Condensed Matter Physics Seminar
Department of Physics, National Taiwan University

Pushing the Limit of metal oxide photodetectors via surface/interface engineering

Date Monday, **Nov 4th , 2013**

Time **14:20-16:20**

Location **R833**
Dept. of Physics / Center for Condensed Matter
National Taiwan University

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All Are Welcome!

Abstract

Nanostructures have attracted extensive attention due to their importance in fundamental research and potential applications in nanoscale electronics and optoelectronics. With large surface-to-volume ratios, the electronic and the optoelectronic properties of metal oxide nanowires are strongly affected by the surface effect via chemisorption/photodesorption.

In this talk, we assess surface effect on photodetection of metal oxide nanostructures and try to extend the limit of photodetection by addressing the fundamental aspects related to surfaces/interfaces. Several methods on surface/interface engineering are utilized to push the limit of photosensitivity of metal oxide nanostructures.

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