

Friday, May 17, 2024

Address: 75. Yil Conference Hall, Faculty of Science, Gazi University

Session 1

Chair: Prof. Alpan Bek

Middle East Technical University, Türkiye

09:00 – 09:50	Plenary Speaker / Prof. Tayfun AKIN Middle East Technical University, Türkiye Title of talk: Evaluation of Infrared Detector and ROIC Development Activities in Türkiye		
09:50 – 10:00	Short Break		
	HALL 1 Chair: Prof. Alpan Bek Middle East Technical University, Türkiye	HALL 2 Chair: Dr. Daryoush Abdollahpour Department of Physics, Institute for Advanced Studies in Basic Sciences (IASBS), Zanjan, Iran	HALL 3 Chair: Prof. Arash Sabatyan Urmia University, Iran
10:00 – 10:30	Invited Speaker / Prof. Benedetta Marmioli Graz University of Technology, Graz, Austria Title of talk: Deep X-ray Lithography for Optics and Photonics	Invited Speaker / Prof. Abdollah Borhanifar University of Mohaghegh Ardabili (UMA), Iran Title of talk: Interaction and efficiency of three optical pulses in optical fiber	Invited Speaker / Dr. Zeynep Demircioğlu Tübitak, SAGE Title of talk: Production and characterization of amorphous Silicon thin film solar cells on flexible substrates
10:30 – 11:00	Invited Speaker / Prof. Alina Manshina Institute of Chemistry, St. Petersburg state university, Russia Title of talk: How to make optical and electrochemical sensors with laser	Invited Speaker / Dr. Berna Morova Istanbul Technical University Title of talk: Tailored Light Beams: An Innovative Approach in Micromachining	Invited Speaker / Dr. Nesrin Töre Şen Kalyon PV, Türkiye Title of talk: Technological roadmap of KalyonPV R&D Center
11:00 – 11:20	Coffee Break		
11:20 – 11:40	Speaker / Barbara Sartori Graz University of Technology, Institute of Inorganic Chemistry Title of talk: Synchrotron Radiation for Structural Biology	Speaker / Sabreen A. Hameed Department of Physics, College of Science, University of Diyala, Diyala, Iraq Title of talk: Intersection behavior in the forward bias I-V curves and current transport mechanisms (CTMs) in the Al/Al ₂ O ₃ /Ge/p-Si heterostructures in temperature range of 90-420 K	Speaker / Buğra Yalçın Nanotechnology Research Center, Bilkent University Title of talk: Raman OTDR Based Distributed Temperature Sensing for Environmental and Structural Monitoring
11:40 – 12:00	Speaker / Erkut Emin AKBAŞ Gazi University, Ankara, Türkiye Title of talk: Design Of All-Fiber Er-Doped Ase Source For Fiber Optic Sensors	Speaker / Mina Mollaei Department of Physics, Institute for Advanced Studies in Basic Science (IASBS), Zanjan, Iran Title of talk: Optimization of photolithography exposure by Lensletlens	Speaker / Behnaz Javidi Physics Department, Urmia University, Urmia, Iran Title of talk: Impact of Astigmatism on diffractive features of spiral checkerboard zone plate
12:00 – 12:20	Speaker / Uğur Özçelik Gazi University, Ankara, Türkiye Title of talk: The investigation of frequency dependent electrical parameters and density distribution of interface-traps (Dit) of the Au/(ZnO:CeO ₂ :PVP)/n-Si (MPS) Schottky diodes (SDs) by utilizing impedance spectroscopy model in the frequency range of 2kHz-1MHz	Speaker / Mohammad Khanjani Department of Physics, Institute for Advanced Studies in Basic Science (IASBS), Zanjan, Iran Title of talk: Improving Illumination and Enhancing the Accuracy of White Light Interferometry Using Array Lenses	Speaker / Maryam Fatehi University of Urmia - Faculty of Science - Optics & Laser Group Title of talk: Innovative Optical Beam Shaping with One-Dimensional Fresnel-Zone Plates: Novel Complex Structures
12:20 – 13:30	Lunch Break		

<p><i>Session 2</i></p> <p>Chair: Prof. Luis L. Sánchez-Soto Faculty of Physics, Complutense University of Madrid, Spain</p>			
13:30 – 14:20	<p>Plenary Speaker / Prof. Gerd Leuchs Max Planck Institute, Germany Title of talk: Improving the sensitivity of an interferometer beyond shot noise using Kerr squeezed light</p>		
14:20 – 14:30	<p><i>Short Break</i></p>		
<p>HALL 1</p> <p>Chair: Prof. Luis L. Sánchez-Soto Faculty of Physics, Complutense University of Madrid, Spain</p>	<p>HALL 2</p> <p>Chair: Dr. Sumea Klokic Ceric-Eric, Trieste, Italy</p>	<p>HALL 3</p> <p>Chair: Dr. Nihan Akın Sönmez Department of Photonics, Faculty of Applied Sciences, Gazi University, Ankara, Türkiye</p>	
14:30 – 15:00	<p>Invited Speaker / Prof. Saifollah Rasouli Department of Physics, Institute for Advanced Studies in Basic Sciences (IASBS), Zanjan, Iran Title of talk: Diffraction from periodic structures, Talbot effect, and beam shaping</p>	<p>Invited Speaker / Dr. Ehsan Ahadi-Akhlaghi Department of Physics, Institute for Advanced Studies in Basic Sciences (IASBS), Zanjan, Iran Title of talk: Optical Metrology: 3D imaging</p>	<p>Invited Speaker / Prof. Şemsettin Altındal Gazi University, Ankara, Türkiye Title of talk: The investigation of basic current transportation mechanisms and energy dependence profiles of interface traps(NSS) and relaxation times of the Au/n-Si structures with (PVA-Fe3O4) interlayer</p>
15:00 – 15:20	<p>Speaker / Mozhgan Hashemi Department of Physics, Institute for Advanced Studies in Basic Science (IASBS), Zanjan, Iran Title of talk: Polarimetric Analysis of Whitefly Larvae on Pomegranate Leaves via Mueller Matrix Imaging</p>	<p>Speaker / Sina Zeynali Department of Physics, Institute for Advanced Studies in Basic Science (IASBS), Zanjan, Iran Title of talk: SPR simulation of exosome with different drugs</p>	<p>Speaker / Parisa Pashaei Gazi University, Ankara, Türkiye Title of talk: Flexible Interdigital Ag Electrode Fabrication for UV-photodetectors: A Comparative Study of Aerosol Jet Printing and Thermal Evaporation Methods</p>
15:20 – 15:40	<p>Speaker / Mahkame Abolfathi Department of Physics, Institute for Advanced Studies in Basic Science (IASBS), Zanjan, Iran Title of talk: Using the highly sensitive surface plasmon resonance sensors to accurately determine organic dyes and some inorganic minerals in water</p>	<p>Speaker / Alireza Shafiei Department of Physics, Institute for Advanced Studies in Basic Science (IASBS), Zanjan, Iran Title of talk: Investigation of SPR in single-layer and double-layer systems of silver nanoparticles infiltrated by EAFD method in soda-lime glasses</p>	<p>Speaker / Mohammad Reza Ataii Department of Physics, Institute for Advanced Studies in Basic Science (IASBS), Zanjan, Iran Title of talk: Periodic SPR Nano-Sensors in Form of a 6-Point Shuriken</p>
15:40 – 16:00	<p>Speaker / Sinan Genç Middle East Technical University Title of talk: Using optical interference and machine learning to categorize microbeads in water</p>	<p>Speaker / Zahra Akbarpour Institute for Advanced Studies in Basic Sciences (IASBS) Title of talk: Investigating the Mechanical Properties of Biological Cells using Dual-beam Optical Tweezers</p>	<p>Speaker / Abdulkadir Yentur TOBB University of Economics and Technology Title of talk: SOA-based broadband light source relative intensity noise suppression</p>
16:00 – 17:00	<p><i>Coffee Break and Poster Presentations</i></p>		

Session 3

HALL 1 Chair: Prof. Hamidreza Khalesifard <i>Department of Physics, Institute for Advanced Studies in Basic Sciences (IASBS), Zanjan, Iran</i>			HALL 2 Chair: Dr. İsa Hatipoğlu <i>Department of Photonics, Faculty of Applied Sciences, Gazi University, Ankara, Türkiye</i>			HALL 3 Chair: Dr. Barbara Sartori <i>Graz University of Technology, Institute of Inorganic Chemistry</i>		
17:00 – 17:30	Invited Speaker / Prof. Alpan Bek <i>Middle East Technical University, Türkiye</i> Title of talk: Environmental Photonics: From ultrafast IR laser material processing to trace molecule detection	Invited Speaker / Dr. Sumea Klokic <i>Ceric-Eric, Trieste, Italy</i> Title of talk: Structural dynamics in photo-responsive crystalline film systems: a multi-technique approach	Invited Speaker / Dr. Sevilay Sevinçli <i>Department of Photonics, İzmir Institute of Technology, Türkiye</i> Title of talk: Ultra-cold Rydberg Atoms and Quantum Technologies					
17:30 – 17:50	Speaker / Ferhat Hanife <i>Gazi University, Photonics Application and Research Center</i> Title of talk: Utilizing Interference Microscopy to Determine Micro-Sized Objects	Speaker / Narges Rezaei <i>Department of Physics, Institute for Advanced Studies in Basic Science (IASBS), Zanjan, Iran</i> Title of talk: Fabrication and Calibration a Spectral -Domain Optical Coherence Tomography in Infrared range	Speaker / Utku TOPCU <i>Gazi University, Photonics Application and Research Center</i> Title of talk: Fabrication of Different Patterns of Diffraction Grating with Aerosol Jet Printing System					
17:50 – 18:10	Speaker / Zahra Ashuri <i>Department of Physics, Institute for Advanced Studies in Basic Science (IASBS), Zanjan, Iran</i> Title of talk: Cancer biomarker detection by surface plasmon resonance (SPR)	Speaker / Sara Aminian <i>Department of Physics, Institute for Advanced Studies in Basic Science (IASBS), Zanjan, Iran</i> Title of talk: Refractometry based on reflection phase step spectroscopy	Speaker / Mahammad Baghir Baghirov <i>Baku State University</i> Title of talk: Study of optical properties of asymmetric AgNWs/PVA/Ag ₂ S nanocomposites by vapor phase sulfidation process					
18:10 – 18:30	Speaker / Ömer Faruk Dinç <i>Nanotechnology Research Center, Bilkent University</i> Title of talk: Pulse Distortion Optimization Caused by EDFA Transient Effect	Speaker / Sharareh Jalali <i>Urmia University</i> Title of talk: Exploring Novel Techniques for Optical Vortex Beam Generation and Detection Using Mach-Zehnder Interferometer and Spiral Zone Plate	Speaker / Fateme Gheibi <i>Department of Physics, Institute for Advanced Studies in Basic Science (IASBS), Zanjan, Iran</i> Title of talk: White light spectroscopy of the structured surface plasmon resonance biosensors					
18:30 – 18:50	Speaker / Yiğit Levent Çeçen <i>Department of Photonics, Gazi University Graduate School of Natural and Applied Sciences</i> Title of talk: Investigation of Quantum Confinement Effects in Cadmium Sulfide Polymer Nanocomposites and Their Role in Optoelectronic Device Applications	Speaker / Sima Hosseini <i>Department of Physics, Institute for Advanced Studies in Basic Science (IASBS), Zanjan, Iran</i> Title of talk: Surface Topography Measurement through Fringe Visibility Analysis	Speaker / Lamiya Balayeva <i>Baku State University</i> Title of talk: Determination of conductivity in Ga _{0.95} B _{0.05} Se crystal in the dark and under the influence of light					