



Yasser Mohammed Sabry Gad Aboelmagd

Vice President of Sensor Systems Technology, Si-Ware Systems

3, Khaled Ibn Al-Waleed St. Sheraton, Heliopolis, 11361, Cairo Egypt

16 Boulevard Saint-Germain, Paris 75005, France

101 Jefferson Drive, 1st Floor, Menlo Park, CA 94025, USA

Email: yasser.sabry@si-ware.com

Associate Professor, Electronic and Communication Engineering Department, Faculty of Engineering, Ain Shams University (ASU)

1 Elsarayat St. Abbassia, 11517, Cairo, Egypt.

Email : yasser.sabry@eng.asu.edu.eg

Personal Information

Date of birth: May 21, 1982

Place of birth: Kuwait

Nationality: Egyptian

Languages: Arabic – English – French (fair)

Education

Doctor of Philosophy (May 2014) – ESIEE Engineering, Paris-Est University, Paris, France.

Thesis title: Acylindrical and Aspherical Microscale Mirrors: Principles, Technology and Applications to Miniature Optical Benches.

Master of Science (June 2009) - Electronics & Communication Engineering,

Faculty of Engineering, Ain Shams University, Cairo, Egypt. Thesis title: Simulation of Quantum Transport in Nanoscale Devices

Bachelor of Science (August 2005) - Electronics & Communication Engineering, Faculty of Engineering, Ain Shams University, Cairo, Egypt

- Cumulative Grade: **Distinction with Honor**
- Rank: **2nd out of 195**

Awards and prizes

1. Member in the winner team of the Product Showdown Award at the MEMS and Sensors Congress 2022, Europe.
2. Mohammed Rabee Nasser Award for Young Scientists in Applied Research , 2019, Egypt
3. State Encouragement Award in Engineering Science, 2018, Egypt.
4. Japan Agency for Science and Technology travel grant to attend the Science and Technology in Society Forum, Kyoto, 2018

5. Young Scientist award finalist in Microsystems & Nanoengineering Summit (MINE 2018) Beijing, China
6. Member in the industrial team nominated as Prism Award finalist 2018 for Photonics Innovation, San Francisco, USA.
7. TWAS-ARO Young Arab Scientist (YAS) Prize 2017 in "Scientific and Technological Achievement in Engineering Science".
8. Member in the winner team of SEMI's MEMS & Sensor Technology Showcase Award 2017 in Europe
9. TWAS-ARO Young Affiliate for 2017-2021.
10. National Science Foundation (NSF) and the National Aeronautics and Space Administration (NASA) travel grant to the Arab-American Frontiers of Science, Engineering, and Medicine symposium 2017, Rabat, Morocco.
11. Best paper award in 34th National Radio Science Conference 2017, Cairo, Egypt.
12. National Science Foundation (NSF) and the National Aeronautics and Space Administration (NASA) travel grant to the Arab-American Frontiers of Science, Engineering, and Medicine symposium 2016, Abu Dhabi, United Arab Emirates.
13. Best paper award in 33rd National Radio Science Conference 2016, Cairo, Egypt.
14. Prix de These 2014 de L'UPE finalist, 2014 France,
15. Best paper award in 31st National Radio Science Conference 2014, Cairo, Egypt.
16. Best student paper award in SPIE Photonics West 2013, San Francisco, USA.
17. Member in the industrial team winner of the Prism Award 2014 for Photonics Innovation, San Francisco, USA.
18. Featured article in OCTnews.org. Link:<http://www.octnews.org/articles/5223550/feature-of-the-week-3-9-14-deeply-etched-optical-m/>
19. Selected as one of the pioneers in the field of engineering by the Marquise Who's Who in Science and Engineering 2011-2012 (11th Edition).
20. Ph.D. scholarship from Si-Ware System Company, 2010.
21. Graduate studies scholarship, Department of Communication and Electronic Engineering, Ain Shams University, 2006.

Industrial Experience

Si-Ware Systems (September 2008- Present): Vice President of Sensor Systems Technology
<http://www.si-ware.com/>

Information Technology Industry Development Agency (July 2008- March 2010): Consultant in the research and innovation support department
<http://www.itida.gov.eg/>

Mentor Graphics Corporation (September 2005-June 2008): Consultant in the device modeling and parameter extraction team
<http://www.mentor.com/>

Granted patents

1. Yasser M. Sabry, Amr O. Ghoname, Momen Anwar, and Daa Khalil. "Integrated evanescent wave spectral sensing device." U.S. Patent 11,953,377, issued April 9, 2024.

2. Y.M. Sabry, Mortada, B.A., Hassan, K., Salem, A.A.M.M.E., Khalil, D., Al Haron, M.H., Elsheikh, M.A., Shebl, A., Saadany, B., Medhat, M. and Shenouda, B.G.I., 2023. Compact material analyzer. U.S. Patent 11,841,268.
3. Yasser M. Sabry, Mohammad Sakr, Bassam A. Saadany, Momen Anwar, and Mohamed H. Al Haron. "Compact multi-pass gas cell for multi-gas spectral sensors." U.S. 11150130, granted October, 2021.
4. Bassam Saadany, Mostafa Medhat, Muhammad Nagi, Ahmed Shebl, Yasser M. Sabry, Bassem Mortada, Diaan Khalil, "Integrated optical probe card and system for batch testing of optical mems structures with in-plane optical axis using micro-optical bench components," U.S. 20180143245A1, granted July 22, 2020.
5. Bassam Saadany, Yasser M. Sabry, Mostafa Medhat, Bassem Mortada, Muhammed Nagi, Mohamed Sadek, Yasseen Nada and Khaled Hassan, "Micro-optical bench device with highly-controlled optical surfaces," U.S. patent 10120134, granted November 9, 2018.
6. Yasser M. Sabry, Diaan Abdel Maged Khalil, Mostafa Medhat, Hisham Haddara, Bassam Saadany and Khaled Hassan, "Integrated spectral unit," U.S. patent 10060791, granted August 28, 2018.
7. Diaan Khalil, Bassam A. Saadany and Yasser M. Sabry, "High performance parallel spectrometer device," U.S. patent 9970819, granted May 15, 2018
8. Yasser M. Sabry, Diaan Khalil, Tarik E. Bourouina, Momen Anwar, "Structured silicon-based thermal emitter," U.S. patent 9793478, granted October 17, 2017.
9. Yasser M. Sabry, Diaan Abdel Maged Khalil, Mohamed Sadek, "Integrated apertured micromirror and applications thereof," U.S. patent 9557556, granted January 31, 2017.
10. Yasser M. Sabry, Diaan Khalil and Bassam Saadany "Fourier transform micro spectrometer based on spatially-shifted interferogram bursts" U.S. patent 9429474, granted August 30, 2016.
11. Yasser M. Sabry, Diaan Khalil, Bassam Saadany and Tarik Bourounia "Aspherical optical surfaces and optical scanners" U.S. patent 9158109, granted October 13, 2015.
12. Yasser M. Sabry, Tarik Bourounia, Diaan Khalil and Bassam Saadany "Integrated monolithic optical bench containing 3-D curved optical elements and methods of its fabrication" U.S. patent 9046690, granted June 2, 2015.

Patent applications

1. M.S. Radwan, Mortada, B., Labib, S., Medhat, M., Sabry, Y.M. and Erfan, M., SI Ware Systems Inc, 2024. *Diffuse multi-reflection optical device with light re-direction for spectrometer collection*. U.S. Patent Application 18/240,595.
2. Tarek Mohamed Zeinah, Bassem Mortada, Momen Anwar, Mohamed Ramadan, Mohamed Hamouda, Yasser M. Sabry, Diaan Khalil et al. "Opto-electrical probe card platform for wafer-level testing of optical mems structures." U.S. Patent Application 18/204,853, filed December 7, 2023.
3. BGI Shenouda, TM Zeinah, B Mortada, YM Sabry, B Saadany, ... "Handheld optical spectroscopy scanner" US Patent App. 17/903,536
4. YM Sabry, B Mortada, S Abozyd, M Medhat, M Said, B Saadany, Y Helmy, ..., "Generalized artificial intelligence modeler for ultra-wide-scale deployment of spectral devices" US Patent App. 18/124,912
5. B Mortada, YM Sabry, S Abozyd, "On-line compensation of instrumental response drift in miniaturized spectrometers" US Patent App. 17/989,317
6. Yasser M. Sabry, Erik Deutsch, Bassam Saadany, Bassem Mortada, Mohammed Al Haron, Mazen Erfan, ..., "Mass screening biological detection solutions." U.S. Patent App. 17/575,591.

7. Momen Anwar, Mohammed Al Haron, Yasser M. Sabry and Mohammed Sakr, "Optical fluid Analyzer," U.S. Patent Application 17/839,102
8. Mohammed Radwan, Shady Labib, Mostafa MEDhat, Bassem Mortada, Tarek Zeinah, Yasser M. Sabry, ..., "Large spot size spectrometer," U.S. Patent Application 17/828, 747.
9. Yasser M. Sabry, Bassem A. Mortada, Khaled Hassan, Abdelrahman Ahmed Maher Mohamed Elsayed Salem, Diao Khalil, Mohamed H. Al Haron, Mohammed Ahmed Elsheikh et al. "Compact material analyzer." U.S. Patent Application 17/590,781, filed August 4, 2022.
10. Yasser M. Sabry, Alaa Fathy, Diao Abdelmaguid Khalil, Tarik Bourouina, and Bassam A. Saadany. "Integrated device for fluid analysis." U.S. Patent Application 16/885,186, filed December 3, 2020.
11. Yasser M. Sabry, Mohammad Sakr, Bassam A. Saadany, Momen Anwar, and Mohamed H. Al Haron. "Compact multi-pass gas cell for multi-gas spectral sensors." U.S. Patent Application 16/808,238, filed September 10, 2020.
12. Medhat, Mostafa, Bassem Mortada, Yasser Sabry, Mohamed Hossam, Momen Anwar, Ahmed Shebl, Hisham Haddara, and Bassam A. Saadany. "Self-referenced spectrometer." U.S. Patent Application 16/368,771, filed October 3, 2019.

Application notes

Yasser M. Sabry and Device modeling team MGC, "IBIS Signal Integrity Analysis using ELDO, "AppNot 2008: <http://supportnet.mentor.com/reference/appnotes/10223.cfm>

Academic Experience

Publications profile (see complete list at the end)

Metric	Documents by author	Total citations	h-index	i-10 index
Google scholar	217	1497	20	47
Scopus	179	1146	17	NA

Research Projects

2023-2025: Broadband MEMS-Based Infrared Spectrometers: The Core of A Multipurpose Spectral Sensing Photonic Platform, HORIZON-CL4-2022-DIGITAL-EME (Spectral sensor expert)

2020-2021: Fast and low-cost method of viral infection detection using micro FTIR spectrometer and artificial intelligence technology, funded by ASRT National Program, Ministry of Higher Education and Scientific Research (Principal Investigator)

2020-2021: Solar driven and nano-enabled water purification, mobility project (Egypt-France) funded by ASRT National Program, Ministry of Higher Education and Scientific Research (Principal Investigator- Egypt side)

2019-2021: MEMS Based Semiconductor Quantum Dot Laser, mobility project (Egypt-Germany) funded by Science and Technology Development Fund (STDF), Egypt (Micro-optics and MEMS Expert)

2019-2020: Deep learning-based resolution enhancement of miniaturized FTIR spectrometers, funded by ITIDA –ITAC PRP Program Ministry of Comm. Egypt (Co Principal Investigator)

2019-2020: The Use of NEOSPECTRA Ultra-Compact FTIR spectrometer for Gas Analysis, funded by CITEPH Organization, France (Principal Investigator)

2018-2020: Nano-enabled integrated solution for quality analysis and management of water grids with decentralized production NANO-4-WATER, funded by Paris-Est University, France (Micro-Optics and Spectroscopy Expert)

2018-2019: MEMS Tunable Optoelectronic Oscillator, funded by ITIDA –ITAC PRP Program Ministry of Comm. Egypt (Optical MEMS Lead)

2017-2018: Characterization and Development of Micro Spectral Sensor for High Volume Applications, funded by Si-Ware Systems through the ASRT National Program, Ministry of Higher Education and Scientific Research (Co Principal Investigator)

2016-2017: Compact MEMS Scanner for High-speed Light Beam Steering, funded by FabCat Ministry of Comm. Egypt (Supervisor)

2016-2017: Finesse-Enhanced Optical Tunable Filter for Gas Sensing Applications, funded by FabCat Ministry of Comm. Egypt (Co Supervisor)

2014-2017: MEMS IR gas sensor Module, funded by RDI Programme, EU-Egypt Innovation fund (Technical Lead/Project Manager)

2012-2013: MEMS Optical Coherence Tomography Module, funded by the NTRA and ITIDA Ministry of Comm. Egypt (Design and Fabrication Lead)

2009-2010: Integrated High Resolution Optical MEMS Spectrometer, funded by RDI Programme, EU-Egypt Innovation fund (Senior MOEMS Design and Characterization Engineer)

2008-2009: Miniaturized MEMS Spectrometer: funded by ITIDA –ITAC PDP Program Ministry of Comm. Egypt (Senior Characterization Engineer)

2007-2008: Optical Fiber Sensor Project (Optical Engineer)

Teaching Experience

Post Graduate Courses: Micro-optics, Applied Optical Engineering, Biomedical Engineering

Under Graduate Courses: Optical Communications, Integrated Optics & Optical MEMS, Introduction to Electromagnetic Waves, Optical Sensing & Instrumentation, Nano-Imaging & Testing

Mentoring student Activities

1. Academic advisor of the student activity Pi aiming at increasing the awareness and knowledge in science, research and technology 2017-2019
2. Organizing summer training in photonics and microsystems 2016-2019
3. Supervising graduation projects 2016-2021

Community services

- Member in working group TMODS/OOM/2520.2.1 , P2520.2.1 - Machine Olfaction Devices and Systems used for General Outdoor Odor Monitoring, SEN/SC - Standards Committee, IEEE Sensors Council
- Technical committee member for the Microelectronics Lab- Knowledge City, New Capital of Egypt
- **Evaluation committee member**
 1. Africa Science Leadership Program evaluation committee
- **Journal Peer Reviewing**
 2. Nature Journal of Light: Science and Applications
 3. OSA Optics Letters
 4. IEEE Photonics Journal
 5. IEEE Transactions on Nanotechnology
 6. IOP Journal of Micromechanics and Microengineering
 7. SPIE Journal of Micro/Nanolithography, MEMS, and MOEMS (JM3)
 8. SPIE Optical Engineering
 9. Wiley International Journal of Numerical Modelling

10. Elsevier Applied Mathematics and Computation
11. Chinese Optics Letters

▪ **Journal Editing**

Guest editor

1. Micromachines special issue on Photonic MEMS and Optofluidic Devices 2017
2. Sensors special issue on Optical Sensing Based on Microscale Devices 2018

Associate editor

1. Elsevier Journal of Faculty of Engineering, Ain Shams University

▪ **Research Projects Judge**

1. ITIDA ITAC collaborative funded projects (CFP), Egypt
2. FabCat, TIEC, Egypt

▪ **Graduation Projects Judge**

1. ITIDA, TIEC, graduation projects completion, Egypt

Invited talks

1. Wide spectral range, large scanning area, cloud connected and compact FT-NIR spectral sensing platform for on-site analysis, SxiX2022, Northern Kentucky, USA, October 2022.
2. Sensor-scale FTIR spectrometers, LC Talks 1st Global Infrared Sessions-Online Event, November 2020.
3. MEMS-based mid-IR spectral sensing solutions for process analytical technology, SciX2020, Nevada, USA, October 2020.
4. MEMS Spectral Sensing Enabling Soil Analysis in the Field, FUTURE Days workshop, ESIEE Paris, France, November 2019
5. Photonic MEMS & Optofluidics: Platform for Instrument-to-Sensor Transformation, Faculty of Engineering, Northwestern Polytechnical University, Xian, China, July 2018.
6. Integrated Optical Benches for Bulky System Miniaturization, Faculty of Engineering, University of Duisburg Essen, December 2016.
7. NeospectraTM: a Story of Photonics Success & Opportunity, APEC 2016, Faculty of Engineering, Ain Shams University, October 2016.
8. MEMS Spectrometers and Optical Coherence Tomography Modules for Biomedical applications, ITAC event in the faculty of Engineering, Cairo University, February 2016.
9. Recent advances in MEMS-based FTIR spectroscopy, ICL Lab in the faculty of Engineering, Ain Shams University, December 2015.

Books

1. Mazen Erfan, Yasser M. Sabry, Marwa Rageb and Daa Khalil "Optical Gas Sensing Based on MEMS FTIR Spectrometers" SPIE 31 August 2017, Volume SL32, **ISBN 9781510613706**

Book chapters

1. Ahmed Saeed Mohamed, Yasser M. Sabry, Heba A. Shawky, and Daa Khalil. "CNT-Based Infrared Optical Sensors and Sources." In *Handbook of Nanosensors: Materials and Technological Applications*, pp. 1-38. Cham: Springer Nature Switzerland, 2023
2. Bassem Mortada, Yasser M. Sabry, Daa Khalil, and Tarik Bourouina. "Miniature Infrared Spectral Sensing Solutions for Ubiquitous Analytical Chemistry." In *Green Chemical Analysis and Sample Preparations*, pp. 513-536. Springer, Cham, 2022
3. John O. Gerguis, Yasser M. Sabry, Haitham Omran, and Daa Khalil, "MEMS-Based Swept Laser Source," in *Handbook of Laser Technology and Applications Laser Design*

- and Laser Systems (Volume Two) edited By Chunlei Guo, Subhash Chandra Singh, **ISBN 9781138032620**.
4. Yasser M. Sabry, Daaa Khalil, Bassam Saadany, and Tarik Bourouina. "In-plane optical beam collimation using a three-dimensional curved MEMS mirror." *Micromachines* 8, no. 5 (2017): 134 in *MEMS Mirrors* edited by Printed Edition of the Special Issue Published in *Micromachines* First Editon (2018), **ISBN 978-3-03842-867-1**
 5. Yasser M. Sabry, Daaa Khalil and Tarik Bourouina, "Optical MEMS Interferometers," in *Interferometers: Fundamentals, Methods and Applications* edited by Kystal Harmon, Nova Science Publishers (2015), **ISBN: 978-1-63483-692-0**.
 6. Yasser M. Sabry, Mohammed Elbanna, Tarek M. Abdolkader and Wael Fikry Farouk, "Simulation of Quantum Ballistic Transport in FinFETs " in *Toward Quantum Fin FET 17 (Lecture Notes in Nanoscale Science and Technology)* edited by Weihua Han and Zhiming M. Wang, Springer (2013), **ISBN 978-3-319-02021-1**.

Thesis Supervision

Ph.D.

1. George Albert Adib Abdelsayed, *Multi-dimensional Infrared Spectroscopy*, Ain Shams University, October 2024.
2. Yomna Medhat Abdel Kariem Eltagoury, *Polarized Light Infrared Spectrometer*, Ain Shams University, September 2024.
3. Ahmed Mohammed Ahmed Sayed OTHMAN, *Methods for Infrared Spectral Sensing of Chemical and Biological Matter at the Microscale: Theory and Experiments*, l'Université Gustave Eiffel, November 2023.
4. Alaa FATHY, *MEMS FTIR Air Quality Analyzer*, University Paris Est, France, November 2021.
5. Mazen ERFAN, *Micro-Opto-Fluidics: Addressing Nanomaterials Fundamentals and Water Quality*, University Paris Est, France, November 2019.
6. Mohammed Nabil, *Microcavity Optical Sensor*, Ain Shams University, Egypt, expected June 2019.
7. Mohammed Othman, *Slotted Optical Microstructure*, Ain Shams University, Egypt, September 2018.
8. Heba Mohamed, *Narrow Line-width Single Mode Optical Random Fiber Laser*, Ain Shams University, Egypt, September 2018.

M.Sc.

1. Hoda Ahmed Hisham Eissa Morshed, *MEMS Structures for Optical Gas Sensing*, Ain Shams University, Egypt, October 2023.
2. Radwa Ahmed Abbas Ahmed Khairy, *ExternalCavity Quantum Dot Laser*, Ain Shams University, Egypt, October 2023.
3. Shady Reda Fathy Labib, *Integrated Infrared Light Source*, Ain Shams University, Egypt, December 2022.
4. Mohammed Kelany, *Multimode Interference-Based MEMS Spectrometer*, Ain Shams University, Egypt, June 2022.
5. Waleed ElZeiny, *MEMS Based Scanning Fabry Perot Spectrometer*, Ain Shams University, Egypt, expected June 2021.

6. Kirollos Arnest, Tracking-Free Solar Concentrators, Ain Shams University, Egypt, expected October 2021.
7. Abdelrahman Maher, MEMS-Based Non-Invasive Spectrometer, Ain Shams University, Egypt, expected Jan 2021.
8. Rabab Shalaby, Silicon Photonics Micro Ring Resonator, Ain Shams University, Egypt, expected June 2021.
9. Moez-Elmasry, *FTIR Spectrometer Resolution Enhancement*, Ain Shams University, Egypt, expected September 2020.
10. Ahmed Saeed, *Printed Optoelectronics*, Ain Shams University, Egypt, expected June 2020.
11. Amr Osama, *Wide Spectral Range MEMS FTIR Spectrometer*, Ain Shams University, Egypt, expected June 2020.
12. Karim Hedayet, *MEMS FTIR Compressive Spectral Sensing*, Ain Shams University, Egypt, expected March 2020.
13. Mina Labib, *Infrared circuits using silicon photonics*, Ain Shams University, Egypt, expected September 2019.
14. Amir Shaheen, *High Resolution MEMS Spectrometer*, Ain Shams University, Egypt, expected June 2019.
15. John Gerguis, *MEMS-Based Spectral Sensing*, Ain Shams University, Egypt, expected June 2019.
16. Islam El-Sayed, *Signal Processing for Microscale Optical Spectrometer*, Ain Shams University, Egypt, expected March 2019.
17. Mahmoud Abd Al-Rahman, *Cavity Enhanced Spectroscopy*, Ain Shams University, Egypt, expected May 2019.
18. Ahmed Elsayed, *Micro-Structured Silicon for Optical Sensing Applications*, Ain Shams University, Egypt, October 2018.
19. Yomna Eltagoury, *MEMS Fabry-Perot Spectrometer*, Ain Shams University, Egypt, October 2017.
20. George Abdelsayed, *Coupled Cavities Ring Laser*, Ain Shams University, Egypt, August 2017. **[Best MSc thesis award in Faculty of Engineering for 2017]**
21. Alaa Fathy, *Optical MEMS Parallel Spectrometer*, Ain Shams University, Egypt, June 2017.

Soft Skills Training

1. Situational leadership, 2016, Trainera
2. Seven habits of highly effective people, 2016, LTC
3. Updating Organizational Self Study, April 2015, Center of Accreditation and Quality Assurance, Ain Shams University, Egypt.
4. Situational Leadership, May 2016, The KenBlanchard Companies, Enables by ITIDA ManageIt Program, Egypt.
5. Effective communication skills, September 2018, Training and Development Center, Ain Shams University, Egypt.
6. Problem Solving and Decision Making, January 2019, Training and Development Center, Ain Shams University, Egypt.
7. Leadership, February 2019, Training and Development Center, Ain Shams University, Egypt.

8. Managing Innovation in Academia, Training and Development Center, April 2019, Ain Shams University in collaboration with German Academic Exchange Service DAAD, Egypt.
9. Egyptian Knowledge Bank, October 2019, Training and Development Center, Ain Shams University, Egypt

Personal Contact Information

Email: yasser.sabry82@gmail.com

Mobile phone: +201001834833

Home addresses: 22 Abd Elhay Hegazi St., 8th region, Nasr City, Cairo, Egypt.

Complete list of publications

Journal publications

1. Omar Khater, Ali Khater, Ashar Seif Al-Nasr, Samir Abozyd, Bassem Mortada, and Yasser M. Sabry. "Advancing near-infrared spectroscopy: A synergistic approach through Bayesian optimization and model stacking." *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy* 318 (2024): 124492.
2. Mahmoud A. Selim, Yasser M. Sabry, Frédéric Marty, Tarik Bourouina, and Daa Khalil. "Modeling and characterization of deeply etched multilayer resonators under partial coherent excitation via multimode optical fibers." *Journal of Optics* 26, no. 6 (2024): 065801.
3. Radwa A. Abbas, Yasser M. Sabry, Haitham Omran, Zihua Huang, Michael Zimmer, Michael Jetter, Peter Michler, and Daa Khalil. "Modelling and experimental characterization of double layer InP/AlGaInP quantum dot laser." *Optical and Quantum Electronics* 56, no. 2 (2024): 20.
4. Mohamed Hisham Aref, Sanzhar Korganbayev, Ibrahim H. Aboughaleb, Abdallah Abdelkader Hussein, Mohamed A. Abbass, Ramy Abdlaty, Yasser M. Sabry, Paola Saccomandi, and Abou-Bakr M. Youssef. "Custom hyperspectral imaging system reveals unique spectral signatures of Heart, Kidney, and liver tissues." *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy* (2023): 123363.
5. Ahmed M. Othman, Yasser M. Sabry, Daa Khalil, Bassam Saadany, and Tarik Bourouina. "A disposable optofluidic micro-transmission cell with tailorable length for Fourier-transform infrared spectroscopy of biological fluids." *Analytical Methods* 16, no. 2 (2024): 262-268.
6. Ahmed M. Othman, Yasser M. Sabry, Daa Khalil, and Tarik Bourouina. "Single Infrared Spectrum Enables Simultaneous Identification of (Bio) Chemical Nature and Particle Size of Microorganisms and Synthetic Microplastic Beads." *Analytical Chemistry* 95, no. 48 (2023): 17826-17833.
7. Alaa Fathy, Martine Gnambodoe-Capochichi, Yasser M. Sabry, Momen Anwar, Amr O. Ghoname, Ahmed Saeed, Yamin Leprince-Wang, Daa Khalil, and Tarik Bourouina. "Potential of a Miniature Spectral Analyzer for District-Scale Monitoring of Multiple Gaseous Air Pollutants." *Sensors* 23, no. 14 (2023): 6343.
8. Walid Elsayed Elzeiny, Yomna M. Eltagoury, Yasser M. Sabry, and Daa A. Khalil. "On-Chip Photonic MEMS Coupled-Cavity Spectrometer." *IEEE Photonics Technology Letters* (2023).
9. Rabab A. Shalaby, Yasser M. Sabry, and Daa Khalil. "Matrix analysis for back reflection and mode conversion in silicon waveguide bend structure." *Optics Communications* 537 (2023): 129429.
10. George A. Adib, Yasser M. Sabry, and Daa Khalil. "Allan Variance Characterization of Compact Fourier Transform Infrared Spectrometers." *Applied Spectroscopy* (2023): 00037028231174248.
11. Alaa Sultan, Yasser M. Sabry, Ahmed Samir, and Mostafa A. El-Aasser. "Mirror-terminated Mach-Zehnder interferometer based on SiNOI slot and strip waveguides for sensing applications using visible light." *Frontiers in Nanotechnology* 5 (2023): 1121537.
12. Yomna M. Eltagoury, Yasser M. Sabry, and Daa Khalil. "Polarized light diffuse reflectance FT-NIR MEMS spectrometer enabling the detection of powder samples through a thin plastic layer." *JOSA A* 40, no. 4 (2023): 774-781.
13. Ahmed A. Elsayed, Ahmed M. Othman, Yasser M. Sabry, Frédéric Marty, Haitham Omran, Daa Khalil, Ai-Qun Liu, and Tarik Bourouina. "Substrate Signal Inhibition in Raman Analysis of Microplastic Particles." *ACS omega* 8, no. 11 (2023): 9854-9860.
14. Ahmed M. Othman, Ahmed A. Elsayed, Yasser M. Sabry, Daa Khalil, and Tarik Bourouina. "Detection of Sub-20 μm Microplastic Particles by Attenuated Total

- Reflection Fourier Transform Infrared Spectroscopy and Comparison with Raman Spectroscopy." ACS omega 8, no. 11 (2023): 10335-10341.
15. Sreyash Sarkar, Ahmed A. Elsayed, Yasser M. Sabry, Frédéric Marty, Jérémie Drévilion, Xiaoyi Liu, Zhongzhu Liang et al. "Black Silicon Revisited as an Ultrabroadband Perfect Infrared Absorber over 20 μm Wavelength Range." *Advanced Photonics Research* 4, no. 2 (2023): 2200223.
 16. Ahmed Mostafa, Yasser M. Sabry, Haitham Omran, Hassan F. El-Nashar, Ahmed Samir, and Diao Khalil. "Modeling of surface roughness in deeply etched photonic MEMS mirrors and filters." *Optical Engineering* 61, no. 11 (2022): 117105.
 17. Ahmed M. Othman, Hussein E. Kotb, Mohamed A. Abdelalim, Yasser M. Sabry, Hanan Anis, and Diao Khalil. "Numerical Study of Parabolic Pulse Generation in Backward-Pumped Erbium-Doped Fiber Amplifiers." *IEEE Photonics Journal* 14, no. 4 (2022): 1-8.
 18. Yasser M. Sabry, Mazen Erfan, Diao Khalil, Tarik Bourouina, "Critical analysis of in-plane free-space light beam coupling using photonic curved micromirrors," *J. Opt. Microsyst.* 2(3), 034001 (2022), doi: 10.1117/1.JOM.2.3.034001.
 19. Alaa Fathy, Yasser M. Sabry, Ian W. Hunter, Diao Khalil, and Tarik Bourouina. "Direct Absorption and Photoacoustic Spectroscopy for Gas Sensing and Analysis: A Critical Review." *Laser & Photonics Reviews* : 2100556, 2022
 20. Mohamed N. Ali, Yasser M. Sabry, Khaled A. Kirah, and Diao Khalil. "Analysis of metallic slotted micromirrors using modal decomposition and multiple reflections." *JOSA B* 39, no. 2: 586-593, 2022.
 21. Samar Elaraby, Sherif M. Abuelenin, Adel Moussa, and Yasser M. Sabry. "Deep Learning on Synthesized Sensor Characteristics and Transmission Spectra Enabling MEMS-Based Spectroscopic Gas Analysis beyond the Fourier Transform Limit." *Foundations* 1, no. 2 : 304-317, 2021.
 22. Mazen Erfan, Martine Gnambodoe-Capochichi, Yasser M. Sabry, Diao Khalil, Yamin Leprince-Wang, and Tarik Bourouina. "Spatiotemporal dynamics of nanowire growth in a microfluidic reactor." *Microsystems & nanoengineering* 7, no. 1: 1-10, 2021.
 23. Walid ElSayed ElZeiny, Yasser M. Sabry, and Diao A. Khalil. "Complex Kernel-based spectrum reconstruction algorithm for cascaded Fabry–Perot interferometric spectrometer." *Applied Optics* 60, no. 29: 8999-9006, 2021.
 24. Amr O. Ghoname, Yasser M. Sabry, and Diao Khalil. "Modelling of ATR-FTIR MEMS Spectrometer Under Partially-Coherent Multimode-Fiber Illumination." *Journal of Lightwave Technology* 39, no. 22: 7092-7098, 2021.
 25. Moez El-Massry, Sebastien Nazeer, Yasser M. Sabry and Diao Khalil, "Physical Parameter Extraction and Modeling of Metallized Deeply-Etched Vertical Mirrors," in *Journal of Microelectromechanical Systems*, vol. 30, no. 6, pp. 930-938, Dec. 2021, doi: 10.1109/JMEMS.2021.3108833.
 26. Amr O. Ghoname, Yasser M. Sabry and Diao Khalil, "Modelling of ATR-FTIR MEMS Spectrometer under Partially-Coherent Multimode-Fiber Illumination," *IEEE/OSA Journal of Lightwave Technology*, 2021
 27. Ahmed A. Elsayed, Mazen Erfan, Yasser M. Sabry, Rachid Dris, Johnny Gaspéri, Jean-Sébastien Barbier, Frédéric Marty et al. "A microfluidic chip enables fast analysis of water microplastics by optical spectroscopy." *Scientific reports* 11, no. 1, 1-11, 2021
 28. Bassem Mortada, Mostafa Medhat, Yasser M. Sabry, Mohamed Sadek, Ahmed Shebl, Khalid Hassan, Moez El-Masry et al. "Ultra-Compact Fourier Transform Near-Infrared MEMS Spectral Sensor for Smart Industry and IoT." *IEEE Journal of Selected Topics in Quantum Electronics* (2021).
 29. Abdelrahman M. Salem, Yasser M. Sabry, Alaa Fathy, and Diao A. Khalil. "Single MEMS Chip Enabling Dual Spectral-Range Infrared Micro-Spectrometer with Optimal Detectors." *Advanced Materials Technologies* 6, no. 5 (2021): 2001013.

30. Alaa Fathy, Yasser M. Sabry, Diao Khalil, and Tarik Bourouina. "Differential Optical Spectrometer Based on Critical Angle Dispersion." *Journal of Lightwave Technology* 39, no. 9 (2021): 2911-2916.
31. Amir Khaled Shaheen, Yasser Mohammed Sabry, and Diao Khalil. "Modeling of Fabry-Perot micro cavities under partial spatial coherence illumination using multimode optical fibers." *Journal of Lightwave Technology* (2021).
32. Hussein E. Kotb, Yasser M. Sabry, Mohab S. Abdallah, and Haitham Omran. "MEMS-SOA Spectrum-Sliced Auto-Equalized Source Enabling Uniformly Tunable Microwave Photonic Filter." *IEEE Photonics Technology Letters* 33, no. 1 (2020): 15-18.
33. Mazen Erfan, Léonce Martine Gnambodoe-Capochichi, Frédéric Marty, Yasser M. Sabry, Tarik Bourouina, and Yamin Leprince-Wang. "Rapid assessment of nanomaterial homogeneity reveals crosswise structural gradients in zinc-oxide nanowire arrays." *Nanoscale* 12, no. 3 (2020): 1397-1405.
34. Haitham Omran, Mohab Sameh, Ahmed Mahfouz, Omar Saad, Maram TH Abou Kana, Frédéric Marty, Diao Khalil, Tarik Bourouina, and Yasser M. Sabry. "Visible Laser on Silicon Optofluidic Microcavity." *Advanced Materials Technologies* 5, no. 5 (2020): 1901132
35. M. Salah, Michael Gad, Mohamed Elkattan, and Yasser M. Sabry. "Effect of gamma-irradiation and doping on the absorption edge and the optical bandgap of silver-doped PVA films." *Optics Communications* 473, 125933 (2020).
36. Alaa Fathy, Yasser M. Sabry, Martine Gnambodoe-Capochichi, Frederic Marty, Diao Khalil, and Tarik Bourouina. "Silicon Multi-Pass Gas Cell for Chip-Scale Gas Analysis by Absorption Spectroscopy." *Micromachines* 11, no. 5, 463 (2020).
37. Mahmoud A. Selim, Yasser M. Sabry, and Diao Khalil. "Sensitivity Enhancement Factor for Gain-Assisted Cavity Enhanced Spectroscopy." *IEEE Journal of Quantum Electronics* (2020).
38. Mohamed Salah, Michael Gad, Mohamed Elkattan, and Yasser Sabry. "The optical constants of gamma irradiated silver doped PVA in the near infrared range." *Micro & Nano Letters* (2020).
39. Alaa Fathy, Yasser M. Sabry, Sébastien Nazeer, Tarik Bourouina, and Diao A. Khalil. "On-chip parallel Fourier transform spectrometer for broadband selective infrared spectral sensing." *Microsystems & Nanoengineering* 6, no. 1 (2020): 1-9.
40. Alaa Fathy, Marie Le Pivert, Young Jai Kim, Mame Ousmane Ba, Mazen Erfan, Yasser M. Sabry, Diao Khalil, Yamin Leprince-Wang, Tarik Bourouina, and Martine Gnambodoe-Capochichi. "Continuous Monitoring of Air Purification: A Study on Volatile Organic Compounds in a Gas Cell." *Sensors* 20, no. 3 (2020): 934.
41. Ahmed M. Othman, Hussein E. Kotb, Yasser Mohamed Sabry, and Diao Khalil. "EXPRESS: Micro-Electro-Mechanical Fourier Transform Infrared (MEMS FT-IR) Spectrometer Under Modulated-Pulsed Light Source Excitation." *Applied Spectroscopy* (2019): 0003702819886091.
42. Yomna M. Eltagoury, Yasser M. Sabry, and Diao A. Khalil. "All-Silicon Double-Cavity Fourier-Transform Infrared Spectrometer On-Chip." *Advanced Materials Technologies* (2019): 1900441.
43. John Onsy Gerguis, Yasser Mohammed Sabry, Haitham Omran, and Diao A. Khalil. "Spectroscopic Gas Sensing Based on a MEMS-SOA Swept Fiber Laser Source." *IEEE Journal of Lightwave Technology* 37, no. 20 (2019).
44. Islam Samir, Yasser M. Sabry, Alaa Fathy, Amr O. Ghoname, Niveen Badra, and Diao A. Khalil. "Autoregressive super-resolution microelectromechanical systems Fourier transform spectrometer." *Applied Optics* 58, no. 25 (2019): 6784-6790.
45. Mazen Erfan, Martine Gnambodoe-Capochichi, Yamin Leprince-Wang, Frédéric Marty, Yasser M. Sabry, and Tarik Bourouina. "Nanowire Length, Density, and Crystalline Quality Retrieved from a Single Optical Spectrum." *Nano Lett.*, 2019, 19 (4), pp 2509-2515.

46. Muhammad A. Othman, Yasser M. Sabry, Ahmed M. Othman, Ismail M. Nassar, and Diaan A. Khalil. "Modal analysis of TE and TM excitations in a metallic slotted micromirror." *JOSA B* 36, no. 3 (2019): 610-615.
47. Mahmoud A. Selim, George A. Adib, Yasser M. Sabry, and Diaan Khalil. "Incoherent Gain-Assisted Ring Enhanced Gas Absorption Spectroscopy." *IEEE Journal of Quantum Electronics* 55, no. 1 (2019): 1-8.
48. John Onsy Gerguis, Yasser M. Sabry, and Diaan A. Khalil. "Capturing the Instantaneous Spectral Response of a MEMS Swept Laser Source Using a Quasi-Static Tunable Filter." *IEEE Journal of Selected Topics in Quantum Electronics* (2019).
49. Noha Gaber, Ahmad Altayyeb, Sherif A. Soliman, Yasser M. Sabry, Frédéric Marty, and Tarik Bourouina. "On-Channel Integrated Optofluidic Pressure Sensor with Optically Boosted Sensitivity." *Sensors* 19, no. 4 (2019): 944.
50. Muhammad Ahmed Othman, Yasser Mohammed Sabry, Mohammed Sadek, Ismail Nassar, and Diaan Khalil, Transmission-enabled fiber Fabry–Perot cavity based on a deeply etched slotted micromirror. *Applied optics*, 57(16), pp.4610-4617 (2018).
51. Ahmed M. Othman, Hussein Eissa Abdelsalam Kotb, Yasser M. Sabry, Osama Terra, and Diaan A. Khalil, "Towards On-Chip MEMS-Based Optical Autocorrelator." *Journal of Lightwave Technology* 36, no. 20, pp. 5003-5009 (2018).
52. Islam Samir El-Sayed, Yasser M. Sabry, Walid ElSayd ElZeiny, Niveen Badra, and Diaan A. Khalil, "Transformation algorithm and analysis of the Fourier transform spectrometer based on cascaded Fabry–Perot interferometers," *Applied optics* 57, no. 25, pp. 7225-7231 (2018).
53. Mohamed N. Ali, Yasser M. Sabry, Frédéric Marty, Tarik Bourouina, Khaled A. Kirah and Diaan Khalil, "In-plane coupled Fabry–Perot micro-cavities based on Si-air Bragg mirrors: a theoretical and practical study" *Applied Optics* 57, no. 18, pp. 5112-5120 (2018).
54. Ahmed. Elsayed, Yasser M. Sabry, Fredreic Marty, Tarik Bourouina, and Diaan Khalil, "Optical modeling of black silicon using effective medium/multi-layer approach," *Optics Express* Vol. 26, Issue 10, pp. 13443-13460 (2018).
55. Noha Gaber, Yasser M. Sabry, Mazen Erfan, Fredreic Marty and Tarik Bourouina, "High-Q Fabry–Pérot Micro-Cavities for High-Sensitivity Volume Refractometry," *Micromachines* 9, no. 2, p. 54 (2018).
56. George A. Adib, Yasser M. Sabry, and Diaan Khalil. "Analysis of dual coupler nested coupled cavities." *Applied optics* 56, no. 34, pp. 9457-9468 (2017).
57. M.A. Othman, Y. M. Sabry, I. M. Nassar, M. Sadek and D.A. Khalil, "Deeply-Etched MEMS Slotted Micromirrors with Controlled Transmittance," *IEEE J. Quantum Electron.* 53, no.6, pp. 1-8 (2017).
58. Alaa Fathy, Yasser. M. Sabry and Diaan A. Khalil, "Quasi-homogeneous partial coherent source modeling of multimode optical fiber output using the elementary source method," *Journal of Optics* 19, no. 10, p.105605 (2017).
59. Yasser M. Sabry, Diaan Khalil, Bassam Saadany, and Tarik Bourouina, "In-Plane Optical Beam Collimation Using a Three-Dimensional Curved MEMS Mirror," *Micromachines* 8, no.5, p. 134 (2017).
60. Alaa. A. Elhady, Yasser M. Sabry, and Diaan Khalil. "Optical characterization of high speed microscanners based on static slit profiling method." *Optics and Lasers in Engineering* 88, pp. 129-138 (2017).
61. Yomna M. Eltagoury, Mostafa Soliman, Yasser M. Sabry, Mohammed J. Alotaibi and Diaan Khalil, "Electrostatic Comb-Drive Actuator with High In-Plane Translational Velocity," *Micromachines* 7, p. 188 (2016).

62. Kamal Khalil, Yasser M. Sabry, Khaled Hassan, Ahmed Shebl, Mostafa Soliman, Yomna Eltagoury and Diao Khalil, "In-line optical MEMS phase modulator and application in ring laser frequency modulation," *J. Quantum Electron.* 52, 1-8 (2016).
63. Noha Gaber, Yasser M. Sabry, Frédéric Marty and Tarik Bourouina, "Optofluidic Fabry-Pérot Micro-Cavities Comprising Curved Surfaces for Homogeneous Liquid Refractometry—Design, Simulation, and Experimental Performance Assessment," *Micromachines* 7, no. 4, p. 62 (2016).
64. Mazen Erfan, Yasser M. Sabry, Mohammad Sakr, Bassem Mortada, Mostafa Medhat and Diao Khalil, "On-Chip Micro-Electro-Mechanical System Fourier Transform Infrared (MEMS FT-IR) Spectrometer-Based Gas Sensing," *Appl. Spectrosc.* 70, pp. 897-904 (2016).
65. Bassem Mortada, Mazen Erfan, Mostafa Medhat, Yasser M. Sabry, Bassam Saadany and Diao Khalil, "Wideband Optical MEMS Interferometer Enabled by Multi-Mode Interference Waveguides," *J. Lightwave Technol.* 34, no. 9, pp.2145-2151 (2016).
66. Yasser M. Sabry; Yomna Eltagoury; Ahmed Shebl, Mostafa Soliman; Mohamed Sadek and Diao Khalil, "In-plane deeply-etched optical MEMS notch filter with high- speed tunability," *J. Opt.* 17, no. 12, p. 125703, October 2015.
67. Yasser M. Sabry, Diao Khalil, Bassam Saadany and Tarik Bourouina, "Curved Silicon Micromirror for Linear Displacement-to-Angle Conversion with Uniform Spot Size," *IEEE J. Sel. Top. Quantum Electron.* 21, no. 4, pp. 165-173 (2015).
68. Haitham Omran, Yasser M. Sabry, Mohamed Sadek, Khalid Hassan and Diao Khalil, "Wideband Sub-Wavelength Deeply Etched Multilayer Silicon Mirrors for Tunable Optical Filters and SS-OCT Applications," *IEEE J. Sel. Top. Quantum Electron.* 21, no. 4, pp.157-164 (2015).
69. Yasser M. Sabry, Diao Khalil and Tarik Bourouina, "Monolithic silicon-micromachined free-space optical interferometers onchip", *Laser Photonics Rev.* 9, no. 1, 1–24 (2015).
70. Yasser M. Sabry, Diao Khalil, Bassam Saadany and Tarik Bourouina, "In-plane external fiber Fabry–Perot cavity comprising silicon micromachined concave mirror," *J. Micro/Nanolith. MEMS MOEMS* 13, 011110 (2014).
71. Yasser M. Sabry, Diao Khalil, Bassam Saadany and Tarik Bourouina, "Multi-step etching of three-dimensional sub-millimeter curved silicon microstructures with in-plane principal axis," *Microelectron. Eng.* 114, pp. 78-84 (2014).
72. Haitham Omran, Yasser M. Sabry, Mohamed Sadek, Khalid Hassan, Mohammed Y. Shalaby and Diao Khalil, "Deeply-Etched Optical MEMS Tunable Filter for Swept Laser Source Applications," *Photonic. Technol. Lett.* PP(99), 1 (2013). Featured article in OCTnews.org: <http://www.octnews.org/articles/5223550/feature-of-the-week-3-9-14-deeply-etched-optical-m/>.
73. Yasser M. Sabry, Bassam Saadany, Diao Khalil and Tarik Bourouina, "Silicon micromirror of three-dimensional curvature enabling lensless efficient coupling of free space light" *Nature Light Sci. Appl.* 2, e94 (2013). [**Most downloaded article in JLSA in August 2013**].
74. Yasser M. Sabry, Bassam Saadany, Diao Khalil and Tarik Bourouina, "Integrated wide angle optical microscanner" *Optic. Express*, 21, pp. 13906-13916 (2013). [**Selected as featured article in advances in engineering**]
75. Mohammed M. El-Banna, Yasser M. Sabry, W. Fikry, O. A. Omar. "Partial-Coupled Mode-Space" A new Approach for Efficient Simulation of Ballistic Quantum Transport in Multi-gate Devices, *J Am Sci* 9, pp. 329-338 (2013).
76. Yasser M. Sabry, Mostafa Medhat, Bassam Saadany, Tarik Bourouina and Diao Khalil, "Parameter extraction of MEMS combdrive near-resonance equivalent circuit: physically-based technique for a unique solution" *J. Micro/Nanolith. MEMS MOEMS* 11, p. 021205 (2012).

77. Yasser M. Sabry, Tarek M. Abdolkader and Wael Fikry Farouk, "Simulation of quantum transport in double-gate MOSFETs using the non-equilibrium Green's function formalism in real-space: A comparison of four methods", *Int. J. Numer. Model.* 24, 322–334 (2011).

International conferences publications

1. Mohamed Hisham Fouad Aref, Ibrahim H. Aboughaleb, Mohamed A. Abbass, Abdallah Abdelkader Hussein, Sara Abd El-Ghaffar, and Yasser M. Sabry. "Low-Cost Commercial Integrated Spectral Sensor for Revealing Breast Cancer Margins." In *2024 14th International Conference on Electrical Engineering (ICEENG)*, pp. 137-141. IEEE, 2024.
2. Ashar Seif Al-Nasr, Ahmed Darweesh, Samir Abozyd, Bassem Mortada, and Yasser M. Sabry. "Dual-Modality Machine Learning: Enhancing Predictions with NIR Spectra and Interferogram Data Fusion." In *2024 International Conference on Machine Intelligence and Smart Innovation (ICMISI)*, pp. 220-223. IEEE, 2024.
3. Samir AboZyd, Mohamed Osama, Bassem Mortada, Ahmed M. Othman, Ahmed Mahfouz, and Yasser M. Sabry. "Development and Validation of a Powder Mixture Set for Performance Testing of Miniaturized Spectrometers using Machine Learning Models." In *2024 International Conference on Machine Intelligence and Smart Innovation (ICMISI)*, pp. 1-5. IEEE, 2024.
4. Mohamed Kelany, Yasser M. Sabry, and Daaa Khalil. "Multi-scale modelling and experimental measurements of absorption enhancements of biological samples using HgTe colloidal QDs." In *Colloidal Nanoparticles for Biomedical Applications XIX*, vol. 12859, pp. 30-39. SPIE, 2024.
5. Samir Abozyd, Bassem Mortada, Hassan Saied, Ahmed Fadeel, Tarek Zeinah, Shady R. Labib, Abdelrahman Sirry, Mohamed Elarabawy, Bassam Saadany, and Yasser M. Sabry. "Spectral compensation of extended InGaAs photodetector thermal drift in miniaturized FTIR spectral sensors." In *MOEMS and Miniaturized Systems XXIII*, vol. 12899, pp. 30-40. SPIE, 2024.
6. Karim D. Khalil, Alaa Fathy, Yasser M. Sabry, Daaa Khalil, and Ahmed Hisham Morshed. "Modeling of photonic MEMS Michelson interferometers comprising curved micromirrors under partially coherent light excitation." In *MOEMS and Miniaturized Systems XXIII*, vol. 12899, pp. 102-110. SPIE, 2024.
7. Hoda AH Morshed, Yasser M. Sabry, and Daaa Khalil. "Modeling and analysis of nonuniform metal-coating of deeply-etched vertical micromirrors." In *MOEMS and Miniaturized Systems XXIII*, vol. 12899, pp. 153-163. SPIE, 2024.
8. Mohamed Elsaedy, Momen Anwar, Islam Samir, Mohamed H. Al Haron, Bassem Mortada, Shady R. Labib, Samir AboZyd, Mazen Erfan, Yasser Sabry, and Bassam Saadany. "Accurat Labib, Shady R., Ahmad Mahfouz, Mohamed S. Radwan, Omar M. Eid, Mazen Erfan, Hoda Elgibally, Sherif Okda et al. "Measurements and analysis of spectrally resolved spot profile of diffuse reflection micro spectrometers using knife-edge white reference." In *Photonic Instrumentation Engineering XI*, vol. 12893, pp. 326-332. SPIE, 2024. e and portable plastic sorting using diffuse reflection and transmission MEMS spectrometer in the mid-infrared." In *MOEMS and Miniaturized Systems XXIII*, vol. 12899, pp. 140-145. SPIE, 2024.
9. Radwa A. Abbas, Yasser M. Sabry, and Daaa Khalil. "Effective reflectivity for flat and spherical external cavity semiconductor laser with multi spatial mode beam profile." In *Integrated Optics: Devices, Materials, and Technologies XXVIII*, vol. 12889, pp. 164-172. SPIE, 2024.

10. Shady R. Labib, Omar M. Eid, Mazen Erfan, and Yasser M. Sabry. "Characterization of high aspect ratio miniature reflectors using negative shape polymer filling and image processing." In *Photonic Instrumentation Engineering XI*, vol. 12893, pp. 318-325. SPIE, 2024.
11. Ahmed M. Othman, Amr O. Ghoname, Yasser M. Sabry, Diao Khalil, and Tarik Bourouina. "Modelling the side-wall roughness scattering loss of MEMS-based optical waveguides using the perturbation theory and the generalized Harvey-Shack model." In *MOEMS and Miniaturized Systems XXIII*, vol. 12899, pp. 146-150. SPIE, 2024.
12. Ahmed M. Othman, Amr O. Ghoname, Yasser M. Sabry, Diao Khalil, and Tarik Bourouina. "Modelling the side-wall roughness scattering loss of MEMS-based optical waveguides using the perturbation theory and the generalized Harvey-Shack model." In *MOEMS and Miniaturized Systems XXIII*, vol. 12899, pp. 146-150. SPIE, 2024.
13. Ahmed Mahfouz, Yasser M. Sabry, Tarik Bourouina, and Haitham Omran. "Deeply Etched Optofluidic MEMS Cavity in a Fibre Ring Laser Configuration for High Resolution Refractive Index Sensing." In *Optical Sensors*, pp. SM3B-6. Optica Publishing Group, 2023.
14. Hussein E. Kotb, Yasser M. Sabry, Ahmed Mahfouz, and Haitham Omran. "Fourier Optics Modeling of Deeply Etched Silicon Cavities with Submillimeter Gap for Optical Sensing Applications." In *Optical Sensors*, pp. SM4D-3. Optica Publishing Group, 2023.
15. George A. Adib, Yasser M. Sabry, Bassem Mortada, Amir K. Shaheen, and Diao Khalil. "Denoised MEMS FTIR Spectral Sensor." In *Applied Industrial Spectroscopy*, pp. JW2A-21. Optica Publishing Group, 2023.
16. Ahmed M. Othman, Yasser M. Sabry, Diao Khalil, and Tarik Bourouina. "Numerical modelling for micropillar-enhanced silicon ATR crystals for mid-infrared spectroscopy of biomarkers." In *Optical Diagnostics and Sensing XXIII: Toward Point-of-Care Diagnostics*, vol. 12387, pp. 105-110. SPIE, 2023.
17. Ahmed M. Othman, Yasser M. Sabry, Diao Khalil, and Tarik Bourouina. "Simultaneous identification of microparticles material nature and size distribution using spectral resonances in MIR-ATR spectroscopy." In *MOEMS and Miniaturized Systems XXII*, vol. 12434, pp. 71-76. SPIE, 2023.
18. Yasser M. Sabry, Amr O. Ghoname, Mohamed Kelany, Moustafa Mohamed, Ahmed Mostafa, Amgad Khalifa, Sherif Okda et al. "Rapid and low-cost detection of human corona virus using MEMS ATR-FTIR spectroscopy." In *Photonic Diagnosis, Monitoring, Prevention, and Treatment of Infections and Inflammatory Diseases 2023*, vol. 12358, pp. 9-13. SPIE, 2023.
19. Bassem Mortada, Yasser M. Sabry, Bassam Saadany, Tarik Bourouina, and Diao Khalil. "Novel Wavefront-Splitting Interferometer for Ultra-Compact Broadband FT-IR Spectroscopy Extending to Visible Range." In *2023 IEEE 36th International Conference on Micro Electro Mechanical Systems (MEMS)*, pp. 1119-1122. IEEE, 2023.
20. Hussein E. Kotb, Yasser M. Sabry, Mohab S. Abdallah, and Haitham Omran. "MEMS-SOA Tunable Optoelectronic Oscillator." In *2022 39th National Radio Science Conference (NRSC)*, vol. 1, pp. 289-292. IEEE, 2022.
21. Karim D. Khalil, Muhammad R. Eliwa, Ahmed M. Othman, and Yasser M. Sabry. "Optical Modeling and Characterization of Lipid Emulsion Skin Phantoms for SWIR

- Diffuse Reflectance Spectroscopy." In 2022 IEEE International Conference on Design & Test of Integrated Micro & Nano-Systems (DTS), pp. 1-5. IEEE, 2022.
22. Mohamed Kelany, Shaimaa Ib Aref, Maram TH Abou Kana, Yasser M. Sabry, Hasnaa M. Fahmy, and Daaa Khalil. "Infrared Absorbance of Distributed-Size HgTe Quantum Dots Under Diffuse Reflectance." In 2022 IEEE International Conference on Design & Test of Integrated Micro & Nano-Systems (DTS), pp. 01-06. IEEE, 2022
 23. Shady R. Labib, Yasser M. Sabry, and Daaa Khalil. "Double coincide rings-patterned plasmonic photonic crystal with engineered spectral emissivity for integrated thermal emitters." In *Silicon Photonics XVII*, vol. 12006, pp. 184-189. SPIE, 2022.
 24. Kirillos Ernest, Ahmed S. Abd-Rabou, Yasser M. Sabry, and Daaa Khalil. "Three-dimensional v-trough solar concentrator with diffuser for uniform cell illumination." In *Physics, Simulation, and Photonic Engineering of Photovoltaic Devices XI*, vol. 11996, pp. 84-90. SPIE, 2022.
 25. Adham Hesham, Lama Zeyad, Fatma ElZahraa, Amr ElGamal, Passant Mohammed, Mohammad Sakr, and Yasser M. Sabry. "Deep Learning Enabling Analysis of Exhaled Breath Using Fourier Transform Spectroscopy in the Mid-Infrared." In 2021 Tenth International Conference on Intelligent Computing and Information Systems (ICICIS), pp. 124-129. IEEE, 2021
 26. Karim D. Khalil, Lama Zeyad, Abdullah Maher, Ahmed M. Othman, and Yasser M. Sabry. "Photonic Monte Carlo Analysis and Deep Learning Predicting the Performance of Non-Invasive Glucose Detection Using Compact NIR Spectrometers." In 2021 Tenth International Conference on Intelligent Computing and Information Systems (ICICIS), pp. 136-141. IEEE, 2021
 27. Radwa A. Abbas, Haitham Omran, Yasser M. Sabry, Zhihua Huang, Michael Zimmer, Michael Jetter, Peter Michler, and Daaa Khalil. "Subthreshold Spectral Bi-Modality of Double Layer InP/AlGaInP Quantum Dot Laser." In 2021 27th International Semiconductor Laser Conference (ISLC), pp. 1-2. IEEE, 2021.
 28. Hoda AH Morshed, Yasser M. Sabry, and Daaa Khalil. "Wide-angle wide-spectral range IMI plasmonic MEMS mirror in the MIR for spectroscopic gas sensing applications." In *MOEMS and Miniaturized Systems XX*, vol. 11697, p. 116970B. International Society for Optics and Photonics, 2021.
 29. Yomna M. Eltagoury, Yasser M. Sabry, and Daaa A. Khalil. "MEMS-based polarized FTIR spectrometer for polymer quality control." In *MOEMS and Miniaturized Systems XX*, vol. 11697, p. 1169714. International Society for Optics and Photonics, 2021.
 30. Kirillos Ernest, Yasser M. Sabry, and Daaa Khalil. "High collection uniformity three-dimensional V-trough concentrators." In *Physics, Simulation, and Photonic Engineering of Photovoltaic Devices X*, vol. 11681, p. 116810K. International Society for Optics and Photonics, 2021.
 31. Abdelrahman Salem, Alaa Fathy, Ahmed M. Othman, Yasser Sabry and Daaa Khalil, "MEMS FTIR Parallel Spectrometer for Non-Invasive Skin Biochemistry Analysis" CLEO 2021 Virtual Conference.
 32. Alaa Fathy, Yasser M. Sabry, Momen Anwar, Amr O. Ghoname, Ahmed Saeed, Yamin Leprince-Wang, Daaa A. M. Khalil, Tarik Bourouina," Open path air pollution

- monitoring in Sense-City using MEMS-based FTIR spectral sensor,” Digital Forum: On-demand starting 6 March | Part of SPIE OPTO.
33. Yomna M. Eltagoury, Yasser M. Sabry, Daaa Khalil, “MEMS-based polarized FTIR spectrometer for polymer quality control,” Digital Forum: On-demand starting 6 March | Part of SPIE OPTO.
 34. Kirillos Ernest, Yasser M. Sabry, Daaa Khalil, “High collection uniformity three-dimensional V-trough concentrators,” Digital Forum: On-demand starting 6 March | Part of SPIE OPTO
 35. Hoda Morshed, Yasser M. Sabry, Daaa Khalil,” Wide-angle wide-spectral range IMI plasmonic MEMS mirror in the MIR for spectroscopic gas sensing applications,” Digital Forum: On-demand starting 6 March | Part of SPIE OPTO.
 36. Abdelrahman M. Salem, Ahmed M. Othman, Yasser M. Sabry, and Daaa AM Khalil. "Semi-Analytical Effective Layer Model for the Skin in the SWIR Spectral Range." In *Frontiers in Optics*, pp. JTh4B-26. Optical Society of America, 2020.
 37. Samar Elaraby, Yasser M. Sabry, and Sherif M. Abuelenin. "Super-resolution infrared spectroscopy for gas analysis using convolutional neural networks." In *Applications of Machine Learning 2020*, vol. 11511, p. 115110W. International Society for Optics and Photonics, 2020.
 38. Sreyash Sarkar, Ahmed Elsayed, Frédéric Marty, Jeremie Drevillon, Yasser Sabry, Jiancun Zhao, Yiting Yu, E. Richalot, P. Basset, T. Bourouina and E. Nefzaoui, "Enhanced Wide-band Infrared Absorptivity of Black Silicon." In *Congrès Annuel de la Société Française de Thermique 2020*.
 39. Rabab A. Shalaby, Yasser M. Sabry, and Daaa Khalil. "Parameter extraction of silicon photonic devices using optical coherence tomography." In *Integrated Photonics Platforms: Fundamental Research, Manufacturing and Applications*, vol. 11364, p. 113641K. International Society for Optics and Photonics, 2020.
 40. Amir K. Shaheen, Yasser M. Sabry, and Daaa Khalil. "Enhanced resolution MEMS spectrometer based on FTIR technique combined with reflection-type etalon." In *Optical Sensing and Detection VI*, vol. 11354, p. 113542A. International Society for Optics and Photonics, 2020.
 41. Mai Said, Mariam Amr, Yasser Sabry, Daaa Khalil, and Ayman Wahba. "Plastic sorting based on MEMS FTIR spectral chemometrics sensing." In *Optical Sensing and Detection VI*, vol. 11354, p. 113540J. International Society for Optics and Photonics, 2020.
 42. Alaa Fathy, Yasser M. Sabry, Frédéric Marty, Daaa Khalil, and Tarik Bourouina. "Silicon based integrated hollow waveguide for gas sensing applications." In *Micro-Structured and Specialty Optical Fibres VI*, vol. 11355, p. 113550T. International Society for Optics and Photonics, 2020.
 43. Ahmed Saeed, Ahmed A. Elsayed, Frédéric Marty, Elyes Nefzaoui, Tarik Bourouina, Heba A. Shawkey, Yasser M. Sabry, and Daaa Khalil. "Mid-infrared radiation source for spectroscopic applications based on multiwalled carbon nanotubes on top of silicon." In *Nanophotonics VIII*, vol. 11345, p. 113451I. International Society for Optics and Photonics, 2020.
 44. Hend H. Kholeif, Yasser M. Sabry, Michael MYR Rizk, and Daaa AM Khalil. "Simple and low-cost method for particulate matter size determination based on far-field

- interference pattern image processing." In *Unconventional Optical Imaging II*, vol. 11351, p. 1135123. International Society for Optics and Photonics, 2020.
45. Mahmoud A. Selim, Radwa A. Abas, Yasser M. Sabry, and Diao Khalil. "Cavity enhanced spectroscopy using multi-longitudinal mode laser RF beating." In *Photonic Instrumentation Engineering VII*, vol. 11287, p. 112870Q. International Society for Optics and Photonics, 2020.
 46. Mariam Amr, Yasser M. Sabry, and Diao M. Khalil. "Spectral background removal of MEMS FTIR spectrometer-based gas analyzer." In *Photonic Instrumentation Engineering VII*, vol. 11287, p. 1128712. International Society for Optics and Photonics, 2020.
 47. Ahmed Saeed, Yasser M. Sabry, Heba A. Shawkey, and Diao Khalil. "NIR optical properties of SWCNTs based on ab-initio calculations and the transfer matrix method." In *Physics and Simulation of Optoelectronic Devices XXVIII*, vol. 11274, p. 112740Z. International Society for Optics and Photonics, 2020.
 48. Amir K. Shaheen, Yasser M. Sabry, and Diao A. Khalil. "Combined MEMS spectrometer based on Michelson interferometer and tunable filter for wideband selective operation." In *MOEMS and Miniaturized Systems XIX*, vol. 11293, p. 112930K. International Society for Optics and Photonics, 2020.
 49. Ahmed Saeed, Ahmed A. Elsayed, Frédéric Marty, Elyes Nefzaoui, Tarik Bourouina, Heba A. Shawkey, Yasser M. Sabry, and Diao Khalil. "Multi-walled carbon nanotubes based near-infrared radiation source." In *MOEMS and Miniaturized Systems XIX*, vol. 11293, p. 112930U. International Society for Optics and Photonics, 2020.
 50. Amr O. Ghoname, Yasser M. Sabry, Momen Anwar, and Diao Khalil. "Attenuated total reflection (ATR) MEMS FTIR spectrometer." In *MOEMS and Miniaturized Systems XIX*, vol. 11293, p. 112930W. International Society for Optics and Photonics, 2020.
 51. Moez El-Massry, Yasser M. Sabry, Sebastien Nazeer, Ahmed Shebl, and Diao Khalil. "Modeling and characterization of the reflectance of vertical metal-coated micromirrors in deeply-etched optical benches." In *MOEMS and Miniaturized Systems XIX*, vol. 11293, p. 112930V. International Society for Optics and Photonics, 2020.
 52. Karim S. Hedayet, Yasser M. Sabry, and Diao Khalil. "Compressive sensing MEMS FTIR spectrometer." In *MOEMS and Miniaturized Systems XIX*, vol. 11293, p. 112930T. International Society for Optics and Photonics, 2020.
 53. A. Khaled, Hussein, M., Elsayed, A.A., Marty, F., Nefzaoui, E., Bourouina, T., Sabry, Y.M. and Khalil, D., 2020, February. Absorptivity enhancement of black silicon using electroless Cu plating. In *Silicon Photonics XV* (Vol. 11285, p. 112851T). International Society for Optics and Photonics.
 54. Mazen Erfan, Lan Gao, Marie Le Pivert, Martine Gnambodoe-Capochichi, Yasser M. Sabry, Diao Khalil, Tarik Bourouina, and Yamin Leprince-Wang. "Real-time optical monitoring of zinc-oxide nanowires in-situ growth within a microfluidic chamber." In *Microfluidics, BioMEMS, and Medical Microsystems XVIII*, vol. 11235, p. 112350W. International Society for Optics and Photonics, 2020.
 55. Mazen Erfan, Lan Gao, Martine Gnambodoe-Capochich, Elyes Nefzaoui, Yasser M. Sabry, Diao Khalil, Yamin Leprince-Wang, and Tarik Bourouina. "Kinetics Study and Online Monitoring of in-Situ Growth of Zinc-Oxide Nanowire Arrays Within

- Microfluidic Chambers." In 2020 IEEE 33rd International Conference on Micro Electro Mechanical Systems (MEMS), pp. 1090-1093. IEEE, 2020.
56. Rabab A. Shalaby, George Adib, Yasser M. Sabry, Michael Gad, and Daa Khalil. "Silicon photonic coupled-ring resonator in nested configuration comprising different length scales." In 2019 14th International Conference on Computer Engineering and Systems (ICCES), pp. 432-437. IEEE, 2019.
 57. Ahmed Saeed, Heba A. Shawkey, Yasser M. Sabry, and Daa Khalil. "Micro-Machined Heater Designed for Miniaturized Thermal IR Sources." In 2019 6th International Conference on Advanced Control Circuits and Systems (ACCS) & 2019 5th International Conference on New Paradigms in Electronics & information Technology (PEIT), pp. 29-31. IEEE, 2019.
 58. Sreyash Sarkar, Ahmed A. Elsayed, Frédéric Marty, Jérémie Drévilion, Yasser M. Sabry, Jiancun Zhao, Yiting Yu et al. "Effects of Doping on the Morphology and Infrared Radiative Properties of Black Silicon." In 2019 25th International Workshop on Thermal Investigations of ICs and Systems (THERMINIC), pp. 1-4. IEEE, 2019.
 59. Alaa Fathy, Marie Le Pivert, Youngjai Kim, Mazen Erfan, Yasser M. Sabry, Yamin Leprince-Wang, Tarik Bourouina, and Martine Gnambodoe-Capochichi. "Mems Meets Zinc-Oxide Nanowires for Real-Time Monitoring of Air Purification: Case of Tobacco Smoke." In 2019 20th International Conference on Solid-State Sensors, Actuators and Microsystems & Eurosensors XXXIII (TRANSDUCERS & EUROSENSORS XXXIII), pp. 1385-1388. IEEE, 2019.
 60. Alaa Fathy, Yasser M. Sabry, Tarik Bourouina, and Daa Khalil. "On-Chip Parallel Architecture Mems FTIR Spectrometers Enabling High Spectral Resolution for Environmental Gas Analysis." In 2019 20th International Conference on Solid-State Sensors, Actuators and Microsystems & Eurosensors XXXIII (TRANSDUCERS & EUROSENSORS XXXIII), pp. 1515-1517. IEEE, 2019.
 61. Mazen Erfan, Martine Gnambodoe-Capochichi, Marie Le Pivert, Frédéric Marty, Yasser M. Sabry, Yamin Leprince-Wang, Tarik Bourouina, "Zinc-oxide nanowires characterization using optical reflectance," In International Society for Optics and Photonics, Oxide-based Materials and Devices X, vol. 10919, p. 1091922., 2019.
 62. Mahmoud A. Selim, Yasser M. Sabry, George A. Adib, Daa Khalil, "Active fiber-ring enhanced absorption gas spectroscopy using multi-longitudinal mode tunable laser in the NIR," In International Society for Optics and Photonics Photonic Instrumentation Engineering VI, vol. 10925, p. 1092508., 2019.
 63. Ahmad Mahfouz, Haitham Omran, Yasser M. Sabry, Frédéric Marty, Tarik Bourouina, "Deeply etched silicon optical cavity with curved slotted micromirrors," In International Society for Optics and Photonics MOEMS and Miniaturized Systems XVIII, vol. 10931, p. 109310N., 2019.
 64. Amr O. Ghoname, Yasser M. Sabry, Momen Anwar, Ahmed Saeed, Daa Khalil, "Ultra wide band MIR MEMS FTIR spectrometer" In International Society for Optics and Photonics MOEMS and Miniaturized Systems XVIII (Vol. 10931, p. 109310Z), 2019.
 65. John O. Gerguis, Yasser M. Sabry, Ahmed M. Hassanen, Haitham O. Omran, Daa Khalil, "MEMS swept laser source with enhanced performance," In International Society

- for Optics and Photonics MOEMS and Miniaturized Systems XVIII, vol. 10931, p. 1093105., 2019.
66. Rabab A. Shalaby, Mahmoud A. Selim, George A. Adib, Yasser M. Sabry, Michael Gad, Diaan Khalil, "Silicon photonics dual-coupler nested coupled cavities," In International Society for Optics and Photonics Silicon Photonics XIV, vol. 10923, p. 109231P., 2019.
 67. Léonce Martine Gnambodoe-Capochichi, Alaa Fathy, Young Jai Kim, Mazen Erfan, Marie Le Pivert, Yasser M. Sabry, Yamin Leprince-Wang, Tarik Bourouina, "Monitoring the purification of tobacco smoke in air assisted by ZnO nanowires and using MEMS-FTIR spectrometer for online continuous analysis of volatile organic compounds (VOCs)," In International Society for Optics and Photonics Optical Components and Materials XVI, vol. 10914, p. 109141N., 2019.
 68. Mazen Erfan, Martine Gnambodoe-Capochichi, Marie Le Pivert, Frédéric Marty, Yasser M. Sabry, Tarik Bourouina, Yamin Leprince-Wang, "Zinc-oxide nanowires growth in-situ in microfluidic chamber," In International Society for Optics and Photonics *Microfluidics, BioMEMS, and Medical Microsystems XVII*, vol. 10875, p. 108750O, 2019.
 69. Alaa Fathy, Yasser M. Sabry, Mariam Amr, Martine Capochichi, Momen Anwar, Amr O. Ghoname, Ahmed A. Elsayed, Ahmed Saeed, Mina Gad, Mohamed H. Hamouda, Mazen Erfan, Yamin Leprince-Wang, Bassam Saadany, Diaan A. M. Khalil, Tarik Bourouina, "MEMS FTIR optical spectrometer enables detection of volatile organic compounds (VOCs) in part-per-billion (ppb) range for air quality monitoring" In International Society for Optics and Photonics *MOEMS and Miniaturized Systems XVIII*, vol. 10931, p. 1093109, 2019.
 70. Sreyash Sarkar, Ahmed A. Elsayed, Elyes Nefzaoui, Jérémie Drévilion, Philippe Basset, Frédéric Marty, Momen Anwar, Yiting Yu, Jiancun Zhao, Xichen Yuan, ZhongZhu Liang, Diaan Khalil, Yasser M. Sabry, and Tarik Bourouina, "NIR and MIR absorption of ultra-black silicon (UBS). Application to high emissivity, all-silicon, light source," accepted in IEEE 32nd MEMS, Korea (2019).
 71. Mina Labib, Michael Gad, Yasser M. Sabry, and Diaan Khalil. "Strip Waveguide Enabling Low Loss for Silicon on Silica Technology in the MIR." In 13th International Conference on Computer Engineering and Systems (ICCES), pp. 536-540. IEEE, 2018.
 72. Martine Capochichi-Gnambodoe, Marie Le Pivert, Mazen Erfan, Alaa Fathy, Imadeddine Azzouz, Yamina G. Habba, Yasser M. Sabry, Frédéric Marty, Tarik Bourouina and Yamin Leprince-Wang, "ZnO Nanostructures in Microsystem for Volatile Organic Compounds (VOCs) Sensing" In the 9th Asia-Pacific Conference of Transducers and Micro-Nano Technology (APCOT 2018), Hong Kong (2018).
 73. John O. Gerguis, Yasser M. Sabry, and Diaan Khalil, "Experimental Access to the Instantaneous Spectrum of MEMS-Based Swept Source, CLEO: Applications and Technology (CLEO_AT), San Jose, California United States (2018).
 74. George A. Adib, Yasser M. Sabry, and Diaan Khalil. "Vernier effect-based multiplication of the Sagnac beating frequency in RLG." In International Society for Optics and Photonics Fiber Lasers XV: Technology and Systems, vol. 10512, p. 105121M. (2018).
 75. Momen Anwar, Yasser Sabry, and Diaan Khalil. "Modeling of the emissivity of super-wavelength black silicon in the geometrical optics regime." In International Society for

- Optics and Photonics , Physics and Simulation of Optoelectronic Devices XXVI, vol. 10526, p. 105262P. (2018).
76. Ahmed M. Othman, Hussein E. Kotb, Yasser Sabry, and Diao Khalil. "MEMS-based Fourier transform spectrometer using pulsed infrared light source." In International Society for Optics and Photonics, MOEMS and Miniaturized Systems XVII, vol. 10545, p. 105450Y (2018).
 77. Muhammad A. Othman, Yasser M. Sabry, Mohamed Sadek, Ismail M. Nassar, and Diao A. Khalil. "MEMS tunable-finesse slotted micromirror resonator." In International Society for Optics and Photonics, MOEMS and Miniaturized Systems XVII, vol. 10545, p. 1054515 (2018).
 78. Islam Samir, Yasser M. Sabry, Mazen Erfan, Niveen Badra, and Diao Khalil. "MEMS FTIR spectrometer with enhanced resolution for low cost gas sensing in the NIR." In International Society for Optics and Photonics, MOEMS and Miniaturized Systems XVII, vol. 10545, p. 105450E (2018).
 79. Mohamed Kilany, Yasser M. Sabry, Mazen Erfan, Ahmed M. Othman, Sébastien Nazeer, and Diao Khalil. "Optical MEMS notch filter based on the multi-mode interference in a butterfly metallic waveguide." In International Society for Optics and Photonics, MOEMS and Miniaturized Systems XVII, vol. 10545, p. 105450L. (2018).
 80. Shady R. Labib, Ahmed A. Elsayed, Yasser M. Sabry, and Diao Khalil. "Ring-patterned plasmonic photonic crystal thermal light source for miniaturized near-infrared spectrometers." In International Society for Optics and Photonics, Silicon Photonics XIII, vol. 10537, p. 105371F., (2018).
 81. Adib, George A., Yasser M. Sabry, and Diao Khalil. "Dual coupler coupled cavities optical gyroscope with enhanced performance." In International Society for Optics and Photonics Laser Resonators, Microresonators, and Beam Control XX, vol. 10518, p. 1051810. (2018).
 82. M. Erfan, Y. Sabry, F. Marty, D. Khalil, Y. Leprince-Wang and T. Bourouina, "Overcoming the near-infra-red spectral range limit with Fabry-Perot silicon microcavity enabled by slotted micromirrors", 2017 Conference on Lasers and Electro-Optics Pacific Rim (CLEO-PR), 2017.
 83. Yasser M. Sabry, Khaled Hassan, Momen Anwar, Mohamed H. Alharon, Mostafa Medhat, George A. Adib, Rich Dumont, Bassam Saadany, Diao Khalil, "Ultra-compact MEMS FTIR spectrometer", Proc. SPIE 10210, Next-Generation Spectroscopic Technologies X, 102100H, doi: 10.1117/12.2268078 (2017).
 84. Alaa Fathy, Yasser M. Sabry, Diao Abdel Maguid Khalil, "Characterization and modelling of multimode optical fiber for MOEMS applications using the elementary source method" in SPIE Photonics West – OPTO, San Francisco, February (2017).
 85. Mahmoud A. Selim, George A. Adib, Yasser M. Sabry, Diao A. M. Khalil, "Gain-assisted broadband ring cavity enhanced spectroscopy", in SPIE Photonics West – OPTO, San Francisco, February (2017).
 86. Yasser M. Sabry, Kamal Khalil, Diao Khalil, "Tunable and non-reciprocal dual-wavelength SOA-fiber ring laser", in SPIE Photonics West – LASE, San Francisco, February (2017).

87. Mostafa Abdelsalam, Yasser M. Sabry, Mazen Erfan, Diao A. M. Khalil, "Multi-segment tapered optical mirror for MEMS LiDAR application", in SPIE Photonics West – LASE, San Francisco, February (2017).
88. Mazen Erfan, Ahmed A. Elsayed, Yasser M. Sabry, Bassem Mortada, Khaled Sharaf, Diao A. M. Khalil, "Environmental mid-infrared gas sensing using MEMS FTIR spectrometer", in SPIE Photonics West – OPTO, San Francisco, February (2017).
89. Mohamed N. Ali, Yasser M. Sabry, Fredric Marty, Tarik Bourouina, Diao Khalil and Khaled Kirah, "Coupled-Cavity Optofluidic Fabry-Perot Resonators for Enhanced Volume Refractometry," by MDPI AG in The 7th International Multidisciplinary Conference on Optofluidics 2017 session Micro-/nano-fluidics, Singapore (2017) (doi:10.3390/optofluidics2017-04155).
90. Ahmed M. Othman, Mazen Erfan, Yasser M. Sabry, Sébastien Nazeer, Marwa Ragheb and Diao Khalil, "Compact Optical Mems 1×N Beam-Splitter Based on Multi-Mode Interference for Optofluidic Applications," by MDPI AG in The 7th International Multidisciplinary Conference on Optofluidics 2017 session Optical devices and systems, Singapore (2017) (doi:10.3390/optofluidics2017-04195).
91. Noha A. Gaber, Yasser M. Sabry, Mazen Erfan, Frédéric Marty and Tarik Bourouina, "Novel Design of Fabry–Pérot Cavities Achieving Superior Sensitivity for Volume Refractometry of Homogeneous Liquids," by MDPI AG in The 7th International Multidisciplinary Conference on Optofluidics 2017 session Optical devices and systems, Singapore (2017) (doi:10.3390/optofluidics2017-04188).
92. Mazen Erfan, Martine Capochichi-Gnambodoe, Yamina G. Habba, Frédéric Marty, Yasser M. Sabry, Yamin Leprince-Wang and Tarik Bourouina, "Optical Analysis Method for Quality Control of Microfluidic Devices Based on Zinc-Oxide Nanowire Arrays," by MDPI AG in The 7th International Multidisciplinary Conference on Optofluidics 2017 session Other emerging and multidisciplinary researches, Singapore (2017)(doi:10.3390/optofluidics2017-04585).
93. Mazen Erfan, Yasser M. Sabry, Bassem Mortada, Khaled Sharaf and Diao Khalil, "Mid Infra-Red MEMS FTIR Spectrometer," in SPIE Photonics West – OPTO, San Francisco, February (2016).
94. Muhammad A. Othman, Yasser M. Sabry, Mohamed Sadek, Ismail M. Nassar and Diao Khalil, "Deeply-etched micromirror with vertical slit and metallic coating enabling transmission-type optical MEMS filters," Presented in SPIE Photonics West – OPTO, San Francisco, February (2016).
95. Yomna Eltagoury, Yasser M. Sabry and Diao Khalil, "Novel Fourier transform infrared spectrometer architecture based on cascaded Fabry-Perot interferometers," Presented in SPIE Photonics West – OPTO, San Francisco, February (2016).
96. Momen Anwar, Yasser M. Sabry, Philippe Basset, Frédéric Marty, Tarik Bourouina and Diao Khalil, "Black silicon-based infrared radiation source," Presented in SPIE Photonics West – OPTO, San Francisco, February (2016).
97. Yasser M. Sabry, Yomna M. Eltagoury, Ahmed Shebl, Mostafa Soliman, Mohamed Sadek, Diao Khalil, "Fiber-coupled Fabry-Pérot notch filter combining in-plane axis, high speed MEMS tunability and large etching depth," SPIE, Photonics West 2015, USA, February (2015).

98. Kamal Khalil, Fares Al-Arifi, Mohammed Al-Otaibi, Yasser M. Sabry, Diao Khalil, "Bidirectional single-longitudinal mode SOA-fiber ring laser based on optical filter-assisted gain starvation," SPIE, Photonics West 2015, USA, February (2015).
99. Ahmed Shebl, Khaled Hassan, Fares Al-Arifi, Mohammed Al-Otaibi, Yasser M. Sabry, Diao Khalil, "Thermal stability of multi-longitudinal mode laser beating frequencies in hybrid semiconductor-fiber ring lasers," SPIE, Photonics West 2015, USA, February (2015).
100. Kamal Khalil, Khaled Hassan, Ahmed Shebl, Mostafa Soliman, Fares Al-Arifi, Mohammed Al-Otaibi, Yomna M. Eltagoury, Yasser M. Sabry, Diao Khalil, "MEMS-based frequency modulation of fiber ring laser," SPIE, Photonics West 2015, USA, February (2015).
101. Haitham Omran, Yasser M. Sabry, Khaled Hassan and Diao Khalil "Deeply-etched 1 micron-thick silicon layers enabling 170-nm bandwidth highly-reflective Bragg mirrors", International Conference on Optical MEMS and Nanophotonics Glasgow, Scotland (2014).
102. Yomna M. Eltagoury, Mostafa Soliman, Mohammed Al-Otaibi, Yasser M. Sabry, Mohamed Sadek and Diao Khalil, "In-plane comb-drive actuator with high frequency-displacement product for micro-optical bench applications", International Conference on Optical MEMS and Nanophotonics Glasgow, Scotland (2014).
103. Bassem Mortada, Yasser M. Sabry, Muhammad Nagi, Khaled Hassan, Bassam Saaday, Tarik Bourouina and Diao Khalil, "High-throughput deeply-etched scanning Michelson interferometer on-chip", International Conference on Optical MEMS and Nanophotonics Glasgow, Scotland (2014).
104. Kamal Khalil, Khaled Hassan, Ahmed Shebl, Mostafa Soliman, Yomna M. Eltagoury, Mohammed Al-Otaibi, Yasser M. Sabry and Diao Khalil, "MEMS corner-cube transmission-type optical phase modulator in DRIE technology", International Conference on Optical MEMS and Nanophotonics Glasgow, Scotland (2014).
105. Yasser M. Sabry, Diao Khalil, Bassam Saadany, and Tarik Bourouina, "Inclination-independent transformation of light beams using high-throughput uniquely-curved micromirrors", The 27th IEEE International Conference on Micro Electro Mechanical Systems, January (2014).
106. Haitham Omran, Yasser M. Sabry, Mohamed Sadek, Khaled Hassan, Mohammed Y. Shalaby, and Diao Khalil, "MEMS optical tunable filter based on free-standing sub-wavelength silicon layers", SPIE MOEMS-MEMS, Photonics West 2014, USA, February (2014).
107. Yasser M. Sabry, Diao Khalil, Bassam Saadany and Tarik Bourouina, "Three-dimensional collimation of in-plane-propagating light using silicon micromachined mirror", SPIE MOEMS-MEMS, Photonics West 2014, USA, February (2014).
108. Alaa Eldin S. M. El Hady, Yasser M. Sabry, M. Yehia, and D. Khalil, "Dual-fiber OCT measurements", SPIE BiOS, Photonics West 2014, USA, February (2014).
109. Yasser Sabry, Diao Khalil, Bassam Saadany, and Tarik Bourouina, "Wide steering angle microscanner based on curved surface" SPIE MOEMS-MEMS, Photonics West 2013, pp. 86160F-86160F (2013) **[Best student paper award]**.
110. Yasser Sabry, Tarik Bourouina, Bassam Saadany, and Diao Khalil, "In-plane diffraction loss free optical cavity using coated optical fiber and silicon micromachined spherical mirror" SPIE MOEMS-MEMS, Photonics West 2013, pp. 86160P-86160P (2013).
111. Mohammed M. El-Banna, Yasser M. Sabry, Wael Fikry, Tarek M. Abdolkader, Omar A. Omar, "Simulation of Quantum Transport in Double Gate MOSFETs: Coupled-Mode Space versus Real Space", ICET, pp. 1-5 (2012).

112. Diaan Khalil , Yasser Sabry, Haitham Omran, Mostafa Medhat, Amr Hafez, and Bassam Saadany, "Characterization of MEMS FTIR Spectrometer ", SPIE MOEMS-MEMS, pp. 86160P-86160P (2011).
113. Mohammed El-Banna, Yasser M. Sabry, Wael Fikry and Omar A. Omar, "Partial-coupled mode space for quantum transport simulation in nanoscale double-gate MOSFET" in International Conference on Microelectronics ICM, pp.303:306 (2010).
114. Yasser Sabry, Mostafa Medhat, Bassam Saadany, Amr Safwat and Diaa Khalil, "Optical Characterization Technique for MEMS Comb Drive Resonators", International Conference on Optical MEMS and Nanophotonics, pp. 127:128 (2009).
115. Yasser M. Sabry, Ahmed Hareedy and Mohamed Selim "Novel Method for Modeling IBIS Four-Level Hysteresis Behavior in an Analog Simulator", in Electronics Packaging Technology Conference EPTC, pp.1403:1408 (2008).
116. Yasser M. Sabry, Tarek M. Abdolkader and Wael Fikry Farouk, "Uncoupled Mode-Space Simulation Validity for Double Gate MOSFETs," in International Conference on Microelectronics ICM, pp.364:365 (2007).

National conferences publications

1. Hussein E. Kotb, Yasser M. Sabry, Mohab S. Abdallah, Marwan OM Sayed, and Haitham Omran. "Tunable Microwave Single-Bandpass Photonic Filter Based on Amplified Mems-Based Gires–Tournois Interferometer." In IEEE 2020 37th National Radio Science Conference (NRSC), pp. 216-221., 2020 [**Best paper award**]
2. Mohab Abdallah, Yasser Sabry, Ahmed Mahfouz, Frédéric Marty, Tarik Bourouina, and Haitham Omran. "Optical Cavity with Large Operational Bandwidth using Silicon-Based Slotted Micromirrors." In IEEE 2020 37th National Radio Science Conference (NRSC), pp. 222-229., 2020
3. Michael M.Y. Rizk, Yasser M. Sabry, Diaa Khalil, "On the Detection of Volatile Organic Compounds (VOCs) Using Machine Learning and FTIR Spectroscopy for Air Quality Monitoring," In IEEE 36th National Radio Science Conference (NRSC), April (2019)
4. Amr O. Ghoname, Ashraf Mahmoud, Yasser M. Sabry, and Diaa Khalil. "Omnidirectional optical MEMS scanner based on two degrees-of-freedom translation of acylindrical micromirrors." In IEEE 35th National Radio Science Conference (NRSC), pp. 417-424, March (2018). [**Best paper award**].
5. Aya Osama, Yasser M. Sabry, and Diaa Khalil. "Long travel range thermal actuator for deeply etched MEMS components." In IEEE 35th National Radio Science Conference (NRSC), pp. 393-400, March (2018).
6. Mariam Amr, Yasser M. Sabry, and Diaa Khalil, "Near-infrared optical MEMS spectrometer-based quantification of fat concentration in milk," In IEEE 35th National Radio Science Conference (NRSC), pp. 409-416, March (2018).
7. Hoda A. Morshed, Yasser M. Sabry, Mohammed Sakr, and Diaa Khalil, "Optical MEMS-scale multipass white cell for onchip gas sensing," In IEEE 35th National Radio Science Conference (NRSC), pp. 401-408, March (2018).
8. Yasser M. Sabry, Diaa Khalil and Tarik Bourouina, "Distortion of Gaussian beams reflected off-axis on curved mirrors in the MEMS scale", in 34th National Radio Science Conference (NRSC), Port Saied, March (2017) [**Best paper award**].
9. Mohamed N. Ali, Yasser M. Sabry, Frédéric Marty, Tarek Bourouina, Diaa Khalil and Khaled A. Kira, "Theoretical and Experimental Analysis of the Fabrication Tolerance on

- Deeply Etched Silicon/Air Bragg Micromirrors”, in 34th National Radio Science Conference (NRSC), Port Saied, March (2017).
10. Michael Gad, Aya Zaki and Yasser M. Sabry, “Silicon photonic mid-infrared grating coupler based on silicon-on-insulator technology”, in 34th National Radio Science Conference (NRSC), Port Saied, March (2017).
 11. Abdelrahman A. Maher, Mazen Erfan, Yasser M. Sabry, and Diaan Khalil, “Multimode Spot-Size Converter for Optical MEMS Applications”, in 34th National Radio Science Conference (NRSC), Port Saied, March (2017).
 12. George Albert, Yasser M. Sabry and Diaan Khalil, “Beating Signal Power Level Improvement in Ring Lasers Based on Coupled Ring Resonators”, Presented in 33rd National Radio Science Conference (NRSC), Aswan, February (2016) [**Best paper award**].
 13. Ahmed Shebl, Ahmed M. Othman, Ashraf Mahmoud, George Albert, Yasser M. Sabry, Khaled Sharaf, Diaan Khalil, “Ring Laser Gyroscope Based on Standard Single-Mode Fiber and Semiconductor Optical Amplifier ,” Presented in 33rd National Radio Science Conference (NRSC), Aswan, February (2016)
 14. Ahmed A. Elsayed, Mohammad Sakr, Mazen Erfan, Yasser M. Sabry and Diaan Khalil, “On the Environmental Gas Sensing Using MEMS FTIR Spectrometer in the Near-Infrared Region”, Presented in 33rd National Radio Science Conference (NRSC), Aswan, February (2016).
 15. Yasser M. Sabry, Tarik Bourouina and Diaan Khalil, “Optical coupling of cylindrical micromirrors in micro-optical benches,” In 32nd National Radio Science Conference (NRSC) 2015, Egypt, March (2015).
 16. Yomna M. Eltagoury, Mostafa Soliman, Mohamed Sadek, Yasser M. Sabry and Diaan Khalil, “High frequency in-plane MEMS actuator,” In 32nd National Radio Science Conference (NRSC) 2015, Egypt, March (2015). [**Best student paper award**].
 17. Yasser M. Sabry, Haitham Omran and Diaan Khalil “Intrinsic Improvement of Diffraction-Limited Resolution in Optical MEMS Fourier-Transform Spectrometers”, 31st National Radio Science Conference (2014). [**Best paper award**].
 18. Yasser M. Sabry, Tarek M. Abdolkader and Wael Fikry Farouk,” Quantum Transport Based Simulation and Design Optimization of a 10 nm FinFET”, in Design and Technology of Integrated Systems in Nanoscale Era DTIS, pp.125:129 (2009).
 19. Yasser M. Sabry, Amr Attaby, Tarek M. Abdolkader and Wael Fikry Farouk, “Inspection of the Contact Block Reduction Method for Quantum Transport Simulation of FinFETs”, in National Radio Science Conference NRSC, pp. 1-8 (2009).
 20. Yasser M. Sabry, Mohammed T. Abdel-Hafez, Tarek M. Abdolkader and Wael Fikry Farouk, “A Computationally Efficient Method for Quantum Transport Simulation of Double-Gate MOSFETs”, in National Radio Science Conference NRSC, pp. 1-8 (2009).
 21. M. Abd El Hakim, Yasser M. Sabry, Yousry Elmaghraby, Tarek M. Abdolkader and Wael Fikry , “Gate Leakage in Low Standby Power 16 nm Gate Length Double-Gate MOSFETs”, in National Radio Science Conference NRSC, pp. 1-9 (2009).