

European Summit on

LASER OPTICS & PHOTONICS TECHNOLOGY

Webinar | September 25-27, 2023

Final Program



XPERTS MEETINGS

**#3rd floor, Shanthala Nagar,
Bengalur, 50001.**

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For more Info Plz Visit Website:

<https://elops.org/>

09:00-09:10 Opening Ceremony

Plenary & Keynote Session

Conference Chair: Qing-Hua Xu, Singapore

- 09:10-9:50 **Plasmon Coupling Enhanced Linear and Nonlinear Optical Properties for Biomedical Applications**
Qing-Hua Xu, National University of Singapore, Singapore
- 09:50-10:20 **Temporally and Spatially Shaped Femtosecond Laser High Performance Composites Fabrication and its Applications**
Xin Li, Beijing Institute of Technology, China
- 10:20-10:50 **3D Body Joint Location and Extraction Based on infrared ToF Camera**
Yang Yue, Xi'an Jiaotong University, China
- 10:50-11:15 **The Electronic Principle of Organic Light-Emitting Diodes**
Dashan Qin, Hebei University of Technology, China
- 11:15-11:40 **Tunable Metaoptics and 2D Photonics**
Jinghua Teng, Institute of Materials Research and Engineering (IMRE), Singapore

Invited Session

- 11:40-12:00 **Optical Microfiber Interferometric Sensors with Enhanced Sensitivity Via Waveguide and Surface Engineering**
Li-Peng Sun, Jinan University, China
- 12:00-12:20 **Effect of Optical Devices Housing on Their Degradation Rates**
Cher Ming Tan, Chang Gung University, Taiwan
- 12:20-12:40 **NIR Transillumination for Macroscopic Functional Imaging**
Koichi Shimizu, Xidian University, China

- 12:40-13:00 **Nonlinear Optics and Ultrafast Photonics in 2D Materials**
Gaozhong Wang, Chinese Academy of Sciences, China
- 13:00-13:20 **Label-Free Volumetric Imaging by Incorporating Raman Scattering Effect and Projection Tomography**
Xueli Chen, Xidian University, China
- 13:20-13:40 **Advantages of Phase-Polarization Modulation of Batio3 Waveguide to Electrooptic Modulators**
DeGui Sun, Changchun University of Science and Technology, China
- 13:40-14:00 **Femtosecond Laser Fabrication of Flexible Sensors**
Sumei Wang, Beijing Institute of Technology, China
- 14:00-14:20 **High Sensitive and Miniature Fluorescence Detector and its Application**
Xuhui Geng, Dalian Institute of Chemical Physics, China
- 14:20-14:40 **Ultra-Compact WDM/MDM Hybrid (De)Multiplexer**
Mahmoud Rasras, New York University Abu Dhabi, UAE
- 14:40-15:00 **MUSICAL – A Versatile Computational Nanoscopy Approach**
Krishna Agarwal, UiT The Arctic University of Norway, Norway
- 15:00-15:20 **TBA**
Ilgim Efeturk, Izmir Institute of Technology, Turkey
- 15:20-15:40 **Applications for Photoacoustic Spectroscopy in Life Science**
Popa Cristina-Mihaela, National Institute for Laser Plasma and radiation Physics-INFLPR, Romania
- 15:40-16:00 **Laser Photoacoustic Spectroscopy for Multi-Gas Detection**
Bercu (Petru) Mioara, National Institute for Laser Plasma and radiation Physics-INFLPR, Romania
- 16:00-16:20 **Laser Photoacoustic Spectroscopy for Hazardous Substances Detection**
BRATU Ana-Maria, National Institute for Laser Plasma and radiation Physics-INFLPR, Romania
- 16:20-16:40 **H3DVisionAir – Development Towards Seeing Beyond Eyesight**
Gabrielle J.M. Tuijthof, University of Twente, Netherlands

- 16:40-17:00 **Optical Trapping of Nanoparticles Using Low Heat Generation Nanostructures**
Zhe Xu, University of Melbourne, Australia
- 17:00-17:20 **Focusing of Surface Plasmon Wave for Small Molecules Sensing**
Hailang dai, Shanghai Jiao Tong University, China
- 17:20-17:40 **Single-Cell Detection by Enhancement of Fluorescence in Waveguides for Cancer Diagnosis and Therapy**
Hongrui Shan, Shanghai Jiao Tong University, China
- 17:40-18:00 **Solid-State Photochromeless Photochromic Materials**
Claudio Roscini, Barcelona Institute of Science and Technology (BIST), Spain
- 18:00-18:30 **Vacuum Ultraviolet Sensors Based on Titanium Dioxide Thin Film Coupled to a Scintillator Crystal**
Marilou Cadatal-Raduban, Massey University, New Zealand
- 18:30-18:50 **Seeing Through Light: A New Way to Characterize Human Tissue “Fnirs Technology ”**
Murad Mohsen Althobaiti, Imam Abdulrahman Bin Faisal University (IAU), Saudi Arabia
- 18:50-19:10 **Engineering of Single Photon Emission**
Shailesh Kumar, University of Southern Denmark, Denmark
- 19:10-19:30 **One Dimensional SP Lattices Based on Photonic Molecules.**
Diego Román-Cortés, University of Chile, Chile
- 19:10-19:30 **All-Photonic Synapse Based on Iron-Doped Lithium Niobate Double Metal-Cladding Waveguide**
Qiheng Wei, Shanghai Jiao Tong University, China

End of Day 1

09:00-09:10 Opening Ceremony

Plenary Session

- 09:10-9:50 **Organic Semiconductor Optoelectronics: Communications, Medicine and Lasers**
Ifor Samuel, University of St Andrews, UK
- 09:50-10:30 **Advances in Tissue Optics and Photonics: forward to New Medical Technologies Through Optical Clearing**
Valery Tuchin, Saratov State University, Russia
- 10:30-11:10 **Integration of Nanostructures into Photoactive Subwavelength Arrays for Broadband Absorption of the Solar Radiation: From the Yablonovitch Limit on The Nanoscale to Bioinspired Light Trapping**
Gil Shalev, Ben-Gurion university of the Negev, Israel

Invited Session

- 11:10-11:35 **RIKEN Compact Neutron Systems, RANS Development and Research, and Their Capabilities**
Yoshie OTAKE, RIKEN Center for Advanced Photonics (RAP), Japan
- 11:35-12:00 **Single-Laser Tb/S Short-Reach Optical Interconnects Based on Standard 125 μ m-Cladding Eight-Core Fiber**
Zhaopeng Xu, Peng Cheng Laboratory, China
- 12:00-12:25 **Real-Time Observations of Ultrafast Lasers**
Xueming Liu, Southeast University, China
- 12:25-12:50 **Aggregation Induced Emission Enhancement by Plasmon Coupling of Noble Metal Nanoparticles**
Jiangling He, Wuhan Polytechnic University, China
- 12:50-13:15 **Self-Assembly of Colloids into Supraparticles for Photonic Applications**
Blaaderen A. van (Alfons), Utrecht University, Netherlands
- 13:15-13:40 **Tuning Fork-Based Gas Sensing Exploiting Beat Frequency Approach**
Giansergio Menduni, Polytechnic University of Bari, Italy

- 13:40-14:05 **Advanced Packaging Solutions for High Reliability Optoelectronic Devices**
Alessio Corazza, SAES Getters, Italy
- 14:05-14:30 **Metasurfaces for Augmented Reality Based on Guided Mode Resonances**
Giovanni Magno, Polytechnic University of Bari, Italy
- 14:30-14:55 **A different Sensor for a Different Use: The UAVIMALS Prototype and its Application on the Archaeological Context of Cencelle (Italy)**
Federica Vacatello, Sapienza University of Rome, Italy
- 14:55-15:20 **Laser Processing for Optimizing Thermoelectric Properties of Oxide Materials**
Nuno Ferreira, University of Aveiro, Portugal
- 15:20-15:45 **Multifunctional Tamoxifen Derivatives As Estrogen-Receptor (ER) Directed Biophotonic Probes for Breast Cancer**
Mario Díaz, University of La Laguna, Spain
- 15:45-16:10 **Functionality of Milk Assessed by NIR and Fluorescence Spectroscopy: A Preliminary Study on Coagulability**
Lucia Verdugo Gonzalez, Universitat Autònoma de Barcelona(UAB), Spain
- 16:10-16:35 **Writing of Defects and Dopants in Nanoparticles:Pulsed Laser Diffusion Enhancement in Liquids The Next Step of Laser based Colloid Processing Technologies**
Sven Reichenberger, University of Duisburg Essen, Germany
- 16:35-17:00 **Wing Twist Angle and Deflection Predictions using Fiber Bragg Gratings**
Thierry Klotz, Centre Technologique en Aérospatiale (CTA), Canada
- 17:00-17:25 **Metasurface based instrumentation for In-Process and On-Machine Measurement Applications**
Andrew Henning, Huddersfield University, UK
- 17:25-17:50 **Towards Iteration Free Aberration Correction in Optical Microscopy**
Amanda Wright, University of Nottingham, UK

- 17:50-18:15 **The Properties of Lead Free Perovskite Thin Film Obtained by Pulsed Laser Ablation**
Valentin Ion, National Institute for Lasers, Plasma and Radiation Physics (INFLPR), Romania
 Delegate **Delegate**
- 18:15-18:40 **Waveguide Amplifiers Produced by Femtosecond Laser in Doped Heavy Metal Glasses**
Wagner de Rossi, Nuclear and Energy Research Institute, Brazil
- 18:40-19:05 **Biospeckle Laser on Clouds**
Roberto Alves Braga Junior, Federal University of Lavras, Brazil
- 19:05-19:30 **Effects of interaction with Serum Albumin on Porphyrin – Quantum Dot Complex formation and Optical Characteristics**
Iouri Borissevitch, University of São Paulo, Brazil
- 19:30-19:55 **Photonics for Food Process Control**
Anna Zamora Viladomiu, Universitat Autònoma de Barcelona(UAB), Spain
- 19:55-20:20 **Optical Biosensor to Monitor Drug Consumption in Drivers**
Elena Torralba Calleja, Leitat Technological Center, Spain
- 20:20-20:40 **High-Energy Mid-Infrared Fibre Lasers**
Lin Xu, University of Southampton, UK

End of Day 2

DAY 3

September 27, 2023 | Virtual Presentation

Laser Optics & Photonics Technology

Time Zone: Chicago, USA (GMT-5)

09:00-09:20 Opening Ceremony

Keynote Session

- 09:20-09:55 **Deployable, Membrane-Based Optics to Enable Cubesat instruments**
John P. Leckey, NASA Langley Research Center, USA
- 09:55-10:30 **Multimodal Microscopy and Its Biomedical Applications**
Lingyan Shi, UC San Diego, USA
- 10:30-11:05 **Photonic Neural Interfaces: Applications in Brain Stimulation and Imaging**
Maysam Chamanzar, Carnegie Mellon University, USA

Invited Session

- 11:05-11:30 **Synthesis and Properties of Fluorophores Containing Triple Bonds Between Carbon Atoms**
Irena Bylińska, University of Gdansk, Poland
- 11:30-11:55 **Nonreciprocal Beam Splitting and Wave vector Discretization**
Miguel Levy, Michigan Technological University, USA
- 11:55-12:20 **Applications of Deep Learning in Microscopic Imaging**
Ana Doblas (adoblas), UMass Dartmouth, USA
- 12:20-12:45 **Epi-Illumination Quantitative Phase Imaging (QPI) and 3D Refractive index (RI) tomography in Thick Scattering Samples with Quantitative Oblique Back-Illumination Microscopy**
Francisco E. Robles, Georgia Institute of Technology and Emory University, USA
- 12:45-13:10 **All-Optical Switching Using Extraordinary Thermo-Optic Nonlinearity of Surface Electronic Waves At Doped Semiconductor interfaces**
Raj Kumar Vinnakota, Troy University, USA
- 13:10-13:35 **Intraoperative Cancer Detection by Laser Optics and Photonics Technology**
Jian Xu, Louisiana State University, USA
- 13:35-14:00 **Active Control of Surface Plasmon Polaritons Waves at Metal-Doped Semiconductor Interfaces**
Mayra Schliemann, Troy University, USA
- 14:00-14:25 **Laser-induced Transitions of Sb₂S₃-Based, Reconfigurable Metaoptics**
Hunt Gabriella M, Johns Hopkins University, USA
- 14:25-14:50 **Breakthrough: Locating Sound Sources inside A Solid Structure**
Sean Wu, Wayne State University, USA

- 14:50-15:15 **Ultra-Narrow Linewidth Brillouin Lasers in A Silicon Nitride Waveguide Platform**
Matthew Puckett, Honeywell Aerospace, USA
- 15:15-15:40 **Two-Dimensional Hexagonal Boron Nitride Nanosheets Decorated with Silver Nanoparticles for High-Performance, Self-Powered, Super-Broad Band UV-Visible Photodetectors**
Wilber Ortiz Lago, University of Puerto Rico Rio Piedras, USA
- 15:40-16:05 **A Review of cmos Photonic integrated Circuits Modulator and Receivers**
Gerardo Castanon, Tecnologico de Monterrey, Mexico
- 16:05-16:30 **Temperature Regulated Photonic Cholesteric Liquid Crystal Based Smart Window**
Nino ponjavidze, Georgian Technical university, Georgia
- 16:30-16:55 **Dual Band Generation in A Mode-Locked Erbium Doped Fiber Laser Based on Monolayer Graphene**
Juan Diego Zapata Caro, University of Antioquia, Colombia
- Delegate **Delegate**
Blaz Kmetec, LPKF Laser & Electronics d.o.o, Slovenia
- 16:55-17:20 **TBA**
Tracy Hunter, NASA Langley Research Center, USA
- 17:20-17:45 **TBA**
Wentao Wang, University of Michigan, USA

End of Day 3

We wish to see you at

ELOPS-2024

2ND EDITION EUROPEAN SUMMIT ON
LASER OPTICS & PHOTONICS TECHNOLOGY
26-28 Sep, 2024 | Paris, France



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