

iNOW 2018

∞ Program Summary ∞

Saturday, July 21, 2018 (Bancroft Hotel, Berkeley)

18:00-20:00	Registration and Welcome Reception Dinner
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Sunday, July 22, 2018 (Sutardja Dai Hall Auditorium)

8:30-8:45	Breakfast/Registration
8:45-9:00	Open Ceremony, Chair: Fumio Koyama Connie Chang-Hasnain , University of California, Berkeley
Session S1 Chair: Fumio Koyama	
9:00-9:45	Dieter Bimberg , Institute of Solid State Physics and Center of Nanophotonics, Technical University Berlin, Germany and Chinese-German Center for Energy Efficient Photonics Changchun Institute for Optics, Fine Mechanics and Physics, CAS <i>Topic: Nanophotonics for a Green Internet</i>
9:45-10:30	James Harris , Stanford University <i>Topic: LIDARs—Wavelength Tradeoffs with VCSELs and SPADs</i>
10:30-11:00	Tea & Coffee Break
Session S2 Chair: Connie Chang-Hasnain	
11:00-11:30	Arka Majumdar , University of Washington <i>Topic: Metasurface Computational Imaging</i>
11:30-12:00	Chennupati Jagadish , Australian National University <i>Topic: Applications Semiconductor Nanowires for Optoelectronics Applications</i>
12:00-12:30	Xiuling Li , University of Illinois Urbana-Champaign <i>Topic: Surface Engineering to Enhance the Performance Of Photodetectors: from Ge to β-Ga₂O₃</i>
12:30-13:30	Lunch (SDH Atrium)
Session S3 Chair: James Harris	
13:30-14:00	Boubacar Kante , University of California, San Diego <i>Topic: Topological Light Sources</i>
14:00-14:30	Soon Fatt Yoon , Nanyang Technological University <i>Topic: III-V/Si Integration for Microelectronic and Photonic Devices</i>
14:30-15:00	Eric Tournie , University of Montpellier <i>Topic: Antimonide-Based Optoelectronic Devices Epitaxially Grown on Si</i>
15:00-15:30	Tea & Coffee Break
Poster Session 1 Chair: Dieter Bimberg	
15:30-16:30	Poster Summary Talk
16:30-18:00	Poster Viewing
18:00-18:30	Walk to Bancroft Hotel
18:30-20:30	Dinner (Bancroft Hotel)

Monday, July 23, 2018 (Sutardja Dai Hall Auditorium)

8:30-9:00	Breakfast/Registration
Session Mo1	Chair: Alfred Forchel
9:00-9:45	Kei May Lau , Hong Kong University of Science and Technology <i>Topic: Micro- and Nano-Lasers Grown On Silicon Emitting in the Telecom Band</i>
9:45-10:30	Hiroki Takesue , NTT Basic Research Laboratories, NTT Corporation <i>Topic: Coherent Ising Machine: an Ising Model Solver Based on Degenerate Optical Parametric Oscillators</i>
10:30-11:00	Tea & Coffee Break
Session Mo2	Chair: Soon Fatt Yoon
11:00-11:45	Alfred Forchel , University of Würzburg <i>Topic: Recent Progress in Exciton-Polariton and Bipolar Lasers</i>
11:45-12:30	Yashuhiko Arakawa , University of Tokyo <i>Topic: Progress in Nanoscale Light Sources with Quantum Dots</i>
12:30-13:30	Lunch (SDH Atrium)
Session Mo3	Chair: Kei May Lau
13:30-14:00	Juergen Christen , Otto-von-Guericke-Universität Magdeburg <i>Topic: Characterization of 3D Semiconductor Nanostructures Using Ultra-High-Resolution STEM-CL</i>
14:00-14:30	Siyan Yu , University of Bristol and Sun Yat-Sen University <i>Topic: Mode Division Multiplexed Optical Communications Based on Ring Core Fibres</i>
14:30-15:00	Jie Yao , University of California, Berkeley <i>Topic: Novel Material Platforms for Nanophotonics</i>
15:00-15:30	Kar Wei Ng , University of Macau <i>Topic: Fully Strained Metastable Multiple Quantum Well Pillar Laser on Silicon</i>
15:30-16:00	Tea & Coffee Break
Session Mo4	Chair: Yashuhiko Arakawa
16:00-16:30	Laura Waller , University of California, Berkeley <i>Topic: Computational Microscopy</i>
16:30-17:00	Weijian Yang , University of California, Davis <i>Topic: Optical Imaging and Manipulation of Brain Activity</i>
17:00-17:30	Bala Pesala , Central Electronics Engineering Research Institute <i>Topic: Terahertz Technologies for Security, Biological and Industrial Applications</i>
17:30-18:00	Jeffrey Chou , MIT Lincoln Laboratory <i>Topic: Electrically Switchable Transparent Phase-Change Materials</i>
18:00-20:30	Free Night

Tuesday, July 24, 2018 (Sutardja Dai Hall Auditorium)

8:30-9:00	Breakfast/Registration
Session Tu1 Chair: Alan Willner	
9:00-9:45	Pallab Bhattacharya , University of Michigan <i>Topic: Optoelectronic Devices on (001) Silicon with III-Nitride Heterostructure Nanowire Arrays</i>
9:45-10:30	Susumu Noda , Kyoto University <i>Topic: High-Power, High-Beam-Quality Photonic Crystal Lasers</i>
10:30-11:00	Tea & Coffee Break
Session Tu2 Chair: Pallab Bhattacharya	
11:00-11:45	Alan Willner , University of Southern California <i>Topic: High-Capacity Communications Using Multiplexing of Multiple Orthogonal Orbital-Angular-Momentum Beams</i>
11:45-12:30	Abderrahim Ramdane , CNRS / Centre for Nanosciences and Nanotechnologies <i>Topic: Semiconductor Laser Based Frequency Combs: Application to Ultra-High Bit Rate Data Transmission</i>
12:30-13:30	Lunch (SDH Atrium)
Session Tu3 Chair: Chennupati Jagadish	
13:30-14:00	Andrei Faraon , California Institute of Technology <i>Topic: Flat Optics Using Dielectric Metasurfaces</i>
14:00-14:30	Wei Wu , University of Southern California <i>Topic: High-Contrast Metastructures for Full-color Reflective Display</i>
14:30-15:00	Group Photo Tea & Coffee Break
Session Tu4 Panel Discussion 1 Chair: Eli Yablonovitch	
15:00-15:30	Fred Kish , Infinera <i>Topic: Integrated Optoelectronic Circuits</i>
15:30-16:00	Cedric Lam , Google <i>Topic: Optical Fiber Infrastructure for 5G Wireless Networks</i>
16:00-16:30	Yasuhiro Matsui , Finisar Corporation <i>Topic: DML Design Toward 100 Ghz Bandwidth</i>
16:30-17:00	Dan Kuchta , IBM <i>Topic: Optics Co-packaging for Next Generation Servers and Switches</i>
17:00-18:00	Panel Discussion
18:00-18:30	Walk to The Faculty Club
18:30-20:30	Dinner (The Faculty Club)

Wednesday, July 25, 2018 (Excursion)

11:00-12:00	Lunch at Sutardja Dai Hall
12:00-14:00	Board bus to Castello di Amorosa
14:00-16:30	Castello di Amorosa: Tour and wine tasting
16:30-17:00	Bus ride to Hans Fahden
17:00-20:30	Hans Fahden: Reception and dinner
20:30-22:00	Board bus for Berkeley

Thursday, July 26, 2018 (Sutardja Dai Hall)

8:30-9:00	Breakfast/Registration
Session Th1 Chair: Jason Eichenholz	
9:00-9:45	Fumio Koyama , Tokyo Institute of Technology <i>Topic: VCSEL photonics for optical sensing</i>
9:45-10:30	Connie Chang-Hasnain , University of California, Berkeley <i>Topic: High Contrast Metastructures for Photonics Applications</i>
10:30-11:00	Tea & Coffee Break
Session Th2 Chair: Fumio Koyama	
11:00-11:45	Ming Wu , University of California, Berkeley <i>Topic: Large-Scale Integrated Photonic Switches</i>
11:45-12:30	Jason Eichenholz , Luminar <i>Topic: The Lasers that Power the Vehicles of Tomorrow</i>
12:30-13:30	Lunch (SDH Atrium)
Session Th3 Chair: Yidong Huang	
13:30-14:00	Xingde Li , Johns Hopkins University <i>Topic: OCT and Nonlinear Endomicroscopy for in vivo Histologic Imaging</i>
14:00-14:30	Hongyan Fu , Tsinghua-Berkeley Shenzhen Institute <i>Topic: Fiber Supercontinuum Source for 3D Sensing</i>
14:30-15:00	Tea & Coffee Break
Session Th4 Panel Discussion 2 Chair: Ming Wu	
15:00-15:30	Michael Eggleston , NOKIA Bell Labs <i>Topic: Integrated Optical Coherence Tomography</i>
15:30-16:00	Kevin Lascola , Thorlabs, Inc. <i>Topic: MEMS Tunable VCSELs for Swept Source OCT</i>
16:00-16:30	Babu Dayal Padullaparthi , Sanan Optoelectronics Co. LTD <i>Topic: High Volume Manufacturing of VCSELs for Datacom & Sensing</i>
16:30-17:00	Wilson Ko , OURS Technology Inc <i>Topic: Lidar, the New Eye of the Machine</i>
17:00-17:30	Linda Li , Rokid Inc. <i>Topic: Advances in AR optics</i>
17:30-18:00	Panel Discussion
18:00-18:30	Walk to The Faculty Club
18:30-20:30	Dinner (The Faculty Club)

Friday, July 27, 2018 (Sutardja Dai Hall)

8:30-9:00	Breakfast/Registration
Session Fr1 Chair: Siyuan Yu	
9:00-9:45	Eli Yablonovitch , University of California, Berkeley <i>Topic: The Reincarnation of Analog Computing</i>
9:45-10:30	Richard Penty , University of Cambridge <i>Topic: Energy Efficient High Port Count Photonic Switches</i>
10:30-11:00	Tea & Coffee Break
Session Fr2 Chair: Pei-Cheng Ku	
11:00-11:45	Yidong Huang , Tsinghua University <i>Topic: On-Chip Cherenkov Radiation Emitter</i>
11:45-12:30	Vlad Shalaev and Alexandra Boltasseva , Purdue University <i>Topic: Building Practical Nanophotonics with Plasmonic Metasurfaces and New Materials</i>
12:30-13:30	Lunch (SDH Atrium)
Session Fr3 Chair: Richard Penty	
13:30-14:00	Seth Bank , University of Texas, Austin <i>Topic: Low-Noise Staircase and Conventional Avalanche Photodetectors</i>
14:00-14:30	Piotr Perlin , Polish Academy of Sciences <i>Topic: Nitride Optoelectronics</i>
14:30-15:00	Pei-Cheng Ku , University of Michigan <i>Topic: Nanopillar LEDs Via Local Strain Engineering</i>
15:00-15:30	Tea & Coffee Break
Poster Session 2 Chair: Juergen Christen	
15:30-16:30	Poster Summary Talks
16:30-18:00	Poster Viewing
18:00-18:30	Transit to Hotel Shattuck
18:00-22:00	Award Banquet, Crystal Ballroom, Hotel Shattuck