

## Concurrent session 6-2: Materials Physics and Engineering

Friday, July 27, 2018

<b>14:00 – 18:05</b>	<b>Concurrent session 6-2: Materials Physics and Engineering</b>
<b>Venue:</b>	<b>Anthony Lau Building (E4), E4-3055</b>
<b>Chairpersons:</b>	<b>1. Jensen Tsan Hang Li   2. Yinguo Xiao</b>
<b>14:00 – 14:30</b>	<b>Keynote presentation</b>
	<b>Structural and magnetic properties of cathode materials studied by neutron scattering</b> Yinguo Xiao, Peking University Shenzhen Graduate School. MC: Jensen Tsan Hang Li
<b>14:30 – 15:10</b>	<b>Invited presentations</b>
14:30 – 14:50	<b>Characterizing collective structure distortions in functional materials using atomic-scale scanning transmission electron microscopy</b> Ye Zhu, The Hong Kong Polytechnic University. MC: Jensen Tsan Hang Li
14:50 – 15:10	<b>Advanced nanotechnology for photovoltaic devices</b> Feng Yan, The Hong Kong Polytechnic University. MC: Jensen Tsan Hang Li
<b>15:10 – 15:55</b>	<b>Contributed presentations</b>
15:10 – 15:25	<b>Stability of wurtzite semi-polar surfaces: algorithms and practices</b> Jingzhao Zhang, The Chinese University of Hong Kong. MC: Jensen Tsan Hang Li
15:25 – 15:40	<b>Improved optoelectronic properties and thermal stability of non-stoichiometric p-type NiO<sub>1+δ</sub> by copper doping</b> Kingsley Egbo, City University of Hong Kong. MC: Jensen Tsan Hang Li
15:40 – 15:55	<b>Electrochemical catalytic reactions of topological-insulator thin films</b> Qing Qu, Hong Kong University of Science and Technology. MC: Jensen Tsan Hang Li
16:00 – 16:30	Tea/coffee break, poster, discussion
<b>16:30 – 17:50</b>	<b>Invited presentations</b>
16:30 – 16:50	<b>Non-Hermitian elastic metamaterials</b> Jensen Tsan Hang Li, Hong Kong University of Science and Technology. MC: Yinguo Xiao
16:50 – 17:10	<b>Nanocrystalline CoCrFeNiAl<sub>0.3</sub> high-entropy alloy thin film coating by magnetron sputtering</b> Weibing Liao, Shenzhen University. MC: Yinguo Xiao
17:10 – 17:30	<b>半导体和绝缘体的激光辅助场蒸发</b> Yu Xia, Sun Yat-sen University. MC: Yinguo Xiao
17:30 – 17:50	<b>Realistic Floquet semimetal with exotic topological linkages between arbitrarily many nodal loops</b> Linhu Li, National University of Singapore. MC: Yinguo Xiao
<b>17:50 – 18:05</b>	<b>Contributed presentations</b>
	<b>Lattice-matched metastable Zinc-blende MnSe<sub>1-x</sub>Te<sub>x</sub> on ZnTe as a promising THz emitter material</b> Man Kit Cheng, Hong Kong University of Science and Technology. MC: Yinguo Xiao
<b>After 18:10</b>	<b>Banquet Dinner (Hotel: Galaxy Macau, Bus pick-up point &amp; time: E4 G/F Lobby @ 18:10 pm)</b>

**Saturday, July 28, 2018**

<b>09:00 – 11:50</b>	<b>Concurrent session 6-2: Materials Physics and Engineering</b>
<b>Venue:</b>	<b>Anthony Lau Building (E4), E4-3055</b>
<b>Chairpersons:</b>	<b>1. Lingmin Yao 2. Francis Chi-Chung Ling</b>
<b>09:00 – 09:25</b>	<b>Keynote presentation</b>
	<b>Reversible tuning of ferromagnetism, near band edge emission and resistive switching in Cu-doped ZnO film grown</b> Francis Chi-Chung Ling, The University of Hong Kong. MC: Lingmin Yao
<b>09:25 – 10:25</b>	<b>Invited presentations</b>
09:25 – 09:40	<b>Thermal transport manipulated by nanoscale interfacial engineering</b> Huashan Li, Sun Yat-sen University. MC: Lingmin Yao
09:40 – 09:55	<b>Preparation and luminescent properties of <math>\text{Li}_{2.06}\text{Nb}_{0.18}\text{Ti}_{0.76}\text{O}_3</math>: <math>\text{Eu}^{3+}</math> phosphors</b> Qun Zeng, South China Normal University. MC: Lingmin Yao
09:55 – 10:10	<b>Fiber-based energy harvesting and storage devices for smart garments</b> Wenjie Mai, Jinan University. MC: Lingmin Yao
10:10 – 10:25	<b>Novel Design of Highly Oriented Titanate-based Nanorod Array and Its Application in Nanocomposite Capacitors</b> Lingmin Yao, Guangzhou University. MC: Lingmin Yao
<b>10:25 – 10:35</b>	<b>Contributed presentations</b>
	<b>Constructing a multichannel low-cost laser scanning microscope for luminescence and transmission/reflection imaging</b> Albert Wai Kit Lau, Hong Kong University of Science and Technology. MC: Lingmin Yao
10:35 – 11:00	Tea/coffee break, poster, discussion
<b>11:00 – 11:20</b>	<b>Keynote presentation</b>
	<b>Neutron Spin excitations in superconducting <math>\text{Ba}(\text{Fe}_{0.926}\text{Co}_{0.074})_2\text{As}_2</math></b> Haifeng Li, University of Macau. MC: Francis Chi-Chung Ling
<b>11:20 – 11:50</b>	<b>Invited presentations</b>
11:20 – 11:35	<b>Fabrication of transparent <math>\text{Tb}_3\text{Al}_5\text{O}_{12}</math> ceramics by hot isostatic pressing sintering</b> Yinzhen Wang, South China Normal University. MC: Francis Chi-Chung Ling
11:35 – 11:50	<b>Approaching the capacity limit of lithium cobalt oxide in lithium ion batteries via lanthanum and aluminum doping</b> Qi Liu, City University of Hong Kong. MC: Francis Chi-Chung Ling
<b>11:55 – 14:00</b>	<b>Buffet Lunch (venue: UM Chao Kuang Piu College, W21-G019)</b>