

The Department of Physics and Astronomy
Presents Research Seminar Speaker

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Friday April 16, 2010
Time: 3:00-4:00 p.m.
Location: AET 0.212

Active Photonic nanomaterials: from disordered to periodic structures

Active photonic nanomaterials, which have high gain or large nonlinearity, are essential to the development of nanophotonic devices and circuits. In this talk, I will provide a review of our recent research activities related to the fabrication of active photonic nanomaterials and the development of photonic devices based on such materials. In particular, we focus on a wide bandgap semiconductor zinc oxide and fabricate a broad range of structures, from disordered to periodic, with various nanofabrication techniques. Lasing in the near-ultraviolet frequency has been realized in both periodic and random structures at room temperature under optical pumping.

