



PROFESSOR YAT LI

University of CA, Santa Cruz

“Metal Oxide Nanostructures for Energy Conversion and Storage”

Metal oxide nanostructures are emerging as a unique class of electrode materials for energy conversion and storage. In comparison to bulk materials, they have increased semiconductor /electrolyte interfacial area, shorter diffusion length for minority carriers, and equally good charge transport. Our goal is to develop chemically-modified semiconductor metal oxide electrodes, with enhanced photoelectrochemical and electrochemical properties. In this talk, I will review our recent efforts in using hydrogen thermal treatment as a general strategy to improve the performance of metal oxide electrodes, such as TiO_2 , for photoelectrochemical water oxidation and charge storage in a supercapacitor device.

Materials Chemistry Seminar

Thursday, Sept. 6 at 12:15 pm