

The 30th Nanotechnology Seminar

二次元材料のドーピングとバンドエンジニアリング

Doping and band structure engineering of 2D materials

聴講自由

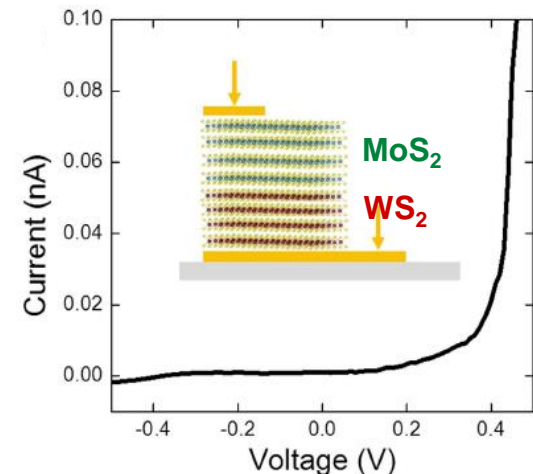
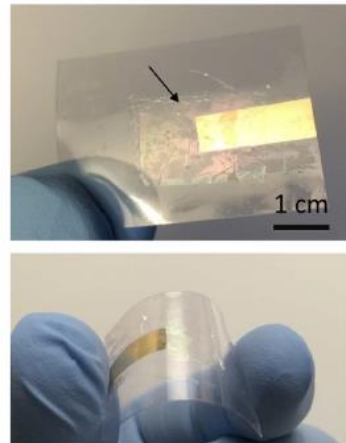
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(University of Central Florida, USA)

<http://physics.ucf.edu/~khondaker/>



1月12日(木) 15:00-16:00 グローバリノベーションセンター 3階研修室
Jan. 12 (Thu) 15:00-16:00 3rd Floor of Global Innovation Center

The ability to modify the electronic structure of a semiconducting material via doping or defect engineering is of significant importance for the development of many novel applications in emerging nano-electronics and optoelectronics. In this talk, I will discuss our recent efforts in tailoring the electrical and optical properties of monolayer and few layer MoS₂ flakes using two different approaches: (i) doping by oxygen via controlled exposure of the samples to oxygen plasma and (ii) interfacial charge transfer via deposition of metallic nanostructures.



Scientific Reports, **6**, 25456 (2016).