

Novel Nanoscale Etching of Electronic, Photonic, and Quantum Materials

Harvard University, Geological Museum, Lecture Hall 100
8am – 5pm, Dec. 6, 2019

Invited Speakers



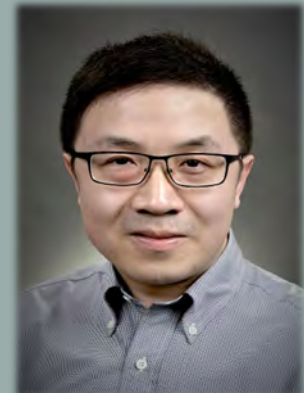
Prof. Federico Capasso
Harvard



Prof. Evelyn Hu
Harvard



Prof. Max Shulaker
MIT



Dr. Mian Zhang
CEO, Hyperlight, Co.

- 8:00am – 8:20am ***Continental Breakfast***
- 8:20am – 8:30am *Welcome*
Dr. William Wilson, Executive Director, Center for Nanoscale Systems, Harvard
- ** 8:30am – 9:15am *Next-Generations Electronics: Transforming Technologies from the "Lab" to the "Fab"*
Prof. Max Shulaker, MIT
- ** 9:15am – 10:00am *Integrated Ultrahigh Performance Electro-Optic Circuits
- Etching Enabled Photonics Breakthrough*
Dr. Mian Zhang, CEO, HyperLight Co.
- 10:00am – 10:30am ***Break/Exhibition***
- 10:30am – 10:55am *Making High Aspect Ratio Wires with Greater Precision*
Dr. Peter Starts, Harvard
- ** 10:55am – 11:40am *Flat Optics with Metasurfaces*
Prof. Federico Capasso, Harvard
- 11:40am – 12:05pm *Advanced Nanoscale Etching Solutions*
Peter Wood, Director, US Operations, Samco, Inc.
- 12:05pm – 1:00pm ***Lunch (provided)***
- ** 1:00pm – 1:45pm *What Will Quantum Bring?*
Prof. Evelyn Hu, Harvard
- 1:45pm – 2:10pm *Impact of Etching on Superconducting Q-bit Fabrication*
Dr. Bethany Huffman, MIT-Lincoln Labs
- 2:10pm – 2:35pm *Dry Etching for Diamond Applications*
Colin Welch, Oxford Instruments America, Inc.
- 2:35pm – 3:05pm ***Break/Exhibition***
- 3:05pm – 3:30pm *Interfacing Silicon Vacancy Centers with Optomechanical Crystals in Diamond*
Cleaven Cai, Harvard
- 3:30pm – 3:55pm *AlN Piezo - MEMS Process: Impact of Crystal Quality on Plasma Etching*
Dr. Ben Davaji, Cornell
- 3:55pm – 4:20pm *Plasma Processes for Wide Bandgap Materials for Power and RF Applications*
Dr. Steve Vargo, Senior Global Applications Manager, SPTS Tech., Inc., A KLA Company
- 4:20pm – 4:45pm *Ion Beam Etching*
Dr. David Lishan, Plasma-Therm LLC
- 4:45pm – 5:15pm ***Touring CNS Facilities***

Free public event, registration required:
<https://projects.iq.harvard.edu/nnci>
Contact: Ling Xie
lxie@cns.fas.harvard.edu

Organizing Committee:
Vince Genova, Cornell
Ling Xie, Harvard
Usha Raghuram, Stanford
Sarmita Majumder, U. of Texas