



International Workshop on Functional Materials 2014

國際功能材料研討會2014

5-7/12/2014

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

Thursday, 4 December 2014 Venue: **Pacific Coffee, Ground Floor of E2 (North Wing)**

8:00 p m – 10:00 p m	Welcome Gathering	Free Attendance
----------------------	-------------------	-----------------

Friday, 5 December 2014 Venue: **E4-G051**

9:00 a m – 9:20 a m	Opening Remarks (Associate Dean of FST) Presentation of Souvenirs Group Photo	Moderator Prof. Haydn H. D. CHEN
9:20 a m – 10:00 a m	Keynote Speech	Prof. Shangjr GWO
	Session 1	Chair Prof. Chi-Tai Kwok
10:00 a m – 10:30 a m	Synchrotron x-ray scattering study of nano ferroelectric superlattice structure	Dr. Hsin-Yi LEE
10:30 a m – 11:00 a m	<i>Coffee Break</i>	
11:00 a m – 11:30 a m	Effect of Composition on the Fracture Toughness of Ti1-xZrxN Hard Coatings	Prof. Jia-Hong HUANG
11:30 p m – 12:00 p m	Energy Storage for Remote Area Power Supply Systems	Prof. Sammy Lap Ip CHAN
12:00 p m – 12:30 p m	Electrical Field Dependence of Electrocaloric Effect in Relaxor Ferroelectrics	Prof. Sheng-Guo LU
12:30 p m – 2:30 p m	<i>Lunch</i>	
	Session 2	Chair Prof. Jia-Hong HUANG
2:30 p m – 3:00 p m	Reduction-resistance enhancement of CaMgSi ₂ O ₆ glass-ceramics as microwave dielectrics	Prof. Chen-Chia CHOU
3:00 p m – 3:30 p m	The study of the strain and orientation on the dielectric properties of BaTiO ₃ -based thin films	Prof. Jiwei ZHAI
3:30 p m – 4:00 p m	Hot-stage transmission electron microscopy study of (Na, K)NbO ₃ based lead-free piezoceramics	Dr. Shengbo LU
4:00 p m – 4:30 p m	<i>Coffee Break</i>	
4:30 p m – 5:00 p m	Structural and electrical properties of titanium oxynitride film on MgO (001) substrate	Prof. Li CHANG
5:00 p m – 5:30 p m	Observations of New Precipitation Phenomena in Duplex Stainless Steels	Prof. Kin Ho LO
5:30 p m – 6:00 p m	Overall Discussion	Prof. Chi Tai KWOK Prof. Jia-Hong HUANG

Saturday, 6 December 2014 Venue: E4-G051

11:00 a m – 12:00 p m	Campus Tour and Networking	
12:00 p m – 2:00 p m	<i>Lunch</i>	
	Session 3	Chair Prof. Igor RAEVSKII
2:00 p m – 2:30 p m	The effect of the bias field on the dielectric and pyroelectric response of Pb(Fe _{0.5} Ta _{0.5})O ₃ relaxor multiferroic ceramics	Dr. Victor TITOV
2:30 p m – 3:00 p m	Electronic, Magnetic, and Catalytic properties of 2D Metal Dichalcogenides	Dr. Hui PAN
3:00 p m – 3:30 p m	Laser surface alloying of copper with tungsten for corrosion and wear resistance	Prof. Chi Tai KWOK
3:30 p m – 4:00 p m	<i>Coffee Break</i>	
4:00 p m – 4:30 p m	Scanning thermoelectric microscopy of local thermal conductivity and Seebeck coefficient of thermoelectric materials	Prof. Huarong ZENG
4:30 p m – 5:00 p m	Oxide Magnetic Nanostructures Investigated by X-ray Absorption Spectroscopy	Prof. Yuan-Chieh TSENG
6:30 p m – 8:00 p m	<i>Banquet</i>	<i>Fortune Inn, UM</i>

Sunday, 7 December 2014 Venue: E4-G051

	Session 4	Chair Prof. Sammy Lap Ip CHAN
9:00 a m – 9:30 a m	Studies of ferroelectric and magnetic phase transitions in multiferroic PbFe _{0.5} Nb _{0.5} O ₃ –PbZrO ₃ solid solutions	Prof. Igor RAEVSKII
9:30 a m – 10:00 a m	Enhanced electrical conductivity of ZnSnO amorphous nanocomposite	Dr. Ling LEE
10:00 a m – 10:30 a m	X-ray Residual Stress Measurement on TiN thin Films using Average X-ray Strain (AXS) Method	Ms An-ni WANG
10:30 a m – 11:00 a m	<i>Coffee Break</i>	
11:00 a m – 11:45 a m	Final discussion	Sessions Chairs
11:45 a m – 12:00 p m	<i>Closing Remarks</i>	Prof. Haydn H. D. CHEN

Appendix – Speakers with Affiliation

Seq	Name	Affiliation
1	Prof. Haydn H. D. CHEN	Institute of Applied Physics and Materials Engineering, Faculty of Science and Technology, University of Macau, Macau SAR
2	Prof. Shangjr GWO	Department of Physics, National Tsing Hua University, Taiwan National Synchrotron Radiation Research Center, Taiwan
3	Dr. Hsin-Yi LEE	National Synchrotron Radiation Research Center, Taiwan
4	Prof. Jia-Hong HUANG	Department of Engineering and System Science, National Tsing Hua University, Taiwan
5	Prof. Sammy Lap Ip CHAN	School of Materials Science & Engineering, University of New South Wales, Australia
6	Prof. Sheng-Guo LU	School of Materials and Energy, Guangdong University of Technology, China
7	Prof. Chen-Chia CHOU	Department of Mechanical Engineering, National Taiwan University of Science and Technology, Taiwan
8	Prof. Jiwei ZHAI	Functional Materials Research Laboratory, Tongji University, China
9	Dr. Shengbo LU	Jawbone Ltd, China
10	Prof. Li CHANG	Department of Materials Science and Engineering , National Chiao Tung University, Taiwan
11	Prof. Kin Ho LO	Department of Electromechanical Engineering, Faculty of Science and Technology, University of Macau, Macau SAR Institute of Applied Physics and Materials Engineering, Faculty of Science and Technology, University of Macau, Macau SAR
12	Dr. Victor TITOV	Research Institute of Physics and Physics Department, Southern Federal University, Russia
13	Dr. Hui PAN	Institute of Applied Physics and Materials Engineering, Faculty of Science and Technology, University of Macau, Macau SAR
14	Prof. Chi Tat KWOK	Department of Electromechanical Engineering, Faculty of Science and Technology, University of Macau, Macau SAR Institute of Applied Physics and Materials Engineering, Faculty of Science and Technology, University of Macau, Macau SAR
15	Prof. Huarong ZENG	Key Laboratory of Inorganic Functional Materials and Devices, Shanghai Institute of Ceramics, Chinese Academy of Sciences, China
16	Prof. Yuan-Chieh TSENG	Department of Materials Science and Engineering , National Chiao Tung University, Taiwan
17	Prof. Igor RAEVSKII	Research Institute of Physics, Southern Federal University, Russia
18	Dr. Ling LEE	Center of Nanoscience and Technology, Tunghai University, Taiwan Department of Chemical and Materials Engineering, Tunghai University, Taiwan
19	Ms. An-Ni WANG	Department of Engineering and System Science, National Tsing Hua University, Taiwan