

# CONGRESS PROGRAM

## OSA Advanced Photonics Congress

**29 July – 1 August 2019**

Hyatt Regency San Francisco Airport  
Burlingame, California, USA

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### CO-LOCATED TOPICAL MEETINGS

Integrated Photonics Research, Silicon and Nanophotonics

Novel Optical Materials and Applications

Optical Devices and Materials for Solar Energy and Solid-state Lighting

Photonic Networks and Devices

Signal Processing in Photonic Communications

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[osa.org/PhotonicsOPC](http://osa.org/PhotonicsOPC)

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The Optical Society

**100**  
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## Grand Peninsula G

Integrated Photonics Research, Silicon and Nanophotonics

### IWZA • Photonic Computing and Emerging Technologies—Continued

IWZA.5 • 12:15

**Quantum Coherence Enhanced Graphene Spacer**, Lakkshitha Kumarasoorias, Melin Piemontec, Monash Univ, Australia. We demonstrate the possibility of significantly enhancing the output characteristics of a plasmonic micro-laser (spaser) made of a graphene plasmonic resonator and 3-level gain chromophores by using a coherent electric field to control the dynamics.

IWZA.6 • 12:30 **Invited**

**Materials Aspects of Disordered Self-assembled Structures**, Cefe Lopez, Consejo Superior de Investigaciones Científicas, Spain. Self-assembled structures are intrinsically disordered. Therefore it is no surprise that suppressing disorder to improve performance will encounter many difficulties. Where surprise lies is in the difficulty to produce disorder entirely averting order.

## Sandpebble Room AB

Novel Optical Materials and Applications

### NoW2B • Two-dimensional Materials—Continued

NoW2B.5 • 12:15

**Optical Characteristics of Hybrid-nanostructures Using 2D Semiconductors and Applications to Photo-triggered Field-effect-transistors and Sensitive Photodetectors**, Jinsoo Joo, Cheol-Joon Park, HyounJung Park, Joocho Noh, Kwang-Soo Lee, Jeongyong Kim, Korea Univ, South Korea; Hanwan Univ, South Korea; Sungkyunkwan Univ, South Korea. Optical properties for 2D MoS<sub>2</sub> hybridized with organic semiconductors or perovskite CsPbBr<sub>3</sub> are studied. Photo-triggered MoS<sub>2</sub>/subrene transistors are controlled by gate-bias. Photoresponsivity of MoS<sub>2</sub> device is enhanced by hybridization with CsPbBr<sub>3</sub>.

## Sandpebble Room CD

Optical Devices and Materials for Solar Energy and Solid-state Lighting

### PW2C • Modeling, Bifacial, Solar Resource, BIPV—Continued

PW2C.7 • 12:15

**Enhanced Multi-layer Lens-let Array for Extreme Angle Solar Collection**, Ratan E. Asagi, Rafi Bauer, Martin P. Lavery, Univ of Glasgow, UK; Univ of Strathclyde, UK. Deployment of solar panels on the side of buildings leads to very low collector efficiency. We present an enhanced multi-layer lens-let array that increases the daily generated power at near vertical deployment by a factor of 4.783.

12:30-14:00 Lunch (on own)

12:30-14:00 **Workshop: Hands-on Introduction to Data Analytics and Machine Learning in Optical Networks**, Bayside Room

## Anti-harassment Policy and Code of Conduct

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