

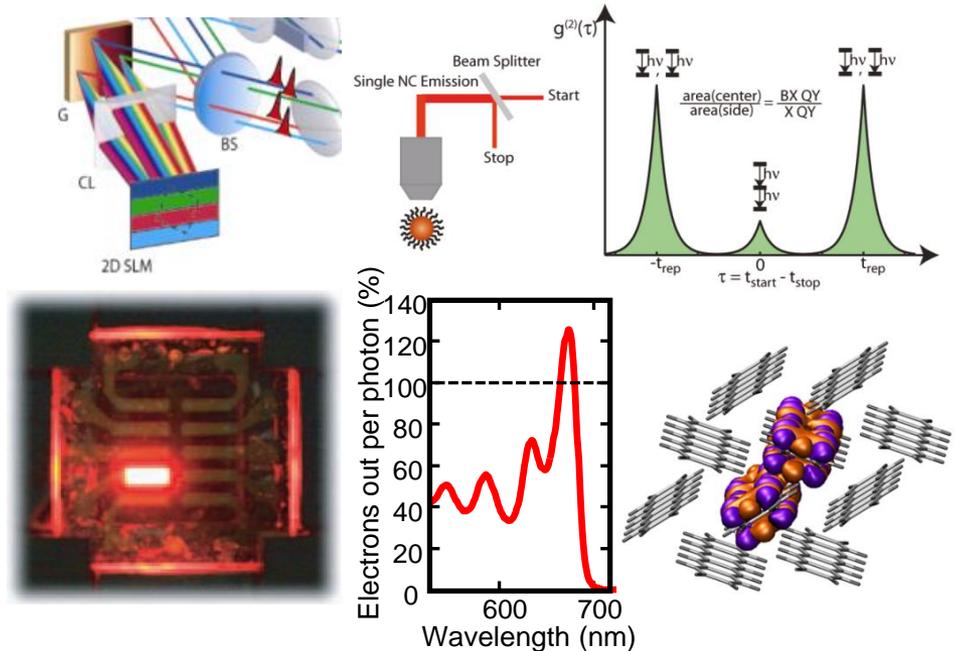
Center for Excitonics (CE)

Marc Baldo (MIT)

Electronics vs Excitonics

Excitons are nanoscale packets of energy that are characteristic of low-cost materials for solar cells and solid state lighting. The CE EFRC seeks to supersede traditional electronics with devices that use excitons to mediate the flow of energy.

<http://www.rle.mit.edu/excitonics/>



RESEARCH PLAN

The CE EFRC addresses the two grand challenges in excitonics:

- (1) Understand, control and exploit exciton transport
- (2) Understand and exploit energy conversion between excitons, electrons, and photons.

CE's advances will be applied to low-cost solar cells and solid state lighting.



U.S. DEPARTMENT OF
ENERGY

Office of
Science



BROOKHAVEN
NATIONAL LABORATORY

excitonics
center for