health/.premium-1.2034234
- http://www.digitaljournal.com/article/351212
- http://www.economist.com/blogs/babbage/2013/06/giving-sight-blind
- http://www.solveisraelsproblems.com/israeli-bionic-contact-lenses-turn-touch-into-vision/
- Science and Inventions: Groundbreaking discoveries in science and the inventors behind them: http://www.scienceandinventions.com/
- Zelda radio show (Canada): http://www.sendspace.com/file/ozo6uf
- Reshet B, radio show of Anat Dolev, www.iba.org.il
- http://mfa.gov.il/MFA/InnovativeIsrael/ScienceTech/Pages/'Bionic-Braille'-3-Nov-2013.aspx
- http://nl.icej.org/news/headlines/polish-president-visits-jerusalem
- http://itongadol.com/noticias/val/74762/%E2%80%98bionic-braille%E2%80%99-for-the-unsighted.html
- http://www.nrg.co.il/online/1/ART2/539/606.html?hp=1&cat=351&loc=9
- http://embassies.gov.il/UnGeneva/NewsAndEvents/Pages/FM-Liberman's-Speech-at-CERN-Ceremony-admitting-Israel-as-full-member.aspx
- http://www.gizmag.com/experimental-contact-lens-tactile-sight-blind/30621/
- http://www.wired.co.uk/news/archive/2014-01/30/braille-for-the-eyeballs
- http://www.dailymail.co.uk/health/article-2552940/The-BRAILLE-contact-lens-Implant-stimulates-eye-600-times-sensitive-fingerprints.html
- http://www.futura-sciences.com/magazines/sante/infos/actu/d/diabete-lentille-contact-bionique-pourrait-assister-non-voyants-52119/
- http://www.electronics-eetimes.com/en/haptic-lens-converts-light-into-touch.html?cmp_id=7&news_id=222920347

- http://www.trendbear.com/18375-helping-the-blind-see-with-contact-lenses.html
- http://www.israelhayom.co.il/article/169465
- http://www.gadget-rumours.com/computers-2/helping-the-blind-see-with-contact-lenses/
- http://uk.reuters.com/video/2014/05/09/contact-lens-could-open-new-vistas-for-t?videoId=312893630&videoChannel=78
- http://in.reuters.com/video/2014/05/09/contact-lens-could-open-new-vistas-for-t?videoId=312893630
- http://www.reuters.com/article/2014/06/10/dc-optical-society-idUSnBw106256a+100+BSW20140610
- http://www.wallstreetdaily.com/2014/05/12/contact-lens/
- http://kxan.com/2014/05/15/braille-contact-lens-may-help-the-blind-see/
- http://www.electronics-eetimes.com/documents/check.php?filename=/en/archives/pdf-eete-apr-2014.pdf
- http://israel21c.org/health/top-10-incredible-israeli-advances-in-vision/
- http://israel21c.org/technology/bionic-contact-lenses-turn-touch-into-vision/
- http://nocamels.com/2013/07/israeli-bionic-contact-lens-will-help-blind-people-see/
- http://www.osa.org/en-us/about_osa/newsroom/news_releases/2014/check_your_glucose_with_a_turn_of_the_wrist_new_bi/
- http://www.osa-opn.org/home/newsroom/2014/june/optics-empowered_wearable_health_monitors/#.U65z0fmSw1M
- http://www.nytimes.com/2014/06/11/science/to-aid-the-blind-an-assist-from-cameras.html?hpw&rref=technology&_r=0
- http://www.meddeviceonline.com/doc/new-biometric-wristwatches-use-light-to-measure-vital-statistics-0001
- http://www.newindianexpress.com/cities/hyderabad/Now-A-Watch-to-Monitor-Your-Pulse/2014/06/13/article2277458.ece1
- http://ibnlive.in.com/news/new-biometric-watches-that-can-monitor-glucose-dehydration-pulse/478603-11.html
  http://www.photonicsonline.com/doc/new-biometric-wristwatches-use-light-to-measure-vital-statistics-0001
- http://www.mensjournal.com/health-fitness/exercise/apples-health-tracking-new-iwatch-what-we-know-20140625
- http://www.businessinsider.com/google-contacts-monitor-health-diabetes-2014-7
- http://www.photonics.com/Article.aspx?AID=56546
- http://www.opticianonline.net/cl-offers-hope-of-tactile-vision/
- http://www.onlinetmd.com/Article.aspx?article_id=168876#.U-Ufv_mSw1M
- http://buzztrick.com/buzz/2014/08/15/experimental-contact-lens-aims-offer-tactile-sight-blind
- http://blog.youknowit.com/contact-lens-blog/index.php/category/contact-lense-technology/
- http://www.wearabletechusa.com/news/new-biometric-watches-use-light-to-non-invasively-monitor-glucose-dehydration-pulse/
- http://www.electrooptics.com/news/news_story.php?news_id=2187
- http://www.darkdaily.com/companies-developing-non-invasive-and-wearable-glucose-monitoring-devices-that-can-report-test-data-in-real-time-to-physicians-and-clinical-laboratories-1015#axzz3GUztuqNr
- http://www.sciencedaily.com/releases/2014/06/140610122012.htm
- http://www.forbes.com/sites/zackmiller/2015/01/20/12-israeli-technologies-changing-the-lives-of-the-disabled-in-2015/3/
- https://www.rebelmouse.com/_articles/israels-top-5-tec-1460746096.html
- http://tfrr.org/index.php/en/news/248-israeli-scientists-develop-bionic-eye-for-people-born-blind
- http://www.forbes.co.il/news/new.aspx?Pn6VQ=L&0r9VQ=EFEEH
- http://techtime.co.il/2015/03/05/oasis-4/
- http://most.gov.il/Information/PostsSpokenman/Pages/LaserTech.aspx
- http://www.mako.co.il/nexter-internet/developments/Article-d37ecfa2ffc1c41006.htm?sCh=3d385dd2dd5d4110&pId=757332771
- http://www.journals.elsevier.com/optics-communications/news/keeping-the-halo-effect-at-arms-length/
- http://www.materialstoday.com/optical-materials/news/keeping-the-halo-effect-at-arms-length/
- http://www.journals.elsevier.com/corrosion-science/materials-science-news/
- http://www.elsevier.com/connect/keeping-visions-halo-effect-at-arms-length

- http://www.sciencedaily.com/releases/2015/04/150415112534.htm
- http://www.optometry.co.uk/news-and-features/news/?article=7217
- http://optics.org/news/6/4/21
- http://www.2016tech.com/science/vision-new-technique-decreases-halo-impact-triggered-by-lenses.html
- http://www.elsevier.com/about/press-releases/research-and-journals/scientists-develop-new-technique-that-reduces-halo-effect-caused-by-lenses
- http://eyesmart.com.au/allnews/oaonews/4673-new-technique-developed-reduces-halo-effect-caused-by-lenses
- http://www.calcalist.co.il/internet/articles/0,7340,L-3657504,00.html
- http://www.geektime.co.il/continuous-biometrics-will-remotely-monitor-you/
- http://www.geektime.com/2015/10/21/gtc2015-bar-ilan-professor-revolutionizes-diagnostics-with-new-company/
- https://www.yediot.co.il/articles/0,7340,L-4730485,00.html
- The New Indian Express newspaper: http://www.newindianexpress.com/cities/thiruvananthapuram/Using-the-Principles-of-Light-to-Listen/2015/11/11/article3122836.ece
- http://www.geektime.co.il/continuous-biometrics-will-remotely-monitor-you/
- http://www.iotevolutionworld.com/m2m/articles/415663-where-wearables-headed.htm
- http://www.jta.org/2016/02/22/news-opinion/israel-middle-east/meet-5-israeli-companies-driving-disability-tech
- http://www.timesofisrael.com/meet-5-israeli-start-ups-driving-disability-tech/
- http://www.haaretz.com/israel-news/1.704964
- http://www.haaretz.com/israel-news/science/.premium-1.711243
- http://www.fastcompany.com/1733273/opto-phone-reads-vital-signs-and-cell-phone-conversations-laser-100-meters
- http://optics.org/news/7/9/32
- On ContinUse Biometrics: https://www.photonics.com/Article.aspx?PID=5&VID=141&IID=923&AID=61376
- http://www.calcalist.co.il/internet/articles/0,7340,L-3711009,00.html
- http://www.ynet.co.il/articles/0,7340,L-4946081,00.html
- http://www.nrg.co.il/online/13/ART2/866/699.html
- https://www.israel21c.org/measuring-a-patients-vital-signs-without-any-contact/
- https://www.youtube.com/watch?v=th_wvDy0jks&feature=youtu.be
- https://www.youtube.com/watch?v=UvoAh7ta_Ho&t=4s (movie on ContinUse Biometrics)
- https://www.calcalist.co.il/conference/articles/0,7340,L-3723862,00.html
- https://www.calcalistech.com/ctech/articles/0,7340,L-3723871,00.html
- https://www.youtube.com/watch?v=a8MRQG6ITDI
- http://www.israelhayom.co.il/article/518087
- https://www.makorrishon.co.il/economy/16625/
- https://www.globes.co.il/news/article.aspx?did=1001225612
- http://www.jpost.com/HEALTH-SCIENCE/The-lab-bench-and-the-stethoscope-544122
- http://nocamels.com/2018/03/israel-opthalmologist-eye-glasses/
- https://www.eurekalert.org/pub_releases/2018-03/bu-rin030718.php
- https://www.digitaltrends.com/cool-tech/israel-eyedrops-correct-vision/
- https://www.technochops.com/say-goodbye-to-glasses-soon-groundbreaking-eye-drops-and-bionic-lenses-are-here/9888/
- http://bgr.com/2018/03/09/nanoparticle-eyedrops-glasses-contacts-vision-correction/
- https://www.resetera.com/threads/vision-improving-nanoparticle-eyedrops-could-end-the-need-for-glasses.28349/
- https://nowthisnews.com/videos/future/these-eyedrops-could-soon-replace-glasses
- https://www.siasat.com/news/these-eyedrops-may-remove-need-wearing-glasses-soon-herere-details-1327895/
- https://de.sputniknews.com/wissen/20180309319858657-augentropfen-sollen-brillen-und-linsen-ersetzen/
- http://www.jpost.com/Jpost-Tech/Israeli-Nano-drops-bring-simple-eye-fix-into-view-549248
- https://reut.rs/2qhBUnz
- https://youtu.be/fvKOKIE_PcA

- http://www.dailymail.co.uk/sciencetech/article-5738029/Scientists-unveil-laser-monitor-breathing-heartbeat-clothes.html
- https://www.newscientist.com/article/2168993-laser-can-detect-your-heartbeat-and-breathing-from-a-metre-away/
- https://www.ynet.co.il/articles/0,7340,L-5460712,00.html
- https://www.digitaltrends.com/cool-tech/laser-monitor-wellbeing/
- https://gizmodo.uol.com.br/colirio-nanoparticulas-miopia-israel/
- http://www.chiportal.co.il/main-news/42-2009-12-11-17-38-45/6160-prof-zalevsky-best-speaker-chipex2018
- https://embassies.gov.il/athens/AboutIsrael/Conferences_exhibitions_events/Pages/zeevzalevskyathensscincefestival2018.aspx
- https://www.industrychronicle.com/new-touch-free-device-utilize-laser-to-monitor-health-parameters/
- https://www.contactlenses.jp/news/article74625/nanotech-could-soon-correct-common-vision-issues.html
- https://www.mako.co.il/nexter-magazine/Article-f13e506a88f5b61026.htm
- https://www.israel21c.org/12-revolutionary-advances-for-your-eye-health/
- http://thejewishvoice.com/2019/08/14/12-revolutionary-advances-for-your-eye-health/
- http://www.mynetroshhaayin.co.il/%D7%9E%D7%92%D7%96%D7%99%D7%9F/%D7%A4%D7%A8%D7%95%D7%A4-%D7%96%D7%90%D7%91-%D7%96%D7%9C%D7%91%D7%A1%D7%A7%D7%99-%D7%9E%D7%A8%D7%90%D7%A9-%D7%94%D7%A2%D7%99%D7%9F-%D7%A8%D7%A9%D7%9D-100-%D7%A4%D7%98%D7%A0%D7%98%D7%99%D7%9D-%D7%9C%D7%9E%D7%94-%D7%A8%D7%95%D7%91%D7%9D-%D7%A0%D7%A9%D7%9E%D7%A2%D7%99%D7%9D-%D7%9B%D7%9E%D7%95-%D7%9E%D7%93%D7%A2-%D7%91%D7%93%D7%99%D7%95%D7%A0%D7%99-415043/4
- https://nocamels.com/2019/12/nocamels-popular-stories-of-2019/
- https://www.jpost.com/Israel-News/Israeli-researchers-unveil-first-all-optical-stealth-encryption-tech-615762
- https://mednews.co.il/infectious-disease/bar-ilan-university-is-investigating-the-corona-virus-a-laser-beam-will-detect-corona-patients-in-the-distance/
- https://www.forbes.com/sites/forbestechcouncil/2020/04/28/how-system-integrators-can-amplify-academia-enterprise-collaboration-for-innovation/#5a630f92668c
- https://roshhaayin.mynet.co.il/magazine/article/m_415043
- https://www.calcalistech.com/ctech/articles/0,7340,L-3845626,00.html
- https://innovationisrael.org.il/magazine/5106
- https://www.prettyprogressive.com/38-best-wellbeing-startups-headquartered-in-israel/
- https://chiportal.co.il/%D7%91%D7%93%D7%99%D7%A7%D7%AA-%D7%A7%D7%95%D7%A8%D7%95%D7%A0%D7%94-%D7%9C%D7%9C%D7%90-%D7%9E%D7%92%D7%A2-%D7%91%D7%93%D7%99%D7%A7%D7%95%D7%AA-%D7%93%D7%9D-%D7%9110-%D7%93%D7%A7-%D7%97%D7%91%D7%A8/
- https://spie.org/news/new-editor-in-chief-appointed-for-journal-of-electronic-imaging-?SSO=1
- https://www.myhealthyapple.com/gili-non-contact-biosensor-system-obtains-fda-de-novo-clearance/
- http://www.koreaittimes.com/news/articleView.html?idxno=111159
- https://www.opli.net/opli_magazine/eo/2022/surpassing-moore-law-cognifiber-raises-6-million-series-a-to-bring-in-fiber-photonic-processing-to-market-feb-news/
- https://www.lifewire.com/glass-chips-could-make-internet-connected-devices-smarter-5225773
- https://www.optica-opn.org/home/articles/volume_34/january_2023/features/photonic_computing_for_sale/
- https://spie.org/news/zeev-zalevsky-the-2023-spie-chandra-s-vikram-award-in-optical-metrology?SSO=1
- https://www.hardreset.co.il/episodes/episode-28-computational-optics-zeev-zalevsky
- https://www.mako.co.il/study-career-open-days/Article-7126b8b47042881026.htm
- https://www.mako.co.il/news-science/2023_q3/Article-28673927cfb8981026.htm
- https://www.jdn.co.il/health/1994019/
- https://www.kan.org.il/content/kan/podcasts/p-8270/508576/ (Minute 52. Radio broadcasting)
- https://www.photonics.com/Articles/Berthold_Leibinger_Awards_Honor_Laser_Research_at/a69354
- https://isnet.co.il/en/2316/
- https://youtu.be/HyiDRqoYO4I?si=GCJslPlD2sTFHDzR

- https://www.youtube.com/watch?y=BrqwdgJX7ow
- https://finance.walla.co.il/item/3702119

Selected TV Links

- Alcohol measurements: Channel 9, Israel
  http://www.zman.com/video/2012/04/05/35761.html

- Optophone technology, Channel 9, Israel
  http://www.zman.com/video/2010/11/08/24737.html

- Optophone technology, Antena TV 3, Spain
  http://www.antena3.com/noticias/ciencia/israel-presenta-laser-espia-capaz-captar-conversaciones-larga-distancia_2010111400051.html

- Innovation news, Channel 2, Israel
  http://www.mako.co.il/news-channel2/Channel-2-Newscast/Article-94a9b9a14202131004.htm

- Channel 2, Israel
  http://www.youtube.com/watch?v=th_wvDy0jks

- Local News, Channel 3, Israel (16 Dec 2012)
  https://www.facebook.com/hot3news#!/hot3news

  https://www.facebook.com/hot3news

- Hoze Israel show with Kobi Meidan, channel 23
  http://www.youtube.com/watch?v=aqk-z74wJKU

- Erev Hadash show, channel 1 and 23, Israel
  http://23tv.co.il/239-he/Tachi.aspx

- Channel 10, Israel:
  https://m.facebook.com/Or.and.Maya.10/

- Channel 2, Israel
  http://reshet.tv/item/news/tonight/season-02/episodes/shai-and-sharon-05-04-17-237850/

  (starting from minute 17)

- Russian TV:
  - http://www.youtube.com/watch?feature=player_embedded&v=8VnasMxClAM#t=24s
  - http://www.ntv.ru/peredacha/chudo_tehniki/m24780/o173456/
  - http://eyewiretoday.com/2018/03/08/researchers-invent-nano-drops-that-improve-nearsightedness-and-farsightedness?utm_campaign=Enewsletters&utm_source=hs_email&utm_medium=email&utm_content=61250221&_hsenc=p2ANqtz--UYxl9GDqmPFxTBBZSU3g8pKHNh5QRKmdq4xjykibR2FVw_WgDnV4D-xmMBLRAdBPROLUMwBOZ3a1cli7V8hJnTQuj_g&_hsmi=61250221
  - https://finance.yahoo.com/news/bar-ilan-university-researchers-invent-183800644.html

- Channel 10, Israel
  http://lnk.nana10.co.il/Article/?ArticleID=982585&sid=182

- Channel 2, Israel
  http://www.mako.co.il/news-money/tech/Article-930c2977dde3641004.htm

- Channel 12, Israel
  https://www.youtube.com/watch?v=5dRBan8cmRU

- Channel i24, Europe
  - https://drive.google.com/file/d/1oJxYOkQLwk7DYUbeT2jTV_vQ_lIM6azE/view
  - https://www.i24news.tv/fr/tv/revoir/le-grand-live/x6fu8rr

- Greece TV interview
  http://www.capital.gr/capitaltv/3291605/o-israilinos-ereunitis-pou-katafere-na-niosei-to-fos

- Youtube interview:
  - https://www.youtube.com/watch?v=Xtnpod5WmOw&t=32s
  - https://www.youtube.com/watch?v=BrqwdgJX7ow
  - https://youtu.be/rP6ogbm-4Ks?si=6u55yzDigtAu93ze
  - TED BIU talk:
    https://www.youtube.com/watch?si=hPi0SNGbQ9xlTkIA&v=NAzhokvptSQ&feature=youtu.be
  -