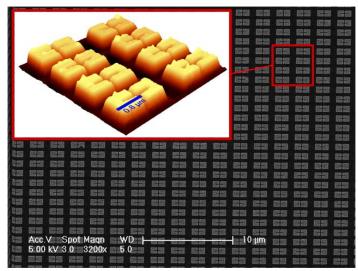
## Luke Sweatlock Northrop Grumman Aerospace Systems



(b) 1.0 Dicken Opt. Express 2009
0.9 0.8 VO<sub>2</sub> Insulator VO<sub>2</sub> Metal
0.0 1.5 2.0 2.5 3.0 3.5 4.0 4.5 5.0 5.5 6.0 6.5 7.0 7.5 8.0 Wavelength (μm)

- We develop nanostructured metaldielectric composite materials with unique electromagnetic properties.
- Enables devices which strongly actuate, sense, or control visible & infrared light.
- Ultimately, achieve reconfigurable, multifunctional systems for many optoelectronic applications: communications, power, sensors, etc.

