

## CURRICULUM VITAE, Prof. Avinoam (Avi) Zadok (Updated December 2024)

### PERSONAL INFORMATION

Family name, First name: Zadok, Avinoam (Avi)

Date of birth: August 2<sup>nd</sup>, 1973.

Nationality: Israel

Email address: [Avi.Zadok@technion.ac.il](mailto:Avi.Zadok@technion.ac.il)

URL for web site: <http://www.avizadoklab.com>

### EDUCATION

- 2007-2009 Caltech, Department of Applied Physics: Post-doctoral research fellow with the group of Prof. Amnon Yariv.
- 2003-2007 Tel Aviv University, Faculty of Engineering: Ph.D. in Electrical Engineering. Degree awarded (with distinction) on June 12th, 2008. Advisor: Prof. Avishay Eyal. Title: *Dynamic Optical Filters: Implementation, Characterization and Applications*.
- 1996-1999 Tel Aviv University, Faculty of Engineering: M.Sc. in physical electronics (cum laude). Advisor: Prof. Moshe Tur.
- 1991-1994 Hebrew University, Jerusalem, Israel: B.Sc. in Physics and Mathematics (cum laude).

### CURRENT AND PREVIOUS POSITIONS

- 2024 - **Full Professor, Viterbi Faculty of Electrical and Computer Engineering, Technion - Israel Institute of Technology**
- 2017-2024 Full Professor, Faculty of Engineering, Bar-Ilan University, Israel
- 2013-2017 Associate Professor, Faculty of Engineering, Bar-Ilan University, Israel
- 2010 - Consultant to Israeli High-Tech Industries, in the area of Electro-Optics.
- 2009-2013 Senior Lecturer, Faculty of Engineering, Bar-Ilan University, Israel
- 2007-2009 Post-doctoral research fellow, Department of Applied Physics, Caltech, CA, USA
- 2003-2007 Research and teaching assistant, Faculty of Engineering, Tel-Aviv University, Israel.
- 1994-2003 Research and development manager, Israeli Ministry of Defence.

### FELLOWSHIPS AND AWARDS

- 2024 **Fellow of Optica (formerly Optical Society of America)**
- 2021- **Member, National Council of Research and Development (MOLMOP), State of Israel**
- 2019-2020 **Chair, Israel Young Academy**
- 2018-2019 **Steering Committee Member, Israel Young Academy**
- 2017 **Bar-Ilan University Rector Award for Research Innovation**, given for outstanding academic achievements during the year 2016, to 12 out of 700 researchers of Bar-Ilan University.
- 2016-2020 **Member of the Israeli Young Academy**
- 2013 **Krill Award of the Wolf Foundation** for excellence in scientific research. Awarded annually for excellence in independent research, to 10 Senior Lecturers, nation-wide. **Given based on achievements as an independent Primary Investigator.**

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|-----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2011      | <b>Excellence in Teaching Award, Bar-Ilan University:</b> given annually to 10 lecturers out of 1,000.                                                                                                                                     |
| 2010      | <b>Alon Fellowship of the Israeli Council for Higher Education,</b> for outstanding new faculty members in the experimental sciences. Highest Israeli fellowship for new faculty, awarded annually to ten new faculty members nation-wide. |
| 2007-2009 | California Institute of Technology, Centre for Physics in Information Post-Doctoral Fellowship.                                                                                                                                            |
| 2007-2008 | <b>Rothschild Fellowship of Yad-Hanadiv Foundation:</b> Most competitive Israeli Fellowship for post-doctoral studies, awarded annually to twelve Ph.D. graduates nation-wide.                                                             |
| 2007      | Award of the Weinstein Research Institute for Signal Processing, Tel-Aviv University, for a high quality journal paper in the field of signal processing.                                                                                  |
| 2006      | Applied Materials Scholarship for excellence in Ph.D. studies in Electrical Engineering.                                                                                                                                                   |
| 2005-2007 | <b>Clore Foundation scholarship.</b> Most competitive Israeli Fellowship for doctoral studies, awarded annually to ten Ph.D. students nation-wide.                                                                                         |
| 1991-1993 | Honours roll of B.Sc. studies, Faculty of Exact Sciences, Hebrew University of Jerusalem ("Talpiot" program).                                                                                                                              |

## SUPERVISION OF GRADUATE STUDENTS AND POSTDOCTORAL FELLOWS

|        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2015 - | <b>Advisor of 5 former post-doctoral scholars:</b> Dr. Dexin Ba, Dr. Mirit Hen, Dr. Arkday (Arik) Bergman, Dr. Kavita Sharma, Dr. Saawan Kumar Bag.                                                                                                                                                                                                                                                                                                                                                |
| 2010 - | <b>Advisor of 11 Ph.D. graduates and 8 current Ph.D. students:</b> Dr. Daniel Grodensky, Dr. Ran Califa, Dr. Shahar Levy, Dr. Yair Antman, Dr. Eyal Preter, Dr. Yosef London, Dr. Dvir Munk, Dr. Hagai Diamandi, Dr. Moshe Katzman, Dr. Gil Bashan, Dr. Maayan Priel, Keren Shemer, Matan Slook, Leroy Dokhanian, Shai Ben-Ami, Elad Zehavi, Alon Bernstein, Guy Deutsch (co-advised), Inbar Shafir (co-advised).                                                                                  |
| 2010 - | <b>Advisor of 21 M.Sc. graduates and 6 current M.Sc. students:</b> Ofir Klinger, Dr. Tali Ilovitch, Idan Bakish, Daniel Kravitz, Yonatan Stern, Raphael Cohen, Dr. Eyal Preter, David Elooz, Assaf Ben-Amram, Dr. Yosef London, Nadav Arbel, Dr. Dvir Munk, Orel Shlomi, Dr. Hilel Hagai Diamandi, Dr. Moshe Katzman, Dr. Gil Bashan, Etai Grunwald, Elad Zehavi, Leroy Dokhanian, Matan Slook, Alon Bernstein, Rafael Suna, Elad Layosh, Maayan Holtzblatt, Ori Pearl, Shahaf Noimark, Ohad Buch. |

## AWARDS AND APPOINTMENTS OF GRADUATE STUDENTS

|      |                                                                                                          |
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| 2024 | <b>Shai Ben-Ami, Azrieli Fellowship for Doctoral Studies</b>                                             |
| 2024 | <b>Elad Zehavi, Adams Fellowship for Doctoral Studies</b>                                                |
| 2023 | Alon Bernstein, Bar-Ilan University Rector Award for Excellence in Graduate Studies                      |
| 2022 | <b>Dr. Hilel Hagai Diamandi, Rothschild Fellowship for Post-Doctoral Studies, Yad-Hanadiv Foundation</b> |
| 2022 | <b>Dr. Hilel Hagai Diamandi, Fullbright Fellowship for Post-Doctoral Studies</b>                         |
| 2020 | <b>Dr. Gil Bashan, Adams Fellowship for Doctoral Studies</b>                                             |
| 2019 | <b>Dr. Tali Ilovitch, appointed Senior Lecturer at Tel-Aviv University</b>                               |
| 2018 | <b>Dr. Hilel Hagai Diamandi, Azrieli Fellowship for Doctoral Studies</b>                                 |
| 2018 | Dr. Gil Bashan, Bar-Ilan University Rector Award for Excellence in Graduate Studies                      |

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| 2017 | <b>Dr. Yair Antman, Rothschild Fellowship for Post-Doctoral Studies, Yad-Hanadiv Foundation</b> |
| 2017 | Dr. Hilel Hagai Diamandi, Bar-Ilan University Rector Award for Excellence in Graduate Studies   |
| 2016 | Dr. Eyal Preter, Bar-Ilan University Rector Award for Excellence in Graduate Studies            |
| 2015 | Dr. Yair Antman, Bar-Ilan University Excellence in Teaching Award                               |
| 2015 | Dr. Yosef London, Bar-Ilan University Rector Award for Excellence in Graduate Studies           |
| 2012 | Ofir Klinger, Bar-Ilan University Rector Award for Excellence in Graduate Studies               |

## TEACHING ACTIVITIES

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| 2024 -    | Teaching at the Faculty of Electrical and Computer Engineering, Technion: <ul style="list-style-type: none"> <li>Undergraduate level: Electromagnetic Fields (00440140).</li> <li>Graduate level: Silicon Photonics (00460251).</li> </ul>                                                                                                                                              |
| 2009-2024 | Teaching at the Faculty of Engineering, Bar-Ilan University: <ul style="list-style-type: none"> <li>Undergraduate level: Optical Communication (83-466); Advanced Topics in Optical Communication (83-648).</li> <li>Graduate level: Nonlinear Optics (83-915); Silicon Photonics (83-912); Statistical Optics (83-916); Academic Writing for Engineering Students (83-813).</li> </ul> |

## ORGANISATION OF SCIENTIFIC MEETINGS

|           |                                                                                                                                                                                                                                      |
|-----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2022-     | <b>Member of the International Steering Committee, Optical Fiber Sensors (OFS) Conferences series.</b>                                                                                                                               |
| 2021      | Member of the Technical Program Committee, Optical Fiber Sensors (OFS-27) Conference, Alexandria VA, (August 2022).                                                                                                                  |
| 2019      | Member of the Technical Program Committee, Microwave Photonics Topical Meeting (MWP) of the IEEE Photonics Society, Ottawa, Canada, (October 2019).                                                                                  |
| 2019      | Member of the Technical Program Committee, Seventh European Workshop on Optical Fiber Sensors (EWOFS7), Limassol, Cyprus, (October 2019).                                                                                            |
| 2019-2022 | <b>Chair of Steering Committee, Workshop series on Opto-Mechanics and Brillouin Scattering: Fundamentals, Applications and Technology (WOMBAT)</b>                                                                                   |
| 2019      | <b>Chair and host of the Third Workshop on Opto-Mechanics and Brillouin Scattering: Fundamentals, Applications and Technology (WOMBAT 3), Tel-Aviv, Israel, (March 2019).</b>                                                        |
| 2018      | <b>Co-Chair of Technical Program Committee, Optical Fiber Sensors (OFS-26) Conference, Lausanne, Switzerland, (September 2018).</b>                                                                                                  |
| 2018-     | Member of the Technical Program Committee, Integrated Optics Conference, San-Francisco, CA as part of SPIE Photonics West, Feb. 2018, Feb. 2019, Feb. 2020, Feb. 2021, Feb. 2022, Feb. 2023, Feb. 2024.                              |
| 2018-     | Member of the Technical Program Committee, Slow and Fast Light and Precision Metrology Conference, San-Francisco, CA as part of SPIE Photonics West, Feb. 2018 and Feb. 2019, Feb. 2020, Feb. 2021, Feb. 2022, Feb. 2023, Feb. 2024. |
| 2017      | Member of the Technical Program Committee, Workshop on Specialty Optical Fibers and Their Applications, Limassol, Cyprus, (October 2017).                                                                                            |

- 2017 Member of the Technical Program Committee, Optical Fiber Sensors (OFS-25) Conference, Jeju, South Korea, (April 2017).
- 2016 Member of the Technical Program Committee, European Workshop on Optical Fiber Sensors (EWOFS), Limerick, Ireland, (June 2016).
- 2015 Member of the Technical Program Committee, Microwave Photonics Topical Meeting (MWP) of the IEEE Photonics Society, Paphos, Cyprus, (October 2015).
- 2014 Organizer of a special session on distributed Brillouin fibre sensors, within IEEE Sensors Conference, Valencia, Spain, (November 2014).
- 2013-2015 **Member of the Technical Program Sub-Committee** of the Science and Innovation Program Track 6 (SI-6): Optical Materials, Fabrication and Characterization, the **Conference on Lasers and Electro-Optics (CLEO)**, for the years 2013, 2014, 2015. CLEO, organized annually by the Optical Society of America and the IEEE Photonics Society, is generally regarded as the premier scientific conference in Optics.

## INSTITUTIONAL RESPONSIBILITIES

- 2019-2024 **Head of Electro-Optics Track, Faculty of Engineering, Bar-Ilan University, Israel**
- 2018-2021 Member of the Institutional Curriculum and Teaching Committee, Bar-Ilan University, Israel
- 2014-2017 **Chair of the Curriculum and Teaching Committee, Faculty of Engineering, Bar-Ilan University, Israel.**
- 2013-2016 Member of the Students Appeals Committee, Bar-Ilan University, Israel.
- 2011-2014 Academic Consultant for undergraduate students in Electrical Engineering, and member of the Curriculum and Teaching Committee, Faculty of Engineering, Bar-Ilan University, Israel.
- 2008-2009 Organizer of Internal Seminar, Department of Applied Physics, Caltech, USA.

## EDITORIAL RESPONSIBILITIES

- 2023-2024 Guest Associate Editor, Special Issue on Optomechanical Photonics, *Optical Materials Express* (Optica Publishing Group)
- 2020 - **Associate Editor, *IEEE Journal of Lightwave Technology***
- 2019 Guest Associate Editor, Special Issue on Optical Fiber Sensors, *IEEE Journal of Lightwave Technology*

## REVIEW RESPONSIBILITIES

- 2011 - Scientific Reviewer of Research Proposals submitted to the European Research Council (ERC), the Canadian National Research Council, the Deutsche Forschungsgemeinschaft (DFG), the Israeli Science Foundation (ISF), and the Israeli Ministry of Science and Technology (MoST).
- 2010 - Reviewer of M.Sc. research proposals, M.Sc. theses, Ph.D. research proposals, and Ph.D. dissertations in the following institutions: Bar-Ilan University, Israel. Tel-Aviv University, Israel. Hebrew University of Jerusalem, Israel. Technion - Israel Institute of Technology. Ben-Gurion University of the Negev, Israel. Public University of Navarra, Spain. EPFL, Switzerland. Polytechnic Univ. of Valencia, Spain. Technical Univ. Braunschweig, Germany. Univ. of Sydney, Australia. Univ. of Alcala, Spain. Yale University, USA.

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| 2006 - | Scientific Reviewer of manuscripts submitted to the following journals: Nature Photonics, Light: Science and Applications, Scientific Reports, ACS Photonics, IEEE Journal of Lightwave Technology, IEEE Photonics Technology Letters, IEEE Photonics, IEEE Sensors Journal, Optics Express, Optics Letters, Journal of the Optical Society of America B, Applied Optics, and Optics Communications. |
| 2017   | Named as Top Reviewer by Optical Society of America, and by IEEE Journal of Lightwave Technology                                                                                                                                                                                                                                                                                                     |

## MEMBERSHIPS OF SCIENTIFIC SOCIETIES

|              |                                                                         |
|--------------|-------------------------------------------------------------------------|
| <b>2024-</b> | <b>Fellow of Optica (formerly Optical Society of America, OSA)</b>      |
| 2023 -       | Member of the Society of Photo-Optical Instrumentation Engineers (SPIE) |
| 2019-2023    | Senior Member of the Optical Society of America (OSA).                  |
| 2006-2019    | Member of the Optical Society of America (OSA).                         |

## RESEARCH GRANTS AWARDED (Active grants noted in bold, sum represent the share of the Zadok group).

| <i>Years</i>     | <i>Title and Funding Agency</i>                                                                                                          | <i>Sum</i>      |
|------------------|------------------------------------------------------------------------------------------------------------------------------------------|-----------------|
| <b>2024-2028</b> | <b>Israel Science Foundation (ISF): Optical and Mechanical Cladding Modes of Standard Fibers</b>                                         | <b>350k USD</b> |
| <b>2023-2025</b> | <b>Member of the Israel Innovation Authority Consortium on Silicon Photonics</b>                                                         | <b>350k USD</b> |
| <b>2022-2025</b> | <b>DFG: Measurement of ultra-high bandwidth signals with integrated devices</b>                                                          | <b>150k USD</b> |
| <b>2022-2025</b> | <b>Israel Science Foundation (ISF) Quantum Program: High Fidelity Integrated Photonics for Universal Quantum Information Processing</b>  | <b>450k USD</b> |
| <b>2021-2026</b> | <b>ERC Consolidator Grant: Surface acoustic waves stimulated Brillouin scattering</b>                                                    | <b>2.5M USD</b> |
| 2020-2023        | PAZI Foundation: Optical and opto-mechanical distributed sensing of ionizing radiation over fibers                                       | 170k USD        |
| 2020-2022        | Israel Innovation Authority MAGNETON Program: Silicon-photonic integrated circuits for data-center communication                         | 180k USD        |
| 2020-2023        | LightSense Consortium (Cyprus): Intelligent light sensing for next generation smart grids                                                | 60k USD         |
| 2019-2024        | Israel Science Foundation (ISF): Opto-mechanics of hybrid-silicon photonic devices                                                       | 300k USD        |
| 2019-2022        | Israeli Ministry of Science and Technology research program: Opto-mechanical signal processing devices on silicon chip                   | 200k USD        |
| 2017-2018        | Israeli Ministry of Defence (MAFAT) research program: Coherent laser range finder based on advanced signal processing                    | 120k USD        |
| 2017-2020        | Israeli Ministry of Science and Technology research program: Opto-Mechanics in Standard and Multi-Core Fibers                            | 200k USD        |
| 2016-2021        | ERC Starter grant: Light and sound waves in silicon and nonlinear glass waveguides                                                       | 1.8M USD        |
| 2016-2019        | VW Israel-Lower Saxony Collaboration Research program: Integrated blocks for optical sinc-shaped Nyquist pulse transmission              | 100k USD        |
| 2016-2019        | Membership in the Israeli Chief Scientist Office “Peta-Cloud” consortium, for the development of optical communication for data centers. | 200k USD        |

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| 2016-2019 | Membership in the Israeli Chief Scientist Office “Altia” consortium, for the development of industrial fiber lasers.                                                     | 150k USD |
| 2016      | Israeli Ministry of Defence (MAFAT) research program: Advanced signal processing for laser range finders                                                                 | 40k USD  |
| 2014-2019 | Israeli Science Foundation (ISF): Chalcogenide Glass Fibers and Devices in Photonic Sensing and Signal Processing.                                                       | 300k USD |
| 2014-2015 | Israeli Chief Scientist Office MAGNETON program grant for high-resolution fiber sensors within composite materials.                                                      | 150k USD |
| 2014-2015 | Israeli Chief Scientist Office NUFAR program grant for fiber-optic monitoring of liquid evaporation for mobile-point-of-care applications                                | 120k USD |
| 2013-2015 | Israel Ministry of Defence (MAFAT) research program: Laser range finder with low probability of intercept.                                                               | 120k USD |
| 2013-2015 | Israel Ministry of Defence (MAFAT) research program: Long continuously variable microwave-photonic delay of radar waveforms.                                             | 120k USD |
| 2011-2013 | Israeli Chief Scientist Office KAMIN program grant for the development of high-resolution, long-range stimulated Brillouin scattering sensing of temperature and strain. | 240k USD |
| 2011-2012 | Israeli Chief Scientist Office MAGNETON program grant for the development of tapered semiconductor optical amplifiers                                                    | 100k USD |
| 2011      | German-Israeli Foundation Young Researcher Grant: Photonic Generation of Ultra-Wideband Radio Waveforms.                                                                 | 40k USD  |
| 2011      | Israel Ministry of Defense (MAFAT) research program: Light transfer between waveguides in silicon and electro-optic materials based on wafer bonding.                    | 25k USD  |
| 2010-2015 | Membership in the Israeli Chief Scientist Office “Tera Santa” consortium, for the development of future high-rate optical communication.                                 | 300k USD |
| 2010-2014 | Israeli Science Foundation (ISF): Active Hybrid Silicon Photonic Devices.                                                                                                | 300k USD |
| 2010      | Israeli Science Foundation Equipment Grant for Laboratory of a New Faculty Member.                                                                                       | 230k USD |

**Total grant funds since 2010: the equivalent of ~9.3 M USD.**

## INVITED CONFERENCE PRESENTATIONS

1. A. Zadok, "Practical and Robust Quantum Sensing in Fiber by Four-Wave Mixing and Quantum Interference," SPIE Photonics West, San Francisco CA (Jan. 2025).
2. A. Zadok, "Opto-Mechanics of Few-Mode Fibers," SPIE Photonics West, San Francisco CA (Jan. 2025).
3. A. Zadok, "Opto-Mechanical Sensors of Media Outside the Fiber," SPIE Photonics Europe, Strasbourg, France (Apr. 2024).
4. A. Zadok, "Forward SBS in Standard Fibers" Tutorial Presentation, 5<sup>th</sup> Workshop on Opto-Mechanics and Brillouin Scattering (WOMBAT 5), Campinas, Sao Paulo, Brazil (Feb. 2024).
5. A. Zadok, "Plasmonic-enhanced surface acoustic wave-photonic devices on silicon," SPIE Photonics West 2024, San Francisco CA (Jan.-Feb. 2024).
6. A. Zadok, "Forward Brillouin Scattering Fiber Sensors," Asia Communication and Photonics (ACP) Conference, Wuhan, China (Nov. 2023).
7. A. Zadok, “Forward Brillouin Fiber Lasers and Sensors,” Optica Sensors Conference, Munich, Germany (July 2023).
8. A. Zadok, “Angular Momentum Exchange in Stimulated Brillouin Scattering by Acoustic Vortex Beams,” SPIE Photonics West 2023, San Francisco CA (Feb. 2023).

9. **A. Zadok, "Sensing Outside the Cladding Boundary with Fiber Opto-Mechanics," Tutorial presentation, the 27<sup>th</sup> Optical Fiber Sensors (OFS-27) Conference, Alexandria, VA, Aug. 2022.**
10. H. H. Diamandi and A. Zadok, "Opto-Mechanical Inter-Core Crosstalk in Multi-Core Fibers," in Optical Fiber Communication Conference (OFC) 2021, P. Dong, J. Kani, C. Xie, R. Casellas, C. Cole, and M. Li, eds., OSA Technical Digest (Optica Publishing Group, 2021), paper F1B.6.
11. D. Munk, M. Katzman, M. Priel, M. Hen, and A. Zadok, "Surface Acoustic Wave Integrated-Photonic Radio-Frequency Filters with Arbitrary Complex Tap Coefficients," in Asia Communications and Photonics Conference (ACP/IPOC) (2020)
12. A. Zadok, "Forward stimulated Brillouin Scattering-Based Sensing," Conference on Lasers and Electro-Optics (CLEO) Pacific Rim, Sydney, Australia, Aug. 2020.
13. A. Zadok, "Opto-mechanics of standard and multi-core fibers," Nonlinear Photonics meeting, OSA Advanced Photonics Congress, Montreal, Canada, July 2020.
14. A. Zadok, "Surface acoustic wave-photonic devices in standard silicon on insulator," European Conference on Integrated Optics (ECIO), Paris, France, June 2020.
15. **A. Zadok, "Forward stimulated Brillouin scattering in optical fibers and its applications," Conference on Lasers and Electro-Optics (CLEO), San Jose CA, May 2020.**
16. A. Zadok, "Forward Stimulated Brillouin Scattering in Optical Fibers and its Applications," Asia Communications and Photonics Conference (ACP), Chengdu, China, Nov. 2019.
17. A. Zadok, "Opto-Mechanics of Standard and Multi-Core Fibers: Principles and Applications," Photonics North, Quebec City, Canada (May 2019).
18. A. Zadok, "Eight-Channel Silicon-Photonic Wavelength-Division-Multiplexer with 17 GHz Spacing," Silicon and Diamond Photonics Workshop, Braunschweig, Germany (Mar. 2019).
19. H. H. Diamandi, Y. London, G. Bashan, A. Bergman, and A. Zadok, "Stimulated phononic oscillators in multi-core fibers," SPIE Photonics West 2019, San Francisco CA (Feb. 2019).
20. A. Zadok, "Forward stimulated Brillouin scattering in standard and multi-core fibers: fundamentals and applications," The 26<sup>th</sup> Optical Fiber Sensors (OFS-26) Conference, Lausanne, Switzerland, September 2018.
21. G. Bashan, H. H. Diamandi, Y. London, Y. Antman, E. Preter, and A. Zadok, "Distributed analysis of media outside optical fibers using forward stimulated Brillouin scattering," The 7<sup>th</sup> Asia-Pacific Optical Sensors Conference, Matsue City, Japan, May 2018.
22. G. Bashan, H. H. Diamandi, Y. London, Eyal Preter, and A. Zadok, "Distributed analysis of guided acoustic waves Brillouin scattering: a new class of fiber sensor," SPIE Photonics West 2018, San Francisco, CA (Feb. 2018).
23. H. H. Diamandi, Y. London, Eyal Preter, G. Bashan, and A. Zadok, "Interplay of Kerr effect and forward Brillouin scattering in four-wave mixing processes," SPIE Photonics West 2018, San Francisco, CA (Feb. 2018).
24. A. Zadok, "Fiber opto-mechanics: oscillators, crosstalk and sensors," IEEE Microwave Photonics Conference (MWP), October 2017, Beijing, China.
25. A. Zadok, "Opto-mechanical effects in standard and multi-core fibers," IEEE International Photonics Conference, October 2017, Orlando FL.
26. A. Zadok, "Sensing outside of standard fibers using guided acoustic wave Brillouin scattering," second workshop on opto-mechanics and Brillouin scattering, fundamentals, applications and technologies (WOMBAT), July 2017, Besancon, France.
27. A. Zadok, "Opto-mechanics of single-mode and multi-core fibers," International Fiber Lasers and Applications (IFLA) Conference, Tel-Aviv, Israel (Feb. 2017).
28. A. Zadok, "Opto-mechanics in single-mode and multi-core fibers," SPIE Photonics West 2017, San Francisco, CA (Feb. 2017).
29. Y. London, R. Cohen, H. H. Diamandi, E. Preter and A. Zadok, "Distributed Brillouin analysis with ultra-high resolution using amplified spontaneous emission sources," SPIE Photonics West 2017, San Francisco, CA (Feb. 2017).

30. Y. Antman, A. Clain, Y. London, and A. Zadok, "Opto-mechanical analysis of liquids outside the cladding of standard fiber," European Workshop on Fibre Optic Sensors, Limerick, Ireland, June 2016.
31. A. Zadok, "Hybrid Chalcogenide-on- Silicon Photonic Devices," Silicon and Diamond Photonics Workshop, Braunschweig, Germany, March 2016.
32. E. Preter and A. Zadok, "Scanning-free characterization of local Brillouin spectra based on transient analysis," SPIE Photonics West 2016, *Proc. SPIE* **9763**, 9763-55, San Francisco, CA (Feb. 2016).
33. Y. Antman, A. Clain, Y. London, and A. Zadok, "Sensing the outside of standard optical fibers," Annual Meeting of the Israeli Physics Society (IPS), Dec. 2015.
34. Y. Antman, Y. London, D. Elouz, N. Levanon and A. Zadok, "High-resolution Brillouin metrology of strain and temperature," SPIE Photonics West 2015, *Proc. SPIE* **9378**, 9378-60, San Francisco, CA (Feb. 2015).
35. Y. Antman, D. Elouz, R. Cohen, Y. London, and A. Zadok, "Brillouin time-domain and correlation-domain analyses combined," pp.158-161, Proceedings of IEEE SENSORS Conference 2014, Valencia, Spain (2014). (Paper in a special session that I organized).
36. Y. Antman, L. Yaron, T. Langer, M. Tur, and A. Zadok, "Variable delay of Gbit/s data using coded Brillouin dynamic gratings", SPIE Photonics West 2014, *Proc. SPIE* **8998**, 89980W, San Francisco, CA (2014).
37. Y. Stern, K. Zhong, and A. Zadok, "Sharp and tuneable microwave photonic filters based on stimulated Brillouin scattering," in Microwave Photonics Workshop, Asia Communications and Photonics (ACP) Conference, Beijing, China, (2013).
38. V. Artel, T. Ilovitsh, I. Bakish, M. Shubely, E. Shekel, Y. Ben-Ezra, C. N. Sukenik, and A. Zadok, "Wafer bonding techniques for hybrid silicon photonic devices based on surface modifications," Proceedings of the 14th Transparent Optical Networks (ICTON), Coventry, UK, (2012).
39. Y. Antman, N. Primerov, J. Sancho, L. Thevenaz, and A. Zadok, "Variable delay and sensing using stationary and localized Brillouin dynamic gratings," SPIE Photonics West 2012, *Proc. SPIE* **8273**, 8273-11, San Francisco, CA (2012).
40. A. Zadok, Avishay Eyal, M. Tur and L. Thevenaz, "Polarization attributes of stimulated Brillouin scattering slow light in fiber," SPIE Photonics West 2011, *Proc. SPIE* **7949**, 79490A, San Francisco, CA (2011).

## BOOKS AND BOOK CHAPTERS

1. A. Zadok, H. H. Diamandi, Y. London, and G. Bashan, "Forward Brillouin Scattering in Standard Optical Fibers," **Springer Series in Optical Sciences, Springer (2022)**
2. A. Zadok, X. Bao, Z. Yang, and L. Thevenaz, "SBS-based fiber sensors," Brillouin Scattering Part 1, B. J. Eggleton, C. Poulton, and M. Steel (Eds.), Semiconductors and Semimetals, Eslevier (2022).

## JOURNAL PUBLICATIONS

1. A. Bernstein, E. Zehavi, Y. London, M. Hen, R. Suna, S. Ben-Ami, and A. Zadok, "Tensor Characteristics of Forward Brillouin Sensors in Bare and Coated Fibers," *Appl. Phys. Lett. – Photonics* **8**, 126105 (2023).
2. A. Bernstein, E. Zehavi, Y. London, M. Hen, A. A. Stolov, and A. Zadok, "Measuring glass transition of a polymer coating layer over working fiber using forward Brillouin scattering," *Opt. Lett.* **48**, 5037-5040 (2023).
3. A. Zadok, E. Zehavi, and A. Bernstein, "Opto-mechanical fiber sensing with optical and acoustic cladding modes," Tutorial paper. *Applied Physics Letters - Photonics* **8**, 071101 (2023).

4. M. Priel, S. Kumar Bag, M. Slook, L. Dokhanian, I. Shafir, M. Hen, M. Katzman, E. Grunwald, D. Munk, M. Feldberg, T. Sharabani, N. Inbar, G. Bashan, and A. Zadok, "Thermo-elastic gigahertz-frequency oscillator through surface acoustic wave-silicon photonics," *Opt. Express* **31**, 684-697 (2023).
5. M. Katzman, Y. Piasetzky, E. Rubin, B. Barenboim, M. Priel, M. Erew, A. Zadok, and H. Suchowski, "Robust Directional Couplers for State Manipulation in Silicon Photonic-Integrated Circuits," *J. Lightwave Technol.* **40**, 7634-7639 (2022).
6. E. Zehavi, A. Bernstein, G. Bashan, H. H. Diamandi, K. Sharma, Y. London, M. Hen, K. Shemer, A. A. Stolov, J. Li, and A. Zadok, "Distributed chemical detection outside standard coated fibers using Brillouin optical time-domain analysis of cladding mode spectra," *Optica* **9**, 1433-1443 (2022).
7. M. Slook, S. Kumar Bag, M. Katzman, D. Munk, Y. Kaganovskii, M. Rosenbluh, N. Inbar, I. Shafir, L. Dokhanian, M. Priel, M. Hen, E. Zehavi, and A. Zadok, "16-channel O-band silicon-photonics wavelength division multiplexer with a 1 nm channel spacing," *Opt. Continuum* **1**, 2135-2145 (2022).
8. K. Shemer, G. Bashan, E. Zehavi, H. H. Diamandi, A. Bernstein, K. Sharma, Y. London, D. Barrera, S. Sales, A. Bergman, and A. Zadok, "Optical fiber point sensors based on forward Brillouin scattering," *Opt. Express* **30**, 39321-39328 (2022).
9. M. Katzman, M. Priel, I. Shafir, S. Kumar Bag, D. Munk, N. Inbar, M. Feldberg, T. Sharabani, L. Dokhanian, M. Slook, and A. Zadok, "Surface acoustic wave photonic filters with a single narrow radio-frequency passband in standard silicon on insulator," *Photon. Res.* **10**, 1723-1730 (2022).
10. G. Bashan, H. H. Diamandi, E. Zehavi, K. Sharma, Y. London, and A. Zadok, "A forward Brillouin fibre laser," *Nat. Commun.* **13**, 3554 (2022).
11. K. Sharma, E. Zehavi, H. H. Diamandi, G. Bashan, Y. London, and A. Zadok, "Direct time-of-flight distributed analysis of nonlinear forward scattering," *Optica* **9**, 419-428 (2022).
12. M. Hen, L. Dokhanian, E. Grunwald, M. Slook, M. Katzman, M. Priel, O. Girshevitz, and A. Zadok, "Analysis of thin layers using surface acoustic wave-photonic devices in silicon-on-insulator," *Opt. Express* **30**, 6949-6959 (2022).
13. H. H. Diamandi, G. Bashan, Y. London, K. Sharma, K. Shemer, and A. Zadok, "Interpolarization Forward Stimulated Brillouin Scattering in Standard Single-Mode Fibers," *Laser Photon. Rev.* **16**, 2100337 (2022).
14. Y. London, K. Sharma, H. H. Diamandi, M. Hen, G. Bashan, E. Zehavi, S. Zilberman, G. Berkovic, A. Zentner, M. Mayoni, A. A. Stolov, M. Kalina, O. Kleinerman, E. Shafir, and A. Zadok, "Opto-Mechanical Fiber Sensing of Gamma Radiation," *J. Lightwave Technol.* **39**, 6637-6645 (2021).
15. G. Bashan, H. H. Diamandi, Y. London, K. Sharma, K. Shemer, E. Zehavi, and A. Zadok, "Forward stimulated Brillouin scattering and opto-mechanical non-reciprocity in standard polarization maintaining fibres," *Light Sci. Appl.* **10**, 119 (2021).
16. M. Katzman, D. Munk, M. Priel, E. Grunwald, M. Hen, N. Inbar, M. Feldberg, T. Sharabani, R. Zektzer, G. Bashan, M. Vofsi, U. Levy, and A. Zadok, "Surface acoustic microwave photonic filters in standard silicon-on-insulator," *Optica* **8**, 697-707 (2021).
17. H. Diamandi, Y. London, G. Bashan, K. Shemer and A. Zadok, "Forward Stimulated Brillouin Scattering Analysis of Optical Fibers Coatings," *J. Lightwave Technol.* **39**, 1800-1807 (2021).
18. A. Bergman, R. Duggan, K. Sharma, M. Tur, A. Zadok and A. Alu, "Observation of anti-parity-time-symmetry, phase transitions and exceptional points in an optical fibre," *Nature Commun.* **12**, 486 (2021).
19. A. Misra, S. Preussler, D. Munk, M. Katzman, L. Zhou, A. Zadok, and T. Schneider, "Integrated High-Resolution Optical Spectrum Analyzer With Broad Operational Bandwidth," *IEEE Photonics Technology Letters* **32**, 1061-1064 (2020).
20. K. Shemer, G. Bashan, H. H. Diamandi, Y. London, T. Raanan, Y. Israelashvili, A. Charny, I. Cohen, A. Bergman, N. Levanon, and A. Zadok, "Sequence-coded coherent laser ranging with high detection sensitivity," *OSA Continuum* **3**, 1274-1282 (2020).

21. G. Bashan, Y. London, H. H. Diamandi and A. Zadok, "Distributed cladding mode fiber-optic sensor," *Optica* **7**, 85-92 (2020).
22. H. H. Diamandi, Y. London, A. Bergman, G. Bashan, J. Madrigal, D. Barrera, S. Sales, and A. Zadok, "Opto-mechanical interactions in multi-core optical fibers and their applications," invited paper, *IEEE J. Selected Topics in Quantum Electronics* **26**, 2600113 (2020).
23. D. Munk, M. Katzman, M. Hen, M. Priel, M. Feldberg, T. Sharabani, S. Levy, A. Bergman, and A. Zadok, "Surface acoustic wave photonic devices in silicon on insulator," accepted for publication, *Nature Communications* **10**, 4214 (2019).
24. D. Munk, M. Katzman, Y. Kaganovskii, N. Inbar, A. Misra, M. Hen, M. Priel, M. Feldberg, M. Tkachev, A. Bergman, M. Vofsi, M. Rosenbluh, T. Schneider, and A. Zadok, "Eight-Channel Silicon-Photonic Wavelength Division Multiplexer With 17 GHz Spacing," *IEEE J. Selected Topics Quantum Electron.* **25**, 8300310 (2019).
25. H. H. Diamandi, Y. London, G. Bashan, and A. Zadok, "Distributed opto-mechanical analysis of liquids outside standard fibers coated with polyimide," *Applied Physics Letters - Photonics* **4**, 016105 (2019). Selected as Featured Article.
26. Y. London, H. H. Diamandi, G. Bashan, and A. Zadok, "Invited Article: Distributed analysis of nonlinear wave mixing in fiber due to forward Brillouin scattering and Kerr effects," *Applied Physics Letters - Photonics* **3**, 110804 (2018). Selected as Editor Pick.
27. A. Zadok, E. Preter, and Y. London, "Phase-Coded and Noise-Based Brillouin Optical Correlation-Domain Analysis," *Applied Sciences* **8**, 1482 (2018). Invited Review paper.
28. G. Bashan, H. H. Diamandi, Y. London, E. Preter, and A. Zadok, "Optomechanical time-domain reflectometry," *Nature Communications* **9**, 2991 (2018).
29. H. H. Diamandi, Y. London, G. Bashan, A. Bergman, and A. Zadok, "Highly-coherent stimulated phonon oscillations in a multi-core optical fiber," *Scientific Reports* **8**, 9514 (2018).
30. D. Munk, M. Katzman, O. Westreich, M. Bin Nun, Y. Lior, N. Sicron, Y. Paltiel, and A. Zadok, "Four-wave mixing and nonlinear index measurement in a gallium-nitride ridge waveguide," *Optical Material Express* **8**, 66-72 (2018).
31. Y. Stern, Y. London, E. Preter, Y. Antman, H. H. Diamandi, M. Silbiger, G. Adler, E. Levenberg, D. Shalev, and A. Zadok, "Brillouin optical correlation domain analysis in composite material beams," *Sensors* **17**, 2266 (2017).
32. Y. London, H. H. Diamandi, and A. Zadok, "Electro-opto-mechanical radio-frequency oscillator driven by guided acoustic waves in standard single-mode fiber," *Applied Physics Letters – Photonics* **2**, 041303 (2017).
33. H. H. Diamandi, Y. London, and A. Zadok, "Opto-mechanical inter-core cross-talk in multi-core fibers," *Optica* **4**, 289-297 (2017).
34. E. Preter, D. Ba, Y. London, Y. Antman, O. Shlomi and A. Zadok, "High-resolution Brillouin optical correlation domain analysis with no spectral scanning," accepted for publication in *Opt. Express* **24**, 27253-27267 (2016).
35. O. Shlomi, D. Ba, Y. London, E. Preter, Y. Antman and A. Zadok, "Double-pulse Brillouin optical correlation-domain analysis," accepted for publication in *Opt. Express* **24**, 26867-26876 (2016).
36. E. Preter, M. Katzman, Z. Oren, M. Ronen, D. Gerber, and A. Zadok, "Fiber-Optic Evaporation Sensing: Monitoring Environmental Conditions and Urinalysis," *J. Lightwave Technol.* **34**, 4486-4492 (2016).
37. Y. London, Y. Antman, E. Preter, N. Levanon, and A. Zadok, "Brillouin optical correlation domain analysis addressing 440,000 resolution points," *J. Lightwave Technol.* **34**, 4421-4429 (2016).
38. Y. Antman, A. Clain, Y. London, and A. Zadok, "Optomechanical sensing of liquids outside standard fibers using forward stimulated Brillouin scattering," *Optica* **3**, 510-516 (2016).
39. Y. Ben Ezra, A. Zadok, R. Califa, D. Munk and B. I. Lembrikov, "All-optical wavelet-based orthogonal frequency division multiplexing system based on silicon photonic integrated components," *IET Optoelectronics* **10**, 44-50 (2016).

40. N. Arbel, L. Hirschbrand, S. Weiss, N. Levanon and A. Zadok, "Continuously Operating Laser Range Finder Based on Incoherent Pulse Compression: Noise Analysis and Experiment," *IEEE Photonics* **8**, 6801211, (2016).
41. N. Levanon, I. Cohen, N. Arbel and A. Zadok, "Non-coherent pulse compression – aperiodic and periodic waveforms," *IET Radar Sonar and Navigation* **10**, 216-224 (2016).
42. A. Ben-Amram, Y. Stern, Y. London, Y. Antman, and A. Zadok, "Stable closed-loop fiber-optic delay of arbitrary radio-frequency waveforms," *Opt. Express* **23**, 28244-28257 (2015).
43. R. Califa, D. Munk, H. Genish, Yu. Kaganovskii, I. Bakish, M. Rosenbluh, and A. Zadok, "Large one-time photo-induced tuning of directional couplers in chalcogenide-on-silicon platform," *Opt. Express* **23**, 28234-28243 (2015)
44. S. Levy, M. Klebanov, and A. Zadok, "High-Q ring resonators directly written in As<sub>2</sub>S<sub>3</sub> chalcogenide glass films," *Photon. Res.* **3**, 63-67 (2015)
45. H. Alon, I. Bakish, J. Nehrer, A. Y. Anderson, C. N. Sukenik, A. Zadok, and D. Naveh, "Direct observation of patterned self-assembled monolayers and bilayers on silica-on-silicon surfaces," *Opt. Mater. Express* **5**, 149-162 (2015)
46. Y. London, Y. Antman, R. Cohen, N. Kimelfeld, N. Levanon, and A. Zadok, "High-resolution long-range distributed Brillouin analysis using dual-layer phase and amplitude coding," *Opt. Express* **22**, 27144-27158 (2014)
47. R. Califa, Y. Kaganovskii, D. Munk, H. Genish, I. Bakish, M. Rosenbluh, and A. Zadok, "Large photo-induced index variations in chalcogenide-on-silicon waveguides," *Opt. Lett.* **39**, 5905-5908 (2014)
48. Y. Stern, K. Zhong, T. Schneider, R. Zhang, Y. Ben-Ezra, M. Tur, and A. Zadok, "Tunable sharp and highly selective microwave-photonic band-pass filters based on stimulated Brillouin scattering" *Photon. Res.* **2**, B18-B25 (2014)
49. R. Cohen, Y. London, Y. Antman, and A. Zadok, "Brillouin optical correlation domain analysis with 4 millimeter resolution based on amplified spontaneous emission," *Opt. Express* **22**, 12070-12078 (2014)
50. E. Preter, R. A. Katims, V. Artel, C. N. Sukenik, D. Donlagic, and A. Zadok, "Monitoring and analysis of pendant droplets evaporation using bare and monolayer-coated optical fiber facets," *Opt. Mater. Express* **4**, 903-915 (2014)
51. D. Elooz, Y. Antman, N. Levanon, and A. Zadok, "High-resolution long-reach distributed Brillouin sensing based on combined time-domain and correlation-domain analysis," *Opt. Express* **22**, 6453-6463 (2014).
52. Y. Antman, L. Yaron, T. Langer, M. Tur, N. Levanon, and A. Zadok, "Experimental demonstration of localized Brillouin gratings with low off-peak reflectivity established by perfect Golomb codes," *Opt. Lett.* **38**, 4701-4704 (2013).
53. E. Preter, B. Preloznik, V. Artel, C. N. Sukenik, D. Donlagic, and A. Zadok, "Monitoring the evaporation of fluids from fiber-optic micro-cell cavities," *Sensors* **13**, 15261-15273 (2013).
54. S. Preussler, N. Wenzel, R.-P. Braun, N. Owschimikow, C. Vogel, A. Deninger, A. Zadok, U. Woggon, and T. Schneider, "Generation of ultra-narrow, stable and tunable millimeter- and terahertz- waves with very low phase noise," *Opt. Express* **21**, 23950-23962 (2013).
55. A. Mokhtari, K. Jamshidi, S. Preussler, A. Zadok, and T. Schneider, "Tunable microwave-photonic filter using frequency-to-time mapping-based delay lines," *Opt. Express* **21**, 21702-21707 (2013).
56. Y. Stern, K. Zhong, T. Schneider, Y. Ben-Ezra, R. Zhang, M. Tur, and A. Zadok, "Brillouin optical spectrum analyzer monitoring of subcarrier-multiplexed fiber-optic signals," *Appl. Opt.* **52**, 6179-6184 (2013).
57. Y. Antman, N. Levanon, and A. Zadok, "Low-noise delays from dynamic Brillouin gratings based on perfect Golomb coding of pump waves," *Opt. Lett.* **37**, 5259-5261 (2012).
58. S. Levy, V. Lyubin, M. Klebanov, J. Scheuer, and A. Zadok, "Stimulated Brillouin scattering amplification in centimeter-long directly written chalcogenide waveguides," *Opt. Lett.* **37**, 5112-5114 (2012).

59. D. Kravitz, D. Grodensky, N. Levanon, and A. Zadok, "High-Resolution Low-Sidelobe Laser Ranging Based on Incoherent Pulse Compression," *IEEE Photon. Technol. Lett.* **24**, 2119-2121 (2012).
60. O. Klinger, Y. Stern, F. Pederiva, K. Jamshidi, T. Schneider, and A. Zadok, "Continuously variable long microwave-photonic delay of arbitrary frequency-chirped signals," *Opt. Lett.* **37**, 3939-3941 (2012).
61. I. Bakish, V. Artel, T. Ilovitsh, M. Shubely, Y. Ben-Ezra, A. Zadok, and C. N. Sukenik, "Self-assembled monolayer assisted bonding of Si and InP," *Opt. Mater. Express* **2**, 1141-1148 (2012).
62. A. Zadok, Y. Antman, N. Primerov, A. Denisov, J. Sancho, and L. Thevenaz, "Random-access distributed fiber sensing," *Laser and Photon. Rev.* **6**, L1-L5 (2012).
63. S. Preussler, A. Zadok, A. Wiatrek, M. Tur, and T. Schneider, "Enhancement of spectral resolution and optical rejection ratio of Brillouin optical spectral analysis using polarization pulling," *Opt. Express* **20**, 14734-14745 (2012).
64. D. Grodensky, D. Kravitz, and A. Zadok, "Ultra-wideband microwave-photonic noise radar based on optical waveform generation," *IEEE Photon. Technol. Lett.* **24**, 839-841 (2012).
65. Y. Stern, O. Klinger, T. Schneider, K. Jamshidi, A. Peer and A. Zadok, "Low-distortion long variable delay of linear frequency modulated waveforms," *IEEE Photonics* **4**, 499-503 (2012).
66. Y. Antman, N. Primerov, J. Sancho, L. Thevenaz, and A. Zadok, "Localized and stationary dynamic gratings via stimulated Brillouin scattering with phase modulated pumps," *Opt. Express* **20**, 7807-7821 (2012).
67. J. Sancho, N. Primerov, S. Chin, Y. Antman, A. Zadok, S. Sales, and L. Thévenaz, "Tunable and reconfigurable multi-tap microwave photonic filter based on dynamic Brillouin gratings in fibers," *Opt. Express* **20**, 6157-6162 (2012).
68. O. Klinger, Y. Stern, T. Schneider, K. Jamshidi and A. Zadok, "Long Microwave-Photonic Variable Delay of Linear Frequency Modulated Waveforms," *IEEE Photon. Technol. Lett.* **24**, 200-202 (2012).
69. Z. Shmilovitch, N. Primerov, A. Zadok, A. Eyal, S. Chin, L. Thevenaz, and M. Tur, "Dual-pump push-pull polarization control using stimulated Brillouin scattering," *Opt. Express* **19**, 25873-25880 (2011).
70. A. Wise, M. Tur, and A. Zadok, "Sharp tunable optical filters based on the polarization attributes of stimulated Brillouin scattering," *Opt. Express* **19**, 21945-21955 (2011).
71. A. Zadok, A. Eyal and M. Tur, "Stimulated Brillouin scattering slow light in optical fibers," (invited review paper), *Appl. Opt.* **50**, E38-E49 (2011).
72. Y. Peled, M. Tur and A. Zadok, "Generation and Detection of Ultra-Wideband Waveforms Using Stimulated Brillouin Scattering Amplified Spontaneous Emission," *IEEE Photon. Technol. Lett.* **22**, 1692-1694 (2010).
73. A. Zadok, X. Wu, J. Sendowski, A. Yariv, and A. E. Willner, "Reconfigurable generation of high-order ultra-wideband waveforms using edge detection," *J. Lightwave Technol.* **28**, 2207-2212 (2010).
74. A. Zadok, X. Wu, J. Sendowski, A. Yariv, and A. E. Willner, "Photonic generation of ultra-wideband signals via pulse compression in a highly nonlinear fiber," *IEEE Photon. Technol. Lett.* **22**, 239-241 (2010).
75. M. J. Shearn, K. A. Diest, X. K. Sun, A. Zadok, A. Yariv, A. Scherer, and H. A. Atwater, "Advanced silicon processing for active planar photonic devices," *J. of Vacuum Science and Technology B* **27**, 3180-3182 (2009).
76. A. Zadok, S. Chin, L. Thevenaz, E. Zilka, A. Eyal, and M. Tur, "Polarization induced distortion in stimulated Brillouin scattering slow light systems," *Opt. Lett.* **34**, 2530-2532 (2009).
77. A. Zadok, J. Sendowski, and A. Yariv, "Birefringence induced trains of high-rate pulses in a mode-locked fiber laser," *IEEE Photonics* **1**, 128-134 (2009).
78. X. K. Sun, A. Zadok, M. J. Shearn, K. A. Diest, A. Ghaffari, H. A. Atwater, A. Scherer, and A. Yariv, "Electrically Pumped Hybrid Evanescent Si/InGaAsP Lasers," *Opt. Lett.* **34**, 1345-1347 (2009).

79. A. Zadok, E. Zilka, A. Eyal, L. Thevenaz, and M. Tur, "Vector analysis of stimulated Brillouin scattering amplification in standard single-mode fibers," *Opt. Express* **16**, 21692-21707 (2008).
80. A. Zadok, J. Scheuer, J. Sendowski, and A. Yariv, "Secure key generation using an ultra-long fiber laser: transient analysis and experiment," *Opt. Express* **16**, 16680-16690 (2008).
81. A. Zadok, A. Eyal, and M. Tur, "GHz-wide optically reconfigurable filters using stimulated Brillouin scattering," *J. Lightwave Technol.* **25**, 2168-2174 (2007).
82. A. Zadok, O. Raz, A. Eyal, and M. Tur, "Optically controlled low distortion delay of GHz-wide RF signals using slow light in fibers," *IEEE Photon. Technol. Lett.* **19**, 462-464 (2007).
83. A. Zadok and A. Eyal, "Polarimetric characterization of RF spectra at the output of linear optical systems" (invited paper), *J. Lightwave Technol.* **24**, 4138-4148 (2006).
84. A. Zadok, A. Eyal, and M. Tur, "Extended delay of broadband signals in stimulated Brillouin scattering slow light using synthesized pump chirp," *Opt. Express* **14**, 8498-8505 (2006).
85. A. Zadok and A. Eyal, "Source induced optical noise in polarization measurements" *IEEE Photon. Technol. Lett.* **18**, 1365-1367 (2006).
86. A. Zadok and A. Eyal, "Frequency resolved polarimetry via a tunable interferometer", *IEEE Photon. Technol. Lett.* **17**, 1707-1709 (2005).
87. A. Eyal and A. Zadok, "Optical noise induced by Gaussian sources in Stokes parameters measurements", *J. Opt. Soc. Am. A* **22**, 662-671 (2005).
88. A. Zadok, N. Simon, and A. Eyal, "The dependence of the output Stokes parameters on the state of an arbitrarily located polarization controller in PMD mitigation schemes," *J. Lightwave Technol.* **22**, 1533-1538 (2004).
89. W. D. Cornwell, I. Andonovich, A. Zadok and M. Tur, "The Role of Thermal Chirp in Reducing Interferometric Noise in Fiber-Optic Systems Driven by Directly Modulated DFB Lasers", *J. Lightwave Technol.* **18**, 154-160 (2000).
90. A. Zadok, H. Shalom, M. Tur, W.D. Cornwell and I. Andonovich, "Spectral Shift and Broadening of DFB Lasers under Direct Modulation", *IEEE Photon. Technol. Lett.* **10**, 1709-1711 (1998).
91. H. Shalom, A. Zadok, M. Tur, W. D. Cornwell and I. Andonovich, "On the Various Time Constants of Wavelength Changes of a DFB Laser under Direct Modulation", *IEEE J. Quantum Elect.* **34**, 1816-24 (1998).

## CONFERENCE PROCEEDINGS PUBLICATIONS

1. L. Dokhanian, S. K. Bag, M. Hen and A. Zadok, "Plasmonic Enhancement of Surface Acoustic Wave-Photonic Integrated Devices in Silicon-on-Insulator," in Conference on Lasers and Electro-Optics (CLEO 2024), Technical Digest Series (Optica Publishing Group, 2024) Charlotte, NC, USA, May 2024.
2. A. Bernstein, E. Zehavi, Y. London, R. Suna, S. Ben-Ami, M. Hen, and A. Zadok, "Tensor Attributes of Forward Brillouin Fiber Sensors," in 28th International Conference on Optical Fiber Sensors, Technical Digest Series (Optica Publishing Group, 2023), paper W5.3, Hamamatsu, Japan, Nov. 2023.
3. M. Priel, S. Kumar Bag, M. Slook, L. Dokhanian, I. Shafir, E. Grunwald, M. Katzman, M. Hen, and A. Zadok, "Electro-Opto-Mechanical Microwave-Frequency Oscillator in a Surface Acoustic Wave Silicon-Photonic Circuit," 2022 IEEE International Topical Meeting on Microwave Photonics (MWP), Orlando, FL, USA, Sep. 2022.
4. K. Shemer, G. Bashan, E. Zehavi, H. H. Diamandi, A. Bernstein, K. Sharma, Y. London, D. Barrera, S. Sales, and A. Zadok, "Forward Brillouin Point Sensor in a Multi-Core Fiber," in 27th International Conference on Optical Fiber Sensors, Technical Digest Series (Optica Publishing Group, 2022), paper Th4.67, Alexandria VA, Aug. 2022.
5. K. Sharma, E. Zehavi, H. H. Diamandi, G. Bashan, Y. London, and A. Zadok, "Direct Spatially Distributed Analysis of Forward Brillouin Scattering in Polarization Maintaining Fibers," in 27th International Conference on Optical Fiber Sensors, Technical Digest Series (Optica Publishing Group, 2022), paper Tu1.5, Alexandria VA, Aug. 2022.

6. E. Zehavi, A. Bernstein, G. Bashan, Y. London, H. H. Diamandi, K. Sharma, M. Hen, and A. Zadok, "Brillouin Optical Time-Domain Distributed Analysis of Cladding Modes in a Coated Fiber," in 27th International Conference on Optical Fiber Sensors, Technical Digest Series (Optica Publishing Group, 2022), paper Tu1.4, Alexandria VA, Aug. 2022.
7. S. Zilberman, Y. London, A. Bernstein, K. Sharma, H. H. Diamandi, M. Hen, E. Zehavi, G. Bashan, G. Berkovic, A. Zentner, M. Mayoni, E. Shafir, and A. Zadok "Optomechanical measurements of optical fiber coating for radiation dosimetry and structural health monitoring", Proc. SPIE 12140, Micro-Structured and Specialty Optical Fibres VII, 121400B (May 2022).
8. M. Katzman, M. Priel, L. Dokhanian, I. Shafir, M. Slook, S. K. Bag, and A. Zadok, "Surface Acoustic Wave Microwave Photonic Filters in Silicon-on-Insulator with 16 and 32 Taps," in Conference on Lasers and Electro-Optics, Technical Digest Series (Optica Publishing Group, 2022), paper SW4O.4, San Jose CA, May 2022.
9. K. Sharma, E. Zehavi, H. H. Diamandi, G. Bashan, Y. London, and A. Zadok, "Direct Distributed Analysis of Nonlinear Inter-Modal Forward Scattering in Polarization Maintaining Fibers," in Conference on Lasers and Electro-Optics, Technical Digest Series (Optica Publishing Group, 2022), paper JTh3A.15, San Jose CA, May 2022.
10. G. Bashan, H. H. Diamandi, E. Zehavi, K. Sharma, Y. London and A. Zadok, "Forward Brillouin Laser in a Polarization Maintaining Fiber," in Conference on Lasers and Electro-Optics, Technical Digest Series (Optica Publishing Group, 2022), San Jose CA, May 2022.
11. Y. Piasetzky, M. Katzman, M. Priel, H. Suchowski, and A. Zadok, "Detuning Modulated Composite Segments for High Fidelity Directional Couplers in Integrated Photonic Devices," in Conference on Lasers and Electro-Optics, Technical Digest Series (Optica Publishing Group, 2022), paper JTu3B.6, San Jose CA, May 2022.
12. H. H. Diamandi, G. Bashan, Y. London, K. Shemer, K. Sharma, E. Zehavi, and A. Zadok, "Vector Properties of Forward Stimulated Brillouin Scattering in Standard Single-Mode Fibers," in OSA Nonlinear Optics 2021, R. Boyd, C. Conti, D. Christodoulides, and P. Rakich, eds., OSA Technical Digest (Optica Publishing Group, 2021), paper NW2B.4.
13. M. Katzman, D. Munk, M. Priel, E. Grunwald, M. Hen, and A. Zadok, "Integrated Discrete-Time Surface Acoustic Wave Photonic Radio-Frequency Filters with Arbitrary Tap Weights," in Conference on Lasers and Electro-Optics, J. Kang, S. Tomasulo, I. Ilev, D. Müller, N. Litchinitser, S. Polyakov, V. Podolskiy, J. Nunn, C. Dorrer, T. Fortier, Q. Gan, and C. Saraceno, eds., OSA Technical Digest (Optica Publishing Group, 2021), paper STu2H.5.
14. G. Bashan, H. H. Diamandi, Y. London, K. Shemer, K. Sharma and A. Zadok, "Inter-Modal Forward Stimulated Brillouin Scattering and Non-Reciprocity in Standard Polarization Maintaining Fiber," in Conference on Lasers and Electro-Optics, J. Kang, S. Tomasulo, I. Ilev, D. Müller, N. Litchinitser, S. Polyakov, V. Podolskiy, J. Nunn, C. Dorrer, T. Fortier, Q. Gan, and C. Saraceno, eds., OSA Technical Digest (Optica Publishing Group, 2021).
15. H. H. Diamandi and A. Zadok, "Opto-Mechanical Inter-Core Crosstalk in Multi-Core Fibers," in Optical Fiber Communication Conference (OFC) 2021, P. Dong, J. Kani, C. Xie, R. Casellas, C. Cole, and M. Li, eds., OSA Technical Digest (Optica Publishing Group, 2021), paper F1B.6.
16. D. Munk, M. Katzman, M. Priel, M. Hen, and A. Zadok, "Surface Acoustic Wave Integrated-Photonic Radio-Frequency Filters with Arbitrary Complex Tap Coefficients," in Asia Communications and Photonics Conference (ACP/IPOC), OSA Technical Digest (Optica Publishing Group, 2020), paper M3E.4.
17. D. Munk, M. Katzman, M. Hen, M. Priel, and A. Zadok, "Surface-Acoustic-Wave Modulation of a Silicon-on-Insulator Defect Bragg Grating," in Conference on Lasers and Electro-Optics, OSA Technical Digest (Optical Society of America, 2020), paper SM2J.5.
18. M. Hen, D. Munk, M. Katzman, M. Priel, S. Taragin, and A. Zadok, "Surface-Acoustic-Wave Characterization of Thin Layer Deposition on a Standard Silicon-Photonic Circuit," in Conference on Lasers and Electro-Optics, OSA Technical Digest (Optical Society of America, 2020), paper STh1R.3.
19. A. Bergman, R. Duggan, K. Sharma, H. H. Diamandi, M. Tur, A. Zadok, and A. Alù, "Exceptional points in fiber optomechanics," in Conference on Lasers and Electro-Optics, OSA Technical Digest (Optical Society of America, 2020), paper FM2P.4.

20. D. Munk, M. Katzman, M. Hen, M. Priel, A. Bergman and A. Zadok, "An Integrated Discrete-Time Microwave Photonic Filter Using Surface Acoustic Waves in Silicon," 2019 International Topical Meeting on Microwave Photonics (MWP), Ottawa, ON, Canada, 2019, pp. 1-4
21. A. Zadok, "Forward Stimulated Brillouin Scattering in Optical Fibers and its Applications," in Asia Communications and Photonics Conference (ACPC) 2019, OSA Technical Digest (Optical Society of America, 2019), paper S3A.1.
22. K. Shemer et al., "Sequence-Coded Coherent Laser Range-Finder with Hundreds of Photons Sensitivity," 2019 Asia Communications and Photonics Conference (ACP), Chengdu, China, 2019, pp. 1-3.
23. G. Bashan, Y. London, H. H. Diamandi, and A. Zadok, "Distributed clad mode sensor in unmodified standard single-mode fiber with 8 centimeters resolution," Proc. SPIE 11199, Seventh European Workshop on Optical Fibre Sensors, 111991T (28 August 2019).
24. A. Misra, D. Munk, M. Katzman, S. Preubler, A. Zadok, and T. Schneider, "Sinc-shaped, Nyquist Channel Demultiplexing with Silicon Photonics," 12th German Microwave Conference (GeMiC), 170-173 (2019) .
25. K. Shemer, G. Bashan, H. H. Diamandi, Y. London, A. Bergman, N. Levanon, and A. Zadok, "Sequence-Coded Coherent Laser Range Finder," paper SM1N2, Conference on Lasers and Electro-Optics (CLEO) 2019, San-Jose, CA.
26. D. Munk, M. Katzman, M. Hen, M. Priel, and A. Zadok, "Surface-Acoustic-Wave-Photonic Devices in Standard Silicon-on-Insulator," paper STh3H5, Conference on Lasers and Electro-Optics (CLEO) 2019, San-Jose, CA.
27. D. Munk, M. Katzman, M. Hen, M. Priel, A. Bergman, Y. Kaganovskii, M. Rosenbluh, N. Inbar, and M. Vofsi, and A. Zadok, "Silicon-photonic dense 8-channel multiplexer using auto-regressive moving-average filters," Proc. of IEEE Microwave Photonics Conference (MWP 2018), (Toulouse, France, 22-25 October, 2018), Proc. IEEE, 2018.
28. A. Bergman, H. H. Diamandi, Y. London, G. Bashan, J. Madrigal, D. Barrera, S. Sales, and A. Zadok, "Opto-mechanical point-sensing in a multi-core fiber," post-deadline paper FB.3, the 26th Optical Fiber Sensors (OFS-26) Conference, Lausanne, Switzerland, Proc. Optical Society of America, September 2018.
29. H. H. Diamandi, Y. London, G. Bashan, and A. Zadok, "Distributed Opto-Mechanical Sensing Outside Polyimide-Coated Fiber," post-deadline paper FB.1, the 26th Optical Fiber Sensors (OFS-26) Conference, Lausanne, Switzerland, September 2018.
30. H. H. Diamandi, Y. London, G. Bashan, and A. Zadok, "Forward Brillouin Scattering-Based Sensing Outside Polyimide-Coated Standard Fiber," paper WF.89, the 26th Optical Fiber Sensors (OFS-26) Conference, Lausanne, Switzerland, September 2018.
31. Y. London, H. H. Diamandi, G. Bashan, and A. Zadok, "Theoretical and Experimental Mapping of Forward Brillouin Scattering Four-Wave Mixing Processes in Fiber," paper Tu.27, the 26th Optical Fiber Sensors (OFS-26) Conference, Lausanne, Switzerland, September 2018.
32. G. Bashan, H. H. Diamandi, Y. London, Y. Antman, and A. Zadok, "Distributed analysis of media outside optical fibers using forward stimulated Brillouin scattering," The 7th Asia-Pacific Optical Sensors Conference, Matsue City, Japan, May 2018.
33. M. Katzman, D. Munk, M. Hen, A. Bergman M. Oksman, Y. Kaganovskii, M. Rosenbluh, and A. Zadok, "Four-Wave Mixing in Highly Nonlinear Chalcogenide Glass-in-Silica Waveguides," paper JTu2A. 63, Conference on Lasers and Electro-Optics (CLEO) 2018, San-Jose, CA.
34. D. Munk, M. Katzman, O. Westreich, M. Bin Nun, Y. Lior, N. Sicron, Y. Paltiel, and A. Zadok "Four-Wave Mixing in GaN Waveguides," paper SF2A.4, Conference on Lasers and Electro-Optics (CLEO) 2018, San-Jose, CA.
35. H. H. Diamandi, Y. London, G. Bashan, and A. Zadok, "Sensing Outside Polyimide-Coated Fibers Using Guided Acoustic Waves Brillouin Scattering," paper SM3K. 1, Conference on Lasers and Electro-Optics (CLEO) 2018, San-Jose, CA.

36. Y. London, H. H. Diamandi, G. Bashan, and A. Zadok, "Electro-Opto-Mechanical Radio-Frequency Oscillator in a Multi-Core Fiber," paper STu4F.3, Conference on Lasers and Electro-Optics (CLEO) 2018, San-Jose, CA.
37. G. Bashan, H. H. Diamandi, Y. London, E. Preter, and A. Zadok, "Opto-Mechanical Time-Domain Reflectometry: Distributed Sensing Outside the Cladding of Standard Fiber," paper SM3K. 7, Conference on Lasers and Electro-Optics (CLEO) 2018, San-Jose, CA.
38. H. H. Diamandi, Y. Londond, G. Bashan, and A. Zadok, "Distributed Monitoring of Cascaded Four-Wave Mixing due to Kerr and Opto-Mechanical Nonlinearities," paper JTU2A. 80, Conference on Lasers and Electro-Optics (CLEO) 2018, San-Jose, CA.
39. H. H. Diamandi. Y. London, and A. Zadok, "Guided acoustic waves Brillouin scattering in multi-core fibers," accepted for presentation in 25th International Conference on Optical Fibre Sensors (OFS-25), Proc. SPIE 10323, (Jeju, Korea, April 2017).
40. E. Preter, D. Ba, O. Shlomi, Y. London, and A. Zadok, "Transient Brillouin optical correlation domain analysis," accepted for presentation in 25th International Conference on Optical Fiber Sensors (OFS-25), Proc. SPIE 10323, (Jeju, Korea, April 2017).
41. Y. Stern, Y. London, E. Preter, Y. Antman, O. Shlomi, M. Silbiger, G. Adler, and A. Zadok, "High-resolution Brillouin analysis in a carbon-fiber-composite unmanned aerial vehicle model wing," Proc. SPIE 9916, paper 9916-126, 6th European Workshop on Optical Fibre Sensors, Limerick, Ireland, May 31-June 3, 2016.
42. E. Preter, O. Shlomi, Y. London, Y. Antman, and A. Zadok, "Spectral scanning-free measurement of Brillouin frequency shift using transient analysis," Proc. SPIE 9916, paper 9916-86, 6th European Workshop on Optical Fibre Sensors, Limerick, Ireland, May 31-June 3, 2016.
43. E. Preter and A. Zadok, "Scanning-free characterization of local Brillouin spectra based on transient analysis," SPIE Photonics West 2016, *Proc. SPIE* **9763**, 9763-55, San Francisco, CA (Feb. 2016).
44. A. Ben-Amram, Y. Stern, Y. Antman, Y. London, and A. Zadok, "Stablized fiber-optic delay of arbitrary waveforms with application in distributed sensors," IEEE Microwave Photonics (MWP) Topical Meeting, Proc. IEEE, (Paphos, Cyprus, Oct. 26-29, 2015).
45. E. Preter, M. Katzman, Z. Oren, M. Ronen, D. Gerber, and A. Zadok, "Fiber optic evaporation analysis of environmental parameters and of synthetic urine samples," paper 96342J, Proc. SPIE 9634, 24th International Conference on Optical Fibre Sensors (OFS-24), (Curitiba, Brazil, September 28, 2015).
46. Y. Antman, Y. London, and A. Zadok, "Scanning-free characterization of temperature dependence of forward stimulated Brillouin scattering resonances," paper 96345C, Proc. SPIE 9634, 24th International Conference on Optical Fibre Sensors (OFS-24), (Curitiba, Brazil, September 28, 2015).
47. Y. London, Y. Antman, M. Silbiger, L. Efraim, A. Froochzad, G. Adler, E. Levenberg, and A. Zadok, "High-resolution Brillouin analysis of composite materials beams," paper 96346N, Proc. SPIE 9634, 24th International Conference on Optical Fibre Sensors (OFS-24), (Curitiba, Brazil, September 28, 2015).
48. Y. London, Y. Antman, N. Levanon, and A. Zadok, "Brillouin analysis with 8.8 km range and 2 cm resolution," paper 96340G, Proc. SPIE 9634, 24th International Conference on Optical Fibre Sensors (OFS-24), (Curitiba, Brazil, September 28, 2015).
49. M. Iten et al. "Benefits of Global Standards on the Use of Optical Fiber Sensing Systems for the Impact of Construction of New Utilities and Tunnels on Existing Utilities." Pipelines 2015. 1655-1666.
50. Y. London, Y. Antman, M. Silbiger, L. Efraim, A. Froochzad, G. Adler, E. Levenberg, and A. Zadok, "High-resolution distributed fiber-optic monitoring of composite beams production". Proc. of the 10th International Workshop on Structural Health Monitoring, Stanford University, (September 2015).

51. R. Califa, D. Munk, I. Bakish, A. Zadok, H. Genish, Y. Kaganovskii, and M. Rosenbluh, "Photo-induced trimming of chalcogenide-on-silicon photonic integrated circuits," in International Conference on Optical MEMS and Nanophotonics (OMN), 2015, Aug. 2015.
52. N. Arbel, L. Hirschbrand, S. Weiss, N. Levanon, and A. Zadok, "Continuous-Wave Laser Range Finder Based on Incoherent Compression of Periodic Sequences," paper STh3O.2 in Conference on Laser and Electro-Optics (CLEO) 2015, San-Jose CA, May 2015). OSA Technical Digest (online) (Optical Society of America, 2015).
53. A. Ben-Amram, Y. Stern, and A. Zadok, "Fiber-optic distribution of arbitrary radio-frequency waveforms with stabilized group delay," paper JTh2A.54 in Conference on Laser and Electro-Optics (CLEO) 2015, San-Jose CA, May 2015). OSA Technical Digest (online) (Optical Society of America, 2015).
54. R. Califa, H. Genish, D. Munk, Y. Kaganovskii, I. Bakish, M. Rosenbluh, and A. Zadok, "Photo-induced tuning of chalcogenide-on-silicon photonic integrated circuits," paper STh1G.3 in Conference on Laser and Electro-Optics (CLEO) 2015, San-Jose CA, May 2015). OSA Technical Digest (online) (Optical Society of America, 2015).
55. Y. Antman, D. Eloo, R. Cohen, Y. London, and A. Zadok, "Brillouin time-domain and correlation-domain analyses combined," Proceedings of IEEE SENSORS Conference 2014, Valencia, Spain, Nov. 2-5, 2014, pp.158-161.
56. D. Grodensky, D. Kravitz, N. Arbel, N. Levanon and A. Zadok, "Incoherent pulse compression in laser range finder", Proc. SPIE 9080, Laser Radar Technology and Applications XIX; and Atmospheric Propagation XI, 90800M (June 2014).
57. R. Califa, Y. Kaganovskii, D. Munk, H. Genish, I. Bakish, M. Rosenbluh, and A. Zadok, "Large Photo-Induced Group Delay Variations in Chalcogenide-on-Silicon Mach-Zehnder Interferometers," paper STh1M.7 in Conference on Lasers and Electro-Optics (CLEO) 2014, San-Jose CA, June 2014). OSA Technical Digest (online) (Optical Society of America, 2014).
58. S. Levy, M. Klebanov, V. Lyubin, and A. Zadok, "High-Q Ring Resonators in Directly-Written Chalcogenide Glass Waveguides," paper SF2O.7 in Conference on Lasers and Electro-Optics (CLEO) 2014, San-Jose CA, June 2014). OSA Technical Digest (online) (Optical Society of America, 2014).
59. R. Cohen, Y. London, Y. Antman, and A. Zadok, "Few millimetre-resolution Brillouin optical correlation domain analysis using amplified-spontaneous-emission pump and signal waves," paper 91576B, Proc. SPIE 9157, Optical Fiber Sensors (OFS-23) Conference, Santander, Spain, June 2014.
60. E. Preter, D. Donlagic, V. Artel, R. A. Katims, C. N. Sukenik, and A. Zadok, "Analysis of organic solvents and liquid mixtures using a fiber-tip evaporation sensor," paper 91574Y, Proc. SPIE 9157, Optical Fiber Sensors (OFS-23) Conference, Santander, Spain, June 2014.
61. D. Eloo, Y. Antman, and A. Zadok, "Combined time-domain and correlation-domain Brillouin analysis with 1600 meters range and 2 centimeters resolution," paper 91576O, Proc. SPIE 9157, Optical Fiber Sensors (OFS-23) Conference, Santander, Spain, June 2014.
62. Y. Antman, L. Yaron, T. Langer, M. Tur, and A. Zadok, "Variable delay of Gbit/s data using coded Brillouin dynamic gratings ", Proc. SPIE 8998, Advances in Slow and Fast Light VII, 89980W (San Francisco CA, Feb. 2014).
63. Kravitz, D.; Grodensky, D.; Zadok, A.; Levanon, N., "Incoherent compression of complementary code pairs for laser ranging and detection," *2013 IEEE International Conference on Microwaves, Communications, Antennas and Electronics Systems (COMCAS)*, 21-23 Oct. 2013.
64. S. Levy, V. Lyubin, M. Klebanov, J. Scheuer, and A. Zadok, "Stimulated Brillouin Scattering Amplification in Directly Written As<sub>2</sub>S<sub>3</sub> Glass Waveguides," paper CTh3J.3 in CLEO: 2013, OSA Technical Digest (online) (Optical Society of America, 2013).
65. I. Bakish, R. Califa, T. Ilovitsh, V. Artel, G. Winzer, K. Voigt, L. Zimmermann, E. Shekel, C. Sukenik, and A. Zadok, "Voltage-Induced Phase Shift in a Hybrid LiNbO<sub>3</sub>-on-Silicon Mach-Zehnder Interferometer," paper IW4A.2 in Advanced Photonics 2013, H. Chang, V. Tolstikhin,

- T. Krauss, and M. Watts, eds., OSA Technical Digest (online) (Optical Society of America, 2013).
66. E. Preter, V. Artel, D. Donlagic, C. Sukenik, and A. Zadok, "Fiber Optic Monitoring of Fluid Evaporation," paper SM3C.5 in Advanced Photonics 2013, K. Ewing and M. Ferreira, eds., OSA Technical Digest (online) (Optical Society of America, 2013).
  67. Y. Stern, K. Zhong, T. Schneider, Y. Ben-Ezra, R. Zhang, M. Tur, and A. Zadok, "Frequency-selective filtering and analysis of radio-over-fiber using stimulated Brillouin scattering," IEEE International topical meeting on Microwave Photonics, 2013.
  68. E. Preter, B. Preloznik, C. N. Sukenik, D. Donlagic, and A. Zadok, "Monitoring of fluid evaporation using fiber-optic micro-cells," Optical Fiber Sensors 22, *Proc. SPIE 8421*, 8421-397, 2012.
  69. Y. Antman, N. Primerov, L. Thevenaz, and A. Zadok, "High-resolution Brillouin fiber sensing using random phase coding of the pump and probe waves," Optical Fiber Sensors 22, *Proc. SPIE 8421*, 8421-302, 2012.
  70. V. Artel, I. Bakish, T. Ilovitsh, M. Shubely, A. Zadok, and C. N. Sukenik, "Organic self-assembled monolayers as a tool for low temperature wafer bonding," paper POS-13, 4th EuCheMS Chemistry Congress Prague, Czech Republic, August 2012.
  71. V. Artel, T. Ilovitsh, I. Bakish, M. Shubely, E. Shekel, Y. Ben-Ezra, C. N. Sukenik, and A. Zadok, "Wafer bonding techniques for hybrid silicon photonic devices based on surface modifications," proceedings of the 14th Transparent Optical Networks (ICTON), Coventry, UK, July 2012.
  72. A. Mokhtari, K. Jamshidi, S. Preussler, A. Zadok, and T. Schneider, "Highly Tunable Delay Line with Linear Phase Modulation and Optical Filtering," paper ITu3C.3 in Proceedings of Integrated Photonics Research, Silicon, and Nano-Photonics (IPR) topical meeting, the Optical Society of America, Colorado Springs CO, 2012.
  73. N. Primerov, Y. Antman, J. Sancho, A. Zadok, and L. Thevenaz, "Brillouin Distributed Sensing Using Localized and Stationary Dynamic Gratings," paper 8439-7, SPIE Photonics Europe 2012, Brussels, Belgium. *Proc. SPIE 8439*, 8439-7, 2012
  74. D. Grodensky, D. Kravitz, and A. Zadok, "Ultra-Wideband Noise Radar Based on Optical Waveform Generation," paper 8361-43, Radar Sensor and Technology, SPIE Defense, Security and Sensing 2012, Baltimore MD. *Proc. SPIE 8361*, 8361-43, 2012
  75. Y. Antman, N. Primerov, J. Sancho, L. Thevenaz, and A. Zadok, "Long Variable Delay and Distributed Sensing Using Stationary and Localized Brillouin Dynamic Gratings," paper JWA2A.24, OFC/NFOEC 2012, Los Angeles, Ca, 2012
  76. V. Artel, I. Bakish, T. Kraus, M. Shubeli, Y. Ben-Ezra, E. Shekel, S. Zach, A. Zadok, and C. N. Sukenik, "Low Temperature Wafer Bonding of Silicon to InP and Silicon to LiNbO<sub>3</sub> Using Self-Assembled Monolayers," paper OM3E4, OFC/NFOEC 2012, Los Angeles, Ca, 2012
  77. Y. Antman, N. Primerov, J. Sancho, L. Thevenaz, and A. Zadok, "Variable delay and sensing using stationary and localized Brillouin dynamic gratings," (invited paper), SPIE Photonics West 2012, *Proc. SPIE 8273*, 8273-11, 2012
  78. D. Grodensky, D. Kravitz, and A. Zadok, "Ultra-Wideband Noise Radar Based on Optical Waveform Generation," IEEE COMCAS 2011, Tel-Aviv, Israel, Nov. 2011
  79. Y. Ben-Ezra, D. Brodeski, A. Zadok, R. Califa, and B. I. Lembrikov, "1 Tbps transmission system based on hierarchical approach to Wavelet Packet Transform OFDM," proceedings of the 13th Transparent Optical Networks (ICTON), Stockholm, Sweden, August 2011.
  80. Z. Shmilovich, A. Eyal, M. Tur, A. Zadok and N. Primerov et al. Polarization pulling based on stimulated Brillouin scattering in a dual-pump configuration. 21st International Conference on Optical Fiber Sensors, Ottawa, Canada, May 15-19, 2011. *Proc. SPIE*, vol. 7753, p. 77532D, SPIE, 2011.
  81. A. Zadok, Avishay Eyal, M. Tur and L. Thevenaz, "Polarization attributes of stimulated Brillouin scattering slow light in fiber" (invited paper), *Proc. SPIE 7949*, 79490A, 2011.

82. M. Tur, A. Eyal and A. Zadok, "Stimulated Brillouin scattering slow light in optical fibers", *Invited Talk*, 10<sup>th</sup> International Conference on Fibre Optics and Photonics: PHOTONICS-2010, Guwahati, India, December 2010
83. X. K. Sun, M. J. Shearn, A. Zadok, M. S. Leite, S. T. Steger, H. A. Atwater, A. Scherer, and A. Yariv, "Electrically pumped supermode Si/InGaAsP hybrid lasers," CLEO/QELS 2010, San Jose, CA, May 2010.
84. Y. Peled, M. Tur, and A. Zadok, "Ultra-wideband noise communication based on amplified spontaneous emission of broadened Brillouin scattering", paper NTuC16 in *Nonlinear Photonics*, Karlsruhe, Germany, June 2010.
85. A. Zadok, X. Wu, J. Sendowski, A. Yariv, and A. E. Willner, "Flexible All-Fiber Generation of Ultra-Wideband Signals via Pulse Compression and Differential Detection," paper FWK3 in *Frontiers in Optics / Laser Science annual OSA meeting*, San Jose CA, October 2009.
86. A. Zadok, S. Chin, E. Zilka, A. Eyal, L. Thevenaz, and M. Tur, "Polarization dependent pulse distortion in stimulated Brillouin scattering slow light systems," (*post-deadline paper*), paper PDPC1 in *Slow Light OSA topical meeting*, Honolulu, Hawaii, Jul. 2009.
87. M. Tur, A. Zadok, E. Zilka, A. Eyal, and L. Thevenaz, "Polarization Properties of Stimulated Brillouin Scattering and their Implications on Slow and Fast Light," (*invited paper*), paper SMC2 in *Slow Light OSA topical meeting*, Honolulu, Hawaii, Jul. 2009.
88. A. Zadok, E. Zilka, A. Eyal, L. Thevenaz, and M. Tur, "Polarization evolution of stimulated Brillouin scattering amplified signals in standard fibers," paper JTUB2, in *CLEO 2009*, Baltimore, MD, 2009.
89. A. Zadok, J. Sendowski, and A. Yariv, "Passively generated high repetition rate pulse bursts using a fiber laser with a polarization maintaining section," paper CMA3 in *CLEO 2009*, Baltimore, MD, 2009.
90. X. K. Sun, A. Zadok, M. J. Shearn, K. A. Diest, A. Ghaffari, H. A. Atwater, A. Scherer, and A. Yariv, "Hybrid electrically pumped evanescent Si/InGaAsP lasers," paper OThN1 in *OFC/NFOEC 2009*, San Diego, Ca, 2009.
91. A. Zadok, E. Zilka, A. Eyal, L. Thevenaz, and M. Tur, "Fiber beat length estimates via polarization measurements of stimulated Brillouin scattering amplified signals," paper OMP4 in *OFC/NFOEC 2009*, San Diego, Ca, 2009.
92. A. Zadok, J. Scheuer, J. Sendowski, D. Segal, and A. Yariv, "Ultra-long Fiber Laser for Secure Optical Key Generation," FThF2 in *Frontiers in Optics / Laser Science annual OSA meeting*, Rochester NY, October 2008.
93. L. Thevenaz, A. Zadok, A. Eyal, and M. Tur, "All-optical polarization control through Brillouin amplification," paper OML7 in *OFC/NFOEC 2008*, San Diego, Ca, Feb. 2008.
94. M. Tur, O. Raz, A. Zadok and R. Rotman, "Slow Light and Photonic Beamforming," *invited paper*, The International IEEE Conference on Microwaves, Communications, Antennas and Electronic Systems (IEEE COMCAS 2008), Tel-Aviv, Israel, May 2008.
95. A. Zadok, A. Eyal, and M. Tur, "Single-sideband modulation and variable delay of GHz-wide analog signals generated via stimulated Brillouin scattering," paper SWC4 in *Slow Light OSA topical meeting*, Salt Lake City Utah, 2007.
96. A. Zadok, A. Eyal, and M. Tur, "The use of synthesized pump chirp in stimulated Brillouin scattering to extend the delay of 5 Gb/s PRBS," paper WC1 in *Slow and Fast Light OSA topical meeting*, Washington DC, July 2006.
97. A. Zadok and A. Eyal, "Dynamic optical signal processing via a recirculating loop", paper JThB31 in *OFC/NFOEC 2006*, Anaheim, Ca, 2006.
98. A. Zadok and A. Eyal, "Characterization of optical noise in measurements of Stokes parameters: theory and experiment", paper OTuB6 in *OFC/NFOEC 2005*, Anaheim, Ca, 2005.
99. A. Eyal, D. Kuperman, A. Zadok and M. Tur, "Analysis of fiber optic sensing in the presence of polarization mode dispersion and polarization dependent loss", *Proc. SPIE*, 5502: pp. 443-446, 2004.