

International Workshop on

Recent Progress in the Functionality of the Artificial Oxide Structures

Beijing, June 10-11, 2015

Scientific Program

| Wednesday, June 10, Meeting Room M236, IOP, CAS | |
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| 09:00-09:10 | Welcome Speech |
| | Session 1 Chair: Kuijuan Jin |
| 09:10-09:50 | E. Ward Plummer (<i>Louisiana State University, USA</i>) “The Origin of Charge Density Waves in Quasi Two-Dimensional Materials” |
| 09:50-10:30 | Jak Tchakhalian (<i>University of Arkansas, USA</i>) “Interface and geometry engineered novel phases of nickelates” |
| 10:30-10:50 | Break and group photo |
| | Session 2 Chair: Jak Tchakhalian |
| 10:50-11:30 | Rob Moore (<i>stanford university, USA</i>) “Significant Tc enhancement in superconducting FeSe films due to interfacial mode coupling with oxide substrate” |
| 11:30-12:00 | Jian Shen (<i>Fudan University, China</i>) “Chemical Ordering Suppresses Large-scale Electronic Phase Separation in Doped Manganites” |
| 12:00 | Lunch Break |

| | Session 3 Chair: E. Ward Plummer |
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| 13:30-14:10 | Ke Zou (<i>Yale University, USA</i>) “ <u>LaTiO₃/KTaO₃ interfaces: A new two-dimensional electron gas system</u> ” |
| 14:10-14:50 | Jiandi Zhang (<i>Louisiana State University, USA</i>) “ Surface termination, interface mixing, and layer-by-layer doping variation of ultrathin manganite films” |
| 14:50-15:20 | Jiandong Guo (<i>Institute of Physics, CAS, China</i>) "Effect of the dopants ordering on the metallicity of La _{2/3} Sr _{1/3} MnO ₃ thin films" |
| 15:20-15:50 | Kuijuan Jin (<i>Institute of Physics, CAS, China</i>) “A new non-destructive readout by using photo-recovered surface potential contrast “ |
| 15:50-16:05 | Break |

| | Session 4 Chair: Rob Moore |
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| 16:05-16:45 | Ying-Hao Chu , (<i>National Chiao Tung University, Taiwan</i>) “Exploration of Emergent Transition Metal Oxide Monolayers “ |
| 16:45-17:25 | Jiyan Dai (<i>The Hong Kong Polytechnic University, China</i>) “Strain Effect and Magnetoresistance of the LaAlO ₃ and SrTiO ₃ Heterostructures” |
| 17:25-17:55 | Cheng Song (<i>Tsinghua University, China</i>) “Electrical control of phase transition and orbital occupancy in |

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| | manganites” |
| 17:55 | Dinner |

| Thursday, June 11, Meeting Room M236, IOP, CAS | |
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| Session 5 Chair: Zhong Fang | |
| 09:00-09:40 | Yimei Zhu (<i>Brookhaven National Laboratory, USA</i>) “Thickness dependent structural modification of the PrSrMnO/SrTiO interface” |
| 09:40-10:10 | Jinxing Zhang (<i>Beijing Normal University, China</i>) "Mechanical Switching of Nanoscale Multiferroic Phase Boundaries" |
| 10:10-10:25 | Break |

| Session 6 Chair: Jiandi Zhang | |
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| 10:25-11:05 | Zhong Fang (<i>Institute of Physics, CAS, China</i>) “ Topological Semimetals” |
| 11:05-11:35 | Donglai Feng (<i>Fudan University, China</i>) “Recent progress on the FeSe interfacial superconductivity” |
| 11:35-12:05 | Hao Yang (<i>Suzhou University, China</i>) “Oxygen Vacancies Effects in Eu _{0.5} Ba _{0.5} TiO _{3-d} Multiferroic |

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| | Thin Films” |
| 12:05 | Lunch Break |

| Thursday, June 11, Meeting Room M236 , IOP, CAS | |
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| Session 7 | |
| Chair: Jiandong Guo | |
| 13:30-14:10 | Zhiming Wang (<i>The Paul Scherrer Institute, Switzerland</i>) “Itinerant polaronic carriers in a SrTiO ₃ -based two-dimensional electron gas |
| 14:10-14:40 | Chun-Gang Duan (<i>East China Normal University, China</i>) “Recent Progress in highly ordered double-perovskite Bi ₂ FeMnO ₆ epitaxial thin film” |
| 14:40-15:10 | Xiuliang Ma (The Institute of Metal Research, Chinese Academy of Sciences, China) “A periodic array of flux-closure quadrants in ferroelectric PbTiO ₃ films” |
| 15:10-15:25 | Closing remark by Ward Plummer |
| 15:25-17:30 | Laboratory Tour |
| 17:30 | Dinner |