

International Summit on

OPTICS, PHOTONICS AND LASER TECHNOLOGIES

3-5
JUNE 2019

Venue

Crowne Plaza Hotel San Francisco Airport
1177 Airport Blvd, Burlingame, CA



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The event invitation code is: **optbd**

Exhibitor



Venue Floor Plan



DAY 1
MONDAY, JUNE 03, 2019

07:00-08:00 Registrations and Introduction to Optics & Laser-2019

Keynote Session

@ PLAZA I ROOM

08:00-08:30 **Michael A. Krainak**
NASA Goddard Space Flight Center, MD
Spaceflight Laser and Photonics Technology

08:30-09:00 **David J. Hagan**
University of Central Florida, FL
Giant, Ultrafast Nonlinear Refraction in Indium-Tin-Oxide at Epsilon-Near-Zero

09:00-09:30 **Jian-Rong Gao**
SRON Netherlands Institute for Space Research, The Netherlands
THz Multi-Beam Source by a Phase Grating and a Quantum Cascade Laser for Space Applications

09:30-10:00 **Bumki Min**
KAIST, South Korea
Linear Frequency Conversion in Time-Variant Metasurfaces

10:00 -10:15 Coffee Break

@ FOYER AREA

10:15-10:45 **Koji Sugioka**
RIKEN Center for Advanced Photonics, Japan
Femtosecond Laser 3D Micro and Nanofabrication

10:45-11:15 **Sunao Kurimura**
National Institute for Materials Science, Japan
Nonlinear Photon Generation/ Manipulation for Quantum Optics

Session: Nanophotonics; Optoelectronics and Silicon and Carbon Photonics

Chairs: *Seongkeun Cho, Semiconductor R&D Center, Samsung Electronics, South Korea*
Isahar Gabay, Bar-Ilan University, Israel

11:15-11:35 **Seongkeun Cho**, Semiconductor R&D Center, Samsung Electronics, South Korea
Super-Contrast-Enhanced Darkfield Imaging Through the Delicate Control of Illumination Polarization

11:35-11:55 **Isahar Gabay**, Bar-Ilan University, Israel
2D Mono Detection Spatially Super Resolved Microwave Imaging for Radar Applications

11:55-12:15 **M. I. Marques**, Autonomous University of Madrid, Spain
Novel Phenomena in Optical Manipulation Due to Magnetic-Field-Induced Resonant States

12:15-12:35 **Qun Wei**, Nanjing Hua Opt-tech Co., Ltd, China
A Compact Top-View Conformal Optical System Based on a Single Rotating Cylindrical Lens with Wide Field of Regard

12:35-13:30 Lunch

@ PLAZA II ROOM

13:30-13:50 **Wang Juan**, Zhejiang Jinko Solar Co., Ltd., China
ECA (Electrical Conductive Adhesive) Induced Failure on Shingling Module

13:50-14:10 **Wei Jiang**, Nanjing University, China
High Density Waveguide Integration for Optical Phased Array Lidars and Optical Interconnects

- 14:10-14:25 **Maria Jessabel Talite**, National Chiao Tung University, Taiwan
Enhanced Light-Harvesting Efficiency of Luminescent Solar Concentrators Based on Organosilane-Functionalized Carbon Nanodots
- 14:25-14:40 **Haijun Zhou**, Chongqing University, China
High-Speed Pure Frequency Modulation and Pulse Optimization Based on a Quantum Cascade Laser by all-Optical Modulation
- 14:40-14:55 **Boe Mendewala**, University of California, CA
Hybrid Perovskite Thin Films as Highly Efficient Luminescent Solar Concentrators

Session: Applications and Trends in Optics, Lasers and Photonics

Chairs: *Thomas Kroll, SLAC National Accelerator Laboratory, CA*
Tsutomu Yoshida, Takushoku University, Japan

- 14:55-15:15 **Thomas Kroll**, SLAC National Accelerator Laboratory, CA
Hard X-ray Lasing from Stimulated Emission Pumped by an X-ray Free-Electron Laser
- 15:15-15:35 **Hiromitsu Kiriya**, National Institutes for Quantum and Radiological Science and Technology (QST), Japan
Recent Advances on the J-KAREN-P High Intensity Laser Facility at QST
- 15:35-15:55 **A. E. Martirosyan**, NAS of Armenia, Armenia
Optical Monitoring of Arbitrary Distributed Substance: An Alternative Approach Against Image Processing
- 15:55-16:15 **Yen-Yin Lin**, National Tsing-Hua University, Taiwan
A Compact and Portable Laser Radioactive Decontamination System Using a Fiber Laser and a Polygon Scanner
- 16:15-16:35 **Madoka Ono**, AGC, Research Center, Japan
Significant Suppression of Rayleigh Scattering Loss in Silica Glass Formed by the Compression of its Melted Phase

16:35-16:45 Coffee Break

@ FOYER AREA

- 16:45-17:05 **Jinesh Jain**, USDOE National Energy Technology Laboratory, PA
Applications of Laser Induced Breakdown Spectroscopy in Elemental Analysis of Varied Materials
- 17:05-17:25 **Tsutomu Yoshida**, Takushoku University, Japan
Stress Measurement by Spectrum Analyses for Round Bar Subjected to Time-Varying Load
- 17:25-17:45 **Kenta Takata**, NTT Nanophotonics Center and NTT Basic Research Laboratories, Japan
Topologically Insulating One-Dimensional Photonic Lattices Based on Gain and Loss
- 17:45-18:00 **Marc Labusch**, University of Duisburg-Essen, Germany
Acoustic Emission Monitoring and Control during Laser Synthesis of Colloids

DAY 2
TUESDAY, JUNE 04, 2019

Keynote Session

@ PLAZA I ROOM

- 08:00-08:30 **Jaime Gomez Rivas**
Eindhoven University of Technology, The Netherlands
Plasmon-Exciton-Polariton Condensation and Lasing
- 08:30-09:00 **Susumu Noda**
Kyoto University, Japan
High-Power and High-Beam-Quality Photonic Crystal Lasers
- 09:00-09:30 **Francis T. S. Yu**
Penn State University, PA
Schrodinger's Cat and Timeless Quantum Mechanics
- 09:30-10:00 **Xiangqiang Jiang**
University of Huddersfield, UK
Advanced Least-Squares Integration Method for Deflectometry
- 10:00-10:30 **Richard P. Mildren**
Macquarie University, Australia
Diamond Brillouin Lasers

10:30-10:40 Coffee Break

@ FOYER AREA

Session: Optoelectronics; Optical Physics and Theoretical Physics

- Chairs:* **Waseem Shaikh**, STFC Rutherford Appleton Laboratory, UK
Wei-Xing Xu, Newtech Monitoring Inc., Canada
- 10:40-11:00 **Waseem Shaikh**, STFC Rutherford Appleton Laboratory, UK
Simulations and Experimental Demonstration of Large Aperture Harmonic Generation Energy Clamping Due to Wavefront Distortion/Defocus in Glass Amplifier Systems for Nanosecond Pulses at 1 GW/cm²
- 11:00-11:20 **Fumio Koyama**, Tokyo Institute of Technology, Japan
VCSEL-Based Beam Scanner for 3D Sensing
- 11:20-11:40 **Toshimasa Umezawa**, National Institute of Information and Communications Technology (NICT), Japan
Energy Harvest Type Millimeter-Wave Integrated Photoreceiver for Photonic Wireless Communications
- 11:40-12:00 **Wei-Xing Xu**, Newtech Monitoring Inc., Canada
The Behavior of Hydrogen Atom Under Different Potential Well
- 12:00-12:20 **Weida Zhu**, Nanjing University, China
Broadband Two-Dimensional Electronic Spectroscopy in an Actively Phase Stabilized Pump-Probe Configuration
- 12:20-12:40 **Sen-Yeu Yang**, National Taiwan University, Taiwan
Replication of Large-Area Microstructures for Optics Using Induction Heated Belt Roller Embossing
- 12:40-13:00 **Ayaki Sunaga**, Tokyo Metropolitan University, Japan
Enhancement Factors of Parity-and Time-Reversal-Violating Effects for Monofluorides

13:00-13:45 Lunch

@ PLAZA II ROOM

**Session: Lasers in Micro, Nano and Bio Systems;
Optics and Light in Life Science and Fibre Optics**

Chairs: *Mario Pothen, Fraunhofer Institute for Production Technology IPT, Germany*
Tommaso Del Rosso, Pontificia Universidade Catolica do Rio de Janeiro, Brazil

13:45-14:05 **Ichiro Shoji**, Chuo University, Japan
Development of Composite Lasers and Stacked Wavelength-Conversion Devices by use of the Room-Temperature-Bonding Technique

14:05-14:25 **Mario Pothen**, Fraunhofer Institute for Production Technology IPT, Germany
Compensation of Scanner Based Inertia for Laser Structuring Processes

14:25-14:45 **A. Marcu**, National Institute for Laser Plasma and Radiation Physics, Romania
Laser Grown ZnO Nanowires for (SAW) Sensors Applications

14:45-15:05 **Valentina Giordano**, CNR-IMM, Hq Catania, Italy
Signal-to-Noise-Ratio Investigation of Silicon Photomultipliers for Functional Near Infrared Spectroscopy Applications

15:05-15:25 **Estefania Hernandez-Martin**, University of La Laguna, Spain
Is it Possible to Measure Hemodynamic Changes Through the Frontal Sinus Using Continuous Wave DOT Systems?

15:25-15:40 Coffee Break

@ FOYER AREA

15:40-16:00 **Tommaso Del Rosso**, Pontifical Catholic University of Rio de Janeiro, Brazil
Surface Plasmon Resonance Nanocounter and Nanosizer

16:00-16:20 **Abdullah Oran**, Abdullah Gul University, Turkey
RF Injection Locked 18 GHz Regeneratively Mode-Locked Semiconductor Laser

16:20-16:40 **L. Neumann**, University of Technology, Braunschweig, Germany
Rare Earth Nanocrystal Doped Polymer Optical Fiber Via *In Situ* Polymerization for POF Laser Applications

- P01** Peng-Cheng Li, Shantou University, China
Shih-I Chu, University of Kansas, KS
Extracting Multiple Rescattering Events for Time-Resolved Emission of High-order Harmonic Generation
- P02** Hsiu-Ying Huang, Chung Yuan Christian University, Taiwan
Synthesis and Characterization of Gold Nanoclusters for Widely Tunable PL Emission
- P03** S. R. Al-Sayed, National Institute of Laser Enhanced Sciences (NILES), Cairo University, Egypt
Characterization of a Laser Surface-Treated Martensitic Stainless Steel
- P04** Kun-Bin Cai, Chung Yuan Christian University, Taiwan
Green White-Light Emitting Diode Based on Zn-Coordinated Gold Nano-Phosphors
- P05** Lo-Yu Wu, National Tsing Hua University, Taiwan
Aberration Analysis of Micro-Offset Free-Form Mirrors by Shack-Hartmann Wavefront Sensor
- P06** Youyoung Kim, Gwangju Institute of Science and Technology, South Korea
Light Extraction Efficiency Enhancement of Phosphor-in-Glass Plate Using Sapphire Powder for Laser Lighting Technology
- P07** Youyoung Kim, Gwangju Institute of Science and Technology, South Korea
Monitoring the Optical Power of LED by Combining Radiation Type Thermocouple
- P08** R. Ungureanu, University of Bucharest, Romania
Laser Impulse Transfer on Metallic Targets
- P09** Marius M. Balas, Aurel Vlaicu University, Romania
Seeing is Believing
- P10** P.G. Sena, Chung Yuan Christian University, Taiwan
Matrix-Enhanced Carbon Nanodots for Sustainable Luminescent Solar Concentrator
- P11** Wei Jiang, Beijing Normal University, China
Optomechanically Induced Transparency in the Presence of Non-Markovian Effect

DAY 3
WEDNESDAY, JUNE 05, 2019

Session: Nonlinear Optics; Optical Computing; Quantum Science and Technology and Biophotonics

@ PLAZA I ROOM

Chair: *Huizhong Xu, San Francisco State University, CA*

- 08:00-08:20 **Huizhong Xu**, San Francisco State University, CA
Tunable Optical Nonlinearity in Synthetic Soft-Matter
- 08:20:08:40 **Shinji Matsuo**, NTT Corporation, Japan
Heterogeneously Integrated Low-Operating Energy Directly Modulated Lasers on Si
- 08:40-09:00 **Haodong Shi**, Changchun University of Science and Technology, China
Nodal Aberration Theory in Non-Rotationally Asymmetric Freeform Optical System Design
- 09:00-09:20 **Chunhua Wang**, Shanghai University, China
Spectral Polarization Spreading in Stimulated Brillouin Scattering and its Influences on Brillouin Frequency Shift in Single Mode Fiber
- 09:20-09:40 **Carlos Wiechers**, University of Guanajuato, Mexico
Study Nonlinear Effects of Dopants in Glass Matrices Using Z-Scan with Laguerre-Gauss Modes
- 09:40-10:00 **Heongkyu Ju**, Gachon University, Korea
Surface Plasmon Aided Fluorescence for Quantitative Biomedical Assay with High Sensitivity and Good Reproducibility
- 10:00-10:15 **Irfan Ahmed**, City University of Hong Kong, Hong Kong
Spontaneous Parametric Four Wave Mixing and Fluorescence Lifetime Manipulation in Diamond NV Center
- 10:15-10:30 **Jacob Gade Koefoed**, Technical University of Denmark, Denmark
Solutions to Continuous-Wave Four-Wave-Mixing Equations in Silicon-on-Insulator Waveguides
- 10:30-10:45 **Nisha Prakash**, CSIR-NPL Campus, India
Novel Ultrabroadband Binary Photoswitching in High-Performance G-C3N4/Si Hybrid Photodetector

10:45-10:55 Coffee Break

@ FOYER AREA

Session: Photonic & Plasmonic Nanomaterials; Optical Metrology; Optical MEMS and Nanophotonics

Chairs: *Feng Zhao, Washington State University, WA*
Cheng Zhang, National Institute of Standards and Technology, MD

- 10:55-11:15 **Jiangtao Xi**, University of Wollongong, Australia
Error Analysis in the Absolute Phase Maps Recovered by Fringe Patterns with three Different Wavelengths
- 11:15-11:35 **Douglas Gill**, IBM T.J. Watson Research Center, NY
Making Short Reach Link Transmitter Figure of Merits Cognizant of Transmission Format
- 11:35-11:55 **Feng Zhao**, Washington State University, WA
Optical Electrostatic MEMS Microactuator on 4H-SiC

- 11:55-12:15 **Gad Bahir**, Technion-Israel Institute of Technology, Israel
Metamaterial Nano-Cavities and MHA Coupled to Near and Mid-Infrared Intersubband Transitions in the GaN/AlGaN Based Quantum Cascade Detectors
- 12:15-12:35 **Cheng Zhang**, National Institute of Standards and Technology, MD
Reliable Characterization of Hyperbolic Metamaterials Using Total Internal Reflection Ellipsometry
- 12:35-12:55 **Christophe Gorecki**, FEMTO-ST Institute, France
MOEMS-Based Imaging Probe with Integrated Mirau Micro-Interferometer and MEMS Microscanner for Swept-Source OCT Endomicroscopy

12:55-13:40 **Lunch**

@ FOYER AREA

- 13:40-14:00 **Lishuang Feng**, Beihang University, China
Enhancement of Optical Sensitivity in a Grating Based Micromechanical Accelerometer by Reducing Non-Parallelism Error
- 14:00-14:20 **Greg Sun**, University of Massachusetts Boston, MA
Landau Damping in Isolated and Coupled Plasmonic Nanoparticles
- 14:20-14:40 **Rishi Maiti**, George Washington University, DC
Heterogeneous Integration of 2D Materials on Si Photonic Platform
- 14:40-15:00 **T. Sikola**, Brno University of Technology, Czech Republic
Quantitative Phase Imaging of Fields Shaped by Plasmonic Metasurfaces
- 15:00-15:15 **Dennis Visser**, KTH Royal Institute of Technology, Sweden
Dielectric Metasurfaces Based on A-Si Nanodisk Arrays for Anti-Reflection and Color Filter Applications

15:15 **Departures**

Thank you for attending!



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