RESUME

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Zeev Zalevsky

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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
2012-2022	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-present	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, Ryerson University, Toronto, Canada and Associate Member of the Yeates School of Graduate Studies (YSGS) at Ryerson University
2017-2018	Member of the prize committee of Bar-Ilan University
2017-present	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-present	Founder and chief scientific officer (CTO) of Cogni-fiber ltd (in-fiber optical processor)
2020-present	Founder and chief scientific officer (CSO) of Nano-drops ltd (ophthalmic nanodrops based solution for presbyopia and visual aberrations)
2020-present	Founder and chief scientific officer (CSO) of SuperSpectra ltd (noninvasive detection of progress in Alzheimer based on super resolved Raman spectroscopy)
2019-2022	Dean of Engineering, Bar-Ilan University

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.
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	**Juludan prize** for advancing technology in medicine.
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 **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 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).

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).

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 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 **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**.

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 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 **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 **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 **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 **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 **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).

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 **Fellow of the Nanosmat Society (FNS) Award**.

2016 **Guest Professorship Fellowship** at the Department of Physics, Faculty of Science, **Ryerson 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 **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).

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 Technology Competition Award Winner** (2nd place).
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	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 due to 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.
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	**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	**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).
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	**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.
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**.
2020-2021	**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.

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," 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**.

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 **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.

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).

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.
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.
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
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).
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 pf 2016.
2016	**Tubitak Bideb 2221 Fellowship for Visiting Scientists Award** given by **Tubitak** (The Scientific and Technological Research Council of Turkey).
2016, 2017	**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.
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/
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 technology I have co-invented and took part in developing on micro-endoscopy and which was commercialized to Zsquare.

2017 **Apprciation 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).

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/

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

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

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

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

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

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.

2021 **8400 Fellowship** and **Yad-HaNadiv Foundation grant** for health entrepreneurship leadership program.

2021 Donisi Health (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, 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 biometrics monitoring which was commercialized to ContinUse Biometrcis/Donisi Health was selected to be one out of 8 finalists in Accenture HealthTech Innovation Challenge Award.

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 colaboration 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.

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 runerup in the **international IET young students' competition** where he presented the research work doen in the group on LIFT and metallic glasses. The copetition 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.

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 Cmabridge, UK

Fields of Research

Nano-photonics, silicon photonics, super resolution, bio-medical optics and bio-imaging, diffractive optical elements and beam shaping, in-fiber devices, fiber optics and communication, RF-photonics.

Impact of the research

In google scholar: H-index of 56; i10-index of 268 and citations number of 15100.

Review Activity

- Acting as a reviewer at various scientific journals including *Nature Photonics*, *Nano Letters, Nature Communications*, *Nature Light: Science & Applications*, *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 and others peer review journals.*
- *Actinvg as a scientific evaluation panel member for various scientific grants: from Israel: ISF, MOST, BSF; International: New Zealand, Netherlands, Austria, Finland etc; from the EU: ERC*

Undergraduate Students

Since 2004 I have supervised more than 100 undergraduate students in their final engineering project task.

Graduate Students

- **Master students**
  - Alex Zlotnik, M.Sc (joint supervision in TAU)

- Yonathan Solomon, M.Sc (joint supervision in TAU)
- Gal Shochat, M.Sc (joint supervision in TAU)
- Eran Rossman, M.Sc (joint supervision in TAU)
- Vardit Eckhouse, M.Sc (joint supervision in TAU)
- Damian Goldring, M.Sc (joint supervision in TAU)
- Eyal Ben-Eliezer, M.Sc (joint supervision in TAU)
- Michael Parshin, M.Sc (from BIU)
- Amikam Borkowski, M.Sc (joint supervision, in TAU)
- Yoed Abraham, M.Sc (from BIU)
- Doron Abraham, M.Sc (from BIU)
- Yevgeny Beiderman, M.Sc (from BIU)
- Yana Reznick, M.Sc (from BIU)
- Tomer Yeminy, M.Sc (joint supervision, in BGU)
- Ohad Fixler, M.Sc (from BIU)
- Ted Frumkin, M.Sc (from BIU)
- Ran Aharoni, M.Sc (from BIU)
- Asaf Ilovitsh, M.Sc (from BIU)
- Ofer Margalit, M.Sc (from BIU)
- Shachar Paz, M.Sc (from BIU)
- Mark Golberg, M.Sc (joint supervision, in TAU)
- Ariel Schwartz, M.Sc (from BIU)
- Alon Shapira, M.Sc (from BIU)
- Sagie Asraf, M.Sc (from BIU)
- Yossi Danan, M.Sc (from BIU)
- Nisan Ozana, M.Sc (from BIU)
- Liron Bidani, M.Sc (from BIU)
- Tzuriel Ram-Cohen, M.Sc (from BIU)
- Aviya Bennet, M.Sc (from BIU)
- Hadar Zafri, M.Sc (from BIU)
- Shai Ben Yaish, M.Sc (from BIU)
- Niv Gorodesky, M.Sc (from BIU)
- Stav Buchsbaum, M.Sc (from BIU)
- Jonathan Azougi, M.Sc (from BIU)
- Chen Abraham, M.Sc (from BIU)
- Talya Sirkis, M.Sc (from BIU)
- Chen Tzur, M.Sc (from BIU)
- Gilad Rachamim, M.Sc (from BIU)
- Daniel Dahan, M.Sc (from BIU)
- Sagiv Benichou, M.Sc (from BIU)
- Gal Shpun, M.Sc (from BIU)
- Rotem Hendel, M.Sc (from the Technion)
- Barak Straussman, M.Sc (from the Technion)
- Mathan Benjamin, M.Sc (from BIU)
- Nadav Shabairou, M.Sc (from BIU)
- Elnathan Davidovich, M.Sc (from BIU)
- Maor Tiferet, M.Sc (from BIU)
- Yarden Zabari, M.Sc (from BIU)
- Hadas Lupa, M.Sc (from BIU)
- Ziv Shemesh, M.Sc (from BIU)
- Liron Gino, M.Sc (from BIU)
- Oran Herman, M.Sc (from BIU)
- Shay Ederman, M.Sc (from BIU)

- **Ph.D students**
  - Vicente Mico, Ph.D (joint supervision in Valencia, Spain)
  - Ofer Limon, Ph.D (from BIU)
  - Aviram Gur, Ph.D (from BIU)

- Amir Shemer, Ph.D (from BIU)
- David Sylman, Ph.D (from BIU)
- Doron Abraham, Ph.D (from BIU)
- Yevgeny Beiderman, Ph.D (from BIU)
- Arkady Rudnitsky, Ph.D (joint supervision, in TAU)
- Hamootal Duadi, Ph.D (from BIU)
- Ran Aharoni, Ph.D (from BIU)
- Asaf Shahmoon, Ph.D (from BIU)
- David Elbaz, Ph.D (from BIU)
- Amihai Meiri, Ph.D (from BIU)
- Assaf Bitman, Ph.D (from BIU)
- Ariel Schwartz, Ph.D (from BIU)
- Alex Zlotnik, Ph.D (from BIU)
- Amikam Borkowski, Ph.D (joint supervision, in TAU)
- Dror Malka, Ph.D (from BIU)
- Maya Aviv, Ph.D (from BIU)
- Tali Ilovitsh, Ph.D (from BIU)
- Asaf Ilovitsh, Ph.D (from BIU)
- Adi Vegerhof, Ph.D (from BIU)
- Moshik Cohen, Ph.D (from BIU)
- Yossi Danan, Ph.D (from BIU)
- Hadar Pinchas, Ph.D (from BIU)
- Tomer Yeminy, Ph.D (joint supervision, in BGU)
- Issaschar Gabay, Ph.D (from BIU)
- Omer Wagner, Ph.D (from BIU)
- Ofer Foger, Ph.D (from BIU)
- Jonathan Bar Magen Ph.D (from BIU)
- Nisan Ozana, Ph.D (from BIU)
- Sagie Asraf, Ph.D (from BIU)
- Dana Gotthilf Nezri, Ph.D (from BIU)
- Aviya Bennett, Ph.D (from BIU)
- Ted Frumkin, Ph.D (joint supervision, in BGU)
- Avigail Amsel, Ph.D (from BIU)

Visiting researchers 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 (2015-2019 a research term in the group). **Received the IVS prize for technicial.**
- 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 (2019-2021 a research post-doc term in the group). Received the **PBC Fellowship** Program for Outstanding Chinese and Indian Post-Doctoral Fellow.

Sport hobbies:

- Short distance runs: 10km/15km in various competions (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
    - 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)
    - **Long relay races:**
        - 230km: Mountan to valey (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

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. Editorial board member of the Open Optics Journal.
7. Editorial board member of the Journal of Physics Express.
8. Editorial board member of the Journal of Electromagnetic Analysis and Applications (2013-2015).
9. Acted as editorial board member of the International Journal of Optoelectronic Engineering.
10. Editorial member of Consumer Electronics Time (CET) journal (2012-2015).
11. **Editor in Chief of Recent Patents on Signal Processing (2011-2015).**
12. **Editor in Chief of the International Journal of Optoelectronic Engineering (2011-2014).**
13. **Editor in Chief of the Journal of Electrical and Control Engineering (JECE) (2011-2014).**
14. **Associate Editor in Chief of the Scientific Journal of Physical Science (2011-2014).**
15. Lifeboat foundation advisory board.
16. Chairman of a session in OASIS conference in Tel-Aviv, March 2007; March 2009; March 2011.
17. Member of the organizing/steering committee of the Israeli-Turkish workshop on nano photonics, March 2007.
18. Chairman of a session in OSA topical meeting in Florida, March 2008.
19. Chairman of a session in ILEOS topical meeting in Israel, March 2008.
20. 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).
21. Chairman of a session in the 27th annual conference of the Israeli Vacuum Society (IVS), Herzelia, Israel October 2008, September 2013.
22. Session chair in SPIE meeting, Orlando, Florida, April 2009.
23. 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.
24. Chairman of sessions in IEEE COMCAS conference in Tel-Aviv November 2009; November 2011.
25. 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.
26. 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.
27. Member of the organizing/steering committee and a chairman of High and Super Resolution Imaging (SHRI) conference in Lipica, Slovenia (September 2009).
28. Chairman of a session in the nano photonics conference in Australia 2009.
29. 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.
30. Chairman and organizer of the annual nano photonic conference of BINA in 2008 (Dead Sea, Israel), 2009 (Ramat Rachel, Israel), 2010 (Nahariya, Israel).
31. Chairman and organizer of the bi-national Bar-Ilan Valencia conference on April 2010.
32. Managing member of the international committee of ICIS.
33. **The general conference chair of ICIS 2014 (Tel-Aviv).**
34. 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).
35. Chair of the scientific committee of the nano technology conference organized in Wahl center near Bar-Ilan University, April 2011.
36. Member of the organizing/steering committee of the International Workshop on Information Optics (WIO), Spain, July 2011.
37. Management Member in the Israeli Engineers Association (starting from 2010).
38. Chairman of a session in SPIE Europe meeting, Conference 8082, Optical Measurement Systems for Industrial Inspection VII, Munich, Germany (May 2011).
39. Leading guest editor for the Journal of Atomic, Molecular, and Optical Physics (2011).
40. Guest editor of special issue on nano-photonics in the Open Optics Journal (2011).
41. Session chair in ISABEL 2011, (the 4th International Symposium on Applied Sciences in Biomedical and Communication Technologies), October 2011, Barcelona, Spain.
42. **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).**
43. Judge in the Agilent award finals given by Ariel University center to graduating students (June 2012).

44. Judge in the ACC (Advanced Communications Center) annual Feder Awards competition for outstanding student research works (2013).
45. Management member of ILEOS (2012).
46. Steering committee of the 15th Israel Materials Engineering Conference (IMEC-15), Dead sea, Israel (March 2012).
47. Technical committee member and a session chair in imaging systems (IS) topical conference of OSA, June 2012; July 2016; June 2019.
48. Program Committee member of Optical Methods for Imaging, Characterization and Inspection of Bio-Materials and Structures, World of Photonics Congress, Munich, Germany (May 2013).
49. **Program Chair in imaging systems (IS) topical conference of OSA, Arlington, Virginia, June 2013.**
50. Program committee member of the 1st International Biophotonics Meeting in Israel, Tel-Aviv (December 2012).
51. 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.
52. Member of the organizing committee of conference on Technologies for Remote Sensing, Detection and Imaging in Ariel, Israel, June 6th, 2013.
53. The organizing committee member of the Israeli Fiber Lasers and Applications Workshop, Bar-Ilan Univ., June 23-24, 2014.
54. **General chair in imaging systems (IS) topical conference of OSA, Seattle, July 2014.**
55. Guest Editor for Applied Optics journal special issue on Imaging Systems and Applications (2014)
56. Guest Editor for Optical Engineering journal special issue on Fiber Lasers.
57. Technical committee member in Computational Sensing and Imaging (COSI) topical conference of OSA, Hawaii, June 2014.
58. Editorial Board of Frontiers in Nanobiotechnology as Review Editor.
59. General chair of the international biophotonics conference, Dec. 2015, Israel
60. **Associate Editor of IEEE Access Journal** (during 2013-2020)
61. Special issue editor of the Journal of Imaging Science and Technology (2015).
62. Guest Editor for Applied Optics journal special issue on Imaging Systems and Signal Recovery (2015).
63. Gurest Editor of the Journal of Imaging Science and Technology (JIST) in special issue of ICIS (published in 2015) conference
64. **Associate Editor for the Journal of Imaging Science and Technology (JIST)** (during 2015-present)
65. Session chair of the Life Sciences Baltics 2014 forum, 10-12 September 2014, Vilnius, Lithuania.
66. Associate editor in the International Medical Physics Journal.
67. **Associate Editor of Opt. Express** (during 2014-2020).
68. Head of the iNNOVEX Technical Program Committee, Feb. 2015; Feb. 2016; Feb. 2017; Feb. 2018.
69. Session chair in the conference of the Israeli Society for Vision and Eye Research (ISVER): March 2015; March 2018
70. Program committee member in imaging systems (IS) and Computational Sensing and Imaging (COSI) topical conference of OSA, Arlington, Virginia, June 2015.
71. Session chair in imaging systems (IS), Arlington, Virginia, June 2015.
72. Program committee member of SPIE conference OSD05 on Computational Optics, Jena (Sep. 2015); Frankfurt (May 2018).
73. International scientific committee member of the 37th annual international conference of the IEEE Engineering in Medicine and Biology Society (EMBS), Milano (Aug. 2015).
74. 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.
75. Member of the Scientific Committee and a session chair in LANE conference, Furth, Germany: Sep. 2016; Sep. 2018; sep. 2020.
76. **Program Chair in Computational Optical Sensing and Imaging (COSI) topical conference of OSA, Heidelberg, Germany, July 2016.**
77. Session chair of SPIE conference 9716 on Optical Methods in Developmental Biology IV, Photonics West (Feb. 2016).
78. Technical committee member of SPIE conference 9720 on High-Speed Biomedical Imaging and Spectroscopy: Toward Big Data Instrumentation and Management, Photonics West (Feb. 2016).
79. Technical program committee member for the 2016 IEEE Photonics Conference on Biophotonics, Hawaii, Oct. 2016.

80. Guest Editor of the journal of Materials. Special issue on Special Issue "Nanoprobes for Imaging" (2017).
81. Guest Editor of the journal of Applied Optics journal special issue on Modern Imaging following COSI 2016 conference chairing in Germany (2016).
82. **General Chair in Computational Optical Sensing and Imaging (COSI) topical conference of OSA, July 2017.**
83. Technical program committee member of the International Conference on Computational Photography (ICCP): Stanford, May 2017; Pittsburgh, May 2018.
84. Committee members of Information Photonics meeting (IP'17) in OPIC2017 in Yokohama, Japan (April 2017).
85. Technical Program Committee member of Data Sciences Conference part of SPIE Photonics West (Feb. 2018).
86. 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).
87. Guest Editor of special issue in the journal of Frontiers in Molecular Biosciences.
88. Guest Editor of the journal of Applied Optics feature issue on “Imaging and Applied Optics” following COSI 2017 conference chairing in San Francisco (2017).
89. Session chair in the EAMC conf. Sweeden (Aug. 2017).
90. Session chair in SPIE conference #10479: Photonic Diagnosis and Treatment of Infections and Inflammatory Diseases, Photonics West, San Francisco, Feb. 2018.
91. Session chair in Advanced Materials World Congress (AMWC), Singapore (Feb. 2018).
92. **General conference chair of *Laser Applications in Life Sciences* (LALS), Ramat-Gan, Nov. 2018.**
93. Member of LALS international advisory board.
94. Guest editor for special issue in the journal of Applied Sciences following LALS conference (Feb. 2019).
95. Member of the 2018, 2019 NAI Fellows Advisory Committee (NAIFAC).
96. Member of the Zero Project nominations evaluation committee.
97. Member of the International Advisory Committee of Photonics 2018, The International Conference on Fiber Optics and Photonics, Dec. 2018, New Delhi, India
98. International Fiber Lasers and Applications (IFLA) conference organizing committee (April 2019).
99. **A member of the OSA, Robert E. Hopkins Leadership Award Committee for a term of March 2019-February 2021**.
100. Member of the International Advisory Committee in International Conference on Optics and Electro-Optics (ICOL-2019), Oct. 2019, Dehradun, India
101. Guest editor of special issue of Applied Sciences on optical fiber-based data processing.
102. Technical Program Committee (TPC) member of ICO-25-OWLS-16-Dresden-Germany-2020
103. **General Chair of SPIE conference on tissue optics and photonics, photonics Europe 2020: Strasbourg, France (April 2020). CHANGED INTO DIGITAL FORUM DUE TO CORONA**
104. Session chair in Laser Applications in Life Sciences (LALS), Nancy, France, April 2020.
105. Editorial Board Membership for the Open Biomedical Engineering Journal, Jan. 2020.
106. Editorial Board member of eLight journal, journal published through Springer Nature.
107. Lead topical editor for JOSA A/B journal on topic of LIDARs.
108. General program committee member of VIII SYMPOSIUM ON OPTICS & BIOPHOTONICS, Saratov Fall meeting, Russia (Sep. 2020).
109. **Senior Editor of IEEE Access Journal (2020-present)**
110. **General chair of quantum sensing and super resolution symposium at CLEO (May 2021)**
111. **Editor in Chief of the journal of electronic imaging (JEI) of SPIE (2021-2024).**
112. **SPIE Publication committee member for 2021.**
113. **An Official Nominator for the 2021 VinFuture Prize, the “Vietnamese Nobel prize”.**
114. **An Official Nominator for the 2022 Kyoto Prize in Advanced Technology given by the Inamori Foundation.**
115. **Topic chair of special session on Deep Tissue Imaging and Quantum Sensing at IPC (Oct. 2021).**

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).

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).
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).
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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).
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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. N. Ozana and Z. Zalevsky, “Noninvasive photonic sensing of glucose in blood stream,” CRC (2022).

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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).
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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).
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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).
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Presentations

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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) **Ketnote 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 Europeanworkship 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 Internatoinal 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 Internatoinal 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 Internatoinal 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 Internatoinal 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, "Minimappy 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 WavefrontShaping 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,” Intrnational 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**
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 Orthopaedic 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).**
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, Innovaion in sensor technology session, invited to present as **Finalist of the AMA Innovation Award** (August 2021). **Invited talk (208)**.
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617. 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 (212)**.
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