

Novel Optical and Photonic Materials:

Design and Fabrication

Wednesday, January 15, 2020

8:00am Introduction & Objectives Waguih Ishak, SPRC

Session I

8:15 *Topological pruning enables ultra-low Rayleigh scattering in pressure-quenched silica glass* John Mauro, Penn State

8:45 *Harnessing materials data and materials simulation capabilities to design better materials and devices* Evan Reed, Stanford

9:15 *Optimized photonic materials and devices* Jelena Vuckovic, Stanford

9:45 *Data-driven Materials Design using the Materials Project* Kristin Persson, UC Berkeley

10:15am Break

Session II

10:45 *Non-reciprocal thermal radiation from magnetized plasmonic metal and from Weyl semimetals* Shanhui Fan, Stanford

11:15 *Dispersion-engineered and broadband high-efficiency flat metalenses* Wei-Ting Chen, Harvard

11:45 *Heterogeneous photonic integration on silicon* John Bowers, UC Santa Barbara

12:15pm Lunch & Poster Session

Session III

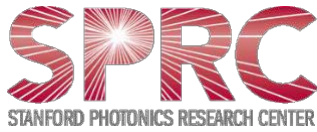
1:15 *Classical and Quantum Photonics with Nanofabricated Lithium Niobate Devices* Amir Safavi-Naeini, Stanford

1:45 *Sculpting Silicon – 3D Si Structures for Sensors and Photonics* Olav Solgaard, Stanford

2:15 *Near-infrared nanoparticles and metasurfaces for nonlinear nanophotonics* Jennifer Dionne, Stanford

2:45 *Developing ultra-high performance coatings through a materials-by-design approach* Riccardo Bassiri, Stanford

3:15pm Break



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Mackenzie Conference Room

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Session IV		
3:45	<i>Using Quantum Confinement to Create Novel Inorganic Light-Emitting Materials</i>	Charlie Hotz, Nanosys
4:15	<i>Designing photonic components in space</i>	Ioana Cozmuta, G-Space
4:45	<i>Heat Assisted Magnetic Recording (HAMR) – plasmonics and nano-magnetism for next generation hard disk drive technology</i>	Jan-Ulrich Thiele, Seagate
5:15	<i>A VC's view of the Investing Landscape in Materials and Photonics</i>	Frank Levinson, Phoenix VP

5:45pm Concluding Remarks & Reception

6:45pm Adjourn