Concurrent session 6-2: Materials Physics and Engineering

Friday, July 27, 2018

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

Saturday, July 28, 2018

09:00 – 11:50	Concurrent session 6-2: Materials Physics and Engineering
Venue:	Anthony Lau Building (E4), E4-3055
Chairpersons:	1. Lingmin Yao 2. Francis Chi-Chung Ling
09:00 – 09:25	Keynote presentation
	Reversible tuning of ferromagnetism, near band edge emission and resistive switching in Cu-doped ZnO film grown Francis Chi-Chung Ling, The University of Hong Kong. MC: Lingmin Yao
09:25 – 10:25	Invited presentations
09:25 – 09:40	**Thermal transport manipulated by nanoscale interfacial engineering** Huashan Li, Sun Yat-sen University. MC: Lingmin Yao
09:40 – 09:55	**Preparation and luminescent properties of $Li_{2.06}Nb_{0.18}Ti_{0.76}O_3$: Eu^{3+} phosphors** Qun Zeng, South China Normal University. MC: Lingmin Yao
09:55 – 10:10	**Fiber-based energy harvesting and storage devices for smart garments** Wenjie Mai, Jinan University. MC: Lingmin Yao
10:10 – 10:25	**Novel Design of Highly Oriented Titanate-based Nanorod Array and Its Application in Nanocomposite Capacitors** Lingmin Yao, Guangzhou University. MC: Lingmin Yao
10:25 – 10:35	Contributed presentations
	Constructing a multichannel low-cost laser scanning microscope for luminescence and transmission/reflection imaging Albert Wai Kit Lau, Hong Kong University of Science and Technology. MC: Lingmin Yao
10:35 – 11:00	Tea/coffee break, poster, discussion
11:00 – 11:20	Keynote presentation
	Neutron Spin excitations in superconducting $Ba(Fe_{0.926}Co_{0.074})_2As_2$ Haifeng Li, University of Macau. MC: Francis Chi-Chung Ling
11:20 – 11:50	Invited presentations
11:20 – 11:35	**Fabrication of transparent $Tb_3Al_5O_{12}$ ceramics by hot isostatic pressing sintering** Yinzhen Wang, South China Normal University. MC: Francis Chi-Chung Ling
11:35 – 11:50	**Approaching the capacity limit of lithium cobalt oxide in lithium ion batteries via lanthanum and aluminum doping** Qi Liu, City University of Hong Kong. MC: Francis Chi-Chung Ling
11:55 – 14:00	Buffet Lunch (venue: UM Chao Kuang Piu College, W21-G019)