

Curriculum Vitae

YAEL NEMIROVSKY

Date: (updated July 21, 2020)

Personal Data:

Date and place of birth: July 21, 1944, Haifa, Israel
Citizenship: Israeli
Family Status: Married, three children
Address: Department of Electrical Engineering
Technion—Israel Institute of Technology, Haifa 32000, Israel.
Tel: 972 – 4 – 8293450, Fax: 972 – 4 – 8295757
E-mail: nemirov@ee.technion.ac.il
Home Address: 7, Golda St., Haifa 34982, Israel
Tel: 972 – 4 – 8255729

Present Position: Professor Emeritus, Department of Electrical Engineering,
Technion—Israel Institute of Technology, Haifa 32000, Israel.

Dept. Head, Electrical Engineering, Kinneret Academic College.

Academic Degrees:

D.Sc. 1971 Chemistry, Technion—Israel Institute of Technology.
B.Sc. 1966 Chemistry, Technion—Israel Institute of Technology.

Academic Appointments:

2013 Professor Emeritus, Dept. of EE, Technion—Israel Institute of Technology.
2012-2015 Dept. Head, Electrical Engineering, Kinneret Academic College.
2011-2012 Full Professor, Department of Electrical Engineering,
Technion—Israel Institute of Technology.
1985–2011 Associate Professor, Department of Electrical Engineering,
Technion—Israel Institute of Technology.
1980–1985 Senior Lecturer, Department of Electrical Engineering,
Technion—Israel Institute of Technology.
1996 (July-October) Sabbatical: Ecole Polytechnique Federale Lausanne, Swiss
Federal Institute of Technology, Switzerland.
1990 (July-October) Sabbatical: University of Pretoria, South Africa.
1973–1975 Adjoint Senior Lecturer, Haifa University.
1971–1972 Research Associate, Laboratory of Physical Chemistry, Faculty of Chemistry,
Technion—Israel Institute of Technology.

Secondary Academic Affiliation:

1980– Solid State Institute, Technion.
1995– Asher Space Research Institute, Technion.
1980– Kidron Microelectronics Research Center, Electrical Engineering, Technion.
1990– VLSI Center, Electrical Engineering, Technion.
1995– Wolfson Center for Interface Studies, Technion.

Professional Experience:

- 2015- Board of Directors, TODOS Technologies Ltd.; Co-Founded by Technion
- 2014- Chief Scientist, TODOS Technologies Ltd.; Co-Founded by Technion
- 2001–2002 Sabbatical: Founder and President (CEO) of BlueBird Optical MEMS Inc. (a company that developed and produced MEMS components for the telecommunication market).
- 2002–2005 Chief scientist of BlueBird Optical MEMS
- 1975–1980 Research Scientist (Rafael, Ministry of Defense):
- i. electro-optical properties of narrow bandgap semiconductors (HgCdTe);
 - ii. quantum semiconductor devices, mainly photo-conductive and photo-voltaic HgCdTe infrared detectors, as well as MOS devices;
 - iii. surface properties of narrow bandgap semiconductors;
 - iv. integrated circuits technology.
- 1972–1975 Research Scientist, Rafael, Ministry of Defense. Research and development of thin-film microwave integrated circuits, surface acoustic wave devices for signal processing.

Consulting:

- 2010-2012 Elbit: Lectures on MEMS sensors and CMOS Image Sensors
- 2009- 2011 IBM Haifa Labs
- 2008 Lectures on MEMS in Elbit; Lectures on microelectronics technology in KLA
- 2006-2007 A series of lectures on Sensors in ElOp
- 2006-2007 Ophir Optronics solutions (for Spiricon Inc, Salt Lake City, USA)
- 1997–1998 Consulting to Rafael in the evaluation of an IR system.
- 1997–1998 Consulting to Kulick&Soffa on the design of a PZT microactuator.
- 1997–1998 Consulting to Shellcase on contacts to VLSI chips.
- 1991–1997 Consulting to Oramir (a subsidiary of Fairchild and Gal Ram) in a project to develop a photoresist stripper based on excimer laser.
- 1994–1995 Consulting to Spire, Patriot Park, Boston, USA.
- 1985–1988 Consulting to Quick (a subsidiary of Elron) in projects related to the technology of custom integrated circuits.

Research Interests:

1. II-VI compound semiconductor devices: from physical properties of semiconductors, crystal growth of epilayers and heterostructures by MOCVD, interface studies, passivation technologies, to novel devices, infrared sensors as well as CdZnTe gamma-ray spectrometers. Including, statistical modeling of the spectral performance of CdZnTe gamma-ray spectrometers.

2. Integrated Microsystems (Focal Plane Arrays), combining II-VI detectors with unique CMOS VLSI silicon signal processing chips, operating in cryogenic temperatures (in IRFPAs-Infra Red Focal Plane Arrays) and exhibiting very low noise (for X/Gamma ray FPAs). Prototypes of complete IRFPAs subsystems were developed, tested and transferred to Israeli industry where they are currently produced. Prototypes of arrays of gamma-ray CdZnTe spectrometers and their silicon signal processors (CdZnTe focal plane arrays) for medical imaging were also developed.
3. Micromachining technology and Micro-Nano-Opto-Electro-Mechanical Systems (MEMS/NEMS): the research focuses on CMOS compatible micromachined microsystems, pursuing either monolithic systems 3D die bonding to integrate CMOS chips with silicon bulk micromachined chips; in particular combining CMOS-SOI-MEMS/NEMS ("CMOST"), System on Chip (SOC), vertical integration and packaging; The research is directed towards several types of generic MEMS, including: Inertial sensors-accelerometers and gyroscopes, Micromachined thermal and uncooled IR Sensors, Electrostatic and Magnetic Actuators, RF MEMS, Ion Selective Field Effect Transistors, Biosensors as well as CMOS VLSI Analog Design for MEMS.
4. CMOS Image Sensors: design and characterization of CMOS and CMOS-SOI dies. Study of in-pixel signal processing and noise mechanisms. CMOS Single Photon Avalanche photodiode (SPAD) imagers.
5. RF MEMS and RF CMOS: Inductors, Varactors, Switches, VCOs, Phase shifter, Power CMOS.
6. CMOS-SOI-MEMS/NEMS Focal Plane Arrays for uncooled IR (TMOS) and Terahertz imaging (TeraMOS) based on CMOST Technology developed by my group.
7. GMOS gas sensors
8. Nanometric temperature and thermal sensors based on CMOS-SOI-MEMS
9. CMOS SPAD-Single Photon Avalanche Diodes and Imagers
10. CMOS Si Photomultipliers for photon counting and timing (Time of Flight measurements)

Teaching Experience:

Undergraduate

04126 Semiconductor Devices
04105 Introduction to Electrical Engineering
04231 Electron Devices 1 (MOS)

Graduate and Undergraduate

04234 Electron Devices 2 (Bipolar), also 046234
04773* Opto-electronic Semiconductor Devices for sensing, also 046773
04772* Interfaces and Charge Coupled Devices
048932* Infrared Systems
048743 Microelectronics Laboratory (1)
048915 Microelectronics Laboratory (2)
048923* Seminar in Microelectronics (Advanced MOS Structures).
049016* Design and Modeling of Micro-Electro-Mechanical Systems (MEMS)
046968* Micromachining and Micro-Electro-Mechanical-Systems (MEMS)
048903 Advanced Topics for graduate students: CMOS Image Sensors, device and Design Perspective, (in collaboration with Dr. Amos Fenigstein, TowerJazz)

***: courses developed by me**

External Studies*

*MEMS/NEMS Microsystems: mechanical, chemical, optical.
*VLSI Technology (at industry).
*MOS Devices (at industry).
*CMOS Image Sensors and applications (at industry and Kinneret College).

***: courses developed by me**

Editorial Boards:

- | | |
|----------------|---|
| 1999– | Member of the Editorial Board of the Journal of Infrared and Millimeter Waves (JIRMW). |
| 2003– | Member of the Editorial Board of the Sensors Letters |
| November 2010– | Member of the Editorial Board of the launched TowerJazz Technical Journal - (TJ) ² |
| November 2015– | Member of the Editorial Board of the Sensors |
| November 2019– | Member of the Editorial Board of Micromachines |

Reviewer of the following scientific journals:

Applied Physics Letters
Journal of Applied Physics
Sensors and Actuators
Sensors Letters (IEEE)
Journal of Micro Electro Mechanical Systems (JMEMS)
Journal of micromachining and Microengineering (JMM)
Journal of Electronic Materials
Solid State Electronics
IEEE transactions on Electron Devices
Electron Device Letters
Quantum Electronics
IEEE Microwave and Wireless Components

Membership in Professional Societies:

IEEE—Institute of Electrical and Electronic Engineers
URSI—Israel National Committee for Radio Science.
Israeli Association for Crystal Growth.
Israeli Vacuum Society.
Israeli MEMS Society.
IEE – Institution of Electrical Engineers.
OSA- Optical Society of America.
SPIE- The International Society for Optics and Photonics.

Honors:

- | | |
|-----------|---|
| 1999– | Elected Fellow of the Institute of Electrical and Electronics Engineers (IEEE), with the citation: “For contributions to compound semiconductor devices and technology. |
| 1999– | Elected Fellow of the Institution of Electrical Engineers, United Kingdom (IEE). |
| 1993 | Kidron Kidron Foundation award for "Innovative Applied Research" |
| 1996–2003 | Distinguished Lecturer, IEEE Electron Device Society. |
| 1980 | “Best Teacher” award. |
| 1978 | “David Ben Aharon” award for “Novel Applied Research”. |
| 1978 | “The Security of Israel award” , Ministry of Defense. |
| 2000– | Chartered Engineer (CEng), Registrant Number 520580, Engineering Council, United Kingdom. |

- | | |
|------|--|
| 2001 | Winner, 2001 R&D100 Award recognizing the top 100 new inventions and products of the year. Award recognizes development of a novel technique to grow cadmium zinc telluride crystals for X-ray and gamma detection and imaging applications. |
| 2004 | Intel Award. |
| 2008 | IBM Faculty Award. |
| 2012 | IBM Faculty Award. |

Technion Activities:

1983	Member of the Academic Disciplinary Tribunal.
1987–1988	Head of Microelectronics Research Center, Department of Electrical Engineering, Technion.
1993–2000	Advisor for candidates to the Department of Electrical Engineering.
2004–2006	The Senate's Degrees Review Committee.
2004 (November)- 2007	Member of the Joint Steering Committee for collaboration between Italian Universities and Technion in areas such as material science, nanotechnology and microsystem, computer science, telecommunication.

Department Activities:

October 82– April 83	Head of Microelectronics Research Center, Department of Electrical Engineering, Technion.
1983–1986	Assistant to the Dean for students in undergraduate studies, Department of Electrical Engineering, Technion.
1993–1999	Member of the Admission Committee of the Department of Electrical Engineering.
1993–	Academic responsibility for the Microelectronics Lab. (on a semester base).
1996–2000	Member of the Safety Committee of the Department of Electrical Engineering.
1997–1999	Academic responsibility for the VLSI Lab.
1998–2000	Advisor for student exchange and study abroad.
1999–2000	Chairperson of the Colloquium Committee of the Department of Electrical Engineering.
2004 -2009	Member of the EE faculty committee for teaching curriculum.
2006–2010	Chairperson of the EE faculty colloquium committee.
2007–	Member of the EE faculty committee for selecting excellent employee.
2018–2020	Responsible for the promotion of women in the faculty

International Public Professional Activities:

2003–	European network of excellence "System on Chip".
2004–	Member of the international committee of IEEE Women in Engineering Awards.
2005–	PhD Opponent, Dept. of Microelectronics and Information Technology, Royal Institute of Technology, Stockholm, Sweden, December 2005.
2008–2010	Member of the Advisory Board, TechFab, Turino, Italy.
2014–	Board of Directors, TODOS Sensors LTD.

National Public Professional Activities:

1983–1984	Member of the Steering Committee of the Microelectronics Activity at Rafael (appointed by the director of Rafael).
1986–1990	Chairperson of the Israeli IEEE Chapter for Microelectronics.
1991–1998	Member of the Executive Committee of the Vortman Foundation for the promotion of excellence and technological leadership of high school students.
1993–2000	Member of the Board of the Israeli Association for Crystal Growth.
1995–1999	Chairperson of the Israeli Association for Crystal Growth.
1995–1999	Member of the Board of the Israeli Vacuum Society.

1996–	Chairperson of Section D (Electronics and Photonics – Microelectronics, Electron Devices, VLSI, Electro-Optical Devices), URSI—Israel National Committee for Radio Science.
1997–1998	Member of the “Ort 2000” Committee to encourage more women into high-tech industry.
1990–1997	Member of a National Committee for Admission Policy to Israeli Universities.
2000	Higher Education Council Accreditation Committee for B.Sc. degree program proposed by the Holon Academic Institute of Technology.
2002–2007	One of the three Technion Founders of the Optical MEMS Consortium, Ministry of Industry & Commerce, with a total budget of ~300,000 million shekels.
2002–2007	Member of the Managing Committee of the Optical Packaging Consortium, Ministry of Industry & Commerce.
2002–	Member of the board of the Israeli MEMS society.
2008–	Chairperson of the Israeli IEEE WIE chapter.
2009–	Co-founder of a national consortium "HySP-Hyper sensitive Photonics", with leading Israel industry (Elbit and SCD as co-founders). Expected budget: of the order of 100,000 million shekels. 3 EE faculty members receive research grants from this consortium.
2010	Member of the Ministry of Science committee for Eshkol Scholarships for PhDs.
2010- (Nov.)	Member of the Scientific committee of "HySP-Hyper sensitive Photonics".
2011	Research Committee of “Pearls of Wisdom”.
2013-2015	Chairperson of the technical committee of the HYSP consorotium.
2015–	Chairperson of the committee appointed by MALAG (the Israeli higher education council) to consider the permission to grant MSc degree to a college.
2016–	Member of MALAG review committee of the call for “digital learning”
2020–	Chairperson of the scientific committee of “Smart Imagig” consortium

Organization of International Conferences:

1997-8	Organizing Committee of the International Crystal Growth Conference (ICGC12) and the International Crystal Vapor Phase Epitaxial Growth (ICVPEG10), Jerusalem, July (1998).
1998 (May) -	Session Chairperson, “Electron Devices”, Melecon’98, 9 th Mediterranean Electrotechnical Conference, May 18–20 (1998), Tel-Aviv, Israel.
2000 -	IEEE/Lasers and Electro-Optics Society, International Conference on Optical MEMS 2000, 21–24 August, Hawaii: Technical Program Committee.
2001-	Organization & Technical Committee of Optical MEMS, 2001, Okinawa, Japan (IEEE/LEOS).
2001-	Councilor of ICCG–13/ICVGE–11, the 13 th International Conference of Crystal Growth in Conjunction with the 11th International Conference of Vap or Phase and Epitaxy, 2001, Kyoto, Japan.
2002-	Organizing & Programme Committee of the IEEE Africon 2002 Conference , Fancourt Hotel, George, South Africa from 1 to 5 October, 2002.
2002-	Organization & Technical Committee of Optical MEMS, 2002, Lugano, Switzerland (IEEE/LEOS).
2003–	Member of the technical committee of Optical MEMS 2003 in Hawaii, USA (IEEE and LEOS).

- 2003 Chairperson of the session on MEMS modeling in Transducers 2003, Boston, USA.
- 2003-4 Program committee for the MEMS, MOEMS, and Micromachining Conf., which will be part of the first Photonics Europe Symp., Strasbourg-France, April 2004.
- 2004 Session Chairperson of the RF MEMS, "MEMS, MOEMS, and Micromachining Conference", which is part of the first Photonics Europe Symposium, Strasbourg-France in April 2004.
- 2003-4 Program committee for the APCOT MNT '04, the Second Asia-Pacific Conf. of Transducers and Micro-Nano Technology, which will be held in July 2004, Sapporo, Japan.
- 2004 Member of the technical committee of Optical MEMS 2004 in Japan, (IEEE and LEOS).
- 2004 Session Chairperson (CMOS Image Sensors), IEEE International Conference on Components and Systems (ICECS 2004), Tel Aviv, December 2004.
- 2005 Member of the Technical Program Committee of ICMAT: Nano-optics and Micro-system, July, Singapore.
- 2005 Member of the Programme Committee of the IFIP International Conference on Very Large Scale Integration VLSI-SOC 2005, which will be held October 17-19, 2005, at Burswood Resort, Perth, Western Australia.
- 2005 Optical MEMS 2005, Finland - Technical Program Committee
- 2005-6 Program committee for the MEMS, MOEMS, and Micromachining Conference, which will be part of the SPIE Photonics Europe Symp., Strasbourg, France. 3-7 April, 2006.
- 2006 Optical MEMS 2006, Montana, USA - Technical Program Committee, Aug. 21-24, 2006.
- 2006 Session Chairperson, "Nanophotonics", Optical MEMS 2006, Montana, Aug. 21-24, 2006
- 2007 Optical MEMS 2007 and Microphotonics, Taiwan-Technical Program Committee.
- 2008 Optical MEMS 2008 and Microphotonics, Germany-Technical Program Committee.
- 2008 Technical Program Committee- SPIE Photonics Europe 2008: MEMS, MOEMS, and Micromachining Conf., 7-11April 2008, Strasbourg, France.
- 2008 Session Chairperson, SPIE Photonics Europe 2008: MEMS, MOEMS, and Micromachining conference, 7-11April 2008, Strasbourg, France.
- 2009 Electrofluidics Symposium, MRS Spring '09 Conference in San Francisco. Symposium Organizers: Prof. Andrew Steckl, Prof. Yael Nemirovsky Dr. Bruno Berge, Prof. Jason Heikenfel.
- 2009 Co-chairing Symposium U: Electrofluidic Materials and Applications— Micro/Biofluidics, Electrowetting, and Electrospinning, MRS Spring '09 Conference in San Francisco.
- 2009 Technical Program Committee- Design, Automation and Test in Europe (IEEE)- 20-24 April, Nice, France.
- 2009 Session Chair: RF MEMS devices and sensors; IEEE COMCAS 2009-The international IEEE conference on Microwaves, Communications, Antennas and Electronic Systems.
- 2011 Program Committee member for IEEE Optical MEMS and Nanophotonics, Istanbul.
- 2012 Organizing and hoisting IEEE "THz Sensors, Optics and Applications", February 8, 2012 (Technion- Israel Institute of Technology).
- 2013 Session Co- Chair: sensors; IEEE COMCAS 2013-The international IEEE conference on Microwaves, Communications, Antennas and Electronic Systems.

Organization of National Conferences:

- 1986 - Chairperson of an annual meeting of the Israeli IEEE Chapter for Microelectronics, Technion, March.
- 1993- Session Chairperson, "Semiconductor Devices", Meeting of the Israeli Vacuum Society, February, Tel-Aviv University.
- 1994- Co-chairperson of a Workshop on Microsystems and Micromachinary (with Prof. Senturia from MIT), Technion, June 25–30.
- 1994- Chairperson of the Organization of the Annual Meeting of the Israeli Association for Crystal Growth, Hebrew University, November 18, Jerusalem.
- 1995 Session Chairperson, "Electronic Devices". The 18th Convention of IEEE in Israel, Tel-Aviv, March 7–8, 1995.
- 1995- Chairperson of an annual meeting of the Israeli Association for Crystal Growth, November 29, Hebrew University, Jerusalem.
- 1996- Co-chairperson of the 1st Technion—EPFL workshop on "Microsystems and Nanoelectronics", February 14–16, Technion.
- 1996- Session Chairperson, "Microelectronics and Chemistry". The 32nd Conference of the Israel Institute of Chemical Engineering, April 8, Dan Panorama, Tel-Aviv.
- 1996- Session Chairperson, "Electronic Devices". The 19th Convention of IEEE in Israel, Jerusalem, 5–6 November, 1996.
- 1996- Session Chairperson, "Micromachining and Microsystems", The 1st Conference of URSI—International Union for Radio Science, Tel Aviv, December 12, 1996.
- 1997- Organizing Committee and Session Chairperson of the 17th Israeli Vacuum Society Conference joint with the Israeli Association for Crystal Growth and the Israel IEEE-Electron Device Society, December 4, 1997, Tel Aviv University.
- 1998- Organizing Committee and Session Chairperson, Israel Materials Union—AGIL, November (1998), Ramat Gan.
- 1998- Session Chairperson, "Biochips and Biosensors", URSI, December, Technion.
- 2000- Session Chairperson, "MEMS and Solid State Devices for Light Processing", URSI, The 4th Annual Conference, The Israel National Committee for Radio Science, February, Tel-Aviv University.
- 2000 - Session Chairperson, "Electron Devices", The 21st Annual Meeting of IEEE, Israel, April, Tel-Aviv.
- 2000- Member of the Panel, "Women in Workplace", Technoda, March.
- 2000- Session Chairperson, Workshop on Micro-Electro-Mechanical-Systems (MEMS), May 22–24, Technion.
- 2000- Chairperson of the Annual Meeting of the Israeli Crystal Growth Association, December 20, the Weizmann Institute of Science.
- 2001- Organizing Committee, MEMS day in Israel, November 15, 2001, Mosad Neeman, Technion.
- 2002- Chairperson, ISRAMEMS'02, October 21st, 2002, Mosad Neheman.
The 1st annual meeting of the Israeli MEMS Society (associated with IEEE and ASME)
- 2002 Session Chairperson, The 22nd IEEE Meeting, 1.12.2002, Tel-Aviv.
- 2003 Member of the organization committee and the technical committee of the 2nd meeting of the Israeli MEMS society, Tel Aviv University, October 2003.
- 2003 Session Chairperson, 2nd meeting of the Israeli MEMS society, Tel Aviv University, October 2003
- 2005 Chairperson, ISRAMEMS'05, June 14, Technion. The 3rd annual meeting of the Israeli MEMS Society (associated with IEEE and ASME).
- 2006 Chairperson of the joint Israel-Serbia Workshop on Micro/Nano Science and Technology, June 19-20, Israel.

- 2006 Chairperson of the workshop on Micro Electro Fluidic Systems (MEFS), June 14, Israel.
- 2006 Member of the organization committee and the technical committee of the annual meeting of the Israeli MEMS Society, Tel Aviv University, December 2006
- 2006 Session Chairperson, The annual meeting of the Israeli MEMS society, Tel Aviv University, Dec.2006.
- 2012 Member of the technical committee, the 27 IEEE Israeli Chapter meeting; Eilat – summarizing 50 years of activity.
- 2013 Chairperson of the Technion 2nd Workshop on THz sensors and THz imaging, March 4, 2013.
- 2014 Scientific Committee, 2014 IEEE 28-th Convention of Electrical and Electronics Engineers in Israel, Dec. 3-5, 2014, Eilat.
- 2020 Oorganizing committee of “Smart Imaging” annual meeting

Patents

1. Y. Nemirovsky, Inventor, “Single Layer Planar HgCdTe Photovoltaic Infrared Detector with Heterostructure Passivation and P-ON-N Homojunction”, US Patent No. 5,608,208 issued March 4, 1997.
2. S. Kaldor, Y. Nemirovsky, D. Seter, O. Degani, E. Socher and E. Netzer, “Micro-Electro-Opto-Mechanical Inertial Sensor”, IL122947, WO99/36788, U.S.Patent 6,350,983, February, 2002.
3. Y. Nemirovsky, S. Stolyarova and B. Brosilow, “Method and apparatus for removing native oxide layers from silicon wafers”, US Patent 6,395,192, 2002.
4. Y. Nemirovsky, S. Stolyarova and B. Brosilow, “Apparatus for removing native oxide layers from silicon wafers”, US Pat. 10115666 - Filed Apr 4, 2002 - STEAG CVD Systems Ltd.
5. Y. Nemirovsky and N. E. Chayen, “Nucleation-Inducing Material, World Patent WO 02/088435 A1, issued November 7, 2002.
6. D. Starosvetsky, M. Kobler, Y. Yahalom and Y. Nemirovsky, “Semiconductor Etching Process and Apparatus”, US Patent 6,521,118, issued 2003.
7. Y. Nemirovsky, R. Weil, R. Beserman, Y. Shamir, S. Stolyarova, and A. Peiser, “Gamma-Ray Detector”, US Patent 6,645,787, issued November 2003. USA Patent, 6,645, 787, 2003.
8. Y. Nemirovsky, “Method for the metallization of optical fibers”, US Patent, No 6.847,752, issued September 2004.
9. Y. Nemirovsky, “Integrated Actuator for Optical Switch Mirror”, US Patent, No 6.847,752, issued January 2005.
10. Y. Nemirovsky, O. Degani, E. Socher, D. Setter, "Method and Apparatus for micromachined sensors using enhanced modulated integrative differential optical sensing", USA Patent 7,091,715 B2, 2006.
11. O. Degani, D. Elata, E. Socher and Y. Nemirovsky, “An efficient method of extracting the Pull-in parameters of an electrostatically activated MEMS device for the purpose of designing the device”, US Patent application No. 20030028360, February 2003.
12. O. Degani, E. Socher and Y. Nemirovsky, “Apparatus and Method for Micro-Machined Sensors Using Enhanced Modulated Integrative Differential Optical Sensing”, US Patent Application No 20040060355, issued 2004.
13. E. Socher, O. Degani and Y. Nemirovsky, "TMOS- Infrared uncooled sensor and focal plane array", Pending Patent, PCT IL 2004/000142, Priority Day, 20.02.03. US Utility Patent Application 10/545,892. USA Patent 7,489,024 B2, 2009.

14. A. Morgenshtein, U. Dinar and Y. Nemirovsky, "Method for ISFET measurements without readout circuitry and application to combined pH-image sensor", US Patent 7,544,979, (approved 2008).
15. S. Stolyarova, Y. Sinai, M. Weinstein, A. Shai, Y. Nemirovsky, "Cd1-xZnxS high performance TCR material for uncooled microbolometers used in infrad sensors and method of making same", US Patent Application, 11/294,677 Filed December 6, 2005, USA Patent 7,527,999, 2009.
16. Y. Nemirovsky, L. Salem, "A Millimeter Wave Pixel Composed of Sub-Pixels and Focal Plane Array Imaging Sensors Thereof", PCT/il, 2005/001062.
17. D. Elata, O. Bochobza-Degani and Y. Nemirovsky, "Device and Method for Stacked Multi-Level Uncoupled Electrostatic Actuators", US Patent 7,423,794 B2, issued September 8, 2008.
18. Y. Nemirovsky, "TERAMOS-Terahertz thermal sensor and Focal Plane Array", US Patent application, October 2009.
19. Y. Nemirovsky, D. Corcos, M. Dolgin, S. Katz and A. Svetzlina, "CMOS-SOI- MEMS Thermal Antennas for Uncooled Thermal Imaging", (Technion US provisional Patent Application 2010).
20. Igor Brouk, Lior Gal and Yael Nemirovsky, "Differential, Calibration-free and Reference-electrode-free CMOS ISFET with Remote Sensing Antennas for Ions and pH Measurements".
21. Y. Nemirovsky, D. Corcos, G. Peled, A. Svetliza, and S. Bar-Lev, "Blackbody as a THz emitter and a THz measurement and characterization set-up based on blackbody and THz filters", provisional submitted on 4/4/2011, # 61/471,366.
22. A. Morgenshtein, U. Dinar and Y. Nemirovsky, "Ion concentration transistor and dual-mode sensors", US patent No. 7,799,205 (issued on 21.9.10).
23. Y. Nemirovsky et al; Device having an avalanche photodiode and a method for sensing photons", provisional submitted on 18/9/2011, # 61/471,366. Full patent submitted 2012.
24. Y. Nemirovsky, T. Merhav, V. Savuskan, A. Nemirovsky, "Gun Muzzle flash detection using a CMOS single photon avalanche diode", Technion US patent,application, applied April 2014.
25. Y. Nemirovsky and Y. Shoham, "Sensor array with self-aligned optical cavities", applied 2014
26. Y. Nemirovsky, "Sensing Device Having a Bicmos Transistor and a Method for Sensing Electromagnetic Radiation", Technion Patent Application, Jan.2014.
27. Y. Nemirovsky, "Gas Sensing Device and a Method for Sensing Gas", TODOS-Technion Patent Application, May, 2014.
28. Y. Nemirovsky, A. Nemirovsky and S. Melman, "Optical Gas Sensing Device and a Method for Sensing Gas", TODOS -Technion Patent Application, May, 2015
29. Y. Nemirovsky, A. Nemirovsky and S. Melman, " Gas Sensing Device Having a Long Optical Path and a Method for Sensing Gas", US Provisional patent, March 2016
30. Y. Nemirovsky, "CMOS Silicon Light Emitting Diode Array Integrated with CMOS SPAD sensors Array: SiliconLightSenseTM", US Provisional patent, February 2016
31. Y. Nemirovsky, "Robust Sensor", US provisional patent, 2017
32. Y. Nemirovsky, " Compact array + manufacturing process", US provisional patent, 2017
33. A. Eshkoli and Y. Nemirovsky, "Digitally configurable on-the-fly SiPM gating and sensing methods for high resolution light detection and range finder based on ToF", April 2018.
34. A. Eshkoli, A. Katz and Y. Nemirovsky, "2D and 3D CMOS super imaging based on Staring Si Photomultiplier", April 2018.
35. A. Katz and Y. Nemirovsky, "CMOS SPAD Active Sensing", US provisional patent, 2019

36. Y. Nemirovsky, I. Brouk and S. Bar-Lev, "TMOS differential voltage readout", provisional Paten, t2020,
37. Y. Nemirovsky, CMOS-SOI-NEMS IR Imager (TMOS Imager) and Method of preparation", Provisional patent, 2020

Research Grants* (1990-)

*** Research Grants (1982–1990):** Principal Investigator in funded research programs with an annual budget of approximately 1.5 million US Dollars.

**** Unless stated otherwise, Y. Nemirovsky is the sole PI**

- 1 Ministry of Industry & Commerce, “Infrared and X-Ray Sensors for Medical Measurements”, \$50,000 (1990–1992). (Technion Budget No. 051–702).
- 2 Ministry of Science, “Wide Band Gap HgCdTe”, \$80,000 (1990–1993). (Technion Budget No. 051–691).
- 3 Semiconductor Devices (SCD) Ltd., “Growth and Characterization of Bulk and Epitaxial CdZnTe”, \$85,000 (1991–1995). (Technion Budget No. 051–755).
- 4 Galram (Rafael), “Photoconductive Arrays with Focal Plane Signal Processing”, \$50,000 (1990–1991). (Technion Budget No. 051–705).
- 5 Galram (Rafael), “1/f Noise and Electrical Properties of Si MOS Transistors Operating at 77K”, \$16,000 (1990–1991). (Technion Budget No. 051–709).
- 6 Ministry of Energy, “CdTe Solar Cells for Satellites”, (1992–1996),
1st year: \$75,000. 2nd year: \$45,000. 3rd year: \$65,000. (Technion Budget No. 050–768).
- 7 The Alexander Goldenberg Foundation, “New X-ray Detectors for Computerized Tomography”, \$4,000 (1992). (Technion Budget No. 051–766).
- 8 The Asher Peled Foundation, “Superstrates for Infra Red Focal Plane Arrays”, \$6,000 (1992). (Technion Budget No. 051–782).
- 9 The Kidron Foundation, “Innovative X-ray Focal Plane Arrays for Medical Imaging”, \$100,000 (1993). (Technion Budget No. 051–791).
- 10 Intel, “A Study of CMOS Compatible Temperature Measurement Techniques for On-Chip Thermal Management”, \$10,000 (1994). (Technion Budget No. 051–845).
- 11 MCS Ltd., “Study of CMOS Microelectromechanical Systems for Sensors and the Realization of a Pressure Sensor”, \$30,000 (1994). (Technion Budget No. 051–824).
- 12 Rafael, “Study and Development of a Microelectromechanical Resonator Using CMOS and Micromachining Technologies”, 1st year: \$70,000. 2nd year: \$88,000 (1995). (Technion Budget No. 051–842).
- 13 Ministry of Industry & Commerce, “MOCVD CdZnTe Superstrates”, \$80,000. (November 1995–1996). (Technion Budget No. 051–877).
- 14 Ministry of Science & Arts, “Micromechanisms and Microsystems: Micromechanic Flexures and Vibratory Systems”, \$235,000 per year. (November 1995–). (Technion Budget No. 051–904).
- 15 Ministry of Science & Arts, “Rapid Thermal Processing of Metallization for CdZnTe”, \$35,000. (December 1995–1998). (Technion Budget No. 095–288).
- 16 Ministry of Industry & Commerce, “Si Micro-Optical Bench”, Consortium for Wide Band Communication, (1995–), \$12,000 per year.
- 17 Ministry of Industry & Commerce, “In Situ Reactor/Wafer Vapor Phase Cleaning for Nonelectronics”, Consortium for 0.25 μm , (1996–2001), \$65,000 in 1996 and \$120,000 in 1997, \$ 75,000 in 1998, \$ 55,000 in 1999 (Technion Budget No. 71930100).
- 18 Academy of Science, “Ordering and Ferroelectricity in II–VI Semiconductors”, \$108,000, Y. Nemirovsky – Investigator. R. Weill and R. Beserman – Principal Investigators, (1994–1997). (Technion Budget No. 095–263).

- 19 Chutik Foundation, "Multimodality Monitory of Brain Function with Micromachined Integrated Multisensors", (1996–), \$35,000. (with U. Dinar and M. Feinsod). (Technion Budget No. 181–876).
- 20 Ministry of Defense, "Uncooled IR Thermal Detectors", (1996–2002), \$330,000. (Technion Budget No. 051–938).
- 21 Ministry of Science, "3D Light Structures: Design, Technology and Applications", (1996–1999), \$120,000. (Technion Budget No. 050–895) (with Prof. J. Shamir).
- 22 Academy of Science, "Control and Generation of Bandgap Discontinuities by Rapid Thermal Processing", (1997–2000), \$113,000. (Technion Budget No. 049–001).
- 23 Ministry of Science, "Rapid VLSI Prototyping-Shiram", (1997–2001), \$300,000. (Technion Budget No. 059–003). (With Prof. R. Ginosar).
- 24 Ministry of Science, "CdZnTe Arrays for Medical Imaging", (1998–2001), \$180,000. (Technion Budget No. 051–956).
- 25 German-Israel Corporation MATECH, "Pyroelectric Infra Red Micromachined Detector Arrays", (1998–2002), DM 400,000. (Technion Budget No. 051–983).
- 26 Ministry of Defense, "MEMS Inertial Sensor", (1999–2000), \$30,000. (Technion Budget No. 051–106).
- 27 Ministry of Science, "CMOS Camera on a Chip", (1999–2003), \$40,000 in 1999, \$50,000 in 2000, \$50,000 in 2001. (Technion Budget No. 051–003).
- 28 Ministry of Science, "Control of Defects by Ultrasonic Energy", (1999–2002), (\$100,000 per year). With Prof. Weil, Profs. Shamir and Beserman. (Technion Budget No. 095–324).
- 29 New York Metropolitan Research Fund, "CdZnTe Arrays for Gamma and Positron Annihilation Imaging", 1999, \$18,000. With Prof. B. Rosner. (Technion Budget 051–029).
- 30 The International Atomic Energy Agency, "CdZnTe Arrays for Hand Held Gamma Spectrometers", (1998–2000). \$40,000. (Technion Budget 051–969).
- 31 The Israeli Atomic Energy Agency, "VLSI Electronics for Nuclear Detectors", (2000). \$20,000. Technion Budget 051–969).
- 32 The Ministry of Defense, "Analog and Mixed VLSI CMOS Design", (2000–2002). \$180,000. (Technion Budget 059–008).
- 33 The Australian Ministry of Education, "A Novel Backside-illuminated Architecture for Vision Focal Plane Arrays", (2000–2003). \$40,000. (Technion Budget 059–007).
- 34 Rafael, "An Infrastructure Research in MEMS", (1999–2002). \$350,000. (Technion Budget 051–842).
- 35 German-Israeli Foundation, GIF, "Vapor Phase Grown CdZnTe Gamma-Ray Spectrometers", (2001–2004). 160,000 Euro. Technion Budget 051–089).
- 36 Ministry of Industry & Commerce, Magneton, "Silicon-On-Insulator (SOI) CMOS Image Sensor with Backside Illumination", (2000–02). \$350,000. (Technion Budget No. 059–010).
- 37 Rafael, "MEMS Devices", (2001–). \$150,000. (Technion Budget 051–104).
- 38 European Community, "Uncooled IR Detectors", (2002–). \$322,500. (Technion Budget 051–097).
- 39 Ministry of Industry & Commerce, Magent Consortium MOEMS, "MEMS Inertial Sensors", (2001–2003). \$160,000. (Technion Budget No. 051–138).
- 40 Ministry of Industry & Commerce, Magent Consortium MOEMS, "Uncooled IR Detectors", (2001–2003). \$150,000. (Technion Budget No. 051–137).
- 41 Technion Foundation for Security, "A new micromachined uncooled IR imager based on CMOS-SOI transistors", (2003), \$25000 and 500,000 shekels, (Technion Budget No. 051–180).
- 42 Australia, "High Speed CMOS photodiodes", AU\$ 80,000. (Technion Budget No. 059–010) (2004–2006).
- 43 Ministry of Defense, "TMOS transistors for uncooled IR sensors", 500,000 shekels, (Technion Budget No. 051–180).

- 44 Mitchel Foundation, "Novel electrostatically actuated liquid micropump and gas microvalve", Mitchell Fund, November 2003.
- 45 Orbotech, "Silicon Thin Film Transistors", (2003–4). \$60,000. Technion Budget No. 051–174).
- 46 ELOP, "Study of Advanced CMOS Design For Applications in Image Sensors", (2003–4). \$ 9,200. (Technion Budget No. 059-015).
- 47 Technion Foundation for Security, "a new micromachined uncooled IR imager", (2003), \$ 25000 and 500,000 shekels, (Technion Budget No. 051–180).
- 48 Australia, Joint research with ECU University, "CMOS SOI Photodiodes", (Technion Budget No. 1005222) 40,000 Australians \$ (2004-5).
- 49 Ministry of Defense, "TMOS transistors for uncooled IR sensors", 800,000 shekels, (Technion Budget No. 051–180) (2003-4).
- 50 Intel, "Charge Detection Circuitry for low noise and high bandwidth", \$ 20,000, (Technion Budget No. 1004796).
- 51 Ministry of Defense, "Hybrid RF MEMS Switch", 400,000 shekels, (Technion Budget No. 1005149) (2004-7).
- 52 Ministry of Defense, "Scattered Sensors", 250,000 shekels, (Technion Budget No. 2004557) (2004).
- 53 Technion Manlam, " Simulation and Dynamic Monitoring of the Musculo-Skeletal System by Novel Miniature and Biocompatible MEMS Acelerometers (with Prof. J. Mizrachi), (Technion Budget No. 1005661) (2005).
- 54 Technion Manlam and space center, "Novel DMOS transistor for space application", 1005699, \$ 7000, 2005.
- 55 Ministry of Science, "network of sensors based on smart dust concept", with Dr. S. Arnon, Ben Gurion University 2005- (400,000 shekels).
- 56 Magenton with Rafael, with Dr. Shusser " MEMS based high pressure regulator"), October 2005-2007 (1st year 460,000 shekels; 2nd year 360,000 shekels).
- 57 Ministry of Science, "MEMS Porous Silicon Cantilevers for Ultrasensitive Biosensing Applications", collaboration with India, 2005-6, \$ 100,000, Technion number 1005729.
- 58 Nato, "Development of a novel sensing technique based on nanomechanics for rapid detection of bioagents", 2006-8, 235,000 Euro (Technion part: 100,000 Euro), Technion number 1006178 **(a consortium with several members from Europe. I am the PI).**
- 59 Ministry of Defense, "Sensing with cantilever microstructures", 2006- 2012, \$360,000, Technion number 1006329 (~60,000). 2013- 280,000 shekels.
- 60 Physical Logic, "Tiny MEMS accelerometer for medical applications", 2006-,\$71,400, Technion number 1006432.
- 61 Singapore Technologies (STE), "Broadband RF MEMS radio", 2006- , \$360,000, Technion number 1006696.
- 62 Ministry of Defense: 200,000 \$ for equipment (MEMS measuring system), 2007.
- 63 Rafael, "RF CMOS", 2008-2013 , 1007682, 100,000 shekels per year.
- 64 Rafael, "RF MEMS", 2003-2011, 800,000 shekels, 2010297.
- 65 Ministry of Industry & Commerce, Magenton with Tower, "CMOS-SOI-MEMS Platform for Power Management", (2008–2010). 600,000 shekels per year.
- 66 Tehnofab, Italy, "Study of Future MEMS Directions", 1008112, 2008 (6,000 €).
- 67 Technion center for security, "ultrasensitive sensor for explosives", 65000 shekels, (with Prof. Y. Eichen) 2008 (2011213).
- 68 IBM Foundation, "THz imager", 20,000\$, 2008.
- 69 Technion Gurwin Foundation, "sensor for air quality", (applied, with Prof. Y. Eichen).
- 70 Technion Security Center, "Multi Cantilever Based Continuous Sensing of Chemical Warfare Agents", (applied, with Prof. Y. Eichen); 1008367, 2008.

- 71 Orbotech, "Characterization of CdZnTe crystals and devices", 1008381, 20,000\$, 2009.
- 72 Ministry of industry and commerce, "CMOS ISFETs for medical applications", 1008478, 465,000 shekels, 2009.
- 73 Ministry of industry and commerce, "Arrays of Si Avalanche Photodiodes", 1009478, 2011-270,000 shekels, 2012- 660,000 shekels per year for the following 3 years. Also: 200,000 shekels for lab instruments approved in 2012. 500,000 shekels for 2013.
- 74 Water authority, "Electro-optical multisensor for water", with Prof. Y. Eichen, , 350,000 shekels (2010-2013).
- 75 MEMS collaboration with KAZAN, 1009938, ~65,000\$, 2011.
- 76 Silicon Integrated Solar Cells, SOLCHIP, 1009939, 25,000 shekels, 2011.
- 77 FP7, European Community, "Terahertz Photonic Imager on chip", ICT-2011.3.5: Core and disruptive photonic technologies, total budget: ~2 milion Euros, Technion part: 290,000 Euros. 2011-2014. Technion #2015552.
- 78 Magnetron with TowerJazz Semiconductors, "DC to DC Converter with integrated inductor",#2015530, 1.1 million shekels, 2011-2013.
- 79 "Real Fire". Submitted to European Community Security Call (to fight large scale fires)- IP project. Technion part: sensors for detecting fires. Technion Requested budget: 210,000 Euro. Submitted November 2011.
- 80 IR Radiation Source, Ministry of Defense, 2011- 2014 (150,000 shekels per year) #2015076. "TMOS Feasibility Study", TODOS Technologies; 2012-2015, 4 million shekels, starting April 1, 2012.; 2017: 600,000 shekels
- 81 "CMOS SPAD for the detection of stray firing", MEYMAD, 2013-2014, 450,000 shekels.
- 82 "ThermallyOptimized Paradigm of thermal Management (TOP-M)", DARPA, 300,000\$, August 2015- 2017.
- 83 Magnetron, "CMOS SPAD Electro-Optical Systemm for the detection of gun muzzle flash", Ministry of Economy, 2016-2018, 1.4 million Shekels
84. Nofar-Memad, "CMOS Si Photomultiplier", 2017, 0.55 million Shekels, Innovation Authority
85. Magent "smart imaging:, 2019-2021, 750,000 Shekels, Innovation Authority
86. Mafat, "Muzzle Fire Detection", 2019-2020, 400,000 Shekels
87. "Innovating Sensing Systems", 2020, 2,4 million Shekels, TODOS Technologies

Graduate Students

Completed D.Sc. /Ph.D. Theses

1. A. Kornfeld (D.Sc.), “Semiconductor Technology and Focal Plane Signal Processing”, Co-supervisor (1983–1986). (Supervisor: Prof. I. Kidron).
2. R. Adar (D.Sc.), “Junctions and Interfaces in Narrow Bandgap Semiconductors”, co-supervisor (1984–1988). (Supervisor: Prof. I. Kidron).
3. Y. Hait (D.Sc.), “Focal Plane Signal Processing for Staring Infrared Sensors”, (1985–1989).
4. D. Rosenfeld (D.Sc.), “Infrared Detectors – HgCdTe Photo-Diodes of Various Structures”, (1985–1989).
5. I. Bloom (D.Sc.), “Advanced Infrared Sensing Focal Plane Arrays”, (1988–1991). (Cosupervisor: A. Bar-Lev.)
6. L. Goldmintz (D.Sc.) “Focal Plane Arrays Signal Processing for Photoconductive Array”, (1988–1993).
7. A. Ruzin (D.Sc.), “CdTe Sensors for X-Ray Imaging”, (1992–1997).
8. N. Amir (D.Sc.), “Interface Studies of II–VI Epilayers”, (1992–1997).
9. D. Goren (D.Sc.), “II–VI Abrupt and Graded Heterojunctions”, (1992–1997). (Co-supervisors: A. Bar-Lev).
10. G. Asa (D.Sc.), “CdZnTe Nuclear Detector Arrays for Spectroscopy and Imaging”, (1995–1999).
11. M. Kobler (D.Sc.), Co-supervisor (with Prof. Y. Yahalom as supervisor), “Coatings for X-Ray Masks”, (1995–2000).
12. C. Jakobson (D.Sc.), Co-supervisor (with U. Dinar as supervisor), “Noise Behaviour of Generic Ionic MOSFETs”, (1997–2001).
13. A. El-Bahar (Ph.D.), “Contacts and Passivation for Porous Silicon”, (1998–2003).
14. I. Brouk (Ph.D.), “CMOS Image Sensors”, (2000–4).
15. E. Socher (Ph.D.), “CMOS Infrared Imagers”, (1999–2005).
16. O. Degani (Ph.D.), “Integrated Sensing and Actuation for Micro-Electro-Mechano-Optical Systems”, (1999–2004).
17. E. Langzam (Ph.D.), Co-supervisor (Supervisors: J. Mizrahi—Biomedical Eng., Y. Nemirovsky - Electrical Eng.; Advisor: D. Elata – Mechanical Eng.) “Dynamic Monitoring for Application of Electro-Mechanical Devices in the Musculo-Skeletal System”, (7/2002–2007).
18. A. Bransky (Ph.D.), Co-supervisor (with U. Dinar as supervisor), “Laser detection of blood cells flowing in silicon microchannels”, (2003–2007).
19. Oren Aharon (Ph.D.), "Micro-Electro-Mechanical Systems for Communication Applications", (2003–2009).
20. Ariel Shemesh (Ph.D.), Co-supervisor (with Y. Eichen as supervisor), “MEMS based cantilever sensors”, (2008–2013).
21. Vitali Savuskan (Ph.D.), "CMOS in pixel readout for Avalenche Photodiode Arrays the Geiger mode (2010–2015).
22. Alex Svetzlina (Ph.D.), "CMOS-SOI-MEMS Thermal antenna for THz imaging" (2010–2015).
23. Evgeny Pikhay (Ph.D.) “Investigation of radiation influence on nano-scale CMOS”, (2011–2016).
24. Maria Maliz (Ph.D.), "Study of Thermal Effects and Noise in CMOS devices and circuits" (2013–2018)

25. Alex Zviagintsev (Ph.D.), “Uncooled Passive IR sensors and small Arrays based on CMOS-SOI-NEMS Technology” (2014-2018)
26. Alexander Katz (PhD); “Sensors and 2-D imagers based on the CMOS SPAD detectors”, (2016-2019)
- 27.
28. *Completed M.Sc. Theses*
29. R. Goshen (M.Sc.), “Plasma Anodization of Narrow Band-Gap Semiconductors”, (1982–1984).
30. L. Burstein (M.Sc.), “MIS Devices in $\text{Hg}_{1-x}\text{Cd}_x\text{Te}$ ”, (1983–1985).
31. A. Kepten (M.Sc.), “Growth and Electrooptical Properties of $\text{Hg}_{1-x}\text{Cd}_x\text{Te}$ Epitaxial Layers”, (1984–1986).
32. E. Sand (M.Sc.), “Liquid Phase Epitaxy of $\text{Hg}_{1-x}\text{Cd}_x\text{Te}$ ”, (1984–1986).
33. D. Shulman (M.Sc.), “Electrooptical Devices in Heterostructures in $\text{CdTe}/\text{Hg}_{1-x}\text{Cd}_x\text{Te}$ ”, (1986–1988).
34. I. Bloom (M.Sc.), “Impedance Spectrum Analysis of MIS Devices in $\text{Hg}_{1-x}\text{Cd}_x\text{Te}$ ”, (1985–1988).
35. Y. Volpert (M.Sc.), “Novel Silicon Focal Plane Signal Processing for HgCdTe Diode Arrays”, (1988–1990).
36. N. Amir (M.Sc.), “MOCVD Growth of HgCdTe Epitaxial Films for Infrared Detectors”, (1988–1990).
37. M. Meyassed (M.Sc.), “Electrical Characterization of Narrow Bandgap Semiconductors by MIS Devices”, (1988–1991).
38. I. Levy (M.Sc.), “Optimal Design of Thermal System with Parallel Scanning”, (1989–1991).
39. D. Goren (M.Sc.), Heterostructures in the Alloy System HgCdTe ”, (1990–1991). (Cosupervisor: A. Bar-Lev.)
40. A. Unikovsky (M.Sc.), “Low Frequency Noise Phenomena in HgCdTe Photodiodes”, (1989–1992).
41. A. Ruzin (M.Sc.), “Photo-Assisted MOCVD Growth of HgCdTe ”, (1990–1992).
42. L. Djaloshinsky (M.Sc.), “Wide Band Gap HgCdTe ”, (1991–1993).
43. G. Asa (M.Sc.), “Metal-Semiconductor Contacts on II-VI Compounds”, (1992–1995).
44. E. Khanin (M.Sc.), “MOCVD Growth and Characterization of CdTe Epilayers”, (1992–1995).
45. C. Jakobson, M.Sc., “Noise Phenomena in MOS Devices for Charge Sensitive Preamplifier”, (1993–1996).
46. M. Levy (M.Sc.), Co-supervisor (with Prof. R. Beserman as supervisor), “Ordering in Mixed CdZnTe ”, (1994–1997).
47. G. Gordon (M.Sc.), “Characterization of Heterojunctions by Capacitance-Voltage Measurements”, (1994–1998).
48. R. Elbahar, “Micro-Electro-Mechanical System for Pressure Measurement based on CMOS Technology”, (1995–1998).
49. E. Socher (M.Sc.), “Study of Uncooled Micromachined Integrated Thermal Sensors”, (1996–1999).
50. O. Degani (M.Sc.), “Vibrating Micro-Electro-Mechano-Optical Systems with Integrated Optical Sensing”, (1996–1999).

51. I. Brouk (M.Sc.), "Study of CMOS Photodiodes and Low Noise Analog Readout for Visible Photon Detection", (1997–2000).
52. A. Peyser (M.Sc.), "X-Ray Detectors for High Rate Applications", (1998–2000).
53. M. Ifraimov (M.Sc.), "Statistical, Electrostatic and Numerical Models of Spectral Performance of 2D-Arrays of Gamma-Ray", (2000–2002)
54. A. Morgenstein (M.Sc.), Co-supervisor (with Prof. Uri Dinnar, Biomedical Engineering Dept., as supervisor), "Design and Methodology of ISFET Microsystems for Bio-Telemetry", (2000–2003).
55. S. Feldman (M.Sc.), "Design Fabrication and Characterization of a MEMS Based Switch", (2001–2005).
56. E. Sidorov (M.Sc.), Co-supervisor (with H. Yarnitzki as supervisor), "Reactive Ion Etching of silicon ", (2000–2004).
57. L. Sudakov-Boreysha (M.Sc.), (with U. Dinar as co-supervisor), "Biocompatible Encapsulation Techniques for ISFETs", (2002–2005).
58. O. Cohen (M.Sc.), "MEMS display for the retina", (2001–2006).
59. L. Gitelman (M.Sc.), "Study of micromachined transistors as uncooled sensors for IR imaging", (2004–2006).
60. R. Khamaisi (M.Sc.), "Co-supervisor (with U. Dinar as supervisor), "Microchannel Flow Device for the Study of Microcirculatory Blood Flow", (2002–2006).
61. T. Nachmias (M.Sc.), Co-supervisor (with H. Yarnitzki as supervisor), "Deep dry etch (DRIE) processes in silicon for 3D microstructures", (2002–2007).
62. Moshe Weinstein (M.Sc.), "Study of micromachined microbolometers as uncooled sensors for IR Imaging", (2005–2008).
63. Omer Lavie (M.Sc.), "MEMS Microwave Filters" (with Dr. A. Saad as co- supervisor), (2007–2009).
64. Eyal David (M.Sc.), "Study and design of RF MEMS tunable capacitor", (2007–2009).
65. Tal Zlotnikov (M.Sc.), "Study and design of RF MEMS Phase Shifter", (2007–2009).
66. Zivit Gutman (M.Sc.), "Study of CMOS-SOI-MEMS transistors and systems", (2006–10).
67. Roe Ben Yishay (M.Sc.), "MEMS Inductors and their applications in low noise RF-CMOS circuits", (2007–2010).
68. Shlomo Katz (M.Sc.), "Electromagnetic applications of CMOS-MEMS", (2008–2010).
69. Dan Corcos (M.Sc.), "CMOS-SOI-MEMS sensors for THz Imaging", (2009–2012).
70. Gal Segev (M.Sc.), "CMOS Phase Shifter", (2009–2012).
71. Maria Maliz (M.Sc.), "Study of CMOS-SOI technologies and devices (2011–2013).
72. Gil Visokolov (M.Sc.), "CMOS Avalanche Photodiode Arrays operating in the Geiger mode (2010–2013).
73. Yoni Khasin (M.Sc.), "Electro-optical characterization of Single Photon Avalanche Photodiode Arrays in CMOS Technology" (2011–2013).
74. Tomer Merhav (M.Sc.); "An Electro-Optic Flash Detection System in the visible waveband", (2011–2014).
75. Micrael Slavenko (M.Sc.), "Study of CMOS-SOI-NEMS THz Sensor", (2011–2014).
76. Michael Javitt (M.Sc.), "CMOS SPAD for 3D imaging applications", (2014–2015)
77. Ayal Eshkoli (M.Sc.), "Design and Analysis of High Performance Inductors for Power Management Applications", (2012–2014).
78. Tomer Saraf (M.Sc.), "Study of CMOS readout circuits for thermal sensors", (2012–2015).

79. Avi Shoham (M.Sc.), “Fast Optical CMOS Sensor-based Applications and Signal Preprocessing Algorithms”, (2014-2017)

Theses in progress

1. Ayal Eshkoli (PhD); “Electro-Optical System for Automotive Applications based on CMOS SiPM Sensors for ToF Ranging and Imaging” (2016-
2. Roy Shor, “Study of CMOS Direct Sensing Systems for High Energy Alpha Radiation,” (2017-)
3. Dima Shlenkevitz, “CMOS-SOI-MEMS Transistors for Gas Sensing”, (2018-
4. Amir Zeevi, “CMOS mixed circuit design for low-power applications”, (2018-
5. Gil Cherniak, Study of Electro-Optical Effects in Sensors”, (2020-)
- 6.

M.Sc. Project without thesis:

1. Eithan Sharoni, “Design and Modeling of MEMS hotplates” (2003-6).
2. Evgeny Poliyaacov, “CMOS capacitive sensing for MEMS applications”, (2003-6).
3. Eyal Tuaf, “Modeling MEMS cantilevers” (2006-2009).
4. Constatine Veinstein, Co-Supervisor, Efficient Computing Architecture for Real-Time SPAD-Based Muzzle Flash Detection”, (2017-2019)

LIST OF PUBLICATIONS
Yael Nemirovsky

Thesis

“The Measurement of Differential Capacitance in Solutions of Low Conductivity”, D.Sc. Thesis, Technion, 1–19, (1971).

Refereed papers in professional journals:

1. U. Eisner, Ch. Yarnitzky, Y. Nemirovsky and M. Ariel, “Anodic Stripping, Voltammetry with Superimposed A.C. Potential”, Israel J. Chem., Vol. 4, pp. 215–222, 1966.
2. E. Sutzkover, Y. Nemirovsky and M. Ariel, “The Iodine–iodide Reference Electrode in Propylene Carbonate”, Electroanal. Chem., Vol. 37, pp. 107–113, 1972.
3. M. Ariel and Y. Nemirovsky, “The Measurements of Differential Capacitance in Solutions of Low Conductivity”, Electrochem. Acta, Vol. 17, pp. 1977–1986, 1972.
4. I. Oref and Y. Nemirovsky, “Gas–phase Electrochemistry: Electrocapillary Effects at the Mercury–gas Interface”, J. of Applied Physics, Vol. 46, pp. 2057–2064, 1975.
5. Y. Nemirovsky, I.A. Blech and J. Yahalom, “Abnormal Undercutting in Etched Cr–Au Films”, J. Electrochem., Vol. 125, pp. 1177–1179, 1978.
6. E. Finkman and Y. Nemirovsky, “Infrared Optical Absorption of $\text{Hg}_{1-x}\text{Cd}_x\text{Te}$ ”, J. Appl. Physics, Vol. 50, pp. 4536–4561, 1979.
7. Y. Nemirovsky and E. Finkman, “Anodic Oxide Films on $\text{Hg}_{1-x}\text{Cd}_x\text{Te}$ ”, J. Electrochem. Soc., Vol. 126, pp. 768–770, 1979.
8. Y. Nemirovsky and I. Kidron, “The Interface Between $\text{Hg}_{1-x}\text{Cd}_x$ and its Native Oxide”, Solid State Electronics, Vol. 22, pp. 831–837, 1979.
9. Y. Nemirovsky and E. Finkman, “Intrinsic Carrier–Concentration of $\text{Hg}_{1-x}\text{Cd}_x\text{Te}$ ”, J. Appl. Physics, Vol. 50, pp. 8107–8111, 1979.
10. S. Margalit, Y. Nemirovsky and I. Rotstein, “Electrical Properties of Ion Implanted Layers in $\text{Hg}_{0.79}\text{Cd}_{0.21}\text{Te}$ ”, J. Appl. Physics, Vol. 50, pp. 6386–6389, 1979.
11. S. Margalit and Y. Nemirovsky, “Diffusion of Indium in $\text{Hg}_{1-x}\text{Cd}_x\text{Te}$ ”, J. Electrochem. Soc., pp. 1530–1534, 1980.
12. Y. Nemirovsky, S. Margalit and I. Kidron, “N-Channel Insulated-Gate Field-Effect Transistors in $\text{Hg}_{1-x}\text{Cd}_x\text{Te}$ with $x=0.215$ ”, Appl. Phys. Letters, Vol. 36, pp. 466–468, 1980.
13. Y. Nemirovsky and R. Goshen, “Plasma Anodization of $\text{Hg}_{1-x}\text{Cd}_x\text{Te}$ ”, Appl. Phys. Lett., Vol. 37, No. 9, pp. 813–815, 1980.
14. E. Finkman and Y. Nemirovsky, “Two-Electron Conduction in $\text{Hg}_{1-x}\text{Cd}_x\text{Te}$ ”, J. Appl. Phys., Vol. 53, No. 2, pp. 1052–1058, 1982.
15. Y. Nemirovsky, S. Margalit, E. Finkman, J. Shacham–Diamand and I. Kidron, “Growth and Properties of $\text{Hg}_{1-x}\text{Cd}_x\text{Te}$ Epitaxial Layers”, J. of Electronic Materials, Vol. 11, pp. 133–153, 1982.
16. Y. Nemirovsky, R. Goshen and I. Kidron, “The Interface of Plasma Anodized $\text{Hg}_{1-x}\text{Cd}_x\text{Te}$ ”, J. Appl. Phys., Vol. 53, No. 7, pp. 4888–4895, 1982.
17. G. Bahir, R. Kalish and Y. Nemirovsky, “Electrical Properties of Donor and Acceptor Implanted Layers in $\text{Hg}_{1-x}\text{Cd}_x\text{Te}$ Following CW CO_2 Laser Annealing”, Appl. Phys. Lett., Vol. 41, No. 11, pp. 1057–1059, 1982.
18. Y. Nemirovsky and L. Burstein, “Anodic Sulfide Films on HgCdTe ”, Appl. Phys. Lett., Vol. 44, pp. 443–444, 1984.
19. Y. Nemirovsky and A. Kepten, “Open-Tube Vapor Transport Epitaxy of $\text{Hg}_{1-x}\text{Cd}_x\text{Te}$ ”, J. of Electronic Materials, Vol. 13, pp. 1–29, 1984.
20. Y. Nemirovsky, L. Burstein and I. Kidron, “The Interface of p- $\text{Hg}_{1-x}\text{Cd}_x\text{Te}$ Passivated with Native Sulfides”, J. Appl. Phys., Vol. 58, pp. 366–373, June 1985.

21. E. Sand, D. Levy and Y. Nemirovsky, "A Combination of Vapor Phase and Liquid Phase Epitaxy of $\text{Hg}_{1-x}\text{Cd}_x\text{Te}$ ", *Appl. Phys. Lett.*, Vol. 46, No. 5, pp. 501–503, 1985.
22. E. Sand and Y. Nemirovsky, "Calibration Curve for Cut off Wavelength of Photodiodes in $\text{Hg}_{1-x}\text{Cd}_x\text{Te}$ Epilayers", *Infrared Physics*, Vol. 25, pp. 591–594, 1985.
23. E. Finkman and Y. Nemirovsky, "Electrical Properties of Shallow Levels in p-Type HgCdTe ", *J. Appl. Phys.*, Vol. 59, pp. 1205–1212, 1986.
24. Y. Nemirovsky, R. Adar, A. Kornfeld and I. Kidron, "Gate-Controlled $\text{Hg}_{1-x}\text{Cd}_x\text{Te}$ Photodiodes Passivated with Native Sulfides", *J. Vacuum Sci. and Technology*, Vol A4, No. 4, pp. 1986–1991, 1986.
25. Y. Nemirovsky and I. Bloom, "Tunneling Currents in Reverse Biased HgCdTe Photodiodes", *Infrared Physics*, Vol. 27, pp. 143–151, 1987.
26. R. Adar, Y. Nemirovsky and I. Kidron, "Bulk Tunneling Contribution to the Reverse Breakdown Characteristics of InSb Gate Controlled Diodes", *Solid State Electronics*, Vol. 30, pp. 1289–1293, 1987.
27. I. Bloom and Y. Nemirovsky, "Bulk Levels and Interface Calculations for Narrow Band-Gap Semiconductors", *Solid State Electronics*, Vol. 31, pp. 17–25, 1988.
28. Y. Nemirovsky and D. Rosenfeld, "The Cut-Off Wavelength and Minority-Carrier Life-Time in Implanted n+-on-Bulk p HgCdTe Photodiodes", *J. Appl. Phys.*, Vol. 63, pp. 2435–2439, 1988.
29. Y. Nemirovsky and I. Bloom, "Admittance Measurements in p-type HgCdTe ", *J. Vac. Sci.*, Vol. A(4), pp. 2710–2715, 1988.
30. D. Lubzens, D. Rosenfeld and Y. Nemirovsky, "The NETD Performance of HgCdTe Photodiode Array", *Infrared Physics*, Vol. 28, pp. 417–423, 1988.
31. R. Adar, I. Bloom and Y. Nemirovsky, "Slow Trapping Measurements in the InSb-Anodic Oxide Interface", *Solid State Electronics*, Vol. 32, pp. 111–118, 1989.
32. Y. Nemirovsky and G. Bahir, "Passivation of HgCdTe Surfaces", *J. Vac. Sci.*, Vol. A7, No. 2, pp. 450–459, 1989.
33. Y. Nemirovsky, D. Rosenfeld, R. Adar and A. Kornfeld, "Tunneling and Dark Currents in HgCdTe Photodiodes", *J. Vac. Sci.*, Vol. A7(2), pp. 528–535, 1989.
34. Y. Hait and Y. Nemirovsky, "Comparison of NETD Performance of Staring and Partial-Scanning Infrared Focal Plane Arrays", *Infrared Physics*, Vol. 29, pp. 971–984, 1989.
35. R. Fastow and Y. Nemirovsky, "Excess Carrier Life-Time and Undoped p-Type HgCdTe by Photoconductive Decay", *J. Appl. Phys.*, Vol. 66, pp. 1705–1710, 1989.
36. R. Fastow and Y. Nemirovsky, "The Transient and Steady-State Excess Carrier Lifetime in p-Type HgCdTe ", *Appl. Phys. Lett.*, Vol. 55, pp. 1882–1884, 1989.
37. Y. Hait and Y. Nemirovsky, "A Modified and Systematic Approach to NETD Calculation for Infra Red Focal Plane Arrays", *Infrared Physics*, Vol. 30, pp. 71–83, 1990.
38. R. Adar, I. Bloom and Y. Nemirovsky, "Combined Technique for Capacitance and Slow Trapping Characterization", *Solid State Electronics*, Vol. 33, pp. 1197–1206, 1990.
39. R. Fastow and Y. Nemirovsky, "The Excess Carrier Lifetime in p-type HgCdTe ", *Vac. Sci. Technol.*, Vol. A, No. 8, pp. 1245–1250, 1990.
40. Y. Nemirovsky and D. Rosenfeld, "Passivation and 1/f Noise Phenomena in HgCdTe Photodiodes", *J. Vac. Sci. Technol.*, Vol. A(8), pp. 1159–1166, 1990.
41. Y. Nemirovsky, "Passivation with II-VI Compounds", *J. Vac. Sci. Technol.*, Vol. A(8), pp. 1185–1187, 1990.
42. N. Amir, D. Fekete and Y. Nemirovsky, "A Model for the Determination of the Solid Composition of Ternary III-V and II-VI MOCVD Epilayers", *J. Appl. Phys.*, Vol. 68, pp. 871–873, 1990.
43. R. Fastow, D. Goren and Y. Nemirovsky, "Shockley-Read Recombination and Trapping in p-type HgCdTe ", *J. Appl. Phys.*, Vol. 68, pp. 3405–3412, 1990.
44. N. Amir, D. Goren, D. Fekete and Y. Nemirovsky, "A Model for High Temperature Growth of CdTe by MOCVD", *J. Electron Materials*, Vol. 20, pp. 227–230, 1990.

45. I. Bloom and Y. Nemirovsky, "1/f Noise Reduction in Metal-Oxide-Semiconductor Transistors by Cycling from Inversion to Accumulation", *Appl. Phys. Lett.*, Vol. 58, pp. 1664–1666, 1991.
46. I. Bloom and Y. Nemirovsky, "Quantum Efficiency and Crosstalk of an Improved Backside Illuminated Indium Antimonide Focal Plane Array", *IEEE Trans. on Electron Devices*, Vol. 38, pp. 1792–1796, 1991.
47. Y. Nemirovsky, R. Fastow, M. Meyassed and A. Unikovsky, "Trapping Effects in HgCdTe", *J. Vac. Sci. Technol.*, Vol. B(9), pp. 1829–1839, 1991.
48. Y. Nemirovsky, D. Goren and A. Ruzin, "A Model for Low Temperature Growth of CdTe by MOCVD", *J. of Electronic Materials*, Vol. 20, pp. 609–613, 1991.
49. M. Meyassed and Y. Nemirovsky, "The Measurement and Modeling of HgCdTe Metal-Insulator-Semiconductor Devices", *Appl. Phys. Lett.*, Vol. 59, pp. 2439–2441, 1991.
50. I. Bloom and Y. Nemirovsky, "Lifetime Determination of Etch-Thinned InSb Wafers", *IEEE Trans. of Electron Devices*, Vol. 39, pp. 809–812, 1992.
51. D. Goren, N. Amir and Y. Nemirovsky, "Determination of the Interface Charge between an Epilayer and a Substrate using Capacitance Voltage Measurements", *J. Appl. Phys.*, Vol. 71, pp. 318–325, 1992.
52. Y. Nemirovsky and A. Unikovsky, "Tunneling and 1/f Noise in HgCdTe Photodiodes", *J. Vac. Sci. & Technology*, Vol. B10(4), pp. 1602–1610, (1992).
53. A. Unikovsky and Y. Nemirovsky, "Trap Assisted Tunneling in HgCdTe Photodiodes", *Appl. Phys. Lett.*, Vol. 61, pp. 330332, (1992).
54. L. Goldmintz and Y. Nemirovsky, "Thermal Noise in Buried Channel MOSFET", *IEEE Trans. on Electron Devices*, 39, pp. 2325–2332, (1992).
55. A. Ruzin, A. Bezinger, Y. Nemirovsky and G. Shairv, "X-Ray Detectors and Integrated Electronics for X-Ray Imaging for Astronomy", *SPIE*, 1971, pp. 266–275, (1992).
56. I. Bloom and Y. Nemirovsky, "Surface Passivation of Backside Illuminated Indium Antimonide Focal Plane Array", *IEEE Trans. on Electron Devices*, 40, pp. 309–314, (1993).
57. A. Ruzin and Y. Nemirovsky, "Photon Assisted Metal Organic Chemical Vapor Deposition of HgTe", *J. Electronic Materials*, 22(3), pp. 281–288, (1993).
58. A. Ruzin, A. Bezinger and Y. Nemirovsky, "UV Photon Assisted Reduction of Interface Charge between CdTe Substrates and Metal Organic Chemical Vapor Deposition CdTe Epilayers", *J. Appl. Phys.*, 73, pp. 995–997, (1993).
59. L. Goldmintz, B. Sabbah, Z. Friedman and Y. Nemirovsky, "Mercury-Cadmium-Telluride Photovoltaic and Photoconductive Arrays", *Optical Engineering*, 32(5), pp. 952–957, (1993).
60. Y. Nemirovsky, D. Goren and A. Ruzin, "The Interface Between CdTe Substrates and CdTe Epilayers", *Trends in Vacuum Science & Technology*, 1, pp. 183–191, (1993).
61. L. Dejaloshinsky, D. Goren and Y. Nemirovsky, "The Band Diagram of HgTe-CdTe Semimetal-Semiconductor Abrupt Heterostructure", *J. Appl. Phys.*, 73(9), pp. 4473–4483, (1993).
62. Y. Nemirovsky, A. Ruzin and A. Bezinger, "UV Photon Assisted Control of Interface between CdTe Substrates and Metal Organic Chemical Vapor Deposition CdTe Epilayers", *J. Electron Mat.* 22(8), pp. 977–983, (1993).
63. Y. Nemirovsky, N. Amir and L. Djaloshinski, "MOCVD CdTe Passivation of HgCdTe", *J. Electronic Materials*, 24(5), pp. 647–654, (1995).
64. D. Goren and Y. Nemirovsky, "Determination of Interface Properties between a Depleted Heteroepitaxial Layer and a Substrate from Capacitance Measurements", *J. Appl. Phys.*, 77(1), pp. 244–251, (1995).
65. Y. Nemirovsky, N. Amir, D. Goren, G. Asa, E. Weiss and N. Mainzer, "The Interface of MOCVD-CdTe/HgCdTe", *J. Electronic Materials*, 24(9), pp. 1161–1168, (1995).
66. E. Khanin, N. Amir, Y. Nemirovsky and E. Gartstein, "The Effect of Growth Conditions on Crystalline Quality of MOCVD (111)B CdTe Epilayers Characterized by X-Ray Diffraction", *Appl. Phys. Lett.*, 66(21), pp. 2873–2875, (1995).

67. G. Asa and Y. Nemirovsky, "Properties of MOCVD HgTe contacts on CdTe", *J. Appl. Phys.*, 77(9), pp. 4417–4424, (1995).
68. D. Goren, G. Asa and Y. Nemirovsky, "An Analytical Approximation for the Free Electron Density of $\text{Hg}_{1-x}\text{Cd}_x\text{Te}$ Alloy System for $0 < x < 1$ ", *J. Appl. Phys.*, 78(9), pp. 5845–5847, (1995).
69. A. Bell, Y. Huang, O. Paul, Y. Nemirovsky and N. Setter, "A Thin Film Pyroelectric Detector", *Integrated Ferroelectrics*, Vol. 6, p. 231–240, (1995).
70. L. Djaloshinski and Y. Nemirovsky, "Methodology of Abrupt Heterostructures Band Diagram Calculations", *Solid State Electronics*, 39(9), pp. 1385–1390, (1996).
71. Y. Nemirovsky, A. Ruzin, G. Asa and J. Gorelik, "Study of Charge Collection Efficiency of CdZnTe Radiation Detectors", *J. Electron Materials*, 25(8), pp. 1221–1231, (1996).
72. R. Sudharsanan, T. Parodos, A. Ruzin, Y. Nemirovsky and N.H. Karam, "CdZnTe Photodiode Arrays for Medical Imaging", *J. Electronic Materials*, 25(8), pp. 1313–1322, (1996).
73. D. Goren, N. Amir, E. Khanin, G. Asa and Y. Nemirovsky, "Single Crystalline CdTe Solar Cells Grown by MOCVD", *Solar Energy Materials and Solar Cells*, 44(4), pp. 341–356, (1996).
74. Y. Nemirovsky, P. Muralt and N. Setter, "Design of a Novel Thin Film Piezoelectric Accelerometer", *Sensors and Actuators*, A56, pp. 239–249, (1996).
75. D. Goren, G. Asa and Y. Nemirovsky, "Barrier Formation in Graded HgTe/CdTe Heterojunctions", *J. Appl. Phys.*, Vol. 80, No. 9, pp. 5083–5088, (1996).
76. C.G. Jakobson and Y. Nemirovsky, "CMOS Low Noise Switched Charge Sensitive Preamplifier for CdTe and CdZnTe X-Ray Detectors", *IEEE Trans. on Nuclear Science*, 44(1), pp. 20–25, (1997).
77. Y. Nemirovsky, A. Ruzin, G. Asa and J. Gorelik, "Study of Contacts to CdZnTe Radiation Detectors", *J. Electronic Materials*, 26(6), pp. 756–764, (1997).
78. A. Ruzin and Y. Nemirovsky, "Statistical Models for Charge Collection Efficiency and Variance in Semiconductor Spectrometers", *J. Appl. Phys.*, 82(9), pp. 2754–2758, (1997).
79. N. Amir, S. Stolyarova and Y. Nemirovsky, "Rapid Thermal Process MOCVD of CdTe", *J. Crystal Growth*, 179, pp. 93–96, (1997).
80. A. Ruzin and Y. Nemirovsky, "Methodology for Evaluation of Mobility-Lifetime Product by Spectroscopy Measurements in CdZnTe Spectrometers", *J. Appl. Phys.*, 82(4), pp. 4166–4171, (1997).
81. A. Ruzin and Y. Nemirovsky, "Passivation and Surface Leakage in CdZnTe Spectrometers", *Appl. Phys. Lett.*, 71(15), pp. 2214–2215, (1997).
82. V. L. Korchnoi, M. I. Lisiansky, Y. Nemirovsky and R. B. Weil, "Study of Stability of Electrical Parameters of MOCVD CdTe Epilayers", *J. Physics D.*, 30(23), pp. 3203–3210, (1997).
83. S. Stolyarova, N. Amir and Y. Nemirovsky, "Rapid Thermal Metal Organic Chemical Vapor Deposition of ZnTe", *J. Crystal Growth*, 186, pp. 55–59, (1998).
84. S. Stolyarova, N. Amir and Y. Nemirovsky, "Rapid Thermal Metalorganic Chemical Vapor Deposition of II-VI Compounds", *J. Crystal Growth*, 184(158), pp. 144–148, (1998).
85. O. Degani, D.J. Seter, E. Socher, S. Kaldor and Y. Nemirovsky, "Micromachined Accelerometer with Modulated Integrative Differential Optical Sensing", *IEEE Electronics Letters*, Vol. 34, No. 7, 2nd April 1998, pp. 654–655.
86. Y. Nemirovsky, G. Asa, A. Ruzin, J. Gorelik and R. Sudharsanan, "Characterization of Dark Noise in CdZnTe Spectrometers", *J. Electronic Materials*, 27(6), pp. 807–813, (1998).
87. Y. Nemirovsky, G. Asa, C.G. Jakobson, A. Ruzin and J. Gorelik, "Dark Noise Currents and Energy Resolution of CdZnTe Spectrometers", *J. Electronic Materials*, 27(6), pp. 800–806, (1998).
88. Y. Nemirovsky, G. Gordon and D. Goren, "Measurement of Band Offsets and Interface Charges by the C-V Matching Method", *J. Appl. Phys.*, 84(2), pp. 1113–1120, (1998).
89. C. Jakobson, I. Bloom and Y. Nemirovsky, "1/f Noise in CMOS Transistors for Analog Applications from Subthreshold to Saturation", *Solid State Electronics*, 42(10), pp. 1807–1817, (1998).

90. M. Levy, N. Amir, E. Khanin, A. Muranevich, Y. Nemirovsky and R. Beserman, "Characterization of CdTe substrates and MOCVD $\text{Cd}_{1-x}\text{Zn}_x\text{Te}$ epilayers by Raman, Photoluminescence and X-ray diffraction techniques", *J. Crystal Growth*, 187(88), pp. 367–372, (1998).
91. O. Degani, D.J. Seter, E. Socher, S. Kaldor and Y. Nemirovsky, "Optimal Design and Noise Considerations of Micromachined Vibrating Rate Gyroscope with Modulated Integrative Differential Optical Sensing", *IEEE Journal of Microelectromechanical Systems (JMEMS)*, Vol. 7, No. 3, September 1998, pp. 329–338.
92. C.G. Jakobson and Y. Nemirovsky, "1/f Noise in Ion Selective Field Effect Transistors from Subthreshold to Saturation", *IEEE Trans. on Electron Devices*, 46(1), pp. 259–261 (1999).
93. E. Socher, O. Degani and Y. Nemirovsky, "Optimal Design and Noise Considerations of CMOS Compatible IR Thermoelectric Sensors", *Sensors and Actuators A-Physical*, Vol. 71, Nos. 1–2, pp. 107–115 (1998).
94. D. Goren, G. Asa and Y. Nemirovsky, "Photocurrent in CdTe NIP Solar Cells", *Solar Energy Materials & Solar Cells*, 60, pp. 367–377, (2000).
95. Y. Nemirovsky and A. El-Bahar, "The Non Equilibrium Band Model of Silicon in TMAH and in Anisotropic Electrochemical Alkaline Etching Solutions", *Sensors and Actuators*, 75, pp. 205–214, (1999).
96. O. Degani, E. Socher, A. Lipson, T. Lietner, D. J. Setter, S. Kaldor and Y. Nemirovsky, "Pull-in Study of an Electrostatic Torsion Micro-Actuator", *IEEE — Journal of Microelectromechanical Systems (JMEMS)*, Vol. 7, No. 4, December, pp. 373–379, 1998.
97. Y. Nemirovsky, "Statistical Modeling of Charge Collection in Semiconductor Gamma-Ray Spectrometers", *Journal of Applied Physics*, 85(1), pp. 8–15, (1999).
98. D.J. Seter, O. Degani, E. Socher, S. Kaldor, E. Scher and Y. Nemirovsky, "Characterization of a Novel Micromachined Optical Vibrating Rate-Gyroscope", *AIP – Review of Scientific Instruments*, Vol. 70, No. 2, February 1999, pp. 1274–1276.
99. Y. Nemirovsky, "Statistical Modeling of Pulse Height Spectrum of Gamma Ray Spectrometers Limited by Incomplete Charge Collection", *Appl. Phys. Letters*, 75(2), pp. 298–300 (1999).
100. K. Cohen, R. Beserman, S. Stolyarova, R. Weil and Y. Nemirovsky, "Valence Band Splitting in $\text{Cd}_{(1-x)}\text{Zn}_x\text{Te}$ Epilayers", *Thin Solid Films*, 336 pp. 205–207, (1998).
101. S. Stolyarova, N. Amir and Y. Nemirovsky, "Rapid Thermal Processing of Epitaxial II-VI Heterostructures", *Journal of Crystal Growth*, 198/199, (pp. 1157–1161, (1999).
102. K. Cohen, S. Stolyarova, N. Amir, A. Chack, R. Beserman, R. Weil and Y. Nemirovsky, "MOCVD Growth of Ordered $\text{Cd}_{(1-x)}\text{Zn}_x\text{Te}$ Epilayers", *Journal of Crystal Growth* 198/199, 1174–1178 (1999).
103. A. Chack, K. Cohen, S. Stolyarova, Y. Nemirovsky, R. Beserman and R. Weil, "Dielectric and Pyroelectric Properties of Ordered CdZnTe Layers Grown by MOCVD", *Journal of Crystal Growth*, 198/199, pp. 1179–1183 (1999).
104. C.G. Jakobson, G. Asa, S. Bar Lev, Y. Nemirovsky, "Low Noise CMOS Readout for CdZnTe Detector Arrays", *Nuclear Instruments and Methods in Physics Research, A* 428, pp. 113–117, (1999).
105. O. Degani, D.J. Seter, E. Socher and Y. Nemirovsky, "A Novel Micromachined Vibrating Rate-Gyroscope with Optical Sensing and Electrostatic Actuation", *Sensors and Actuators A: Physical*, Vol. 83, pp. 54–60, (2000).
106. O. Degani, D.J. Seter, E. Socher and Y. Nemirovsky, "Comparative Study of Novel Micromachined Accelerometers Employing MIDOS", *Sensors and Actuators A: Physical*, Vol. 80, pp. 91–99, 2000.
107. O. Bochobza-Degani, D.J. Seter, E. Socher and Y. Nemirovsky, "Design and Noise Consideration of an Accelerometer Employing Modulated Integrative Differential Optical Sensing", *Sensors and Actuators A: Physical*, Vol. 84, pp. 53–64, (2000).

108. A. El-Bahar and Y. Nemirovsky, "A Novel Technique to Form a Porous Silicon Layer with no Backside Contact by Alternating Current Electrochemical Process", *Appl. Physics Letters*, Vol. 77, No. 2, pp. 208–10, (2000).
109. N. Amir, K. Cohen, S. Stolyarova, A. Chack, R. Beserman, R. Weil and Y. Nemirovsky, "Long Range Order in CdZnTe Epilayers", *J. Phys. D: Applied Physics*, 33, pp. 9–12, (2000).
110. Y. Nemirovsky, G. Asa, J. Gorelik and A. Peyser, "Spectroscopic Evaluation of n-Type CdZnTe Gamma-Ray Spectrometers", *Electron. Materials*, Vol. 29(6), pp. 691–8, (2000).
111. Y. Nemirovsky, G. Asa, J. Gorelik and A. Peyser, "Recent Progress in n-Type CdZnTe Arrays for Gamma-Ray Spectroscopy", *Nuclear Instrument & Methods, A* 458, pp. 325–333, (2001).
112. E. Socher, O. Degani and Y. Nemirovsky, "Optimal Performance of CMOS Compatible IR Thermoelectric Sensors", *Journal of Microelectromechanical Systems*, Vol. 9(1), pp. 38–46, (2000).
113. C.G. Jakobson, Y. Nemirovsky and M. Feinsod, "Low Frequency Noise and Drift in Ion Sensitive Field Effect Transistors", *Sensors & Actuators-B*, Vol. 68(1–3), pp. 134–9, (2000).
114. A. El-Bahar, S. Stolyarova and Y. Nemirovsky, "N-Type Porous Silicon Doping using Phosphorous Oxychloride (POCl₃)", *IEEE Trans. on Electron Devices Letters*, vol. 21, pp. 436–438 (2000).
115. S. Stolyarova, A. El-Bahar and Y. Nemirovsky, "Enhancement of Porous Silicon Photoluminescence by Nf₃/UV Photo-Thermal Treatment", *J. Physics D: Applied Physics*, 33, pp. L90–L92 (2000).
116. Y. Nemirovsky, M. Iframor and A. Ludwig, "The Effect of the Geometrical Parameters on the Electric Field of Pixilated Two-Dimensional Arrays of Gamma-Ray Spectrometers", *J. of Applied Physics*, vol. 88, no. 1, November pp. 5388–94 (2000).
117. Y. Nemirovsky, I. Brouk and C. G. Jakobson, "1/f Noise in CMOS Transistors for Analog Applications", *IEEE Trans. on Electron Devices*, Vol. 48(5), pp. 921–7 (2001).
118. S. Stolyarova, A. El-Bahar and Y. Nemirovsky, "Porous Silicon Light Emission Enhancement by NF₃/UV Photo-Thermal Surface Treatment", *Annals of the Israel Physical Society*, Vol. 14, pp. 232–235 (2000).
119. Y. Nemirovsky and O. Degani, "A Methodology and Model for the Pull-In parameters of Electrostatic Actuators", *JMEMS*, Vol. 10, No. 4, December, pp.601-615 (2001).
120. E. Socher, O. Degani and Y. Nemirovsky, "A Novel Spiral CMOS Compatible Micromachined Thermoelectric IR Microsensor", *J. Michromech. Microeng*, Vol. 11, pp. 574–576 (2001).
121. I. Brouk and Y. Nemirovsky, "Dimensional Effects in CMOS Photodiodes", *Solid State Electronics*, Vol. 46 pp. 19–28 (2002).
122. I. Brouk, Y. Nemirovsky, S. Lachowicz, E.A. Gluszek, S. Hinckley and K. Eshraghian, "Characterization of Crosstalk between CMOS Photodiodes, *Solid State Electronics*", Vol. 46 pp. 53–59 (2002).
123. N.E. Chayen, E. Saridakis, R. El-Bahar and Y. Nemirovsky, "Porous Silicon: an Effective Nucleation-inducing Material for Protein Crystallization", *J. Mol. Biol.*, 312, pp. 591–595 (2001).
124. S. Stolyarova, A. El-Bahar and Y. Nemirovsky, "Unexpected Room Temperature Growth of Silicon Dioxide Crystallites on Passivated Porous Silicon", *Journal of Crystal Growth*, 237–239, pp. 1920–1925 (2002).
125. M. Ifraimov, A. Ludwig and Y. Nemirovsky, "Statistical Modeling of the Spectral Performance of a Two-Dimensional Array of Gamma-Ray Spectrometers", *Journal of Applied Physics*, 91, 338 (2002).
126. F. Edelman, S. Stolyarova, A.Chack, N. Zakharov, P. Werner, R. Beserman, R. Weil and Y. Nemirovsky, "Spontaneous Ordering in Thin Polycrystalline CdZnTe Films during Annealing", *Phys. Stat. Sol. (b)*, 229, No. 1, pp. 141–144 (2002).
127. O. Degani and Y. Nemirovsky, "Design Considerations of Rectangular Electrostatic Torsion Actuators with Rectangular Plates based on Analytical Pull-In Expressions", *JMEMS*, Vol. 11, No. 1, February, pp. 20–26 (2002).

128. M. Ifraimov, A. Ludwig and Y. Nemirovsky, "Modeling of the Induced Charge in Semiconductor Gamma-Ray Imaging Array by the Moments Method", *Journal of Applied Physics*, 91, 9676 (2002).
129. O. Bochobza-Degani, E. Socher and Y. Nemirovsky, "On the Effect of Residual Charges on the Pull-In Parameters of Electrostatic Actuators", *Sensors and Actuators A: Physical*, Vol. 97–98, pp.563-568 (2002).
130. O. Degani and Y. Nemirovsky, "Modeling the Pull-In Parameters of Electrostatic Actuators with a Novel Lumped Two Degrees of Freedom Pull-In Model", *Sensors and Actuators A: Physical*, Vol. 97–98, pp. 569–578 (2002).
131. O. Bochobza-Degani, D. Elata and Y. Nemirovsky, "An Efficient DIPIE Algorithm for CAD of Electrostatically Actuated MEMS devices", *J. MEMS*, Vol. 11(5), pp. 612–620 (2002).
132. C. G. Jakobson, U. Dinnar, M. Feinsod, and Y. Nemirovsky, "Ion Sensitive Filled Effect Transistors in Standard CMOS Fabricated by Post Processing", *IEEE Sensors Journal*, Vol. 2 (4), pp. 279–287 (2002).
133. M. Dolgin, P. D. Einziger and Y. Nemirovsky, "Spectral Method for the Electrostatic Modeling of Semiconductor γ -ray Spectrometer Arrays", *Journal of Applied Physics*, 93(4):2182–2192 (2003).
134. O. Bochobza-Degani, D. Elata and Y. Nemirovsky, "A General Relation between the Ranges of Stability of Electrostatic Actuators under Charge or Voltage Control", *Appl. Phys. Letters*, 82(2), pp. 302–304, 13 January (2003).
135. O. Bochobza-Degani, D. Elata and Y. Nemirovsky, "Micromirror Device with Reversibly Adjustable Properties", *Photonics Technology Letters*, Vol. 15(5), May, pp. 733-735 (2003).
136. D. Elata, O. Bochobza-Degani and Y. Nemirovsky, "Analytical approach and numerical a-lines method for Pull-In hyper surface extraction of electrostatic actuators with multiple uncoupled voltage sources", *JMEMS*, Vol 12(5), pp.681-691 (2003).
137. S. Stolyarova, A. El-Bahar, F. Edelman and Y. Nemirovsky, "NF₃ Induced Photoluminescence Enhancement and Crystalline Oxide Growth in Porous Silicon", *Physica Status Solidi (a)* 197, 388–392 (2003).
138. F. Edelman, A. Zeckzer, P. Grau, S. Stolyarova, A. Berner, R. Beserman, R. Weil and Y. Nemirovsky, "Hardening in CdZnTe by Acoustic Wave Treatment", *Physica Status Solidi (a)* 194, , 30–35 (2002).
139. A. El-Bahar, S. Stolyarova, and Y. Nemirovsky, "Ultrasound Treatment for Porous Silicon Photoluminescence Enhancement", *Physica Status Solidi (a)* 197, 340-344 (2003).
140. A. El-Bahar and Y. Nemirovsky, "Porous Silicon Multiplexers and Dimultiplexers", *Physica Status Solidi (a)* 197,87 293-297 (2003).
141. A. Morgenshtein, L. Sudakov-Boreysha, U. Dinnar, C.G. Jakobson and Y. Nemirovsky, "CMOS Readout Circuitry for ISFET Microsystems", *Sensors and Actuators: B. Chemical*, vol. 97/1, pp. 122-131 (2003).
142. O. Bochobza-Degani and Y. Nemirovsky, High-Resolution micromachined accelerometer with CMOS integrated optical sensing, *IEEE Sensor Letters*, Vol.1(1), pp.16-19 (2003).
143. A. Morgenshtein, L. Sudakov-Boreysha, U. Dinnar, C.G. Jakobson and Y. Nemirovsky, "Wheatstone-Bridge Readout Interface for ISFET/REFET Applications", *Sensors & Actuators: B. Chemical* Vol 98/1, pp 18-27 (2004).
144. A. Morgenshtein, L. Sudakov-Boreysha, U. Dinnar, C.G. Jakobson and Y. Nemirovsky, "CMOS Readout Circuitry for ISFET Microsystems", *Micro Total Analysis Systems Virtual Journal*, vol. 4/1, January (2003).
145. O. Bochobza-Degani and Y. Nemirovsky, "Experimental Verification of a Design Methodology for Torsion Actuators based on a Rapid Pull-In Solver", *JMEMS*, Vol.13(1), pp.121-130 (2004).
146. Y. Nemirovsky, O. Degani, G. Sarusi and I. Zelniker, "A Methodology and Model for the Pull-In Parameters of Magnetostatic Actuators", *IEEE JMEMS*, 14(6), 1253-1264 (2005).
147. S. Stolyarova, E. Baskin, N. Chayen and Y. Nemirovsky, "Possible model of protein nucleation and crystallization on porous silicon", *Phys.Stat.Sol*, 202, N8, 1462-1466 (2005).

148. E. Socher, S. M. Beer, Y. Nemirovsky, "Temperature Sensitivity of SOI-CMOS Transistors for Use in Uncooled Thermal Sensing ", IEEE Trans. On Electron Devices, IEEE Trans. On Electron Devices, 52(12), 2784-2790 (2005).
149. A. Machauf Prochaska, U. Dinnar, Y. Nemirovsky, "A membrane micropump electrostatically actuated across the working fluid", J. Micromech. Microeng. 15, 2309–2316 (2005).
150. A. Bransky, N.Korin, Y. Nemirovski and U. Dinnar, "An automated cell analysis sensing system based on a microfabricated rheoscope for the study of red blood cells physiology", Journal of Biosensors and Bioelectronics, Vol 22 Issue 2 pp. 165-169 (2006).
151. S. Stolyarova, E. Saridakis, N. Chayen, and Y. Nemirovsky, "A model for enhanced nucleation of protein crystals on a fractal porous substrate", Biophysical Journal, 91, n.10, pp. 3857-3863 (2006).
152. O. Cohen, Y. Nemirovsky, "Resonance frequency trimming for MEMS micro-mirror scanner", WSEAS Trans. On Electronics, Issue 4 Vol. 3, April (2006).
153. I. Brouk, A. Kamal and Y. Nemirovsky, Design and characterization of CMOS/SOI Image Sensors", IEEE Trans. On Electron Devices, 54(3), pp.468-475 (2007).
154. R. Ishihara, A. Glazer, Y. Raab, P. Rusian, M. Dorfan, B. Lavi, I.Leizerson, A. Kishinevsky, Y. van Aandel, X. Cao, J. W. Metselaar and C. I.M. Beenakker, S. Stolyarova and Y. Nemirovsky, "A Novel Selected Area Laser Assisted (SALA) System for Crystallization and Doping Processes in Low-Temperature Poly-Si Thin-Film Transistors, Journal of IEICE (Institute of Electronics, Information and Communication Engineers), Oxford, Volume E89-C, Number 10 pp. 1377-1382 (2006).
155. Langzam E, Nemirovsky Y, Isakov E, Mizrahi J, "Muscle enhancement using closed-loop electrical stimulation: Volitional versus induced torque". Journal of Electromyography and Kinesiology, Volume 17, Issue 3, pp. 275-284 May (2006).
156. Langzam E, Nemirovsky Y, Isakov E, Mizrahi J, "Partition between Volitional and Induced Forces in Electrically Augmented Dynamic Isometric Muscle Contractions", IEEE Transactions of Neural Systems and Rehabilitation Engineering, Vol.14(3), pp.322-335 (2006).
157. A. Bransky, N.Korin, Y. Nemirovski and U. Dinnar, "Correlation between Erythrocytes deformability and size: A study using a micro-channel based cell analyzer", Microvascular Research, Jan; 73(1):7-13 (2007).
158. A. Bransky, N.Korin, N. Lanir, Y. Nemirovski and U. Dinnar, "The rheologic properties of Erythrocytes: a study using an automated rheoscope", Rheologica Acta, Vol.46(5), pp 621-627 , May (2007).
159. A. Bransky, N. Korin, Y. Nemirovski, U. Dinnar, "A microfabricated bio-sensor for erythrocytes deformability and volume distributions analysis", Proceedings of SPIE Volume: 6416, SPIE.6416E..21B (2007).
160. S. Stolyarova, S. Weiss, M. Levy and Y. Nemirovsky, "New Type of Fractal Macro and Nano Dual Structure of Vapor Phase Stain Etched Porous Silicon", to be published in Phys. Stat. Sol.(c), (Special Issue on Porous Silicon Science&Technology), 4, No.6, 2054-2058, 2007.
161. F. Edelman, S. Stolyarova, A. Chack, A. Berner, P. Werner, N.Zakharov, M.Vytrykhivsky, Y.Nemirovsky, R. Beserman, and R. Weil, "Structure of CdZnTe Films on Glass", J.of Physics D:Applied Physics, 41 065402 (7pp) 2008.
162. S. Stolyarova S. Cherian R. Raiteri, J. Zeravik, P. Skladal and Y. Nemirovsky, "Composite Porous Silicon-Crystalline Silicon Cantilevers for Enhanced Biosensing", Sensors and Actuators (part B), Vol.131(2), 509-515, 2008.
163. S. Stolyarova, M. Weinstein and Y. Nemirovsky, "Growth, Annealing and Thermo Electrical Properties of $Cd_{1-x}Zn_xS$ Thin Films for Microbolometers", vol. 310(7-9), pp. 1674-1678, 2008.
164. Y. Nemirovsky, A. Shemesh and S. Stolyarocva, "NEMS and MEMS Cantilevers as Ultrasensitive Biosensors", Proc. SPIE, Vol. 6993, pp.1-12, 699302 (2008).
165. R.E. Fernandez , S. Stolyarova, A. Chadha, E. Bhattacharya and Y. Nemirovsky , "MEMS Composite Porous Silicon/Polysilicon Cantilever Sensor for Enhanced Triglycerides Biosensing", IEEE Sensors Journal, 9, pp.1660-1666, 2009.

166. S. Stolyarova, A. Shemesh, O. Aharon, O. Cohen, L. Gal, Y. Eichen, and Y. Nemirovsky, "Vertically Integrated SOI Composite Porous Silicon-Crystalline Silicon Cantilever Devices: Concept for Continuous Sensing of Explosives and Warfare Agents", NATO Science for Peace and Security Series B: Physics and Biophysics, pp. 261-274, 2009.
167. L. Gitelman, S. Stolyarova, S. Bar-Lev, Z. Gutman, Y. Ochana, and Y. Nemirovsky, "CMOS-SOI-MEMS transistor for uncooled IR Imaging", IEEE Trans. On Electron Devices, 56(9), pp. 1935-1942, 2009.
168. O. Aharon, L. Gal and Y. Nemirovsky, "Flip-Chip Integrated RF MEMS Switches Realized in SOI Wafers by Bulk Micromachining", JMEMS, 19 (5), 1162 – 1174, Oct. 2010.
169. I. Brouk, A. Nemirovsky, K. Alameh and Y. Nemirovsky, "Analysis of Noise in CMOS Image Sensor Based on a Unified Time-dependent Approach", Solid State Electronics, Vol.54, pp.28–36, (2010).
170. Y. Nemirovsky, D. Corcos, I. Brouk, A. Nemirovsky and S. Chaudhry, "1/f noise in advanced CMOS transistors", IEEE Instrumentation and Measurement Magazine, January, pp.2-10, 2011.
171. Roe Ben Yishay, Sara Stolyarova, Shye Shapira, David Kriger, Yossi Shiloh and Yael Nemirovsky, "A CMOS Low Noise Amplifier with Integrated Front-Side Micromachined Inductor", Microelectronics Journal, 42(5), pp.754-757, 2011.
172. A. Shemesh, Stolyarova, Y. Nemirovsky and Y. Eichen, "Molecular Recognition induced Mechanics: Isotope Effects in the Interaction between Gas Phase Substances and Polymer Coated Microcantilevers", Journal of Materials Chemistry, 21, 2070-2073, 2011.
173. A. Shemesh, S. Stolyarova, Y. Nemirovsky, Y. Eichen, "Isotope Effect in the Interaction between Gas-Phase Isotopologues and Polymer-Coated Porous Silicon Over Silicon Microcantilevers", Journal of Physical Chemistry C, 115, 15980-15987, 2011.
174. Evgeny Pikhay, "A platform for comprehensive testing of various NVM cells and array-TEGs in Device laboratory", TJ-2, Vol. 1, April 2011, pp.122-129.
175. T. Vitaly Zlotnikov, O. Degani, I. Brouk and Y. Nemirovsky, "A 45 nm CMOS miniature phase shifter with constant amplitude response," Microelectronics Journal, 42(10), pp.1143-1150, 2011.
176. S. Katz, I. Brouk, S. Stolyarova, S. Shapira and Y. Nemirovsky, "High Performance MEMS 0.18 μ m RF-CMOS Transformers," Microelectronics Journal, 43(1), pp.13-16, 2012.
177. S. Stolyarova and Yael Nemirovsky, "Enhanced Crystallization on Porous Silicon: Facts and Models", Journal of Crystal Growth 360 (2012) 131-133.
178. E. Pikhay, Y. Nemirovsky, M. Gutman, G. Villani, Y. Roizin, Radiation sensor based on C-Flash floating gate device, TJ2, Vol. 3, June 2012, pp. 13-16.
179. Maria Malits, Dan Corcos, Alexander Svetlitz, Danny Elad, and Yael Nemirovsky; "Thermal Performance of CMOS-SOI Transistors from Weak to Strong Inversion", IEEE Instrumentation and Measurement Magazine, October, pp.1-10, 2012.
180. E. Pikhay, Y. Nemirovsky, M. Gutman, G. Villani, Y. Roizin, "Radiation sensor based on C-Flash floating gate device", Journal of TowerJazz, 1-5, November 2012.
181. M. Crepaldi, D. Demarchi, A. Gabrielli, A. Khan, E. Pikhay, Y. Roizin, G. Villani and Z. Zhang, A 0.18 μ m CMOS low-power radiation sensor for UWB wireless transmission, Journal of Instrumentation, Vol. 7, Dec. 2012.
182. Y. Roizin, M. Lisiansky and E. Pikhay, Foundry Technologies Focused on Environmental and Ecological Applications, Nanodevices and Nanomaterials for Ecological Security, NATO Science for Peace and Security Series B: Physics and Biophysics, Edited by Yuri N. Shunin and Arnold E. Kiv. © 2012 Springer.
183. V. Savuskan, I. Brouk, M. Javitt and Y. Nemirovsky, "An Estimation of Single Photon Avalanche Diode (SPAD) Photon Detection Efficiency (PDE) Non-Uniformity", IEEE Sensors, July 2012.
184. Ariel Shemesh, Sara Stolyarova, Yael Nemirovsky, Yoav Eichen, "Simple Physical Model for Chemo-Mechanics", J. Poly. Sci. Part B: polymer physics, vol. 51(10), pp.775-853, 2013.
185. Tomer Merhav, Vitali Savuskan, Yael Nemirovsky, "Gun muzzle ash detection using a CMOS single photon avalanche diode", Proc. of SPIE Vol. 8896 88960H-1, 2013

186. Vitali Savuskan, Michael Javitt, Yael Nemirovsky, "Selecting Single Photon Avalanche Diode (SPAD) Passive-Quenching Resistance: An Approach", IEEE Sensors, 13(6), pp. 2322-2328, 2013.
187. T. Leitner , A. Fenigstein , R. Turchetta, R.Coath , S.Chick, G. Visokolov, V. Savuskan, M. Javitt, L.Gal, I. Brouk, S. Bar-Lev, and Y. Nemirovsky, "Measurements and Simulations of Low Dark Count Rate (DCR) Single Photon Avalanche Diode (SPAD) Device in a Low Voltage 180nm CMOS Image Sensor Technology", 60 (6), pp. 1982-1988, 2013.
188. Pikhay, Y. Nemirovsky, Y. Roizin and V. Dayan, Array-Type Floating Gate Radiation Sensors, TowerJazz Technical Journal, Vol 4, July 2013.
189. E.Pikhay, Y.Nemirovsky, Y.Roizin, V.Dayan, Array-type floating gate radiation sensors, TJ2, Vol. 4 July 2013, pp. 23-24.
190. Y. Nemirovsky, A. Svetlitza, I. Brouk, S. Stolyarova, "Nanometric CMOS-SOI-NEMS transistor for uncooled THz sensing", IEEE Trans. On Electron Devices, vol. 60(5), pp.1575-1583, 2013.
191. Meltzman, S., Shemesh, A., Stolyarova, S., Nemirovsky, Y., Eichen, Y. "Microcantilevers as gas-phase sensing platforms: Simplification and optimization of the production of polymer coated porous-silicon-over-silicon microcantilevers", Journal of Polymer Science Part B: Polymer Physics, v. 52, 141-146, 2014.
192. Ariel Shemesh, Tanya Blank, Shai Meltzman, Sara Stolyarova, Rachel Edrei, Elena Borzin, Yael Nemirovsky and Yoav Eichen, " Plasticization of a polymer layer harnessed to a silicon microcantilever as a highly sensitive and selective means to detect nitroaromatic derivatives", Journal of Polymer Science Part A: Polymer Chemistry in press; Article first published online: 20 MAY 2014, DOI: 10.1002/pola.27219.
193. A. Svetlitza, A.; Slavenko, M.; Blank, T.; Brouk, I.; Stolyarova, S.; Nemirovsky, Y., "THz Measurements and Calibration Based on a Blackbody Source," , IEEE Transactions on Terahertz Science and Technology, vol.4, no.3, pp.347-359, May 2014
194. Michael Javitt, Vitali Savuskan, Tomer Merhav, Yael Nemirovsky, "Revisiting Single Photon Avalanche Diode Current-Voltage Modeling and Transient Characteristics", Journal of Applied Physics, 115, pp. 204503 - 204503-9 (2014).
195. E. G. Villani, M. Crepaldi, D. DeMarchi, A. Gabrielli, A. Khan, E. Pikhay, Y. Roizin,A. Rosenfeld, Z. Zhang,, A monolithic 180 nm CMOS Dosimeter for In Vivo Dosimetry medical application, Radiation Measurements, 71 (2014), pp. 389-391.
196. V. Savuskan, D. Cristea, L. Gal, M. Javitt, Yael Nemirovsky, "Single photon avalanche diode (SPAD) collection efficiency enhancement via peripheral well-controlled field", IEEE Transactions on Electron Devices, vol. 62 (6), 2015
197. V. Savuskan, T. Merhav, A. Shoham, I. Brouk, Y. Nemirovsky, "Gun muzzle flash detection using a single photon avalanche diode array in 0.18 μ m CMOS technology", Invited Paper, SPIE Defense and Security Conference 2015.
198. Evgeny Pikhay, Yacov Roizin and Y. Nemirovsky, "Characterization of Single Poly Direct Radiation Sensors", Electron Device Letters, April 2015 (accepted).
199. A.Eshkoli, S. Shapira and Y. Nemirovsky, "Lumped Circuit Model of Conical Shape Inductors for Broad-Bandwidth Applications", IEEE Trans. on Industrial Electronics, vol.63(8), pp.5087-5090, 2016
200. A. Svetlitza, T. Blank, S. Stolyarova, I. Brouk, S. Bar-Lev, Y. Nemirovsky, "CMOS-SOI-NEMS Thermal Antenna and Sensor for Uncooled THz Imaging", IEEE Transactions on Electron Devices, vol. 63, no. 3, pp. 1260-1265, March 2016.
201. A. Svetlitza, T. Blank, S. Stolyarova, I. Brouk, S. Bar-Lev, Y. Nemirovsky, "Modeling of CMOS-SOI-NEMS Thermal Antenna and for Uncooled Passive THz Imaging", Photonics Technology Letters, Vol. 28, no. 5, pp. 585-588, March 2016.
202. E. Pikhay, Y. Roizin, Y. Nemirovsky, Degradation study of single poly radiation sensors by monitoring charge trapping, Microelectronics Reliability, January 2016, DOI: 10.1016/j.microrel.2015.12.032.

203. E. G. Villani, M. Crepaldi, D. DeMarchi, A. Gabrielli, A. Khan, E. Pikhay, Y. Roizin, A. Rosenfeld, Z. Zhang, A monolithic 180 nm CMOS dosimeter for wireless In Vivo Dosimetry, *Radiation Measurements*, 84 (2016), pp.55-64.
204. Tomer Saraf, Igor Brouk, Sharon Bar-Lev, Aharon Unikovsky, Tanya Blank, Praveen Kumar Radhakrishnan and Yael Nemirovsky "CMOS-SOI-MEMS Uncooled Infrared Security Sensor With Integrated Readout", the IEEE Journal of the Electron Devices Society; 4(3):1-7, May 2016.
205. E. Pikhay, Y. Roizin and Y. Nemirovsky, "Ultra-Low Power Consuming Direct Radiation Sensors Based on Floating Gate Structures", *Low Power Electron. Appl.* 2017, 7, 20; doi:10.3390/jlpea7030020.
206. M. Malits and Y. Nemirovsky, "Nanometric Integrated Temperature and Thermal Sensors in CMOS-SOI Technology", *Sensors*, vol. 17, August 2017.
207. A. Zviagintsev, T. Blank, I. Brook, I. Bloom, Y. Nemirovsky, "Modeling the Performance of Nano Machined CMOS Transistors for Uncooled IR Sensing", *IEEE Transactions on Electron Devices*, Volume: 64, [Issue: 11](#), Nov. pp.4657-4663, 2017
208. A. Katz, A. Fenigstein, I. Gur-Arie, A. Shoham and Y. Nemirovsky, "CMOS SPAD 64x64 2-D Camera" – *TowerJazz Journal*, 2017 (recognized as distinguished paper)
209. A. Shoham, A. Katz, and Y. Nemirovsky, "CMOS-Based Gunshot Optical Detection Systems Performance Prediction Model", *IEEE Sensor journal*, Vol.18(12), pp 5090-5097, 2018
210. A. Zviagintsev, I. Brook, S. Bar-Lev, I. Bloom, Y. Nemirovsky, "Modeling the Performance of Mosaic Uncooled Passive IR sensors in CMOS-SOI Technology", *IEEE Transactions on Electron Devices*, Vol.65, pp 4571-4576, 2018.
211. Maria Malits, Igor Brouk, Yael Nemirovsky, "Study of CMOS-SOI Integrated Temperature Sensing Circuits for On-Chip Temperature Monitoring", to be published, *Sensors*, 2018
212. A. Katz, C. Vainstein, A. Shoham, T. Blank, T. Leitner, A. Fenigstein, Y. Birk, Y. Nemirovsky, "CMOS Single-Photon Avalanche Diode Pixel Design for a Gun Muzzle Flash Detection Camera", *IEEE Transactions on Electron Devices*, Vol.65, pp 4407-4412, 2018.
213. A. Katz, C. Vainstein, A. Shoham, T. Blank, T. Leitner, A. Fenigstein, Y. Birk, Y. Nemirovsky, "Passive CMOS Single Photon Avalanche Diode Imager for a Gun Muzzle Flash Detection System", *IEEE Sensors*, 2019.
214. A. Katz, T. Blank, A. Fenigstein, T. Leitner, Y. Nemirovsky, "Active Reset for the N⁺P Single Ended SPAD Used in the NIR LiDAR Receivers", *IEEE Transactions on Electron Devices*, 2019.
215. A. Eshkoli and Y. Nemirovsky, "High Performance at Low Cost New Monolithic System Architecture for ToF Measurements Based On CMOS-SiPM Array", submitted to *J. of Quantum Electronics*, 2020
216. Shlenekvitch, D.; Stolyarova, S.; Blank, T.; Brouk I.; Nemirovsky, Y.; A novel miniature and selective CMOS gas sensor for gas mixture analysis - Part 1: Emphasis on Chemical Aspects, *Micromachines*, 2020, 11(4), 345; <https://doi.org/10.3390/mi11040345>.
217. Avraham, M.; Stolyarova, S.; Blank, T.; Bar-Lev, S.; Golan, G; Nemirovsky, Y.; A novel miniature and selective CMOS gas sensor for gas mixture analysis - Part 1: Emphasis on Physical Aspects, *Micromachines*, 2020, 11(6), 587; <https://doi.org/10.3390/mi11060587>.
218. Blank, Tanya; Brouk, Igor; Bar-Lev, Sharon; Amar, Gavriel; Meimoun, Elie; Meltsin, Maxim; Bouscher, Schlomi; Vaiana, Michele; Maierna, Amedeo; Castagna, Maria Eloisa;

Bruno, Giuseppe; Nemirovsky, Yael; "Non-Imaging Digital CMOS-SOI-MEMS Uncooled Passive Infra-Red Sensing Systems", IEEE Sensors, 2020

219.

220.

221.

Refereed Book Chapter:

222. Y. Nemirovsky, "Passivation of Cd/Zn/Te/Se Compounds", "Properties of Narrow Gap Cadmium-Based Compounds", P. Capper editor, pp. 573–574, IEE (EMIS), England (1994).

223. Y. Nemirovsky, N. Mainzer and E. Weiss, "Passivation of HgCdTe", "Properties of Narrow Gap Cadmium-Based Compounds", P. Capper editor, pp. 284–290, IEE (EMIS), England (1994).

224. Y. Nemirovsky and R. Fastow, "Lifetime in p-type HgCdTe", *ibid*, pp. 233–238, (1994).

225. Y. Nemirovsky and N. Amir, "Surfaces and Interfaces", in "Narrow-Gap II–VI Compounds for Opto-Electronic and Electro-Magnetic Applications", Ed. P. Capper, Electronic Material Series, Series Editors A.F.W. Willoughby and R. Hull, Chapman & Hall, London, forthcoming, pp. 291–326, (1996).

226. Y. Eichen, Y. Gerchikov, E. Borzin, Y. Gannot, A. Shemesh, S. Meltzman, C. Hertzog-Ronen, S. Tal, S. Stolyarova, Y. Nemirovsky and N. Tessler, "Detection of Alkylating Agents Using Optical, Electrical and Mechanical Means", Sensor Array, Prof. Wuqiang Yang (Ed.), chapter 5, pages 67–80, , ISBN: 978-953-51-0613-5, InTech (2012). Available from:

<http://www.intechopen.com/books/sensor-array/optical-electrical-and-mechanical-detection-of-electrophiles-using-sensor-arrays>

Co-Editor

227. B. Mullin, Y. Nemirovsky and D. Gazit, "Proceedings of the Twelfth International Conference on Crystal Growth", July (1998).

228. B. Mullin, Y. Nemirovsky and D. Gazit, "Proceedings of the Tenth International Conference on Vapor Growth and Epitaxy", July (1998).

CONFERENCES

Invited talks, including conferences: International

1. Y. Nemirovsky , “Overview of Research Activities at the Microelectronics Research Center, Department of Electrical Engineering, Technion, Israel”, Hudson - Boston, , Digital Equipment Corporation, USA September 1983.
2. Y. Nemirovsky, “The Infrared Era and the Microelectronics Revolution”, Dept. of Electronics, University of Pretoria, South Africa, February 1984.
3. Y. Nemirovsky, “Interface Studies and Passivation of Mercury Cadmium Telluride Surfaces”, the 1988 U.S. Workshop on the Physics and Chemistry of Mercury Cadmium Telluride, Y. Nemirovsky, Orlando USA, October 1988.
4. Y. Nemirovsky, “Passivation with II-VI Compounds”, The 1989 U.S. Workshop on the Physics and Chemistry of Mercury Cadmium Telluride, San Diego, USA, October 1989,
5. Y. Nemirovsky, “Shockley-Read Recombination and Trapping in p-type HgCdTe”, MRS Conference, November 1989 Boston, USA.
6. Y. Nemirovsky, “Microelectronics in Materials Science”, Departmental Colloquium Lecture, Ecole Polytechnique Federale Lausanne, (EPFL), Switzerland, December 1992.
7. Y. Nemirovsky, “The Scientific and Technological Challenges of Nuclear Radiation Detectors”, MIT Lincoln Lab. Distinguished Lecturer, EDS-IEEE, USA, 1996.
8. Y. Nemirovsky, “Overview of Research Activity in Microsystems”, Colloquium, Dept. of Microtechnology, Swiss Federal Institute of Technology, July 1997.
9. Y. Nemirovsky, “Integrated Microsystems and MEMS at Technion”, Plenary Lecture, 16th Umbrella Symposium, at the Aachen University of Technology, Germany, November, 1999.
10. Y. Nemirovsky, “New Results in CdZnTe Gamma-Ray Spectrometers: Growth, Devices and Modeling”, The 2000 U.S. Workshop on the Physics and Chemistry of II-VI Materials, , Albuquerque, New Mexico, October 30– November 2, 2000.
11. Y. Nemirovsky, “Recent Progress in the Research of Micro-Opto-Electro-Mechanical Systems”, The Intelisense, MA, USA, October 2000.
12. L. Li, F. Lu, W. Yao, R.W. Olson, P. Luke, Y. Nemirovsky, A. Burger, K. Shah and R.B. James “A New Method for Growing Detector-Grade Cadmium Zinc Telluride Crystals”, SPIE, San Diego, August, 2000.
13. E. Socher, O. Bochobza-Degani and Y. Nemirovsky, “Modeling, Design and Fabrication of Uncooled IR CMOS Compatible Thermoelectronic Sensors”, Proc. SPIE Conference Infrared Technology and Applications XXVIII, Seattle, USA, July 2002.
14. Y. Nemirovsky and O. Bochobza-Degani, “Modeling aspects of MOEMS: from system level aspects to physical aspects”, Forum on Specifications and Design Languages, Frankfurt, Germany, September 2003.
15. Y. Nemirovsky, "Novel RF MEMS switches", Asia-Pacific Microwave Conference (16th APMC'04) New Delhi, December 2004.
16. Y. Nemirovsky, "Novel uncooled IR sensors", Dept. of Microelectronics and Information Technology, Royal Institut of Technology (KTH), Stockholm, Sweden, December 2005.
17. Y. Nemirovsky, "An overview of MEMS", Hewlett-Packard, March 2006.
18. Y. Nemirovsky, A. Shemesh and S. Stolyarova, "NEMS and MEMS Cantilevers as Ultrasensitive Biosensors", SPIE Photonics Europe 2008: MEMS, MOEMS, and Micromachining conference, 7-11April 2008, Strasbourg, France.
19. N. E Chayen, E. Saridakis, R. El-Bahar S.Stolyarova and Yael Nemirovsky, “The application of nanopores for protein crystallization”, NPS'08, Sofia Bullgria 26 Feb - 2 March, 2008.
20. S. Stolyarova, A. Shemesh, Y. Eichen, Y. Nemirovsky, "MEMS Composite Porous Silicon/ Crystalline silicon cantilever –Array-Biosensors: Continuous Sensing of Explosive and Chemical Warfae Agents", NATO Advanced Research Workshop, St.Petersburg, 2009.

21. Kyoung-Rok Cho, Younggap You, Sang-Jin Lee, Soon-Ku Kang, Omid Kavehei, Yael Nemirovsky, Derek Abbott, , Kamran Eshraghian, "Back-illuminated 3D Memristor-MOS Imaging System", 2010 International Conference on Communications, Circuits and Systems (ICCCAS), July, China.
22. Y. Nemirovsky, "CMOS-SOI-MEMS Imagers", EuroSOI 2011, Granada, Spain (January 17-January 19, 2011).
23. Y. Nemirovsky, "CMOS-SOI-MEMS Imagers", Instituto de Microelectrónica de Barcelona, Centro Nacional de Microelectrónica (CSIC), Campus UAB Bellaterra, Spain (January 21-January 19, 2011).
24. Y. Nemirovsky, "CMOS-SOI-MEMS/NEMS technology for miniaturized, low cost sensors", International Workshop, sponsored by Proct and Gamble, Frankfurt, Germany (Sept.13-14, 2011).
25. E.Pikhay, Y.Nemirovsky, M.Gutman, G.Villani, Y.Roizin, Radiation Sensor Based on C-Flash Floating Gate Device, IVS-2011.
26. E Pikhay^{1,2}, Y.Nemirovsky², Y.Roizin¹, V.Dayan, K.Lavrenkov, Y.Leibovich, D. Epstein, Radiation sensor based on a floating gate device, IEEE 27-th Convention of Electrical and Electronics Engineers in Israel, 2012.
27. E. Pikhay, Y.Nemirovsky, Y.Roizin, V.Dayan, K. Lavrenkov, Y. Leibovich, D. Epstein, Radiation sensor based on a floating gate device, IEEE 27-th Convention of Electrical and Electronics Engineers in Israel, 2012.
28. E. G. Villani, A. Gabrielli, A. Khan, E. Pikhay, Y. Roizin, Z.Zhang, Monolithic 180 nm CMOS Dosimeter for In Vivo medical applications, SORMA 2012: IEEE Symposium on Radiation Measurements and Applications, May 14-17, 2012, Oakland, USA.
29. H. Dagan, A. Teman, A. Fish, E. Pikhay, V. Dayan, Y. Roizin, A Low-Cost Low-Power Non-Volatile Memory for RFID Applications, IEEE ISCAS 2012, pp.1827-1830.
30. A. Svetlitza and Y. Nemirovsky, CMOS-SOI-NEMS transistor (TeraMOS) for Terahertz imaging", ECS SOI 2013, Toronto, May 2013.
31. E. Pikhay, Y. Nemirovsky, Y. Roizin, E.G. Villani, Radiation array sensor based on C Flash floating gate device, SENSO Conference, Gardanne, Aix-En-Provence, France, Oct. 22-24, 2014.
32. U. Gatti, C. Calligaro, E. Pikhay, Y. Roizin, Radiation-hardened techniques for CMOS flash ADC, Electronics, Circuits and Systems (ICECS), 2014 21st IEEE International Conference on, Dec. 7-10, 2014.
33. V. Savuskan, C. Jakobson, T. Merhav, A. Shoham, I. Brouk, Y. Nemirovsky, "Gun muzzle flash detection using a single photon avalanche diode array in 0.18 μ m CMOS technology", SPIE Defense and Security Conference, Baltimore April 2015.
34. Y. Nemirovsky, "First Steps in Microelectronics in Israel", IEEE ISRAEL HIGH-TECH: 1955-2015 - HISTORICAL PERSPECTIVES, 20 August 2015, Tel-Aviv University
35. Evgeny Pikhay, Yael Nemirovsky, Yakov Roizin, "Single Poly Floating Gate Radiation Sensors in CMOS Technology", MRS fall November 23-25, Boston, 2016
36. Amos Fenigstein, Tomer Leitner, Alex Katz, Avi Shoham, Yael Nemirovsky, "Industrialized NIR SPAD Technology in 180nm", the 1st International SPAD Sensor Workshop (ISSW), February 27-28, Switzerland, 2018
- 37.

Invited talks, including conferences: National

1. Y. Nemirovsky, "The Age of Semiconductors", in the series of lectures on "Scientific Discoveries that Change the Face of the Century", Y. Nemirovsky, Churchill Auditorium Technion, March 1982.
2. Y. Nemirovsky, "The Invisible Rays", in the series of lectures on "Scientific Discoveries that Change the Face of the Century", Churchill Auditorium, Technion, February 1983.

3. Y. Nemirovsky, "Gated Structures in $\text{Hg}_{1-x}\text{Cd}_x\text{Te}$ with $x=0.22$ ", IEEE Microelectronics Meeting on the Technology and Physics of Electron Devices, Tel-Aviv, April 1986.
4. Y. Nemirovsky, "The Epoch and Epos of Prof. Izhak Kidron and the Microelectronics Research Center", Technion – Meeting of the Board of Governors, June 1987.
5. Y. Nemirovsky, "Material Requirements for Advanced Infrared Detectors", IEEE Microelectronics Meeting on the Electronic Materials for Advanced Detectors, Technion, Haifa, December 1987.
6. Y. Nemirovsky, "From MOCVD Growth Models to Higher Performance IRFPAs", IR Detectors Conference, May 1991, Leshem.
7. Y. Nemirovsky, "Models for MOCVD Growth of Binary and Ternary Epilayers", The Israel Crystal Growth Society Conference, Rehovot, November 1991.
8. Y. Nemirovsky, "CdTe Solar Cells for Space", TechSat2 Conference, Technion, Dec. 1993.
9. Y. Nemirovsky, "MOCVD CdTe Passivation of HgCdTe ", Semiconductor Devices Ltd., December 1993.
10. Y. Nemirovsky, "Micromachining and Coatings", The 25th Israel Conference on Mechanical Engineering, Technion, May 1994.
11. Y. Nemirovsky, "The Challenges and Breakthroughs of Micromachining and Microsystems", The 1st Conference of URSI—International Union for Radio Science, Tel Aviv, Dec. 11, 1996.
12. Y. Nemirovsky, "The MEMS Revolution and Technion Activity", The Symposium on "Small is Beautiful", the 1997 Technion Board of Governors, Dan Carmel, May 1997.
13. Y. Nemirovsky, "Overview of Scientific & Technological Challenges in Micromachined Micro-Systems", The Israel Society for Theoretical and Applied Mechanics (ISTAM), Tel-Aviv University, December 20, 1998.
14. Y. Nemirovsky, "Micromachined Microsystems and Applications", Colloquium, Rafael, April 1998.
15. Y. Nemirovsky, "Integrated Microsystems and MEMS: Scientific and Technological Challenges", Colloquium, Dept. of Material Science, Technion, November 1999.
16. Y. Nemirovsky, "Integrated Microsystems and MEMS Activity at Technion", Workshop on Micromachining, a Batsheva de Rothschild Frontier of Science and Technology Seminar, May, Zichon Yaacov, 1999.
17. Y. Nemirovsky, "Noise and Drift in Bio-FETs", IEEE Joined Seminar in Electro-Physiology and Electro-Optics, Tel-Aviv University, June 1999.
18. Y. Nemirovsky, "Updates in Micromachining and Silicon Microsystems", IEEE-EDS (Electron Device Society) Israel, Tel-Aviv, May 1999.
19. Y. Nemirovsky, "MEMS and Integrated Microsystems", 18th Annual Conference of the Israel Vacuum Society (IVS) joint with the Israel IEEE-EDS, Weizmann Institute of Science, November 1999.
20. Y. Nemirovsky, "MEMS Inertial Sensors", The 21st IEEE Convention of the Electrical and Electronic Engineers in Israel, Tel-Aviv, Israel, April 2000.
21. Y. Nemirovsky, "An Introduction to MEMS and an Overview of the Research at the Microelectronic Research Center at the Technion", Workshop on Micro-Electro-Mechanical-Systems (MEMS), North Carolina – Israel Partnership, Technion, May 2000.
22. Y. Nemirovsky, "The Scientific and Technological Challenges of MEMS and CMOS Integrated Micro Systems", Intel Workshop on Advanced Concepts, Jerusalem, May 30, 2000.
23. Y. Nemirovsky, "Physical Issues in Micro-Opto-Electro-Mechanical Systems", The Israel Physical Society, International Conference on Materials Science and Technologies, Jerusalem, Israel, November 2000.
24. Y. Nemirovsky, "A decade of MEMS activity (1991–2001) at Technion, Department of Electrical Engineering", MEMS Day in Israel, Mosad Neeman, Technion, November 2001.
25. S. Feldman and Y. Nemirovsky, "Integration and Assembly of Micromechanical Devices", Integration Microelectronics and Packaging Society, Tel Aviv, June 2002.

26. Y. Nemirovsky, "The Role of MEMS in Optical Networks", TELECOM ISRAEL 2002 Conference & Exhibition, Tel Aviv, Israel, November 2002.
27. Y. Nemirovsky and E. Socher, "MEMS and Applications", the meeting of the Israel Chemistry Society, Tel Aviv, 2002.
28. S. Feldman, Y. Nemirovsky; "MEMS Switches for Microwave Applications - A Review", Invited lecture, IEEE – Israel Section, S-AP/MTT Joint Chapter, 17th Convention, Oct. 2002.
29. Y. Nemirovsky, "The role of MEMS in Electro-Optics", The 13th International Meeting on Electro-Optics and Microelectronics in Israel, Tel- Aviv, 2003.
30. S. Feldman, Y. Nemirovsky, "MEMS devices assembly and packaging", Invited lecture , Israel IMPAS convention, March 2003
31. Y. Nemirovsky and O. Aharon, "MEMS for RF Applications", 23rd IVS Annual Conference and Technical Workshop, Exhibition Halls (Ganei ha Ta'aruchah), Tel Aviv, September 2004.
32. Y. Nemirovsky, "A new micromachined uncooled IR sensor", The Conference on the Scientific Challenge at the Homeseecurity and Antiterror War, Technion, December 2004.
33. Y. Nemirovsky, "The fascinating world of MEMS", " Technology frontier lectures", Technion, January 2005.
34. Y. Nemirovsky, "Low cost bolometric imagers", Avnet consortium, Technion, March 2005.
35. Y. Nemirovsky, "A taste of MEMS and NEMS", Holon Technology Institute, April 2006.
36. Y. Nemirovsky, "RF MEMS Swiitches", Workshop, Rafael, Israel, November 2006.
37. Y. Nemirovsky, "The world of MEMS and NEMS", Jerusalem College of Eng., May 2006.
38. M. Dolgin, D. Corcos, S. Katz, A. Svetliza, Y. Nemirovsky, "CMOS-SOI- MEMS thermal Antennas for uncooled thermal THz imaging", Technologies for Remote Sensing, Detection and Imaging", June 1, 2010, Ariel University.
39. Y. Nemirovsky, D. Corcos, D. Goren and D. Elad, "The TeraMOS sensor for monolithic Terahertz imager –A breakthrough in THz imaging", June 1, 2010, Ariel University.
40. Y. Nemirovsky, "Silicon Avalanche Photodiode Arrays", Mosad Neeman, Technion, The HYSF consortium workshop, November 7, 2010.
41. A. Svetlitz and Y. Nemirovsky, Uncooled THz sensors for passive imaging based on CMOS-SOI-NEMS 2nd Technion worksjop on THz imaging, 2013.
42. Ayal Eshkoli, Sharon Bar-Lev, Gabi Peled, and Yael Nemirovsky, "High Performance Integrated Inductors For Power Management Applications", IEEE 28-th Convention of Electrical and Electronics Engineers in Israel, December 3-5, 2014, Hilton Hotel, Eilat.
43. Maria Malits, Igor Brouk, Adi Birman, Asaf Lahav, Amos Fenigstein and Yael Nemirovsky, "Low Frequency Noise in Surface and Buried Channel Nanometric CMOS transistors", IEEE 28-th Convention of Electrical and Electronics Engineers in Israel, Dec. 3-5, 2014, Hilton Hotel, Eilat.
44. Alexander Svetlitz, Tanya Blank, Sara Stolyarova, Igor Brouk, Sharon Bar-Lev and Yael Nemirovsky, "Design and Simulations of CMOS-SOI-NEMS Thermal Antenna and Sensors for Passive Uncooled THz Imaging", IEEE 28-th Convention of Electrical and Electronics Engineers in Israel, December 3-5, 2014, Hilton Hotel, Eilat.
45. Alex Zviagintsev, Igor Brouk, Ilan Bloom and Yael Nemirovsky, "Voltage and Current Integrated Readout for Uncooled Passive IR sensors based on CMOS-SOI-NEMS Technology", IEEE 28-th Convention of Electrical and Electronics Engineers in Israel, December 3-5, 2014, Hilton Hotel, Eilat.

Contributed Talks: International

1. Y. Nemirovsky and I. Bloom, "Admittance Measurements in p-type HgCdTe", The U.S. Workshop on the Physics and Chemistry of MCT, New Orleans, October 1987.
2. Y. Nemirovsky, D. Rosenfeld, R. Adar and A. Kornfeld, "Tunneling and Dark Currents in HgCdTe Photodiodes", The U.S. Workshop on the Physics and Chemistry of MCT, Orlando, October 1988.

3. R. Fastow and Y. Nemirovsky, "The Excess Carrier Lifetime of p-type HgCdTe", The U.S. Workshop on the Physics and Chemistry of MCT, San Diego, October 1989.
4. Y. Nemirovsky and D. Rosenfeld, "Passivation and 1/f Noise Phenomena in HgCdTe Photodiodes", The U.S. Workshop on the Physics and Chemistry of MCT, San Diego, October 1989.
5. Y. Nemirovsky, "Passivation with II-VI Compounds", The U.S. Workshop on the Physics and Chemistry of MCT, San Diego, October 1989.
6. Y. Nemirovsky, "Trapping Effects in HgCdTe", The U.S. Workshop on the Physics and Chemistry of MCT, San Francisco, October 1990.
7. Y. Nemirovsky and A. Unikovsky, "Tunneling and 1/f Noise in HgCdTe Photodiodes", The U.S. Workshop on the Physics and Chemistry of MCT, Dallas, October 1991.
8. Y. Nemirovsky, A. Ruzin and A. Bezinger, "UV Photon Assisted Control of Interface between CdTe Substrates and Metal Organic Chemical Vapor Deposition CdTe Epilayers", The U.S. Workshop on the Physics and Chemistry of MCT, Boston, October 1992.
9. Y. Nemirovsky and N. Amir, "MOCVD CdTe Passivation of HgCdTe", U.S. Workshop on the Physics and Chemistry of MCT, Seattle, USA, October 1993
10. Y. Nemirovsky, N. Amir, D. Goren and G. Asa, "The Interface of MOCVD-CdTe/HgCdTe", US Workshop on the Physics and Chemistry of MCT, Texas, USA, October 1994.
11. A. Bell, Y. Huang, M. Daglish, O. Paul, Y. Nemirovsky and N. Setter, "A Thin Film Pyroelectric Detector", 6th International Symposium on Integrated Ferroelectrics, March 1994.
12. Y. Nemirovsky, A. Ruzin, G. Asa and J. Gorelik, "Study of Charge Collection Efficiency in CdZnTe Radiation Detectors", US Workshop on the Physics and Chemistry of MCT, Baltimore USA, October 1995.
13. S. Stolyarova, A. Simanovskis and Y. Nemirovsky, "Degradation Mechanisms and Stability Forecasting for Adhesion Contacts of Metal Films with Binary Dielectric Substrates", Proceedings of the 19th Annual Meetings of the Adhesion Society, Murtle Beach, South California, February 1996. Thomas C. Ward, Editor, pp. 218–221.
14. Y. Nemirovsky, A. Ruzin G. Asa and Y. Gorelik, "Study of Contacts to CdZnTe Nuclear Radiation Detectors", The 1996 US Workshop on the Physics and Chemistry of II–VI Materials, Las Vegas, October 1996.
15. S. Stolyarova, N. Amir and Y. Nemirovsky, "RTP-MOCVD of Epitaxial II-VI Semiconductors", Proceedings of the 5th International Conference on Advanced Thermal Processing of Semiconductors RTP'97, Eds. R.B. Fair, M.L. Green, B. Lojek and R.P.S. Thakur, New Orleans, LA, USA, September 3–5, 1997, pp. 269–275.
16. Y. Nemirovsky, G. Asa, A. Ruzin, J. Gorelik and R. Sudharsanan, "Characterization of Dark Noise in CdZnTe Spectrometers", The 1997 US II–VI Workshop, Santa Barbara, October, 1997.
17. Y. Nemirovsky, G. Asa, C.G. Jakobson, A. Ruzin and J. Gorelik, "Dark Noise Currents and Energy Resolution of CdZnTe Spectrometers", The 1997 US II–VI Workshop, Santa Barbara, October, 1997.
18. S. Stolyarova, N. Amir and Y. Nemirovsky, "Rapid Thermal MOCVD of II-VI Compounds", the 8th International Conference on II-VI Compounds, Grenoble, France, August 1997.
19. M. Levy, N. Amir, E. Khanin, A. Muranevich, Y. Nemirovsky and R. Beserman, "Characterization of CdTe Substrates and MOCVD Cd_{1-x}Zn_x Te Epilayers", EMRS Spring Meeting'98, Strasbourg, France, June (1998) – Symposium C on "Growth, Characterization and Applications of II-VIs".
20. D. J. Seter, O. Degani, S. Kaldor, E. Scher, J. Rosenberg and Y. Nemirovsky, "Microelectromechanical Vibrating Inertial Sensors with Integrated Optical Sensing", Proceeding of GYRO-Technology Symposium, Stuttgart, Germany, 15–6 September 1998, pp. 10.0–10.13.
21. D.J. Seter, O. Degani, S. Kaldor, E. Scher, J. Rosenberg and Y. Nemirovsky, "Microelectromechanical Vibrating Inertial Sensors with Integrated Optical Sensing", Proceedings of Gyro-Technology Symposium, Stuttgart, Germany, September 1998.

22. O. Degani, D.J. Seter, E. Socher, S. Kaldor, E. Scher and Y. Nemirovsky, "Comperative Study of Novel Accelerometers Employing MIDOS", Proc. of IEEE—MEMS'99, Orlando, USA, January 1998, pp. 66–71.
23. M. Kovler, D. Stavosvetsky, Y. Nemirovsky and Y. Yahalom, "Silicon Electromachining Processes in Aqueous Solutions", Materials Research Symposium (MRS), Materials Science of Microelectromechanical System (MEMS) Devices, Boston, USA, November 1998.
24. E. Socher, O. Degani and Y. Nemirovsky, "Investigation of Integrated Micromachined Uncooled Thermoelectric Sensors for Imaging Applications", Tech. Dig. International Conf. Solid-State Sensors and Actuators Transducers '99, Sendai, Japan, 7–10 June, 1999, pp. 406–9.
25. Y. Nemirovsky, G. Asa, J. Gorelik and A. Peyser, "Recent Progress in n-Type CdZnTe Arrays for Gamma-Ray Spectroscopy", European MRS, Vienna, October 1999.
26. Y. Nemirovsky, G. Asa, J. Gorelik and A. Peyser, "Spectroscopic Evaluation of n-Type CdZnTe Gamma-Ray Spectrometers", The 1999 US Workshop on II-VI Materials, Las Vegas, September 1999.
27. S. Stolyarova and Y. Nemirovsky, "Porous Silicon: Nanostructured Luminescent Material", Josef Stefan Institute, Ljubljana, Slovenia, October 1999.
28. A. Chack, R. Beserman, S. Stolyarova, Y. Nemirovsky and R. Weil, "New Phonon in Cadmium Zinc Telluride", The 21st IEEE Convention of the Electrical and Electronic Engineers in Israel, Tel-Aviv, Israel, April 11–12, 2000. Proceedings (Cat. No. 00EX377). IEEE, Piscataway, NJ, USA, 2000; 507 pp. p.57–60.
29. S. Stolyarova, B. Malic, S. Javoric, A. El-Bahar, M. Kosec and Y. Nemirovsky, "Integration of Porous Silicon with Sol-Gel Ceramic Films", International Conference Electronic Ceramics VII–2000, Portorose, Slovenia, September 2000.
30. H.W. Yao, L. Li, F. Lu, R.B. James, J. Erickson, G. Wright, R.W. Olsen, Y. Nemirovsky and J. Buturlia, "Radiation Detector Material and Device Studies of CdZnTe Grown by Modified Vertical Bridgman Method and Defect Engineering", SPIE, San Diego, USA, August 2000.
31. S. Stolyarova, A. El-Bahar and Y. Nemirovsky, "Strong Enhancement of Porous Silicon Photoluminescence by Dry Photo-Chemical Treatment", MRS Fall Meeting, Nano-Structured and Micro-Crystalline Materials Symp., Boston, USA, 2000.
32. O. Bochobza-Degani, D. J. Seter, E. Socher and Y. Nemirovsky, "A generalized Pull-In condition in micromachined electrostatic actuators with a single degree of freedom", AISEM'2000, Lecce, Italy, pp. 53–54, February 2000.
33. O. Bochobza-Degani, D. J. Seter, E. Socher and Y. Nemirovsky, "From a single to multi-axial, decoupled mode micromachined inertial sensors with MIDOS", electrostatic actuators with a single degree of freedom", AISEM'2000, Lecce, Italy, pp. 181–182, February 2000.
34. E. Socher, O. Bochobza-Degani and Y. Nemirovsky, "CMOS Compatible Integrated Thermoelectric Sensors using Novel Frontise Micromachining", Proc. AISEM2000, Lecce, Italy, February 2000.
35. E. Socher, O. Bochobza-Degani and Y. Nemirovsky, "Monolithic CMOS Readout for Micromachined IR Thermoelectric Sensors: Modeling and Characterization", Proc. AISEM2000, Lecce, Italy, February 2000.
36. O. Bochobza-Degani, E. Socher and Y. Nemirovsky, "On the design and fabrication of novel micromachined inertial sensors employing enhanced modulated integrative differential optical sensing", IEEE/LEOS Optical MEMS 2001, Okinawa, Japan, September 2001, pp. 53–54.
37. O. Degani, D. Elata and Y. Nemirovsky, "A novel fully automated, rapid Pull-In parameters extraction scheme for optical MEMS devices", IEEE/LEOS Optical MEMS 2001, Okinawa, Japan, September 2001, pp. 61–62.
38. C.G. Jakobson, U. Dinnar, M. Feinsod, A. Shai and Y. Nemirovsky, "Brain Local pH Monitoring with an ISFET Catheter", IEEE-EMBS 23rd Annual Conference, Istanbul, 2001.
39. O. Degani, Y. Yaniv, W. Bishara and Y. Nemirovsky, "Modeling the Pull-In parameters of electrostatic actuators with a novel lumped two degrees of freedom pull-in model", Tech. Dig.

- International Conf. Solid-State Sensors and Actuators (Transducers'01), Munich, Germany, June 2001, pp. 288–291.
40. O. Degani and Y. Nemirovsky, "On the effect of residual charges on the pull-in parameters of electrostatic actuators", Transducers'01/ EurosensorsXV Conf., Munich, June, 2001, pp. 292–295.
41. E. Socher, O. Bochobza-Degani and Y. Nemirovsky, "Novel Uncooled Thermoelectric IR Sensors and Arrays in CMOS Compatible Technology", Proc. IEEE/LEOS International Conf. on Optical MEMS 2001, Okinawa, Japan, pp. 117–118, September 2001.
42. S. Stolyarova, A. El-Bahar and Y. Nemirovsky "Unexpected Room Temperature Growth of Silicon Dioxide Crystallites on Passivated Porous Silicon", Abstract Book of ICCG–13/ICVGE–11, the 13th International Conference of Crystal Growth in conjunction with the 11th International Conference of Vapor Phase and Epitaxy, Kyoto, Japan, 2001.
43. O. Bochobza-Degani, D. Elata and Y. Nemirovsky, "An Efficient Relaxation based DIPIE Algorithm for Computer Aided Design of Electrostatic Actuators", IEEE MEMS'2002 Conference, Las-Vegas, USA, 20–24 January, 2002, pp. 200–203.
44. D. Elata, O. Bochobza-Degani and Y. Nemirovsky, "An Efficient Numerical Algorithm for Extracting the Pull-In Hyper-Surfaces of Electrostatic Actuators with Multiple Uncoupled Electrodes", MSM'2002, San Juan, Puerto-Rico, USA, April 2002.
45. A. El-Bahar and Y. Nemirovsky, "Porous Silicon Multiplexers and Dimultiplexers", Proceedings of The 3rd International Conf. Porous Semiconductors, Tenerife, Spain, 2002.
46. S. Stolyarova, A. El-Bahar and Y. Nemirovsky, "Porous Silicon: Luminescent Material and Crystalization Promotor", 3rd International Conf., Advanced Optical Materials and Devices, Riga, August 2002.
47. O.Bochobza-Degani, S. Feldman, Y. Nemirovsky, "Comparative study of electrostatically actuated torsion micromirrors: design parameters and performance", Optical MEMs, 2002. Conference Digest. 2002 IEEE/LEOS International Conference, August 2002
48. A. Morgenshtein, U. Dinnar, C.G. Jakobson and Y. Nemirovsky, "CMOS Readout Circuitry for Biomedical ISFET-Based Microsystems", Proc. of Eurosensors XVI, Prague, 2002.
49. A. Morgenshtein, U. Dinnar, C.G. Jakobson and Y. Nemirovsky: "Wheatstone-Bridge Readout Interface for ISFET-Based Applications, Proc. of Eurosensors XVI, Prague, 2002.
50. A. Morgenshtein, U. Dinnar, C.A. Jakobson, Y. Nemirovsky, "A Microsystem for ISFET-Based pH Measurement in CMOS Technology", Proc. of Eurosensors, 16th European Conference on Solid-State Transducers, Czech Republic, Prague, pp. 360-363, September 2002.
51. O. Bochobza-Degani, D. Elata, S. Feldman and Y. Nemirovsky, "Secondary DOF and Their Effect on the Instability of Electrostatic MEMS Devices", MEMS'2003, Kyoto, Japan, January 2003.
52. E. Socher, O. Bochobza-Degani, D. Elata and Y. Nemirovsky, "Modeling the Electro-Thermal Response of Thermally Isolated Micromachined Distributed Structures", NanoTec 2003 (MSM'03), San Fransisco, February 2003.
53. D. Elata, O. Degani and Y.Nemirovsky, "An Efficient Adaptive Single-Mode (ASM) Pull-In Extraction Algorithm for Computer Aided Design of Electrostatic MEMS Devices", NanoTec 2003 (MSM'03), San Fransisco, February 2003.
54. O. Bochobza-Degani, D. Elata and Y. Nemirovsky, "Stability of Charge-Controlled Electrostatic Actuators: A General Theorem and A Novel Charge Pull-In Extraction Numerical Scheme", NanoTec 2003 (MSM'03), San Fransisco, February 2003.
55. O. Bochobza-Degani, D. Elata and Y. Nemirovsky, "Alpha-Line Method for Measuring the Stability Domain and Pull-In Hyper-Surface of Electrostatic Actuators with Multiple Voltage Sources", International Conf. Solid-State Sensors and Actuators (Transducers'03), Boston USA, June 2003
56. O. Bochobza-Degani, R. Yechieli, E. Socher, U. Ben-Yehuda and Y. Nemirovsky, "Characterization of a Novel Micromachined Accelerometer with Enhanced-MIDOS", International Conf. Solid-State Sensors and Actuators (Transducers'03), Boston USA, June 2003.

57. D. Elata, O. Bochobza-Degani and Y. Nemirovsky, "A Micromirror Device with Post-Fabrication Re-Adjustable Pull-In Parameters", International Conf. Solid-State Sensors and Actuators (Transducers'03), Boston USA, June 2003.
58. E. Socher, Y. Sinai and Y. Nemirovsky, "Low Cost CMOS Compatible bolometers for IR detection", International Conf. Solid-State Sensors and Actuators (Transducers'03), Boston USA, June 2003.
59. A. Morgenshtein, U. Dinnar, C. G. Jakobson and Y. Nemirovsky, "Combined pH-Image Sensor based on Pass-Transistor Operation of ISFET", Proc. of Eurosensors XVII, Portugal, September 2003.
60. A. Morgenshtein, U. Dinnar and Y. Nemirovsky, "ISFET operation in Pass-Transistor Mode without Readout Circuits", Proc. of Eurosensors XVII, Portugal, September 2003.
61. S. Stolyarova, E. Baskin, N.E.Chayen and Y. Nemirovsky "Model of protein nucleation and crystallization promotion on porous silicon", The 4th International Conf. "Porous Semiconductors – Science and Technology", Cullera-Valencia, March 2004.
62. S. Stolyarova, E. Baskin, N.E.Chayen and Y. Nemirovsky "Universal substrate for protein crystal growth" , The 14th International Conf. on Crystal growth, Grenoble, France, Aug. 2004.
63. O. Aharon, S. Feldman, Y. Nemirovsky, "Silicon single crystalline MEMS shunt contact switch for RF application". 23rd IEEE Convention of Electrical and Electronics Engineers in Israel. IEEE. 2004, pp.281-4. Piscataway, NJ, USA.
64. S. Stolyarova, M. Weinstein, Y. Sinai and Y. Nemirovsky,"Cd_xZn_{1-x}S Films Growth on Microelectronic substrates", Proceedings of 11th European Workshop on MOVPE, Lausanne, June 2005, pp.265-268.
65. R. Ishihara, A. Glazer, Y. Raab, P. Rusian, M. Dorfan, B. Lavi, I. Leizeron, A.Kishinevsky, Y. van Aandel, X. Cao, J. W. Metselaar and C. I. M. Beenakker, S.Stolyarova and Y. Nemirovsky, "A Novel Selected Area Laser Assisted (SALA) System for Crystallization and Doping Processes in Low-Temperature Poly-Si Thin-Film Transistors", Proceedings of 12th International Display Workshops, Japan, December 2005.
66. O. Cohen, Y. Nemirovsky, "Resonance frequency trimming for MEMS micro-mirror scanner", 5th WSEAS int. conf. on Microelectronics, Nanoelectronics, Optoelectronics, MINO'06, Prague, March 2006
67. E. Langzam , Y. Nemirovsky , E. Isakov , J. Mizrahi, "Muscle enhancement using closed-loop electrical stimulation: Volitional versus induced torque", 10th annual conference of the international FES society, Montreal, Canada, July 2005.
68. E. Langzam, E. Isakov, Y. Nemirovsky, J. Mizrahi, "Muscle Force Augmentation by Low-Intensity Electrical Stimulation", 27th annual international conference of the IEEE Engineering in Medicine and Biology Society (EMBS), Shanghai, China, Sept. 2005.
69. S. Stolyarova, M. Weinstein, K. Finkelstein, R. Sarfati, Y. Sinai and Y. Nemirovsky, "Nanostructure and Thermo Electrical Properties of Cd_xZn_{1-x}S Thin Films for Microbolometers, International Conference "Advances in nanostructured materials, Processing - Microstructure - Properties – NANOVED-2006", Slovakia, May 2006.
70. S. Stolyarova, R.E. Fernandez, A. Chadha, E. Bhattacharya and Y. Nemirovsky, "MEMS Composite Porous Silicon/Polysilicon Cantilevers for Biosensing Applications", 3rd Int. Conf on Micro- Nanotechnology, Athens, Greece, November, 2007.
71. L. Gitelman, Z. Gutman, S. Bar-Lev, S. Stolyarova and Y. Nemirovsky, "CMOS-SOI-MEMS Transistor (TMOS) for Infrared Imaging", IEEE/LEOS International conference on Optical MEMS & Nanophotonics, Freiburg, Germany, August 2000.
72. R. Ben Yishay, S. Stolyarova, S. Shapira and Y. Nemirovsky, "High Performance MEMS 0.18 μ m RF- CMOS Inductors", IEEE conference on Microwaves, Communications, Antennas and Electronic Systems, COMCAS 2008. pp.1-7, 13-14 May, 2008.
73. R.E. Fernandez, S. Stolyarova, A. Chadha, E. Bhattacharya and Y. Nemirovsky , "MEMS composite Porous Silicon/Polysilicon cantilever sensors for enhanced triglycerides biosensing", 7th Int Conf. IEEE Sensors, October 26-29, Lecce, Italy, 2009.

74. D. Goren and Y. Nemirovsky, "CMOS-SOI-MEMS Focal Plane Array or Passive Terahertz Imaging (0.6-1.5 THz)", MMWave/THz Security Systems for Government and Commercial Applications, IWPC work shop, April 19-22, 2009 in Herndon, Virginia, USA.
75. Y. Sgan-Cohen, U. Keren, T. Nachmias, , E. Zvulun, S. Meltzer, M. Sachyani, S. Rachimi, M. Shusser, L. Gal, Y. Nemirovsky, "A Novel High Pressure Micro Check Valve Feasibility Study", MRS Spring meeting, San Franscico, April, 2009.
76. D. Corcos, D. Goren, Y. Nemirovsky "CMOS-SOI-MEMS Transistor (TeraMOS) for Terahertz Imaging", IEEE COMCAS 2009, The international IEEE conference on Microwaves, Communications, Antennas and Electronic Systems. November 2009.
77. A. Shemesh, Y. Eichen, S. Stolyarova, Y. Nemirovsky, "Microcantilevers as artificial nose platform", IEEE COMCAS 2009, The international IEEE conference on Microwaves, Communications, Antennas and Electronic Systems. November 2009.
78. S. Katz, I. Brouk, S. Stolyarova, S. Shapira and Yael Nemirovsky "High Performance MEMS 0.18um RF-CMOS Transformers", IEEE COMCAS 2009, The international IEEE conference on Microwaves, Communications, Antennas and Electronic Systems. November 2009.
79. E. David, T. Zlotnikov, L. Gal, O. Lavie and Y. Nemirovsky, "High tuning range MEMS capacitor for microwave applications", IEEE COMCAS 2009, The international IEEE conference on Microwaves, Communications, Antennas and Electronic Systems. Nov. 2009.
80. T. Zlotnikov, O. Degani and Y. Nemirovsky, "Constant Loss Miniature 45nm RF-CMOS 24 GHz Phase Shifter", IEEE COMCAS 2009, The international IEEE conference on Microwaves, Communications, Antennas and Electronic Systems, November 2009.
81. D. Goren, D. Corcos and Y. Nemirovsky, "CMOS-SOI-MEMS Transistor (TeraMOS) for Terahertz Imaging", Electronics KTN Terahertz 10, London (UK), January 21, 2010. over silicon microcantilevers for enhanced chemical sensing", 7th International Conference "Porous Semiconductors-Science and Technology", Valencia, Spain, 14-19, Mar., 2010, p.140-141.
82. S. Stolyarova, Y. Nemirovsky, "Porous silicon as immobilization, adhesion and crystallization promoter for inorganic and biological materials, 7th International Conference "Porous Semiconductors- Science and Technology", Valencia, Spain, 14-19, March, 2010, p.146-147.
83. A. Shemesh, S. Stolyarova, Y. Nemirovsky, Y. Eichen, "Isotope effects in the interaction between gas phase substances and polymer coated porous silicon over silicon microcantilevers", 7th Int. workshop on nanomechanical sensors, Banff, Canada, May, 2010.
84. S. Stolyarova, E. Baskin and Y. Nemirovsky, "Nanostructures porous silicon as substrate for crystallization promotion of inorganic and biomaterials", 16th Int. Conf on Crystal Growth, Beijing, 8-13 Aug. 2010.
85. S. Stolyarova and Y. Nemirovsky, "Porous Silicon as a Nanostructures Template for Enhanced Immobilization and Crystallization of Inorganic and Biomaterials", 218th Electrochemical Society Meeting, Las-Vegas, 10-15 October, 2010.
86. Ariel Shemesh, Sara Stolyarova, Yael Nemirovsky, Yoav Eichen, "Harnessing Isotope Effects as a Tool for Interconnecting Molecular and Macroscopic Phenomena", NMC 2011, May 12th, Dublin, Ireland
87. A. Shemesh, A. Litvinov, M. Valitov, T. Blank, S. Stolyarova, Y. Eichen, Y. Nemirovsky. Sensitive Platform for Detection of Volatile Substances and Explosives. The International IEEE Conference on Microwaves, Communications, Antennas and Electronic Systems COMCAS 2011, Tel Aviv, Israel, November 2011.
88. S. Shapira, A. Unikovski, G. Peled, D. Cristea, E. Rotman, A. Eshkoli, A. Svetlitza and Y. Nemirovsky, "CMOS DC to DC Switched Converter with On Chip Inductors", 24th IEEE International Symposium on Power Semiconductor Devices and ICs, June Bruges, Belgium, 4-7, 2012.
89. Alex Zviagintsev, Igor Brouk, Ilan Bloom and Yael Nemirovsky, "Self-Heating Effects in CMOS-SOI-NEMS Transistors for Uncooled Passive IR sensors", IEEE COMCAS 2015, International IEEE Conference on Microwaves, Communications, Antennas and Electronic Systems", Tel Aviv, Israel, Nov. 4-6.

90. Tomer Saraf¹, Igor Brouk, Sharon Bar-Lev, Aharon Unikovsky and Yael Nemirovsky, "Integrated readout for CMOS-SOI-MEMS uncooled infrared security sensor", IEEE COMCAS 2015, International IEEE Conference on Microwaves, Communications, Antennas and Electronic Systems", Tel Aviv, Israel, Nov. 4-6.
91. Maria Malitz and Yael Nemirovsky, "Comprehensive Comparison of Integrated Temperature Sensors in CMOS-SOI Technology", IEEE COMCAS 2015, International IEEE Conference on Microwaves, Communications, Antennas and Electronic Systems", Tel Aviv, Israel, Nov. 4-6.
92. Constatine Veinstein, Alexander Katz, Itzak Birk and Yael Nemirovsky, "Efficient Computing Architecture for Real-Time SPAD-Based Muzzle Flash Detection", IEEE COMCAS 2017, International IEEE Conference on Microwaves, Communications, Antennas and Electronic Systems", Tel Aviv, Israel, Nov. 13-15.
93. Alex Zviagintsev, Igor Brouk, T. Blank, Sharon Bar-Lev, Alex Svetlitza, Sara Stolyarova Ilan Bloom and Yael Nemirovsky, "Micromachined CMOS-SOI transistor (TMOS) thermal sensor operating in air", IEEE COMCAS 2017, International IEEE Conference on Microwaves, Communications, Antennas and Electronic Systems", Tel Aviv, Israel, Nov. 13-15.
94. Maria Malitz and Yael Nemirovsky, "Temperature Sensing Circuits in CMOS-SOI Technology", IEEE COMCAS 2017, International IEEE Conference on Microwaves, Communications, Antennas and Electronic Systems", Tel Aviv, Israel, Nov. 13-15.
95. A. Eshkoli and Y. Nemirovsky, "A stochastic approach for optimizing the required number of sub-pixels in Silicon Photomultiplier", (SiPM) for optical radar applications (LiDAR), 2018 ICSEE International Conference on the Science of Electrical Engineering, Israel.
96. A. Katz, A. Eshkoli, A. Feininstein and Y. Nemirovsky, "Design Considerations of CMOS Si Photomultiplier for Long Range LIDAR", International IEEE Conference on Microwaves, Communications, Antennas and Electronic Systems", Tel Aviv, Israel, Nov. 13-15.
97. Shlenkevitch, D.; Avraham, M.; Stolyarova, S.; Blank, T.; Nemirovsky, Y. Catalytic gas sensor based on micro machined transistor. In Proceedings of the 2019 IEEE International Conference on Microwaves, Antennas, Communications and Electronic Systems COMCAS, Tel Aviv, Israel, 4–6 November 2019, doi:10.1109/COMCAS44984.2019.89584.
98. Moshe Avraham, Ayal Shabtay, Dima Shlenkevitch, Sara Stolyarova, Tanya Blank and Yael Nemirovsky, "Modeling the thermal performance of a packaged MEMS thermal sensor at wide pressure range for IoT applications", In Proceedings of the 2019 IEEE International Conference on Microwaves, Antennas, Communications and Electronic Systems COMCAS, Tel Aviv, Israel, 4–6 November 2019, doi:10.1109/COMCAS44984.2019.89584.
99. A. Eshkoli, A. Nemirovsky, Y. Nemirovsky, "Modeling the missing part of CMOS silicon photomultiplier: the ultimate photon counting and timing sensor," Proc. SPIE 10978, Advanced Photon Counting Techniques XIII, 109780H (13 May 2019); doi: 10.1117/12.2520490, SPIE Defense + Commercial Sensing, 2019, Baltimore, Maryland, United States
100. Mikel AZPEITIA URQUIA, Giorgio ALLEGATO, Stefano PALEARI, Francesco TRIPODI, Laura OGGIONI, Matteo GARAVAGLIA, Tanya BLANK, Yael NEMIROVSKY, HIGH VACUUM WAFER LEVEL PACKAGING FOR UNCOOLED IR SENSOR, Symposium on Design, Test, Integration and Packaging of MEMS/MOEMS (DTIP 2020).
- 101.
- 102.
- 103.

Contributed Talks: National

1. Y. Nemirovsky, Ch. Yarnitzky and M. Ariel, "Cell Resistance - A Limiting Factor in Electroanalytical and Electrochemical Measurements", Israel J. Chem., Vol. 6, p. 41, 1968.
2. Y. Nemirovsky and M. Ariel, "The Evaluation of Single-Ion Electrochemical Potentials", Proc. Israel J. Chem., Vol. 8, p. 106, 1970.
3. M. Ariel and Y. Nemirovsky, "The Calculation of the Inner Layer Capacity", Israel J. Chem., Vol. 9, p. 268, 1971.

4. M. Ariel, E. Sutzkover, Y. Nemirovsky, "The Iodide-iodine Reference Electrode in Propylene Carbonate", Israel J. Chem., Vol. 9, p. 270, 1971.
5. R. Goshen and Y. Nemirovsky, "Plasma Anodization of Compound Semiconductors", Proceedings of the IEEE Melecon Conference, Tel-Aviv, 81-CH1659, 5.2.4, 1981.
6. E. Sand, D. Levy and Y. Nemirovsky, "A Combination of Vapor Phase and Liquid Phase Epitaxy of HgCdTe", Proceedings of the 14th IEEE Convention, 3p, session 1.4.4, 85-CH2075-0, Tel-Aviv, March 1985.
7. R. Adar, I. Bloom, Y. Nemirovsky and I. Kidron, "Trapping Effects and Interface Characterization of Narrow Bandgap Semiconductors Using Improved Q-C Method", The 15th Conference of Electrical and Electronics Engineers, Tel-Aviv, April 1987.
8. R. Adar, D. Rosenfeld and Y. Nemirovsky, "Tunneling and Noise Phenomena in HgCdTe Photodiodes", The 6th Meeting of Optical Engineering in Israel, Tel-Aviv, Israel, December 1988.
9. D. Rosenfeld and Y. Nemirovsky, "Noise Phenomena in HgCdTe Photodiodes", presented at the 16th Convention of Electrical and Electronics Engineers in Israel, Tel-Aviv, Israel, March 1989.
10. R. Fastow and Y. Nemirovsky, "Excess Carrier Lifetime of p-type HgCdTe Measured by Photoconductive Decay", presented at the 16th Convention of Electrical and Electronics Engineers in Israel, Tel-Aviv, Israel, March 1989.
11. I. Bloom and Y. Nemirovsky, "Design and Fabrication of Indium Antimonide Focal Plane Array", SPIE, Tel-Aviv, Israel, November 1990.
12. A. Ruzin, A. Bezinger, Y. Nemirovsky and G. Shaviv, "X-Ray Detectors and Integrated Electronics for X-Ray Imagery for Astronomy", The 8th Meeting on Optical Engineering in Israel, Tel Aviv, December 1992, Proceedings of SPIE, Volume 1971, August 1993, pp. 266-275.
13. D. Goren, L. Dejaloshinsky and Y. Nemirovsky, "HgTe Contacts on CdTe", 13th Israeli Vacuum Society Conference, Tel Aviv University, May 1993.
14. N. Amir, Y. Nemirovsky, E. Weiss and N. Mainzer, "MOCVD Growth of CdTe on HgCdTe", Israel Crystal Growth Association Annual Conference, Rehovot, November 1993.
15. N. Amir and Y. Nemirovsky, "MOCVD Heterostructure Growth of CdTe (Epilayer) / HgCdTe (Substrate)", The 7th Israel Materials Engineering Conference Proceedings, November 1994.
16. D. Goren, E. Khanin, G. Asa, N. Amir, Y. Nemirovsky and A. Bar-Lev, "New CdTe Solar Cells", Sixth Sde Boqer Symposium on Solar Electricity Production, November 1994.
17. A. Bell, Y. Huang, M. Daglish, O. Paul, Y. Nemirovsky and N. Setter, "A Thin Film Pyroelectric Detector", 6th International Symposium on Integrated Ferroelectrics, March 1994.
18. A. Ruzin, J. Gorelik and Y. Nemirovsky, "Mobility-Lifetime Product of CdTe/CdZnTe Crystals from Charge Collection Efficiency of X-Ray Detectors", The 18th Convention of Electrical Engineers in Israel, Tel-Aviv, March 1995.
19. Y. Satuby, V. Ben-Yehuda, C. G. Jakobson, J. Shneider, D. Lavie and Y. Nemirovsky, "Electrostatically Driven Micro Resonator with a CMOS Capacitive Read Out", The 18th Convention of Electrical Engineers in Israel, Tel-Aviv, March 1995.
20. C.G. Jakobson, D. Lavie and Y. Nemirovsky, "CMOS Low Noise Switched Charge Sensitive Preamplifier for CdTe X-Ray Detection", The 18th Convention of Electrical Engineers in Israel, Tel-Aviv, March 1995.
21. D. Goren, E. Khanin, G. Asa, N. Amir and Y. Nemirovsky, "Single Crystalline Thin Film CdTe Solar Cells", UNESCO-WEC Workshop on the Use of Solar Energy, Tel-Aviv, July-August 1995.
22. N. Amir, E. Khanin, D. Goren and Y. Nemirovsky, "MOCVD of High Quality Single Crystalline CdTe for Solar Cells", UNESCO-WEC Workshop on the Use of Solar Energy, Tel-Aviv, July-August 1995.
23. D. Goren, G. Asa, E. Khanin and Y. Nemirovsky, "Modeling of CdTe PIN Solar Cells", Seventh Sde Boqer Symposium on Solar Electricity Production, March 1996.
24. C.G. Jakobson, I. Bloom and Y. Nemirovsky, "1/f Noise in CMOS Transistors for Analog Applications from Subthreshold to Strong Inversion", The Nineteenth Convention of Electrical and Electronics Engineers in Israel, Jerusalem, November 1996.

25. A. Ruzin, G. Asa and Y. Nemirovsky, "Electronic Noise in CdZnTe Gamma Ray Spectrometers", The Nineteenth Convention of Electrical and Electronics Engineers in Israel, Jerusalem, November 1996.
26. S.L. Spiegel and Y. Nemirovsky, "Micro-Machined GCPW Resonators and Filters for Applications at Millimetric Wave Frequencies", 27th European Microwave, Jerusalem, September 1997.
27. C.G. Jakobson and Y. Nemirovsky, "1/f Noise in Ion Selective Field Effect Transistors compared to MOSFETs", Melecon'98, 9th Mediterranean Electrotechnical Conference, Tel-Aviv, Israel, May 1998.
28. A. El-Bahar, Y. Nemirovsky, J.F. Soustiel and N. Feinsod, "Micromachined CMOS Pressure Sensor", Melecon'98, 9th Mediterranean Electrotechnical Conference, Tel-Aviv, Israel, May 1998.
29. K. Cohen, S. Stolyarova, N. Amir, A. Chack, R. Beserman, R. Weil and Y. Nemirovsky, "MOCVD Growth of Ordered Cd(1-x)ZnxTe Epilayers", The Twelfth International Conference on Crystal Growth, Renaissance Jerusalem Hotel, Jerusalem, Israel, July 1998.
30. S. Stolyarova, N. Amir and Y. Nemirovsky, "Rapid Thermal Processing of Epitaxial II-VI Heterostructures", The Twelfth International Conference on Crystal Growth, Renaissance Jerusalem Hotel, Jerusalem, Israel, July 1998.
31. A. Chack, K. Cohen, S. Stolyarova, Y. Nemirovsky, R. Beserman and R. Weil, "Dielectric and Pyroelectric Properties of Ordered CdZnTe Layers Grown by MOCVD", The Twelfth International Conference on Crystal Growth, Renaissance Jerusalem Hotel, Jerusalem, Israel, July 1998.
32. M. Fiederle, T. Feltgen, T. Kunz, M. Rogalla, J. Meinhardt, Y. Nemirovsky and K.W. Benz, "Vapor Phase Grown CdTe X-and Gamma-Ray Detectors", The Tenth International Conference on Vapor Growth and Epitaxy, Renaissance Jerusalem Hotel, Jerusalem, Israel, July 1998.
33. C.G. Jakobson and Y. Nemirovsky, "Noise and Drift in Ion Sensitive Field Effect Transistors", The First France-Israel Bi-National Workshop on Biosensors and Biochips, Ben-Gurion University, Israel, October 1998.
34. O. Degani, D.J. Seter, E. Socher, S. Kaldor, E. Scher and Y. Nemirovsky, "Optically Sensed Cantilever Suspended Micromachined Inertial Sensor", Proc. of AGIL 98, Ramat-Gan, Israel, November 1998, p. 40.
35. E. Socher, O. Degani and Y. Nemirovsky, "Integrated Uncooled Micromachined Fair-Infra-Red Thermoelectric Sensors for Thermal Imaging", Proc. of AGIL 98, Ramat-Gan, Israel, November 1998, p. 78.
36. C.G. Jacobson, U. Dinar and Y. Nemirovsky, "Low Frequency Noise and Drift in Ion Selective Field Effect Transistors", MEMS Workshop, Zichon Yaacov, Israel, May 1999.
37. E. Socher, O. Bochobza-Degani and Y. Nemirovsky, "Uncooled Micromachined CMOS Compatible IR Sensing Microsystems", 11th International Meeting on Electro-Optics in Israel, Tel-Aviv, Israel, November 1999.
38. O. Bochobza-Degani, D.J. Seter, E. Socher and Y. Nemirovsky, "Investigation and Modeling of Micromachined Electrostatic Torsion Micromirrors for Light Processing", 11th International Meeting on Electro-Optics in Israel, Tel-Aviv, Israel, November 1999.
39. I. Brouk, A. Ezion and Y. Nemirovsky, "Characterization of CMOS Photodiodes for Image Sensors", 11th International Meeting on Electro-Optics in Israel, Tel-Aviv, Israel, November 1999.
40. S. Stolyarova, A. El-Bahar and Y. Nemirovsky, "Porous Silicon Light Emission Enhancement by NF3/UV Photo-Thermal Surface Treatment", 11th International Meeting on Electro-Optics in Israel, Tel-Aviv, Israel, November 1999.
41. I. Brouk and Y. Nemirovsky, "1/f Noise in CMOS Transistors for Analog Applications", The 21st IEEE Convention of the Electrical and Electronic Engineers in Israel, Tel-Aviv, Israel, April 2000.
42. C.G. Jakobson, L. Sudakov-Boreysha, M. Feinsod, U. Dinar and Y. Nemirovsky, "Capacitance-Voltage Characteristics of Floating Gate Electrolyte-Insulator-Semiconductor Capacitors", The 21st IEEE Convention of the Electrical and Electronic Engineers in Israel, Tel-Aviv, Israel, April 2000.
43. O. Bochobza-Degani, D.J. Seter, E. Socher and Y. Nemirovsky, "Novel Dual-Axial SOI Micromachined Inertial Sensors with optical Sensing: Design and Fabrication", The 21st IEEE Convention of the Electrical and Electronic Engineers in Israel, Tel-Aviv, Israel, April 2000.

44. E. Socher, O. Bochobza-Degani and Y. Nemirovsky, "Novel CMOS Compatible Frontside Micromachining of Integrated Thermoelectric Sensors", The 21st IEEE Convention of the Electrical and Electronic Engineers in Israel, Tel-Aviv, Israel, April 2000.
45. E. Socher, O. Bochobza-Degani and Y. Nemirovsky, "Modeling and Characterization of CMOS Readout Circuits for Monolithic Uncooled IR Thermoelectric Sensors", The 21st IEEE Convention of the Electrical and Electronic Engineers in Israel, Tel-Aviv, Israel, April 2000.
46. O. Bochobza-Degani, D.J. Seter, E. Socher and Y. Nemirovsky, "A Generalized Algebraic Equation for the Pull-In Condition in Micromachined Electrostatic Micromirrors: Modeling and Characterization", The 21st IEEE Convention of the Electrical and Electronic Engineers in Israel, April 2000, Tel-Aviv, Israel.
47. I. Brouk and Y. Nemirovsky, "CMOS Image Sensor Device Characterization and Process-Control Monitoring (PCM) Methodology", Workshop on Active Pixel CMOS Sensors & Applications held at Tel-Aviv University, Tel Aviv, Israel, May 2000.
48. S. Stolyarova, B. Malic, S. Javoric, A. El-Bahar, M. Kosec, Y. Nemirovsky, "Protective Sol-Gel Derived Ceramic Coatings on Porous Silicon", Israel Crystal Growth Association Annual Conf., Rehovot, 2000, p. 23.
49. C.G. Jakobson, S. Kaldor, E. Sidirov, A. Nemirovsky and Y. Nemirovsky, "A Silicon-Optical-Bench Approach to Cost-Effective Packaging for the Telecommunication Market", 21st Israeli Vacuum Society Conference, Dan Tel Aviv Hotel, September 2002.
50. O. Bochobza-Degani and Y. Nemirovsky, "Study of Electrostatic Torsion Micromirrors for Digital and Analog Light Processing", The 22nd IEEE Meeting, Tel-Aviv, December 2002.
51. E. Socher, Y. Sinai, O. Degani and Y. Nemirovsky, "Modeling, Design and Characterization of Surface Micromachined Polysilicon Microbolometers", The 22nd IEEE Meeting, Tel-Aviv, December 2002.
52. S. Stolyarova, A. El-Bahar, A. Chack, R. Weil, R. Beserman and Y. Nemirovsky, "Effect of Ultrasound Treatment on Photoluminescence and Stability of Porous Silicon", The 22nd IEEE Meeting, Tel-Aviv, December 2002.
53. A. Prochaska, R. Khamaisi, U. Dinnar, O. Degani and Y. Nemirovsky, "Electrostatically Actuated Micropump with Dynamic Passive Valves", Mechanical Engineering Conference, Israel, Haifa, Technion, 2003.
54. A. Prochaska, O. Degani, Y. Nemirovsky, "Novel electrostatically actuated pull-in-based microvalve", IsraMEMS 2003, Tel Aviv University, 2003.
55. O. Bochobza-Degani, R. Yechieli, S. Bar-Lev, U. Ben Yehuda and Y. Nemirovsky, "Characterization of a Novel Micromachined Accelerometer with Enhanced-MIDOS", IsraMEMS 2003, Tel Aviv University, 2003.
56. O. Aaron, S. Feldman and Y. Nemirovsky, "Silicon single crystalline MEMS shunt contact switch for RF applications", IEEE Israel 2004, Hezelia Sharon Hotel, September 2004.
57. I. Brouk and Y. Nemirovsky, "Noise characterization of the 0.35 micron CMOS process implemented in regular and SOI wafers", 11th IEEE International Conference on Electronics, Circuits and Systems, Tel Aviv, December 2004.
58. I. Brouk and Y. Nemirovsky, "CMOS image sensors", 11th IEEE International Conference on Electronics, Circuits and Systems, Tel Aviv, December 2004.
59. O. Cohen and Y. Nemirovsky, "A novel design and fabrication method of a pyramidal shape chip for scanning micro mirror", 11th IEEE International Conference on Electronics, Circuits and Systems, Tel Aviv, December 2004.
60. O. Cohen, A. S. and Y. Nemirovsky, "A novel design and fabrication method of scanning micro-mirror for retinal scan displays", 11th IEEE International Conference on Electronics, Circuits and Systems, Tel Aviv, December 2004.
61. L. Boryesha, A. Morgenshtein, U. Dinnar, Y. Nemirovsky, "Design and Methodology of ISFET (Ion Sensitive Field Effect Transistor) Microsystems for Bio-telemetry", Convention of Israeli Society for Medical and Biological Engineering, Tel-Aviv University, November 2004.
62. Y. Nemirovsky, O. Cohen, S. Beer and S. Stolyarov, "Power sources for the NESS – Network of Scattered Sensors project", Energy at Technion, Mosad Neeman, Technion, January 2005.

63. L. Boryesha, A. Morgenstein, U. Dinar and Y. Nemirovsky, "ISFET CMOS compatible design and encapsulation challenges", 11th IEEE International Conference on Electronics, Circuits and Systems, Tel Aviv, December 2004.
64. L. Boryesha, A. Morgenstein, U. Dinar and Y. Nemirovsky, "New ISFET catheters encapsulation techniques for brain pH in-vivo monitoring", 11th IEEE International Conference on Electronics, Circuits and Systems, Tel Aviv, December 2004.
65. E. Socher, L. Gitelman, Y. Sinai, A. Shay, Y. Nemirovsky, "TMOS Novel Uncooled Sensors - Theory and Practice", IsraMEMS 2005, Technion, June 2005.
66. A. Bransky, A. Prochaska, N. Korin, Y. Nemirovsky, U. Dinnar, "Micrfabricated Flow Cells for Erythrocytes Analysis", IsraMEMS 2005, Technion, June 2005.
67. O. Cohen, A. Barak, Y. Nemirovsky, "Low Voltage Biaxial Mirror for Scanning Micro Display Applications", IsraMEMS 2005, Technion, June 2005.
68. O. Aharon, Y. Nemirovsky, "Vertically Integrated MEMS Tunable Loaded Line Phase Shifter", IsraMEMS 2005, Technion, June 2005.
69. T. Nachmias, L. Carmiel, S. Meltzer, T. Tepper-Faran, O. Bochobza-Degani, C. Yarnitzky, Y. Nemirovsky, "Optimization of Sacrificial Structures for Large Holes Fabrication Using DRIE", IsraMEMS 2005, Technion, June 2005.
70. A. Prochaska, S. Stolyarova, A. Bransky, N. Korin, Y. Nemirovsky, U. Dinnar, "Micromachined Fabrication Technologies of Microchannels" IsraMEMS 2005, Technion, June 2005.
71. S. Stolyarova, M. Weinstein, Y. Sinai and Y. Nemirovsky, "AFM Study of CdS Films Grown by MOCVD", Scanning Probe Microscopy Israel-2005, Holon, June 2005, p.18.
72. S. Stolyarova, A. Glazer, Y. Raab, P. Rusian, M. Dorfan, B. Lavi, I. Leizerson, A. Kishinevsky, R. Ishihara*, Y. van Aandel, X. Cao, J. W. Metselaar and C. I. M. Beenakker, and Y. Nemirovsky "Selected Area Laser Assisted (SALA) Crystallization and Doping in Low-Temperature Poly-Si Thin-Film Transistors" The 14th IVS Annual Conference&Technical Workshop, Ganei Taaruchah, Tel-Aviv, October 27, 2005. 2. S. Stolyarova, M. Weinstein, Y. Sinai and Y. Nemirovsky "Growth and Annealing of Nanocrystalline CdxZn1-xS Films for Microelectronics" The 14th IVS Annual Conference&Technical Workshop, Ganei Taaruchah, Tel-Aviv, October 2005.
73. O. Cohen, Y. Nemirovsky, "Sensors networks based on "smart dust" concept", Computer Networking Seminar Day, IEEE-Israel Communications Chapter & Israeli M.O.S.T., Tel. Aviv. University, November 2005.
74. M. Weinstein, S. Stolyarova, Y. Sinai, A. Shai and Y. Nemirovsky, "CdZnS Thin Film growth and its implementation at bolometric sensors", annual meeting of the Optical MEMS consortium, Mosad Neeman, Technion, November 2005.
75. M. Weinstein, S. Stolyarova, M. Doron, A. Shai and Y. Nemirovsky, "CdZnS Thin Film growth and its implementation at bolometric sensors", annual meeting of the Optical MEMS consortium, Mosad Neeman, Technion, November 2006.
76. O. Cohen and Y. Nemirovsky, Network of Sensors based on "smart dust concept: acquisition algorithms", Ministry of Science miniconference, Tel Aviv University, November 2006.
77. S. Stolyarova, S. Cherian, R. Raiteri and Y. Nemirovsky, "MEMS Composite Porous Silicon/Silicon Cantilevers for Ultrasensitive Biosensing Applications", IsraMEMS 2006, Tel Aviv University, December 2006 (annual meeting of the Israeli MEMS association).
78. O. Aharon, O. Cohen, L. Gal, and Y. Nemirovsky, "MEMS Test Dies Based on Electrostatically Actuated Cantilevers", IsraMEMS 20056, Tel Aviv University, December 2006 (annual meeting of the Israeli MEMS association).
79. S. Moshe, S. Toledano, K. Finkelstein, R. Sarfaty, S. Richter, S. Stolyarova, Y. Nemirovsky, "Electronic and Electro-Optic Device Development by Scaling Technologies", The 2nd Ort Braude College, Karmiel Interdisciplinary Research Conference, Maalot, Israel, 2006.
80. O. Cohen, D. Kedar, S. Arnon and Y. Nemirovsky, "Micro CCR Array Passive Transmitter for Communication and Sensor Network Applications", The 11th Meeting on Optical Engineering and Science in Israel (OASIS), Tel Aviv, March 2007.
81. O. Cohen and Y. Nemirovsky, "Design of a sensor mote", Ministry of Science & Technology Infrastructure Program Conference, December 2007, Ben Gurion University.

82. O. Aharon, L.Gal, Y. Nemirovsky, "Hydride Approach for RF MEMS Devices", IEEE COMCAS 2008, The International IEEE Conference on Microwaves, Communications, Antennas and Electronic Systems", Tel Aviv, Israel, May 13-14, 2008.
83. Leonid Gitelman, Zivut Gutman, Sharon Bar-Lev, Sara Stolyarova and Yael Nemirovsky, "TMOS Novel Uncooled Sensors – Theory and Practice", IEEE COMCAS 2008, The International IEEE Conference on Microwaves, Communications, Antennas and Electronic Systems", Tel Aviv, Israel, May 13-14, 2008.
84. R. Ben Yishay, S. Stolyarov, S. Shapira and Y. Nemirovsky, "High Performance MEMS 0.18 μ m RF-CMOS Inductors", IEEE COMCAS 2008, International IEEE Conference on Microwaves, Communications, Antennas and Electronic Systems", Tel Aviv, Israel, May 13-14, 2008.
85. I. Brouk, A. Nemirovsky, Y. Nemirovsky, "ANALYSIS OF NOISE IN CMOS IMAGE SENSOR", IEEE COMCAS 2008, The International IEEE Conference on Microwaves, Communications, Antennas and Electronic Systems", Tel Aviv, Israel, May 13-14, 2008.
86. Ariel Shemesh, Sara Stolyarova, Yoav Eichen, Yael Nemirovsky, "Microcantilevers as artificial nose platform", The International IEEE Conference on Microwaves, Communications, Antennas and Electronic Systems", IEEE COMCAS 2009, November 10th 2009, Tel-Aviv, Israel.
87. Maria Malits, Alexander Svetlitza, Dan Corcos, Danny Elad and Yael Nemirovsky, "Revisiting Thermal Effects in Submicron CMOS-SOI Transistors", IEEE COMCAS 2011, The International IEEE Conference on Microwaves, Communications, Antennas and Electronic Systems", Tel Aviv, Israel, November 7-9, 2011.
88. Alex Svetlitza, Shye Shapira, Aharon Unikovski, Gabi Peled, Igor Brouk and Yael Nemirovsky, "CMOS DC to DC Switched Converter with On Chip Inductors", IEEE COMCAS 2011, The International IEEE Conference on Microwaves, Communications, Antennas and Electronic Systems", Tel Aviv, Israel, November 7-9, 2011.
89. D. Corcos, I. Brouk, M. Malits, A. Svetlitza, S. Stolyarova, A. Abramovich, E. Farber, N. Bachar, D. Elad and Y. Nemirovsky, "The TeraMOS Sensor for Monolithic Passive THz Imagers", IEEE COMCAS 2011, The International IEEE Conference on Microwaves, Communications, Antennas and Electronic Systems", Tel Aviv, Israel, Nov. 7-9, 2011.
90. Ariel Shemesh, Murad Valitov, Alexey Litvinov, Tanya Blank, Sara Stolyarova, Yoav Eichen and Yael Nemirovsky, "Microcantilevers as a sensitive platform for detection of volatile substances and explosives", IEEE COMCAS 2011, The International IEEE Conference on Microwaves, Communications, Antennas and Electronic Systems", Tel Aviv, Israel, November 7-9, 2011.
91. Maria Malits, Alex Svetlitza, Evgeny Manzhosov, Noa Rotman and Yael Nemirovsky, "The Influence of Thermoelectric Effects on the Self-Heating of Nanometer CMOS-SOI Devices", the 27 IEEE Israeli Chapter meeting; Eilat, November, 2012
92. E.Pikhay, Y.Nemirovsky, Y.Roizin, V.Dayan, K. Lavrenkov, Y.Leibovich, D. Epstein, "Radiation sensor based on a floating gate device", the 27 IEEE Israeli Chapter meeting; Eilat, November, 2012.
93. Ayal Eshkoli, Sharon Bar-Lev, Gabi Peled, and Yael Nemirovsky, "High Performance Integrated Inductors For Power Management Applications", IEEE 28-th Convention of Electrical and Electronics Engineers in Israel, December 3-5, 2014, Hilton Hotel, Eilat.
94. Maria Malits, Igor Brouk, Adi Birman, Asaf Lahav, Amos Fenigstein and Yael Nemirovsky, "Low Frequency Noise in Surface and Buried Channel Nanometric CMOS transistors", IEEE 28-th Convention of Electrical and Electronics Engineers in Israel, December 3-5, 2014, Hilton Hotel, Eilat.
95. Alexander Svetlitza, Tanya Blank, Sara Stolyarova, Igor Brouk, Sharon Bar-Lev and Yael Nemirovsky, "Design and Simulations of CMOS-SOI-NEMS Thermal Antenna and Sensors for Passive Uncooled THz Imaging", IEEE 28-th Convention of Electrical and Electronics Engineers in Israel, December 3-5, 2014, Hilton Hotel, Eilat.
96. Alex Zviagintsev, Igor Brouk, Ilan Bloom and Yael Nemirovsky, "Voltage and Current Integrated Readout for Uncooled Passive IR sensors based on CMOS-SOI-NEMS Technology", IEEE 28-th Convention of Electrical and Electronics Engineers in Israel, December 3-5, 2014, Hilton Hotel, Eilat.

Conference Posters

1. N. Amir, D. Goren, E. Khanin and Y. Nemirovsky, "High Indium Doping of MOCVD CdTe", Israel Crystal Growth Association Annual Conference Proceedings, Jerusalem, November 1995.
2. E. Khanin, N. Amir, Y. Nemirovsky and E. Gartstein, "The Effect of Growth Conditions on Properties of MOCVD (111)B CdTe Epilayers", Israel Crystal Growth Association Annual Conference Proceedings, Jerusalem, November 1994.
3. N. Amir, E. Khanin, Y. Nemirovsky N. Mainzer and E. Weiss, "The Interface of MOCVD CdTe/HgCdTe: Is It Good? UK-Israel Symposium on Frontiers in Surface and Interface Science, Ma'ale Hachamisha, Israel, March 1994.
4. N. Amir, Y. Nemirovsky E. Weiss and N. Mainzer, "MOCVD Growth of CdTe on HgCdTe", Israel Crystal Growth Association Annual Conference Proceedings, Rehovot, November 1993.
5. S. Stolyarova, A. Simanovskis, Y. Nemirovsky, "Factors Affecting Degradation of Metal Films. Abstract Book of the 1st International Congress of Adhesion Science and Technology, Amsterdam 1995, p. 108.
6. S. Stolyarova, Y. Nemirovsky, "Mechanisms of Degradation of Metal Film—Crystal Interfaces. Abstract Book of the Annual Conf. of the Israeli Association for Crystal Growth, 1995, p. 33.
7. N. Amir, S. Stolyarova, Y. Nemirovsky, "Rapid Thermal MOCVD of II–VI Semiconductors".
8. N. Amir, S. Stolyarova, C. Cohen, Y. Nemirovsky, A. Chack, R. Weil, R. Beserman, "Growth of ordered CdZnTe". Abstract Book Vol. 18, The 1996 Annual Conf. of the Israeli Association for Crystal Growth Jerusalem, December 1996, p. 18.
9. A. Ruzin and Y. Nemirovsky, "Performance Study of CdZnTe Spectrometers", Frontier Detectors for Frontier Physics, Pisa Meeting on Advanced Detectors, Italy, May 1997.
10. S. Stolyarova, N. Amir and Y. Nemirovsky, "Rapid Thermal Metalorganic Chemical Vapor Deposition of II-VI Compounds, Abstracts of 8th International Conference on II-VI Compounds, Grenoble, France, August 1997, p. 239.
11. S. Stolyarova and Y. Nemirovsky, "Comparison of Conventional and Rapid Thermal Processing of MOCVD for II—VI Semiconductors", 17th Israel Vacuum Society Conference, Tel Aviv, December 1997.
12. K. Cohen, S. Stolyarova, N. Amir, Y. Nemirovsky, A. Chack, R. Beserman, R. Weil, "Growth of Cd(1-x)ZnxTe Epilayers on CdTe (100) by MOCVD", 17th Israel Vacuum Society Conference, Tel Aviv, December 1997.
13. K. Cohen, S. Stolyarova, N. Amir, Y. Nemirovsky, R. Beserman, A. Chack and R. Weil, "Atomic Ordering in CdZnTe Epilayers Deposited by MOCVD", EMRS, Strasbourg, France, June 1998.
14. O. Degani, D. Setter, E. Socher, S. Kaldor, E. Scher and Y. Nemirovsky, "Comparative Study of Novel Micromachined Accelerometers Employing MIDOS", Proc. IEEE-MEMS'99, Orlando, FL, USA, January 1999, pp. 66–71.
15. O. Bochobza-Degani, D. J. Seter, E. Socher and Y. Nemirovsky, "A Novel Micromachined Vibrating Rate Gyroscope with Optical Sensing and Electrostatic Actuation", Sensors and Actuators A: Physical, Vol. 83 (2000), pp. 54–60.
16. C.G. Jakobson, M. Feinsod and Y. Nemirovsky, "Low Frequency Noise and Drift in Ion Sensitive Field Effect Transistors", Eurosensos XIII, Holland, September 1999.
17. S. Stolyarova, B. Malic, S. Javoric, A. El-Bahar, M. Kosec and Y. Nemirovsky, "Porous Silicon as a Host for La_{0.5}Sr_{0.5}CoO₃ Sol-Gel Films", 19th Annual Meeting of Israel Crystal Growth Society, Weizmann Institute, November 1999.
18. S. Stolyarova, A. El-Bahar and Y. Nemirovsky, "Porous Silicon Surface Treatments by Photo-Thermal Gas Phase Reactions", Abstract Book of the 9th Israel Material Engineering Conference – IMEC-9, December 1999.
19. S. Stolyarova, A. El-Bahar and Y. Nemirovsky, "Strong Effect of Porous Silicon Passivation on Photoluminescence and Aging Processes", Abstract Book of the 19th Israel Vacuum Society Conf., Holon, 2000, PR-1.

20. A. Chack, R. Beserman, S. Stolyarova, Y. Nemirovsky and R. Weil, "Unexpected Raman Line in CdZnTe Thin Films", Abstract Book of the Annual Israel Physical Society Meeting, Haifa, 2000, p. 55.
21. F. Edelman, S. Stolyarova, A. Chack, N. Zakharov, P. Werner, R. Beserman, R. Weil and Y. Nemirovsky, "Spontaneous Ordering in Thin Polycrystalline CdZnTe Films during Annealing", the 10th International Conf. on II-VI Compounds, Bremen, Germany, September 2001.
22. S. Stolyarova, F. Edelman, V. Orekhovsky, A. Chack, R. Beserman, R. Weil and Y. Nemirovsky, "Effect of Acoustic Wave Treatment on CdZnTe Microindentation", Abstract Book of the Annual Israel Physical Society Meeting, Tel-Aviv, 2001, p. 77.
23. S. Stolyarova, A. Chack, R. Weil, R. Beserman and Y. Nemirovsky, "Surface Preparation of CdZnTe", Abstract Book of the Annual Israel Physical Society Meeting, Tel-Aviv, 2001, p. 130.
24. F. Edelman, S. Stolyarova, A. Chack, N. Zakharov, P. Werner, R. Beserman, R. Weil and Y. Nemirovsky, "Spontaneous Ordering in Polycrystalline Cd_{1-x}Zn_x Te Films, Abstract Book of the Annual Israel Physical Society Meeting, Tel-Aviv, 2001, p. 129.
25. A. Chack, F. Edelman, S. Stolyarova, R. Weil, Y. Nemirovsky, and R. Beserman, "Structure of Cd_{1-x}Zn_xTe Grown by MOCVD", Abstract Book of the Annual Israel Physical Society Meeting, Tel-Aviv, 2001, p. 37.
26. A. Chack, M. Vytrykhivsky, S. Stolyarova, R. Weil, Y. Nemirovsky, and R. Beserman, "Characterization of Bulk CdZnTe by Photoluminescences", Abstract Book of the Annual Israel Physical Society Meeting, Tel-Aviv, 2001, p. 38
27. M. Fiederlie, A. Fauler, J. Frac, V. Babentsov, K.W. Benz, S. Stolyarova, Y. Gorelik, Y. Nemirovsky, "Growth of CdTe and (Cd, Zn) Te crystals from the vapor phase for spectrometer applications", Workshop on II-VI Detectors, USA, 2001.
28. S. Stolyarova, A. El-Bahar, F. Edelman and Y. Nemirovsky, "NF₃ Induced Photoluminescence Enhancement and Crystalline Oxide Growth in Porous Silicon", Proceedings of The 3rd International Conf. Porous Semiconductors, Tenerife, Spain, 2002.
29. A. El-Bahar, S. Stolyarova, and Y. Nemirovsky, "Ultrasound Treatment for Porous Silicon Photoluminescence Enhancement", Proceedings of The 3rd International Conf. Porous Semiconductors, Tenerife, Spain, 2002.
30. A. Morgenshtein, C. G. Jakobson, U. Dinnar and Y. Nemirovsky, "CMOS Readout Circuitry for Biomedical ISFET-Based Microsystems", Proceedings of Eurosensors XVI, Prague, Czech Republic, September 2002.
31. A. Morgenshtein, C. G. Jakobson, U. Dinnar and Y. Nemirovsky, "A Microsystem for ISFET-Based pH Measurement in CMOS Technology", Proceedings of Eurosensors XVI, Prague, Czech Republic, September 2002.
32. A. Morgenshtein, C. G. Jakobson, U. Dinnar and Y. Nemirovsky, "Wheatstone-Bridge Readout Interface for ISFET-Based Applications", Eurosensors XVI Conference, Prague, Czech Republic, September 2002.
33. A. El-Bahar, S. Stolyarova, N. Chayen and Y. Nemirovsky, "Porous Silicon as a Crystallization Promotor for Biological and Inorganic Systems", 21st Annual Conference of the Israel Vacuum Society (IVS), Tel Aviv, September 2002.
34. F. Edelman, S. Stolyarova, A. Chack, A. Stascuk, A. Berner, N. Zakharov, P. Werner, R. Beserman, R. Weil and Y. Nemirovsky, "Microstructure of CdZnTe Films on Glass Grown by MOCVD", 21st Annual Conference of the Israel Vacuum Society (IVS), Tel Aviv, September 2002.
35. S. Stolyarova, A. El-Bahar E. Baskin, N. Chayen and Y. Nemirovsky, Porous silicon as a nanostructured host for crystallization of proteins, Bi-National France-Israel Symposium on Enabling Nano-and Micro-Technologies in Biotechnology, Beer-Sheva-Eilat, December 2003.
36. E. Langzam, E. Isakov, Y. Nemirovsky, J. Mizrahi, "Force Enhancement Patterns in Combined Volitional and Electrically Induced Activation in Muscles", Annual fall meeting, Baltimore, USA, October 2005.

37. S. Stolyarova, B. Malic, S. Javoric, A. El-Bahar, M. Kosec, Y. Nemirovsky Integration of porous silicon with sol-gel derived ceramic films. Integration of Heterogeneous Thin-Film Materials and Devices Symposium (Mater. Res. Soc. Symposium Proceedings Vol.768). Mater. Res. Soc. 2003, pp.57-62. Warrendale, PA, USA.
38. S. Stolyarova, A. El-Bahar, E. Baskin, N. Chayen and Y. Nemirovsky, "Porous Silicon as a Nucleation and Crystallization Inducing Material for Biological and Inorganic Systems", Workshop on Nanotechnology, Haifa, May 2003.
39. S. Stolyarova, E. Baskin, and Y. Nemirovsky, "Role of porous silicon surface morphology in enhanced crystallization of proteins", the 3rd Bi-National France-Israel Workshop, Beer-Sheva-Eilat, December 2003.
40. O. Aharon, S. Feldman, Y. Nemirovsky, "Vertically Integrated Silicon Single Crystalline MEMS Switch", Transducers 2005, Seoul, Korea, 2005.
41. S. Stolyarova, M. Weinstein, Y. Sinai and Y. Nemirovsky "Growth and Annealing of Nanocrystalline $\text{Cd}_x\text{Zn}_{1-x}\text{S}$ Films for Microelectronics", The 14th IVS Annual Conference & Technical Workshop, Ganei Taaruchah, Tel-Aviv, October 27, 2005.
42. E. Langzam, E. Isakov, Y. Nemirovsky, J. Mizrahi, "Force Enhancement Patterns in Combined Volitional and Electrically Induced Activation in Muscles", Annual fall meeting, Baltimore, USA, October 2005.
43. S. Stolyarova, M. Weinstein, M. Doron and Y. Nemirovsky, "CdZnS Film as a Functional Element of Microbolometers for Infrared Radiation Sensors", IsraMEMS 2005/6, Tel Aviv University, December 2006 (annual meeting of the Israeli MEMS association).
44. S. Stolyarova, S. Weiss, M. Levy and Y. Nemirovsky, New Type of Fractal Macro and Nano Dual Structure of Vapor Phase Stain Etched Porous Silicon, Proceedings of the 5th International Conf. "Porous Semiconductors-Science and Technology", Sidges, Spain, 2006, p. 397-398.
45. S. Stolyarova, M. Weinstein and Y. Nemirovsky, Growth, Annealing and Thermo Electrical Properties of CdZnS Films for Microbolometers, 15th International. Conf on Crystal Growth, Salt Lake City, USA. August 2007.
46. O. Lavy, L. Gal, D. Weicherman, S. Stolyarova, E. David, A. Saad, and Y. Nemirovsky, "MEMS Tunable Capacitor With Wide Tuning Range Using Multiple Voltage Sources", IEEE COMCAS 2009, The international IEEE Conference on Microwaves, Communications, Antennas and Electronic Systems, November 2009.
47. S. Stolyarova, A. Shemesh, Y. Eichen and Y. Nemirovsky "Nanoporous silicon and its application for MEMS cantilever chemical and biosensing", RBNI Winter School, Ein-Gedi, March 14-18, 2010.
48. A. Svetlitza, M. Malits, I. Brouk, S. Stolyarova and Y. Nemirovsky, "The TeraMOS Sensing Pixel for Monolithic Passive Uncooled THz Imagers", Optical MEMS and nanophotonics, Canada August, 2012.

Classified Research Reports

1. Y. Nemirovsky, I. Blech and N. Minzer, "Determination of the Phase Diagram (P,T) of HgCdTe", April 1979, 23p. Contract No. 040-213, Technion.
2. I. Kidron and Y. Nemirovsky, "Photoconductor Arrays in HgCdTe for the Spectral Range 8-12 μm ", July 1982, 40p. Contract No. 051-348, Technion.
3. Y. Nemirovsky and I. Kidron, "Single Crystals of HgCdTe", August 1982, 92p. Contract No. 051-348, Technion.
4. Y. Nemirovsky, I. Kidron and A. Kornfeld, "Infrared Detectors with Focal Plane Signal Processing", September 1982, 42p. Contract No. 051-449, Technion.
5. I. Kidron, Y. Nemirovsky and G. Bahir, "Hg_{1-x}Cd_xTe Photoconductors for the 8-12 μm Spectral Region", February 1984, 80p. Contract No. 051-348, Technion.
6. Y. Nemirovsky, I. Sternberg, J. Gotlieb, A. Kepten and I. Kidron, "Epitaxial and Bulk Single Crystals of Hg_{1-x}Cd_xTe", February 1984, 230p. Contract No. 051-348, Technion.

7. J. Shacham-Diamand and Y. Nemirovsky, "The Interface Properties of InSb Passivated with Native Sulfides", April 1984, 33p. Contract No. 051-348, Technion.
8. B. Sabbah and Y. Nemirovsky, "Monolithic Analog Signal Processor Off the Focal Plane for Infrared Systems", April 1984, 20p. Contract No. 051-0596-870430.
9. L. Burstein, Y. Nemirovsky and I. Kidron, "The Interface and the Passivation for p-type HgCdTe", October 1984, 80p. Contract No. 051-348, Technion.
10. I. Kidron, Y. Nemirovsky and A. Kornfeld, "8-12 μ m HgCdTe Arrays with Focal Plane Signal Processing", October 1984, 60p. Contract No. 051-495, Technion.
11. E. Sand, Y. Nemirovsky and I. Kidron, "Epitaxial Films and Heterostructures in HgCdTe", October 1984, 100p. Contract No. 051-348, Technion.
12. A. Kepten, Y. Nemirovsky and I. Kidron, "The Growth and the Electrooptical Properties of HgCdTe VPE Epitaxial Films", November 1984, 100p. Contract No. 051-348, Technion.
13. Y. Nemirovsky, E. Finkman and S. Schacham, "Single Crystals of Hg_{1-x}Cd_xTe for Photo-Voltaic Detectors", April 1985, 118p. Contract No. 051-495, Technion.
14. Y. Nemirovsky, A. Sagi and D. Levy, "Optimization of the SSR Growth of n-type HgCdTe Single Crystals", November 1985, 59p. Contract No. 051-538, Technion.
15. Y. Nemirovsky and I. Kidron, "MCT-PV Detectors for Infrared Systems with Focal Plane Signal Processing", June 1986, 77p. Contract No. 051-348-860603, Technion.
16. A. Kornfeld, Y. Nemirovsky and I. Kidron, "Focal Plane Signal Processing", June 1986, 148p. Contract No. 051-348, Technion.
17. I. Kidron and Y. Nemirovsky, "Silicon Facility and Infrastructure for Infrared Focal Plane Arrays for Advanced Electrooptical Systems", September 1986, 44p. No. 8-790-16-0860901.
18. Y. Nemirovsky and G. Weiss, "The Interface Properties of InSb Passivated with Photon-Assisted Deposited SiO₂", October 1986, 106p. Contract No. 051-542-861028, Technion.
19. I. Kidron and Y. Nemirovsky, "Electrooptical Properties of Infrared Detectors with Small Dimensions", March 1987, 30p. Contract No. 051-643, Technion.
20. I. Kidron, Y. Nemirovsky, D. Lubzens, A. Kornfeld, I. Shacham, A. Farber, Y. Hait, Y. Shoham, V. Orland and A. Lemberg, "Si-CMOS Focal Plane Signal Processors for Infrared Systems", May 1987, 87p. Contract No. 051-348, Technion.
21. Y. Nemirovsky and E. Finkman, "InSb Photodiode for Detection of Radiation in the 3-5 μ m Spectral Region", June 1987, 20p. Contract No. 051-0542-870604.
22. Y. Nemirovsky, B. Sabbah, A. Bar-Lev, Y. Dvir, "Establishment of a Facility for Silicon Signal Processing for Electrooptical Systems", January 1988, 50p. No. 8-790-160-880101.
23. A. Kornfeld, D. Lubzens, Y. Nemirovsky, "Electrooptical Characterization of HgCdTe Photovoltaic Detectors with Focal Plane Signal Processing", January 1988, 7p. Contract No. 051-0348-1.
24. A. Kornfeld, D. Lubzens, Y. Nemirovsky, "Infrared Detector for Hand Held Viewer", January 1988, Contract No. 051-348-MP1.
25. D. Rosenfeld, D. Lubjen and Y. Nemirovsky, "NETD Calculation of MCT-PV Array", March 1988, Contract No. 051-348-880321.
26. Y. Nemirovsky, Y. Shacham, D. Lubzens, A. Kornfeld, B. Sabbah, A. Farber, Y. Shoham, Y. Hait, A. Strum and A. Lemberg, "Design and Processing of Si-CMOS Signal Processors for IRFPA", July 1988, 180p. Contract No. 051-348, Technion.
27. B. Sabbah and Y. Volpert, "SiCMOS Signal Processors", October 1988, Contract No. 051-348-881031.
28. A. Kornfeld, G. Bahir, Y. Nemirovsky, "HgCdTe Test Wafer - Preliminary Characterization of Photodiode Arrays", October 1988, Contract No. 051-348-881021.
29. R. Fastow and Y. Nemirovsky, "Excess Carrier Lifetime in Vacancy and Impurity Doped HgCdTe", November 1988, Contract No. 051-348-151188.
30. R. Fastow and Y. Nemirovsky, "Lifetime Measurements in HgCdTe Grown by Various Methods", December 1988, Contract No. 051-634-8812.

31. Y. Nemirovsky, "Epitaxial Growth of HgCdTe for Infrared Detectors by MOCVD", December 1988, Contract No. 051-702-8812.
32. Y. Nemirovsky and R. Fastow, "Infrared Detector for Thermal Imaging", January 1989, Contract No. 051-463-890123.
33. Y. Volpert, B. Sabbah, Y. Nemirovsky, "Noise Analysis in IRFPAs", April 1989, Contract No. 051-348-890401.
34. A. Kornfeld, D. Lubzens, Y. Nemirovsky, "Infrared Detector Array of MCT-PV", May 1989, Contract No. 051-495-MC-4.
35. Y. Volpert, B. Sabbah, Y. Nemirovsky, "Optimization of 1/f Noise in FPAs", May 1989, Contract No. 051-348-890402.
36. Y. Hait and Y. Nemirovsky, "Focal Plane Signal Processing Staring IR Systems", May 1989, Contract No. 051-348-880518.
37. Y. Nemirovsky and R. Fastow, "Electrooptical Properties of a Photoconductor with Small Dimensions", July 1989, Contract No. 051-543-890601-7.
38. D. Lubzens, A. Kornfeld, D. Schoenmann, Y. Nemirovsky, G. Bahir, "Integration of IR Detectors and FPAs", November 1989, Contract No. 051-348-891101.
39. Y. Volpert, B. Sabbah, Y. Nemirovsky, "Coupling Devices for HgCdTe Photodiodes", December 1989, Contract No. 051-348-891202.
40. Y. Volpert, B. Sabbah, Y. Nemirovsky, D. Lubzens, Y. Shoham, A. Kornfeld, "Design of FPAs", December 1989, Contract No. 051-348-891201.
41. Y. Nemirovsky and G. Bahir, "Process for Fabrication of MCT-PV Array", March 1990, Contract No. 051-348-901001.
42. D. Rosenfeld and Y. Nemirovsky, "Electrical Properties of Gate Controlled HgCdTe Photodiodes", March 1990, Contract No. 051-348-900313.