

Nov. 20, 2011, Sunday

- 09:00 - 17:00 Short Course
- 16:00 - 20:30 Registration
- 18:30 - 20:30 Reception – *Banquet Hall*

Nov. 21, 2011, Monday

- 07:30 - 16:30 Registration
- 08:15 - 10:00 Opening Remark / Keynote Speech
- 10:45 - 17:45 Conference Session

Mon AM (Nov. 21)	Opening Remark / Keynote Speech (Conference Room: Banquet Hall)		
08:15-08:30	President Jow-Lay Huang		Opening Remark
08:30-09:15	Prof. Allan Matthews (<i>Keynote</i>) (Chair: Joe Greene)	Sheffield University UK	Optimising Tribo-contact Performance Using Plasma-based Surface Engineering Processes
09:15-10:00	Prof. David Ginley (<i>Keynote</i>) (Chair: Li-Chyong Chen)	National Renewable Energy Laboratory, USA	Thin Film PV Challenges for Terawatt Production - Emerging Technologies
10:00-10:45	Group Photos / Session Break		
Mon AM (Nov. 21)	Symposium C: Optical, optoelectronic and dielectric coatings		
	<i>Session Chair: Zhe Chuan Feng</i>		Conference Room: Banquet Hall I
10:45-11:15	Prof. Chuan-Pu Liu (<i>Invited</i>)	National Cheng Kung University Taiwan	Optoelectronic and Magnetic Properties of ZnO Thin Films Doped by Cu
11:15-11:30	Heng-Yu Chou	National Cheng Kung University Taiwan	High Throughput Screening of Ta-Si-N Metal Gate for the Advanced Gate Stack
11:30-11:45	Li-Chih Liu	National Cheng Kung University Taiwan	The Influence of Zn/Sn Molar Ratio on Electrical Performance for Solution-Processed Zinc-Tin Oxide Thin-Film Transistors
11:45-12:00	Yun-Shiuan Li	National Taiwan University Taiwan	Permeation Properties of Single-Layer SiO _x N _y C _z Thin Films
12:00-12:15	C. H. Chang	National Taiwan University of Science and Technology, Taiwan	Characterization of Hydrogenated Silicon Germanium Thin Films Prepared by RF Magnetron Sputtering
12:30-13:30	Lunch Break		
Mon PM (Nov. 21)	Symposium C: Optical, optoelectronic and dielectric coatings		
	<i>Session Chair: Chuan-Pu Liu</i>		Conference Room: Banquet Hall I
13:30-14:00	Prof. Zhe Chuan Feng (<i>Invited</i>)	National Taiwan University Taiwan	Dual Wavelength InGaN/GaN Multiple Quantum Well Light Emitting Diodes: Metalorganic Chemical Vapor Deposition and Optical/Structural Properties
14:00-14:15	Jian-Zhang Chen	National Taiwan University Taiwan	Positive and Negative Gate-Bias Stability of the Mg _{0.05} Zn _{0.95} O Thin Film Transistor at Various Temperatures
14:15-14:30	Tsung-Ming Tsai	National Sun Yat-Sen University Taiwan	Bipolar Resistive Switching in Ni-doped SiO ₂ for RRAM applications
14:30-14:45	Sun Gyu Choi	Yonsei University Korea	Resistive Switching Properties of Trivalent Cation Substituted Perovskite Manganite Films
14:45-15:00	Hong-Sub Lee	Yonsei University Korea	Resistive Switching Property of Pr _{0.7} Ca _{0.3} MnO ₃ with Buffer Layer Structure
15:00-15:15	Yu-Ting Tsai	National Chiao Tung University Taiwan	Effect of Top Electrode Material on Resistive Switching Characteristics in MnO ₂ Nonvolatile Memory Devices
15:15-15:30	Hock Jin Quah	Universiti Sains Malaysia Malaysia	Effects of Film Thickness and Post-Deposition Annealing Temperature on the Physical and Electrical Properties of Y ₂ O ₃ Thin Films
15:30-16:00	Session Break		
Mon PM (Nov. 21)	Symposium C: Optical, optoelectronic and dielectric coatings		
	<i>Session Chair: Tsung-Ming Tsai</i>		Conference Room: Banquet Hall I
16:00-16:30	Prof. Chaojing Lu (<i>Invited</i>)	Qingdao University China	Oriented Growth and Electrical Anisotropy of Sol-Gel Derived Ferroelectric Thin Films of Bi-Layered Perovskite Grown on Pt/Ti/SiO ₂ /Si
16:30-16:45	Ivoyl P. Koutsaroff	Murata Manufacturing Co., Ltd. Japan	Structural and Dielectric Properties of Alkaline Earth Titanium Oxynitride Perovskite Thin Films Prepared by RF Magnetron Reactive Sputtering
16:45-17:00	Kou-Chen Liu	Chang Gung University Taiwan	Optimal Indium-Zinc Oxide Transparent Cathode By DC and RF Sputtering Condition for Full transparent Organic Light-Emitting Diode

17:00-17:15	Bo-Jiun Liang	National Cheng Kung University Taiwan	Exploration of Rare Earth Doped HfO ₂ for High-k Dielectric Material Using Combinatorial Methodology
17:15-17:30	Jian-Shuang Liu	Fudan University China	Characterization of Atomic Layer Deposited HfO ₂ -Al ₂ O ₃ Stacks Using NH ₃ Annealing Treatment
17:30-17:45	Jing-Fung Lin	Far East University Taiwan	Measurement of Electro-Optic Effect in Sol-Gel-Derived PLZT Thin Films

Nov. 22, 2011, Tuesday

- 07:30-16:30 Registration
- 08:15-10:30 Keynote Speech
- 11:00-12:15 Conference Session
- 12:15-14:15 Poster Session

Tue AM (Nov. 22)	Keynote Speech (Conference Room: Banquet Hall)		
08:15-09:00	Prof. Hans Hofsässs (Keynote) (Chair: Jyh-Ming Ting)	University of Goettingen Germany	Synthesis of Nanostructured Films by Self-organization
09:00-09:45	Prof. Stan Veprek (Keynote) (Chair: Fu-Hsing Lu)	Technical University Munich Germany	Design Concept for Hard and Superhard Nano-Structured Coatings, the Critical Parameters for their Preparation and Industrial Applications
09:45-10:30	Prof. Sam Zhang (Keynote) (Chair: Aleksey Yerokhin)	Nanyang Technological University Singapore	Toughness evaluation of hard coatings and thin films
10:30-11:00	Session Break		
Tue AM (Nov. 22)	Symposium C: Optical, optoelectronic and dielectric coatings		
	<i>Session Chair: Kou-Chen Liu</i>		Conference Room: Banquet Hall I
11:00-11:30	Prof. Ray-Hua Horng (Invited)	National Chung Hsing University Taiwan	ZnO-Based Film Prepared by Pulsed Laser Deposition and its Applications
11:30-11:45	T. Y. Tou	Multimedia University Malaysia	Pulsed Laser Deposition of ITO Nanorods in Argon and OLED Application
11:45-12:00	Yung-Sen Lin	Feng Chia University Taiwan	Atmospheric Pressure Plasma Jet-Synthesized Electrochromic Organomolybdenum Oxide Thin Films for Flexible Electrochromic Devices
12:00-12:15	Chin-Chi Cheng	Hsiuping University of Science and Technology Taiwan	Effect of Metal Substrate on Characteristics and Orientation of Piezoelectric (PZT) Film
12:15-14:15	Lunch Break Poster Session (Symposium A - Symposium F)		
14:30-18:30	Half Day Tour		
19:00-22:00	Banquet (Banquet Hall)		

Nov. 23, 2011, Wednesday

- 07:30-12:00 Registration
- 08:15-10:30 Keynote Speech
- 11:00-15:00 Conference Session

Wed AM (Nov. 23)	Keynote Speech (Conference Room: Banquet Hall)		
08:15-09:00	Dr. Kuei-Hsien Chen (Keynote) (Chair: Jow-Lay Huang)	National Taiwan University Taiwan	Nanomaterials for Hydrogen Energy Conversion
09:00-09:45	Prof. Yury Gogotsi (Keynote) (Chair: Masahiro Yoshimura)	Drexel University USA	Carbide-Derived Carbon Films for Capacitive Energy Storage
09:45-10:30	Prof. J.G. Duh (Keynote) (Chair: Ming-Show Wong)	National Tsing Hua University Taiwan	Quest for Multi-functional Coatings
10:30-11:00	Session Break		
Wed AM (Nov. 23)	Symposium C: Optical, optoelectronic and dielectric coatings		
	<i>Session Chair: Kao-Shuo Chang</i>		Conference Room: Banquet Hall I
11:00-11:30	Prof. Chia-Liang Cheng (Invited)	National Dong Hwa University Taiwan	Nanodiamond: A promising nanomaterial for bio and medical applications
11:30-11:45	Chan Su Han	Yonsei University Korea	Characteristics of Amorphous CaCu ₃ Ti ₄ O ₁₂ Thin Films Deposited by RF Magnetron Sputtering

Symposium C: Optical, optoelectronic and dielectric coatings

11:45-12:00	Chien-Fei Huang	National Chung Hsing University Taiwan	Characterization of InGaN-Based Photovoltaic Devices by Varying the Indium Contents
12:30-13:30	Lunch Break		
Wed PM (Nov. 23)	Symposium C: Optical, optoelectronic and dielectric coatings		
	<i>Session Chair: Hao-Chih Liu / Kao-Shuo Chang</i>		Conference Room: Banquet Hall I
13:30-14:00	Prof. Kao-Shuo Chang (Invited)	National Cheng Kung University Taiwan	Combinatorial Methodology for Exploring Advanced Gate Stack
14:00-14:15	M. Baseer Haider	King Fahd University of Petroleum & Minerals, Saudi Arabia	Dependence of Optical Properties on Annealing of GaN Grown by Pulsed Laser Deposition
14:15-14:30	Lianshan Wang	Huazhong University of Science and Technology, China	Optical Properties of InGaN Multiple Quantum Well Structures Grown on (1122) Facet GaN/Sapphire Templates
14:30-14:45	Ching-Hsiang Chan	National Taiwan University of Science and Technology, Taiwan	Optical Characterization of the Inter-Subband and Band-Structural Properties of InAlAs/InGaAs Metamorphic High-Electronic Mobility Transistor Structures with Tensile and Compressive Strain
15:00	Conference Adjourn		