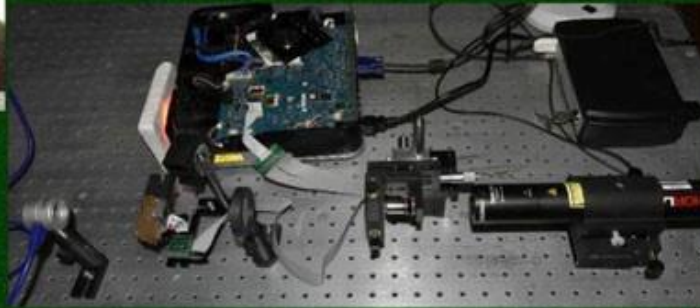


# **1<sup>st</sup>** *International Conference on Optoelectronics, Applied Optics and Microelectronics (OAM)*

August 17-19, 2019 Namin, Ardabil, Iran  
University of Mohaghegh Ardabili,  
Department of Advanced Technologies



**Submission Deadline: May, 10, 2019**



## **Topics:**

- Applied optics
- Microscopy techniques
- Diffraction optics
- Microelectronics
- Optoelectronics
- Lasers and its applications
- Photonics
- Semiconductor nanomaterials and devices
- Plasmonics and nano-optics



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# Welcome to OAM-2019

Welcome to the OAM-2019. We're confident that over the three days you'll get the theoretical grounding, practical knowledge, and personal contacts that will help you build long-term, profitable and sustainable communication among researchers and practitioners working in a wide variety of scientific areas with a common interest in improving Optoelectronics, Applied optics and Microelectronics.

## Conference Program

### Friday, August 16, 2019

**Registration: Main Campus** (Sabalan University College of Namin, Tarbiat Street, Department of Advanced Technologies, University of Mohaghegh Ardabili)

08:00 – 20:00 | Arrival and Registration

### First Day, Saturday, August 17, 2019

07:30 – 08:30 | Breakfast

### Morning – Plenary Session (Asbaghi's Hall)

08:30 – 10:00 | Opening Remarks

#### Plenary Talks- Chairman: *Yashar Azizian*

10:00 – 10:30	<i>Fahrettin YAKUPHANOĞLU</i>	Recent Challenges in the Development of Microelectronic Tools
10:30 – 11:00	<i>Hamid Reza Mohammadi Khalesifard</i>	Remote Sensing of Dust Collecting over Iranian Plateau
11:00 – 11:30	Coffee Break	
11:30 – 12:00	<i>Arashmid Nahal</i>	Optical Chirality of Self-Organized Plasmonic Nanostructures in Thin Photosensitive Films
12:00 – 12:30	<i>Farhad Azadi Namin</i>	Plasmonic Metasurfaces
12:30 – 13:00	<i>Şemsettin ALTINDAL</i>	Electrical and Dielectric Properties of Metal, Insulator, and Semiconductor Structures

13:10 - 14:30 | Lunch

### Afternoon – Parallel Oral Sessions and Workshop (Asbaghi's Hall)

	Parallel Oral Sessions		Workshop
	Session A - Class 2 (Main Building) Session Chairman: <i>S. Golshahi</i>	Session B - Class 3 (Main Building) Session Chairman: <i>F. Abdi</i>	
14:30 – 14:50	Simulation of CZTS Thin Film Solar Cell with ZnO, ZnS and Conventional CdS Buffer Layer <i>Mina Mirzaee, Javad Hassanzadeh, Ali Abdolazadeh Ziabari</i>	Two-Level-Like Behavior of a Three-Level Atom in V Configuration Trapped in an Optical Cavity with Multiphoton Transition <i>Babak Parvin</i>	Tools Made of Light: Optical Metrology, Optical Analysis, Optical Manipulation <i>Ehsan Ahadi-Akhlaghi</i> <i>Mohammad Reza Taheri</i> <i>Hadi Borzoyi</i>
14:50 – 15:10	Structural and Optical Properties of Zinc Selenide Crystal Modified by Ion-Exchange <i>M.B. MURADOV, G.M. EYVAZOVA, L.R. GAHRAMANLI</i>	Studying the Nonlinear Response of Ethylene Oxide Nanoparticles in Combination with the Ethanol Solvent and the Comparison of their Results by Using the Optical Method, Moiré Deflectometry <i>Fatemeh Jamal, Fatemeh Ahmadi, Mohammad Khanzadeh</i>	
15:10 – 15:30	Controllable Lateral Reflection Shift in a Graphene Coated-Nanocomposite <i>Maryam Zoghi</i>	Decentralized Microelectronics-Industrial Internet Object Technology <i>Hamed Nasrollahi</i>	
15:30 – 15:50	Determination of Important Parameters of Lidar to Measure the Concentration of Water Vapor in the Atmosphere <i>Farshid Soleymani, Abbas Bashiri</i>	Effect of Shortcut to Adiabatic Passage on the Elimination of the Spontaneous Emission in the Interaction of a Three-level Atom with the Laser Fields <i>Maryam Kiazand, Maghsoud Saadati Niari</i>	
15:50 – 16:10	Coffee Break		
	Parallel Oral Sessions		Workshop
	Session C - Class 2 (Main Building) Session Chairman: <i>P. Amiri</i>	Session D - Class 3 (Main Building) Session Chairman: <i>S. Farjami-Shayesteh</i>	
16:10 – 16:30	Investigation of Self-healing Property of Non-diffracting Parabolic Beams <i>Negar Azari, Pari Amiri, Ehsan Ahadi Akhlaghi, Yashar Azizian</i>	Electrical Properties of the Ag/n-ZnO/p-Si Structures Using Current-voltage Measurements <i>Şükrü KARATAŞ</i>	Fabrication of Ultrasonic Instruments and its Applications <i>Reza Afzalzadeh</i>

16:30 – 16:50	Comparison of Fourier Transform and Wavelet Transform to Analyze the Diffraction Fringes from the Phase Step <i>Zahra Abbasi, Ehsan Ahadi Akhlaghi, Ahad Saber</i>	The Superposition of Laguerre-Gaussian and Mirrored Laguerre-Gaussian Beams and Investigation of their Self-reconstruction Property <i>Fazel Saadati</i>
16:50 – 17:10	Investigation of Hemoglobin Alteration Amount of Red Blood Cell by Hyperspectral Microscopy <i>Mina Molaei, Ahmad Doroudi, Peyman Soltani</i>	The Effect of the Electrochemical Etching Processes Rate on Electrical Properties of P-silicon <i>Gholamreza Pirgholi-Givi, Javid Farazin, Yashar Azizian-Kalandaragh, Leonid Anatolievich-Golovan</i>
17:10 – 17:30	Preparation of Au/Bi <sub>2</sub> O <sub>3</sub> -x-PVA/4H-SiC Structures by Using Different x Materials and Investigation of Electrical and Dielectric Properties <i>Yusuf Badali, Yashar Azizian-Kalandaragh, Ibrahim Uslu, Şemsettin Altındal</i>	
17:30 – 20:30	Excursion (Fandoghlu Forest/Heyran)	
20:30 – 21:30	Dinner	

### Second day, Sunday August 18, 2019

07:30 - 08:30	Breakfast
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### Morning - Plenary Session (Asbaghi's Hall)

#### Plenary Talk- Chairman: *Arashmid Nahal*

08:30 – 09:10	<i>Faegheh Hajizadeh</i>	Optical Tweezers and its Applications
09:10 – 09:50	<i>Saifollah Rasouli</i>	Diffraction of Optical Vortices
09:50 – 10:30	<i>Seyed Mohammad Rozati</i>	Introduction to Transparent Conducting Oxid Materials (TCO)
10:30 – 11:00	Coffee Break	

#### Plenary Talk- Chairman: *Farhad Azadi Namin*

11:00 – 11:40	<i>Ali Abdolazadeh</i>	Recent Advances of Plasmonic Solar Cells
11:40 – 12:20	<i>Rasoul Aalipour</i>	Phase Sensitive Surface Plasmon Resonance Sensor based on Diffraction
12:20 – 13:10	<i>Siamak Golshahi</i>	Issues and Challenges Facing Sputtering of ITO Thin Films
13:10 – 14:30	Lunch	

### Afternoon (14:00-15:50) – Oral Presentations and Workshop (Asbaghi's Hall)

	Parallel Oral Sessions		Workshop
	Session E - Class 2 (Main Building) Session Chairman: <i>Sh. Mirzaee</i>	Session F - Class 3 (Main Building) Session Chairman: <i>S. Mirershadi</i>	
14:30 – 14:50	The V <sub>4</sub> AlC <sub>3</sub> Max Phase Synthesized Via Mechano-Thermal Process <i>Canan AKSU CANBAY, Ömer GÜLER, İskender ÖZKUL, Öyküm BAŞGÖZ</i>	Derivation of First Order Properties of Optical Systems by Use of Delano's Diagram <i>Ruhollah Moradhaseli, Shahnaz Razavi</i>	Optical Constants Analysis of Zinc Oxide Material by FYTRONIX Optical Constants Analyzer <i>Fahrettin YAKUPHANOĞLU</i>
14:50 – 15:10	Synthesis of PMMA Nanospheres as the Building Blocks of Artificial Opal Photonic Crystals <i>Farzaneh Bayat, Kazem Jamshidi-Ghaleh</i>	Diode Applications of Different Ligand Structure Ruthenium Complex <i>Zafer ŞERBETÇİ</i>	
15:10 – 15:30	Thermodynamic Characterization of Time Depending Aging Effects at 300°C for NiTi Alloy <i>Ayşegül DERE, İskender ÖZKUL, Canan AKSU CANBAY</i>	Guiding-Beam Reflectors System for LED Pumping of Solid-State Lasers <i>Seyyed Morteza Zahedi Dizaji, Amir Hossein Farahbod, Mohammad Mahmoudi, Saeed Ghanbari</i>	
15:30 – 15:50	Temperature Dependent Current-transport Mechanisms (CTMs) in the Al/Al <sub>2</sub> O <sub>3</sub> /p-Si (MIS) Diodes (SDs) Using Current-voltage-temperature (I-V-T) Characteristics in the Temperature Range of 200-320 K <i>Elif Marlı, Mehmet Kosal, Şemsettin Altındal</i>	Usages of Common Lasers in Dentistry <i>Honarmand Javanbakht</i>	
15:50 – 16:50	Coffee Break		

### Afternoon (17:00-19:30) – Poster Presentation (Mohammadian's House) (19:30-24:00)-Dinner and Excursion

17:00 – 19:30	Poster Session
19:30 – 21:30	Social Event & Gala Dinner

22:00 – 24:00 | Excursion (Sarein city - Spa)

**Third day: Monday 19 August- Conference Day**

07:30 – 08:30 | Breakfast

**Morning -Workshop (Asbaghi's Hall)**08:00 – 09:00 | *Taha Falahati, Gh. Pirgholi, A. Jamshidi* | Principles and Performance of 3-D Scanners09:00 – 10:00 | *Araz Siabi, Reza Hasanzadeh* | Recent Challenges in Fabricating and Characterizing the Optical Properties of Thin Films10:00 – 11:00 | *Peyman Soltani* | Hyperspectral Imaging and its Applications

11:00 – 12:00 | Panel Discussion

12:00 – 13:00 | Closing

**Closing****Lunch****Poster Session**

Second day: Sunday 18 August 2019

**Afternoon- Poster SESSION**

ID	Poster Tittle	Presenter
P01	The Influence of Power Electronic Compensators on Performance of Multi-DG in the Presence of Different Load Models	Masoud Alilou
P02	Graphene Assisted Tunable Semiconductor Laser Based on Vernier Effect	Seyyed Moin Alden Mostaan
P03	Fabrication of Copper Oxide-zinc Oxide Nano-photocatalyst by Electrochemical Oxidation of Brass	Mohammad Nami
P04	Simulation and Investigation of the Optical Properties of CdS/CdTe Solar Cells	Prinaz Khaledi
P05	Absorption Enhancement in Graphene-based Photodetector with Plasmonic Structure	Elham Khosravian
P06	Photocatalytic Activity of NiO Nanoparticles under the Different Wavelengths	Kobra Ahadzadeh-Namin
P07	Optical Characterization of Ni:SnO <sub>2</sub> Nanostructured Thin Films Using Spectroscopic Ellipsometry Technique: Effects of Annealing Temperature	Sahar Moradi
P08	Synthesis and Characterization of Cu <sub>2</sub> O/CuO Photocatalyst on Cu Plate	Sara Behjati
P09	Topological Phase in Spin-1/2 Two-leg Ladders	Farzaneh Shafieinezhad
P10	IR Cut-off Filters based on Plasmonic Butterfly-shaped Nano-antennas for Solar Cell Applications	Sima Alilou
P11	Electrospun System for Nanofiber Applications	Fahrettin YAKUPHANOĞLU
P12	Diode Application of Organometallic Ruthenium Complex	Zafer ŞERBETÇİ
P13	First Day-time Seeing Observation in Iran	Mohammad Eftekhar
P14	Theoretical Basics of Calculating Albedo Usintg the Earth Shine Moon	Mohammad Eftekhar
P15	Performance Improvement of CIGS Solar Cells with Composition Graded Active Layer	Ali Abdolhazadeh Ziabari
P16	Comparison of Essential Laser Parameters to Population Transfer Using Stimulated Raman Adiabatic Passage in the Linear and Nonlinear Systems	Maghsood Saadati
P17	Investigating the Optical Properties of Gallium Arsenide Nanocrystals Contaminant with Zn Atoms	Mahboobe Beigmoradi
P18	Investigating the Effect of Gold Coating on the Silicon Tip in Electric Field Enhancement of Tip-enhanced Raman Spectroscopy System	Maryam Bahreini
P19	Design and Optimization of FBG Sensors with the Ability to Measure Strain and Temperature Simultaneously for Testing of Oil and Gas Pipelines	Mehdi Taherpour
P20	Measurement of the Fractional Part of the Topological Charge of Vortex Beams	Seyyed Mohammad ali Hosseini Saber
P21	Design and Optimization of FBG Sensors with the Ability to Measure Strain and Temperature Simultaneously for Testing of Oil and Gas Pipelines	Mehdi Taherpour
P22	Designed and Fabrication on Sunlight for Solid State Laser Pump Applications	Javad Hamoodi
P23	Fabrication of Nanostructure ZnO Metal-oxide-semiconductor Thin Film Transistor	Morteza Charmi
P24	Study of Photocatalytic Properties of Titanium Dioxide Nanotubes Covered by Graphene Quantum Dot	Nahid Akramzadeh
P25	Investigating the Effect of Photothermal Therapy on the Osteosarcoma Cancerous Cell (MG63) by Laser and Graphene Oxide Nanoparticles	Najmeh Sadat Hosseini Motlagh
P26	Design a Biosensor based on Photonic Crystal for Detecting Glucose Density	Parisa Mohammadi
P27	Plastic Nanolayer of Glass over Silver Nanoparticles Produced in the Interaction of High-intensity Ar <sup>+</sup> -laser Beam with Ag <sup>+</sup> /Na <sup>+</sup> Ion-exchanged Glasses	Ali Akbar Ahangary
P28	Measurement and Calibration of the Nonlinear Response of a CMOS Detector	Ali Tamimi
P29	Investigation of the Effective Parameters on the Electron Acceleration in a Laser-generated Ion Channel in Plasma	Amaneh Kargarian
P30	High-energy Particles Production in the Interaction of High-power Ultra-short Laser Pulse with Underdense Plasma	Amaneh Kargarian

P31	Electromagnetic Waves with Circular Polarization in Magnetized Spin Quantum Plasma	Ayda Lotfalizadeh
P32	Making Spatial Light Modulators by Using Video Projector	Farshid Najafinejad
P33	Investigation and Measurement of the Magnetic Effect of Flint Glass by Using the Optical Method, Moiré Deflectometry and Comparing it with Faraday Effect	Fatemeh Jamal
P34	Hyperspectral Imaging for Ink Identification in Handwritten Documents	Peyman Soltani
P35	Using the Hyperspectral Camera to Measure Bruised Skin	Roghayeh Abdollahpour
P36	Determination of Some Optical Properties of Water-dispersed Semiconductor Nano Structures whit Using Wavefront Sensor	Roghayeh Zali
P37	Investigation of Some Chlorophyll Dependent Plant Indices for Ornamental Flowers Using the Hyperspectral Imager	Sara Almasi
P38	Preparation Silver Oxid Nanoparticles and Investigation of the Effect of Claire	Sevda Seyedmatin
P39	Study and Simulation of the Electronic Transmission Behavior of Molecular Semiconductor Chains Attached Graphene Nano-Ribbons	Sina Zabihi
P40	Effects of the Excitation of Leaky Surface Plasmon Waves of Graphene in the Electromagnetic Response of Multi-layered Structures	Vahideh Mohadesi
P41	The Effect of Alkali Metals K and Na on Electro-optical Properties of ZnO Nanoparticles	Batool Akrami
P42	Optimization of Optical Pumping System of a LED-Pumped Ce:Nd:YAG Laser	Seyyed Morteza Zahedi
P43	Preparation of Bismuth Oxide nano Structures and Investigation of the Effect of Mo Source on their Optical and Structural Properties	Maryam Golkheyri
P44	Characterization of Boron Nitride Nanosheets as a Semiconductor Material Using Electron Microscopy Techniques	Zahra Rafiei
P45	The Effect of Graphene Doping on the Photocatalytic Activity of Bismuth Titanite Nano Structures for Removing Methylene Blue from Water	Hamideh Bidakani
P46	Investigation of the Photocatalytic Activity of the Zinc Ferrite	Elaheh Taami
P47	Preparation of Tin Oxide and Tin Oxide Doped by Samarium Nanostructures by Ultrasound Method and Investigation of their Optical and Structural Properties	Sheyda Fakhri
P48	Investigation of Phonon Dispersion Spectrum and Electron Energy Loss Spectrum of Monolayer Silicon Carbide	Somayeh Behzad
P49	Comparison of the Electrical Properties of Al /p-Si (MS) and Al /CdS:PVP /p-Si (MIS) Schottky Structures Using I-V Characterization	Zakieh Hosseini
P50	Frequency Dependent Dielectric Properties of Al /p-Si (MS) and Al /CdS:PVP /p-Si (MIS) Schottky Diodes	Zakieh Hosseini
P51	Derivation of First Order Properties of Optical Systems by Use of Delano's Diagram	Rouhollah Morad Haseli
P52	Spectrophotometric Measurements of Lactic Acid Content by Iron III Chloride in Fermentation Media	Saeed Nedaei
P53	Preparation of Cobalt doped ZnO Nanostructures and Investigation of Annealing Temperature Effect in Photocatalytic for Removing Methylene Blue from Water	Mir Ahmad Jamshidi-Ghozlu
P54	Cobalt-Copper Nanowires Fabrication in Alumina Template by Electrodeposition: Investigate the Effect of Different Concentrations on the Alloy and Electrodeposition Waveform on the Magnetic Properties of Nanowires	Ramin Gholamhosseini