

中国科学院物理研究所纳米材料与器件暑期学校
International Workshop on Nanomaterials and
Nanodevices

(July 1st-2nd, 2014)

Scientific Program

July 1st, Tuesday, IOP Building M 234	
8: 30–8: 40	Opening Ceremony and Welcome Remarks Hongjun Gao (<i>Institute of Physics, CAS, China</i>)
8: 40–10: 35	Session 1 <i>Chair: Wolf-Dieter Schneider</i>
8: 40–9: 15	Andreas J. Heinrich (<i>Almaden Research Center, IBM</i>) “Maximum Magnetic Anisotropy and Long Spin Lifetimes of Single Co Atoms on MgO”
9: 15–9: 50	Yimei Zhu (<i>Brookhaven National Laboratory, USA</i>) “Tracking Lithium Electrochemical Reactions in Individual Nanoparticles”
9: 50–10: 25	Thomas Greber (<i>University of Zurich, Switzerland</i>) “Nanotent- and 2 nm Void-formation in sp ² Hybridized Single Layers on Metals”
10: 25–10: 35	Coffee Break

10: 35–12: 05	Session 2 <i>Chair: Geoff Thornton</i>
10: 35–11: 10	Hrvoje Petek (<i>University of Pittsburgh, USA</i>) “CO ₂ Capture by Metal Supported Metal-Organic Frameworks”
11: 10–11: 45	Jian Shen (<i>Fudan University, China</i>) “Tunable Magnetoresistance in Organic Thin Films”
11: 45–12: 05	Zhenchao Dong (<i>University of Science and Technology of China</i>) “Single-Molecule Raman Mapping Goes Sub-nanometer”
12: 05	Lunch

Session 3	
<i>Chair: Andreas J. Heinrich</i>	
13: 30–15: 25	
13: 30–14: 05	Chonglin Chen (<i>University of Texas at San Antonio, USA</i>) “From Surface Atomic Exchange Diffusion Layer-by-Layer Oxygen Vacancy Exchange Diffusion”
14: 05–14: 40	Xincheng Xie (<i>Peking University, China</i>) “Spin Superconductor and Electric Dipole Superconductor”
14: 40–15: 15	Guangyu Zhang (<i>Institute of Physics, CAS, China</i>) “Resistive Switching and EL Behavior in G/SiO ₂ /G Nanogap Structures”
15: 15–15: 25	Coffee Break

Session 4	
<i>Chair: Hrvoje Petek</i>	
15: 25–17: 10	
15: 25–16: 00	Wolf-Dieter Schneider (<i>Institute of Condensed Matter Physics, Switzerland</i>) “Electron Quantization Effects in Pristine and Isophorone-Modified”
16: 00–16: 35	Min Ouyang (<i>University of Maryland</i>) “NanoPhononics: Materials by Design and Ultrafast Fine-Tuning”
16: 35–17: 10	Jiandi Zhang (<i>Louisiana State University, USA</i>) “What is Behind the Metal-Nonmetal Transition in Thin Films of Oxides? ”

地点：怀柔国科大校区教学楼 107

July 2nd, Wednesday	
9: 30–11: 00	Session 5 <i>Chair: Yimei Zhu</i>
9: 30–10: 05	Shouheng Sun (<i>Brown University, USA</i>) “Rational Synthesis and Assembly of Nanocatalysts for Energy Applications”
10: 05–10: 40	Geoff Thornton (<i>University College London, UK</i>) “Support-Morphology Induced Modification of Adsorbate Bonding to Nanoparticles”
10: 40–11: 00	Photo and Coffee Break

11: 00–12: 10	Session 6 <i>Chair: Karl-Heinz Ernst</i>
11: 00–11: 35	Sheng Dai (<i>Oak Ridge National Laboratory, USA</i>) “Tailoring Mesoporous Carbons and Related Materials for Energy Applications”
11: 35–12: 10	Feng Wang (<i>University of California Berkeley, USA</i>) “Optical Properties of Two-Dimensional Crystals and Heterostructure”
12: 10	Lunch

Session 7	
<i>Chair: Shouheng Sun</i>	
14: 00–15: 55	
14: 00–14: 35	Christian A. Bobisch (<i>University of Duisburg-Essen, Germany</i>) “Step Wise Variation of the Electrochemical Potential at Step Edges of the Bi ₂ Se ₃ Surface”
14: 35–15: 10	Hongjun Gao (<i>Institute of Physics, CAS, China</i>) “ 2D Anatomic Crystals on Transition Metal Surfaces: Graphene, Silicene, and Hafnene ”
15: 10–15: 45	Karl-Heinz Ernst (<i>Empa, Switzerland</i>) “Chirality in Flatland: Molecular Recognition and Chiral Restructuring of Metals”
15: 45–15: 55	Coffee Break

Session 8	
<i>Chair: Thomas Greber</i>	
15: 55–18: 00	
15: 55–16: 30	Siu-Wai Chan (<i>Columbia University, USA</i>) “Nanoparticles of Ceria: their Microstructure and Impedance Response”
16: 30–17: 05	Dapeng Yu (<i>Peking University, China</i>) “Tailoring the Exciton and Carrier Dynamics by Elastic Strain Gradient in Semiconductors”
17: 05–17: 40	Jing Tao (<i>Brookhaven National Laboratory, USA</i>) “Unveiling the Origin of the Electronic Smectic-Nematic Phase Transition in Doped Manganite”
Closed Remark: Andreas J. Heinrich	