



澳門大學
UNIVERSIDADE DE MACAU
UNIVERSITY OF MACAU



International Workshop on Functional Materials 2015

國際功能材料研討會 2015

《《27-28 November, 2015》》



Organizer 主辦單位

Faculty of Science and Technology, University of Macau
澳門大學科技學院

Institute of Applied Physics and Materials Engineering
應用物理及材料工程研究所

Co-organizer 協辦單位

Chiao Tung University (Taiwan)
交通大學 (台灣)

International Workshop on Functional Materials 2015 國際功能材料研討會 2015 26-29/11/2015

Programs

Thursday, 26 November 2015 Venue: **S9, Siu Pang College (SPC)**

7:00 p m – 10:00 p m	Welcome Gathering	Free Attendance
----------------------	--------------------------	-----------------

Friday, 27 November 2015 Venue: **E4-G051, Anthony Lau Building-Tai Fung Lecture Hall, Ground Floor**

9:30 a m – 9:50 a m	Opening Remarks (Vice Rector for Research Rui Martins) Presentation of Souvenirs Group Photo	Moderator: Dean or Associate Dean of FST
9:50 a m – 10:25 a m	Keynote Speech 1 Prof. Tseung-Yuen Tseng (National Chiao Tung University) “Resistive Switching in Oxide-Based OxRRAM and CBRAM Memory Devices”	Chair Prof. Haydn, H.D. Chen
10:25 a m – 11:00 a m	Keynote Speech 2 Prof. Wenwu Cao (Pennsylvania State University) “Growth and Characterization of (K,Na)NbO ₃ -based Lead Free Single Crystals”	Same as above
11:00 a m – 11:20 a m	<i>Coffee Break</i>	
	Oral Presentation: Session 1	Co-Chairs Prof. Pu-Wei Wu Prof. MC Yip
11:20 a m – 11:40 a m	Prof. Li Chang (National Chiao Tung University) “Heteroepitaxial Growth of Nonpolar and Semipolar ZnO on (112) LaAlO ₃ ”	
11:40 a m – 12:00 p m	Prof. Jia-Hong Huang (National Tsing Hua University) “Evaluation of Fracture Toughness of Zr(N,O) Hard Coatings: Effects of Oxygen”	
12:00 p m – 12:20 p m	Prof. Yuan-Chieh Tseng (National Chiao Tung University)	

	"Phase-Engineered Magneto-Electrical Characteristics of Single-Layer MoS ₂ Field Effect Transistors"	
11:20 a.m - 12:40 p.m	Dr. Hui Pan (University of Macau) "Waved Graphenes: Unusual Physical and Chemical Properties"	
1:00 p.m - 2:30 p.m	<i>Lunch</i>	
	Oral Presentation: Session 2	Co-Chairs Prof. Li Chang Prof. Chi Tat Kwok
2:30 p.m - 2:50 p.m	Prof. Pu-Wei Wu (National Chiao Tung University) "Fabrication of Colloidal Crystals and Inverse Opals"	
2:50 p.m - 3:10 p.m	Prof. Chen-Chia Chou (Taiwan University of Science & Technology) "Deposition of ZrO ₂ /Al ₂ O ₃ Oxide Films on 6061 Aluminum Alloy Using Plasma Electrolytic Oxidation Method"	
3:10 p.m - 3:30 p.m	Prof. Hong-Cheu Lin (National Chiao Tung University) "Applications of Liquid Crystal and Sensor Materials via Different Responsive Interactions"	
3:30 p.m - 3:50 p.m	Dr. Kwun Nam Hui (University of Macau) "Engineering Layered Double Hydroxides Materials for High Performance Supercapacitors"	
4:00 p.m - 5:00 p.m	<i>Coffee Break + poster session</i>	<i>Venue: E4 Lobby</i>
	Oral presentation: Session 3	Chair Prof. Yung-Jung Hsu
5:00 p.m - 5:20 p.m	Prof. Nien-Ti Tsou (National Chiao Tung University) "Multi-Scale Microstructural Analysis of Smart Materials"	
5:20 p.m - 5:40 p.m	Prof. Chit Tat Kwok (University of Macau) "Laser Surface Modification of Engineering Alloys for Combating Cavitation Erosion-corrosion"	
5:40 p.m - 6:00 p.m	Prof. Hsin-Chieh Lin (National Chiao Tung University) "Functional Self-Assembled Hydrogels with Tunable Nanostructures"	
6:30 p.m - 8:30 p.m	<i>Banquet</i>	<i>Fortune Inn, UM</i>

Saturday, 28 November 2015 Venue: **E4-G051, Anthony Lau Building-Tai Fung Lecture Hall, Ground Floor**

9:30 a.m - 10:05 a.m	Keynote Speech 3 Prof. Xiang Ming Chen (Zhejiang University) "Enhanced Ferroelectricity and Ferromagnetism in (Ba,Ca)TiO ₃ - and (Sr,Ca)TiO ₃ – Modified BiFeO ₃ Multiferroic Ceramics"	Chair Prof. Sammy Chan
10:05 a.m - 10:40 a.m	Keynote Speech 4 Prof. Edward Yi Chang (National Chiao Tung University) "III-V/ Ge /Si Materials Integration for Post Si CMOS Application"	Same as above
10:40 a.m - 11:00 a.m	<i>Coffee Break</i>	
	Oral Presentation: Session 4	Co-Chairs Prof. San-Yuan Chen Prof. Zikang Tang

11:00 a m - 11:20 a m	Prof. Jihperng (Jim) Leu (National Chiao Tung University) "Thermoelectric Properties of Bismuth Chalcogenide Thin Films with Controlled Structure and Morphology"	
11:20 a m - 11:40 a m	Prof. Sheng-Guo Lu (Guangdong University of Technology) "Multifunctional Properties of PVDF Based Ferroelectric Polymers and Composites"	
11:40 a m - 12:00 p m	Prof. Yung-Jung Hsu (National Chiao Tung University) "Semiconductor Nanoheterostructures for Photoconversion Applications"	
12:00 p m - 12:20 p m	Dr. S.I. Raevskaya (Southern Federal University) "Studies of Ferroelectric and Magnetic Phase Transitions in Pb(Fe _{0.5} Nb _{0.5}) _{1-x} BxO ₃ (B-Zr,Sn,Ce) Multiferroic Ceramics"	
12:20 p m - 12:40 p m	Prof. Tao Tao (Guangdong University of Technology) "LiFeTiO ₄ -C Nanocomposite as a Novel Cathode Materials for Lithium-Ion Batteries"	
1:00 p m - 2:30 p m	<i>Lunch</i>	
2:30 p m - 3:05 p m	Keynote Speech 5 Prof. Sammy Chan (University of New South Wales) "Manipulation of Nanometric and /thin Film Materials into Sizable Components for Engineering and Energy Applications"	Chair Prof. Hong-Cheu Lin
3:05 p m - 3:40 p m	Keynote Speech 6 Prof. Zikang Tang (University of Macau) "Visible Laser Light as a Rule to Measure the Diameter of an Iodine Atom"	Same as above
3:40 p m - 4:00 p m	<i>Coffee Break</i>	
	Oral Presentation: Session 5	Co-Chairs Prof. Jihperng (Jim) Leu Dr. Hui Pan
4:00 p m - 4:20 p m	Prof. Igor Raveski (Southern Federal University) "Studies of a New Perovskite Multiferroic PbFe _{0.5} Sb _{0.5} O ₃ "	
4:20 p m - 4:40 p m	Prof. Jiwei Zhai (Functional Materials Research Laboratory, Tongji University) "The Percolative Properties of the Ferroelectric-Dielectric Composite Ceramics"	
4:40 p m - 5:00 p m	Prof. Ying-Hao Chu (National Chiao Tung University) "Functional Oxide Thin Films for Transparent and Flexible Electronics"	
5:00 p m - 5:20 p m	Prof. Kin Ho Lo (University of Macau) "Influences of Sigma-Phase Formation and 475C-Embrittlement on pitting Behaviour of a Duplex Stainless Steel - Viability of Utilising Both Phenomena for Enhancement of Cavitation-Erosion Resistance"	
5:20 p m - 5:40 p m	Prof. San-Yuan Chen (National Chiao Tung University) "Functional NanoCeramics in Biomedical Application for Tumor Treatment"	
5:50 a m - 6:20 a m	Final Summary Discussion Closing Remarks	Prof. Haydn, H.D. Chen

Sunday, 29 November 2015 **Venue: Campus tour of University of Macau**

10:00 a m - 12:00 p m	Campus tour (Optional) Gathering Point: PGH S1 Hostel	Ms. Freda Lei
-----------------------	--	---------------