

Oral Program

Monday, 27th July 2015

16:00-19:00 | Registration | Room: Mandarin Hall

18:00-19:30 | Welcome Drinks Reception | Room: Mandarin Hall

Tuesday, 28th July 2015

07:30-18:00 | Registration | Room: Mandarin Hall

Room | Mandarin Hall

08:30-08:45 | Welcome Address

08:45-09:30 | **[PLN01] The 14-billion year history of the universe leading to modern applied surface science**

J Greene^{1,2,3}

¹University of Illinois, USA, ²Linköping University, Sweden, ³National Taiwan University of Science and Technology, Taiwan

09:30-10:00 | Coffee Break | Room: Mandarin Hall

Rooms | Mandarin Hall

Yellow River Hall

3C\3D

3H\3I\3J

10:00-12:00 | Functional Surfaces and Coatings

Session Chair: Peter Schaaf

Surface Engineering and Functionalization

Session Chair: Andrew Teplyakov

Surface Science of Catalysis, Electrocatalysis and Photocatalysis

Session Chair: Guido Grundmeier

Surface Nanotechnology and Devices

Session Chair: Robert Opila

10:00-10:20 | **[INV01] Bio-mineralization strategy towards synthesis of nanostructured TiO₂ and its composites**
G. Chen
Beijing University of Technology, China

[O2.01] Effect of multiple jet passes treatment in waterjet peening on fatigue performance
A. Azhari*¹, C. Schindler^{1,2}, C. Godard^{1,2}, J. Gibmeier^{1,3}, E. Kerscher^{1,2}
¹Universiti Malaysia Pahang, Malaysia, ²University of Kaiserslautern, Germany, ³Karlsruhe Institute of Technology, Germany

[O3.01] Investigation of interdiffusion and depth resolution in Cu/Ni multilayer by means of AES depth profiling
X.L. Yan¹, Y. Liu², H.C. Swart¹, J.Y. Wang², J.J. Terblans*¹
¹University of the Free State, South Africa, ²Shantou University, China

[O4.01] Highly sensitive hydrogen sensors based on SnO₂ nanomaterials with different morphologies
Y.B. Shen*, D.Z. Wei, W.G. Liu, S.L. Gao, C. Han, B.Y. Cui, L.J. Jia
Northeastern University, China

10:20-10:40

[O2.02] Uniform depositions of high-performance composite diamond films on surfaces of ultra-large circular holes
X.C. Wang*, X.T. Shen, F.H. Sun, B. Shen
Shanghai Jiao Tong University, China

[O3.02] Constructing spherical heterojunction based on the tantalate and improved photocatalytic activity
L.N. Qu*, J.Y. Lang, C.Y. Li, S.W. Wang, Y.G. Su, X.J. Wang
Inner Mongolia University, China

[O4.02] Surface chemistry of metal oxide nanoparticles: Implications for chemical sensing, optoelectronics, and photocatalysis
J.E. Whitten
University of Massachusetts Lowell, USA

10:40-11:00	[O1.01] Bio-inspired multi-gradient structure surfaces for water collection/repellency Y. Zheng <i>Beihang University, China</i>	[INV02] Introvert and romantic surfaces H. Zuilhof ^{1,2} ¹ <i>Wageningen University, The Netherlands,</i> ² <i>King Abdulaziz University, Saudi Arabia</i>	[O3.03] Finite size effects in sub-monolayer catalysts L.C. Grabow*, H.A. Doan, Q. Yuan, S.R. Brankovic <i>University of Houston, USA</i>	[O4.03] Influence of different TiO₂ blocking layers on the photovoltaic performance of perovskite solar cells Y.D. Luo, C.X. Zhang, X.H. Chen, Y.W. Chen, Z. Sun, S.M. Huang* <i>East China Normal University, China</i>
11:00-11:20	[O1.02] Influence of humidity on friction force in point-contact under small load R. Wang*, S. Furukawa, M. Imakawa <i>Hiroshima Institute of Technology, Japan</i>		[O3.04] Liquid/substrate interface in the heterogeneous nucleation of aluminium Y.F. Han*, H.L. Zhang, J. Xu, Y.B. Dai, J. Wang, B.D. Sun <i>Shanghai Jiao Tong University, China</i>	[O4.04] Surfactant role of Ag in an effort to grow germanene on a Si(111)/Ge($\sqrt{3}\times\sqrt{3}$)-Ag substrate J.C. Mahato, D. Das, B. Bisi, B.N. Dev* <i>Indian Association for the Cultivation of Science, India</i>
11:20-11:40	[O1.03] Structure and lubrication properties of diesel oil thin films confined in solid surfaces by molecular dynamics simulations H. Lan* ¹ , C. Xu ¹ , G. Barber ² ¹ <i>Beijing Jiaotong University, China,</i> ² <i>Oakland University, USA</i>	[O2.03] Functionalization of surfaces with molecularly imprinted polymers for chemical sensing L. Ye <i>Lund University, Sweden</i>	[INV03] Plasmon-mediated surface chemistry for solar photocatalysis W.D. Wei <i>University of Florida, USA</i>	[O4.05] Micropatterned n-doping of graphene via irradiation with low-energy nitrogen ions A. Sala*, G. Zamborlini, T.O. Mente, A. Locatelli <i>Elettra Sincrotrone Trieste, Italy</i>
11:40-12:00	[O1.04] Formation of hard composite layer on tool steel by laser alloying M. Bonek <i>Silesian University of Technology, Poland</i>	[O2.04] Superhydrophobic coatings design based on nanosecond laser texturing K.A. Emelyanenko*, A.M. Emelyanenko, L.B. Boinovich <i>A.N. Frumkin Institute of Physical Chemistry and Electrochemistry, Russia</i>		[O4.06] Enhancement of phosphorus incorporation in hydrogenated nanocrystalline silicon thin films employing a negative substrate bias W. He* ^{1,2} , Z.P. Li ¹ , C. Wen ¹ , W.Z. Shen ¹ ¹ <i>Shanghai Jiao Tong University, China,</i> ² <i>Xinyu University, China</i>
12:00-14:00	Lunch Break and Poster Session 1 Room: Mandarin Hall			
Rooms	Mandarin Hall	Yellow River Hall	3C\3D	3H\3I\3J
14:00-16:00	Functional Surfaces and Coatings Session Chair: Peter Schaaf	Surface Engineering and Functionalization Session Chair: Guido Grundmeier	Surface Science of Catalysis, Electrocatalysis and Photocatalysis Session Chair: Weixin Huang	Surface Nanotechnology and Devices Session Chair: Robert Opila
14:00-14:20	[O1.05] Wannier-Stark electro-optical effect and photonic modes in 2D macroporous silicon structures with SiO₂ nanocoatings L. Karachevtseva* ^{1,2} , Y. Goltviansky ² , O. Sapelnikova ² , O. Lytvynenko ² , O.	[O2.05] Fast Ge diffusion in amorphous films induces by laser pulse irradiation at fluencies less than the melting threshold V.S. Teodorescu* ¹ , C. Ghica ¹ , A.V. Maraloiu ¹ , A. Kuncser ¹ , A.M. Lepadatu ¹ , I. Stavarache ¹ , M.L. Ciurea ¹ , N.D.	[O3.05] The structural evolutions of rhodium nanoparticles on ZrO₂ under diverse ageing atmospheres: particle size, oxidation state and the Rh-ZrO₂ interface Y. Cao*, R. Ran, X. Wu, D. Weng	[INV04] The Surface Science of Chalcopyrite Materials for Photovoltaic Applications A. Rockett <i>University of Illinois, USA</i>

	Stronska ² , W. Bo ¹ , M. Kartel ¹ ¹ Ningbo University of Technology, China, ² V. Lashkaryov Institute of Semiconductor Physics, Ukraine	Scarisoreanu ² , A. Andrei ² , M. Dinescu ¹ ¹ National Institute of Materials Physics, Romania, ² National Institute of Plasma, Lasers and Radiation, Romania	Tsinghua University, China	
14:20-14:40	[O1.06] Prediction of the properties of PVD/CVD coatings with the use of FEM analysis M. Bonek, A. Sliwa, J. Mikula, K. Golombek, T. Tanski, W. Kwasny, Z. Brytan* <i>Silesian University of Technology, Poland</i>	[O2.06] Evolution of nanopores on the surface of Ti during MAO M. Qi*, W.Q. Wang <i>Dalian University of Technology, China</i>	[O3.06] Ethylene adsorption on Pd-Ag bimetallic surfaces: A periodical density functional theory study Q. Li*, L. Tang, H. Qi, L.J. Song <i>Liaoning Shihua University, China</i>	
14:40-15:00	[O1.07] Nanosecond laser micro- and nanotexturing for the design of a superhydrophobic coating robust against long-term contact with water, cavitation, and abrasion A.M. Emelyanenko* ¹ , K.A. Emelyanenko ¹ , A.G. Domantovsky ² , L. Boinovich ¹ ¹ A.N. Frumkin Institute of Physical Chemistry and Electrochemistry, Russia, ² National Research Center "Kurchatov Institute", Russia	[O2.07] Oxidation promoted chemical mechanical polishing of SiC single crystals: An AFM nano-scratching study D. Zhang*, Y. Gan <i>Harbin Institute of Technology, China</i>	[O3.07] Effect of morphology and heterojunction of Ge and Ga based photocatalysts on photocatalytic activity B.J. Ma*, K.Y. Lin, J. Li, H.J. Xu, W.Y. Liu <i>Ningxia, China</i>	[O4.07] Large area nano-grids fabricated by femtosecond laser pulse on tungsten metal surface H.Y. Song*, S.B. Liu <i>Beijing University of Technology, China</i>
15:00-15:20	[O1.08] Corrosion and carburization behaviors of electron beam surface-treated Alloy 617 in supercritical CO₂ environment H.J. Lee*, H. Kim, S.H. Kim, C. Jang <i>KAIST, Republic of Korea</i>	[O2.08] The composites with multiwalled carbon nanotubes M. Kartel* ^{1,2} , Y. Sementsov ^{1,2} , V. Trachevskiy ^{1,3} , W. Bo ¹ ¹ Ningbo University of Technology, China, ² O. Chuiko Institute of Surface Chemistry, NASU, Ukraine, ³ National Aviation University, Kyiv, Ukraine	[O3.08] The influence of surface oxygen and hydroxyl groups on the dehydrogenation of ethylene, acetic acid and hydrogenated vinyl acetate on pure Pd(100): A DFT study Y.P. Huang* ^{1,2} , X.Q. Dong ¹ , Y.Z. Yu ¹ , M.H. Zhang ¹ ¹ Tianjin University, China, ² Collaborative Innovation Center of Chemical Science and Engineering (Tianjin), China	[O4.08] High sensitive flexible pH sensor based on carboxyl-functionalized single-walled carbon nanotubes L. Liu*, J.Y. Shao, Q. Zhao, X.M. Li, H.M. Tian <i>Xi'an Jiaotong University, China</i>
15:20-15:40	[O1.09] How to test the anti-icing ability of superhydrophobic coatings? L.B. Boinovich, A.M. Emelyanenko* <i>A.N. Frumkin Institute of Physical</i>	[O2.09] The relationship of grafted group on PE surface with its barrier properties H. Li*, L.Z. Yang, Z.D. Wang, Q. Chen <i>Beijing Institute of Graphic</i>	[O3.09] MgO-Al₂O₃ catalysts for 1,3-butadiene formation from ethanol M.X. Gao*, M.H. Zhang, H.X. Jiang, Y.Z. Yu, G.M. Li	[O4.09] Optoelectronic properties of layered GaSe based field-effect transistor H. Huang* ^{1,2} , X.D. Wang ^{1,2} , J.G.

	<i>Chemistry and Electrochemistry, Russia</i>	<i>Communication, China</i>	<i>Tianjin University, China</i>	Huang ^{1,2} , P. Wang ^{1,2} , B.L. Liu ^{1,2} , X.L. Zhao ^{1,2} , S. Sun ^{1,2} , H. Shen ^{1,2} , T. Lin ^{1,2} , J.L. Wang ^{1,2} et al <i>¹Shanghai Institute of Technical Physics of Chinese Academy Of Sciences, China, ²University of Chinese Academy of Sciences, China</i>
15:40-16:00	[O1.10] Investigation of TiOxNy films prepared by Ion beam sputtering in mixed NH3 and O2 gases P.W. Wang* ¹ , Y.S. Lin ² , J.C. Hsu ² <i>¹Bradley University, USA, ²Fu Jen Catholic University, Taiwan</i>	[O2.10] Improvement hydrophobic of glass surface by atmospheric pressure plasma jet array Z. Fang*, Z.F. Ding, C. Ruan <i>Nanjing Tech University, China</i>	[O3.10] DFT study on CO adsorption and dissociation over stepped Ni and Ni₃Fe surface K.W. Yang*, Y.Z. Yu, M.H. Zhang <i>Tianjin University, China</i>	[O4.10] Investigating of current transport characteristics in Pt/n-Si nano Schottky contacts Z.G. Zeng, E.J. Guo*, X. Long, H.J. Zhou <i>Shanghai University, China</i>
16:00-16:30	Coffee Break Room: Mandarin Hall			
Rooms	Mandarin Hall	Yellow River Hall	3C\3D	3H\3I\3J
16:30-18:10	Functional Surfaces and Coatings <i>Session Chair: <u>Fátima Montemor</u></i>	Surface Engineering and Functionalization <i>Session Chair: <u>Andrew Teplyakov</u></i>	Surface Science of Catalysis, Electrocatalysis and Photocatalysis <i>Session Chair: <u>Weixin Huang</u></i>	Surface Nanotechnology and Devices <i>Session Chair: <u>Peter Schaaf</u></i>
16:30-16:50	[O1.11] Effect of crystallographic orientation on the Sn electromigration in Blech structure C.E. Ho*, W.Z. Hsieh, C.H. Yang <i>Yuan Ze University, Taiwan</i>	[O2.11] Sulfur passivation of III-V semiconductors: Solvent effect on surface chemistry and electronic properties M.V. Lebedev <i>Ioffe Institute, Russia</i>	[O3.11] Faceting of Rh(553) during CO oxidation C. Zhang* ¹ , E. Lundgren ¹ , J. Gustafson ¹ , P.A. Carlsson ² , O. Balmes ³ , L.R. Merte ¹ , M. Shipilin ¹ <i>¹Lund University, Sweden, ²Chalmers University, Sweden, ³MAX IV Laboratory, Sweden</i>	[O4.11] Ellipsometric study and application of rubrene thin film in organic Schottky diode L. Chen*, J.X. Deng, L. Kong, M. Cui, Z.J. Zhang, H.L. Gao, Q.Q. Yang <i>Beijing University of Technology, China</i>
16:50-17:10	[O1.12] Light-emitting structures of CdS nanocrystals on oxidized macroporous silicon L. Karachevtseva* ^{1,2} , S. Kuchmiy ³ , A. Stroyuk ³ , O. Lytvynenko ² , E. Stronska ² , W. Bo ¹ , M. Kartel ¹ <i>¹Ningbo University of Technology, China, ²V. Lashkaryov Institute of Semiconductor Physics, Ukraine, ³L. Pisarzhevsky Institute of Physical Chemistry, Ukraine</i>	[O2.12] Fabrication of ultra-flat surface by remote interfacial stress induced annealing (RISIA) J.C. Chen* ¹ , I.T. Tevis ¹ , S. Oyola ² , M.T. Thuo ¹ <i>¹Iowa State University, USA, ²University of Massachusetts Boston, USA</i>	[O3.12] Behavior of the new composites obtained from fly ash and titanium dioxide in removing of the pollutants from wastewater M. Visa*, L. Andronic <i>Transilvania University of Brasov, Romania</i>	[O4.12] In-situ observation of self-organizing Au nanoparticles on SiC substrate via pulsed laser Induced wetting of thin Au film Y.H. Lei*, R.X. Yu, J. Ishioka, T. Shibayama, S. Watanabe, S. Yatsu <i>Hokkaido University, Japan</i>
17:10-17:30	[O1.13] Polyurethane matrixes: Synthesis and properties of block and	[O2.13] A super-hydrophobic acrylic polyurethane coating with high	[O3.13] Co-catalyst-free photocatalytic H2 evolution from defect-engineered	[O4.13] Experimental study of surface properties of PTFE before and after

	foamy composite with nanoporous carbon M. Kartel* ^{1,2} , Y. Savelyev ³ , Y. Sementsov ^{1,2} , V. Trachevskiy ^{1,4} , W. Bo ¹ ¹ Ningbo University of Technology, China, ² O. Chuiko Institute of Surface Chemistry, Ukraine, ³ Institute of Macromolecular Chemistry, Ukraine, ⁴ National Aviation University, Ukraine	mechanical strength through facile preparation F. Xue*, D-M. Jia, Y. Li, X-L. Jing Department of Applied Chemistry, School of Science, Xi'an Jiaotong University, China	TiO2 X. Zhou.*, P. Schmuki. Friedrich-Alexander University, Germany	surface flashover B. Wang, Q. Xie, C. Wang, X. Liu, K.X. Fu, F.C. Lü, H. Huang*, X.J. Wang North China Electric Power University, China
17:30-17:50	[O1.14] The effect of oxygen content on argon/oxygen dielectric barrier discharge plasma treatment of polyethylene terephthalate film Z. Fang, W.J. Wu*, J. Xu Nanjing Tech University, China	[O2.14] Laser-induced ohmic metallization of polycrystalline diamond B. Ren*, J. Huang, H.Z. Yu, L.J. Li, L. Wang, R. Xu, L.J. Wang School of Materials Science and Engineering, Shanghai University, China	[O3.14] Controllable synthesis and photocatalytic properties of anatase TiO₂ single crystals with different percentage of highly active facets Y.Y. Zhou*, G. Chang, Y.B. He Hubei University, China	[O4.14] Influence of rapid thermal annealing on electrical properties of thin-film transistors with hfO₂ dielectrics R.Z. Wang*, Y. He, S.L. Wu, J.T. Zhang Xi'an Jiaotong University, China
17:50-18:10	[O1.15] Improved conductivity of indium-tin-oxide film through the introduction of intermediate layer S.W. Ng*, K.P. Beh, F.K. Yam, Z. Hassan Universiti Sains Malaysia, Malaysia	[O2.15] Adaptation of statistical analysis to variable kinetic energy x-ray photoemission spectroscopy for compositional depth profiles J. Church ¹ , R.L. Opila* ¹ , C. Weiland ² ¹ University of Delaware, USA, ² Synchrotron Research, Inc., USA	[O3.15] Synthesis and enhanced photocatalysis properties of carbon-modified Ti³⁺ self-doped hierarchical porous TiO₂ Z.S. Wang*, C.X. Zhao, W. Chen, Y.B. Song, T. Xie Wuhan University of Technology, China	[O4.15] Fabrication of Si nanoparticles from Si swarf and enhancement of photoluminescence T. Matsumoto*, M. Maeda, H. Kobayashi Osaka University, Japan
Wednesday, 29th July 2015				
07:30-08:40	Registration Room: Mandarin Hall			
Room	Mandarin Hall			
08:40-08:45	Welcome Address			
08:45-09:30	[PLN02] Applications of atomic and molecular layer deposition: Toward catalysts, solar cells, and nanoelectronics S.F. Bent Stanford University, USA			
09:30-10:00	Coffee Break Room: Mandarin Hall			
Rooms	Mandarin Hall	Yellow River Hall	3C\3D	3H\3I\3J
10:00-12:00	Functional Surfaces and Coatings Session Chair: <u>Fátima Montemor</u>	Surface Engineering and Functionalization Session Chair: <u>Andrew Teplyakov</u>	Surface Science of Catalysis, Electrocatalysis and Photocatalysis Session Chair: <u>Qiang Fu</u>	Surface Nanotechnology and Devices Session Chair: <u>Angus Rockett</u>
10:00-10:20	[O1.16] Synthesis and vacuum cold	[O2.16] Preparation and tribology	[INV05] Advanced photocatalysts for	[O4.16] Evidence of liquid phase during

	<p>spray deposition of biofunctionalized nanodiamond/hydroxyapatite nanocomposites for biomedical applications X.Y. Chen*, Y.F. Gong, J. Huang, Y. Liu, X.K. Suo, H. Li <i>Ningbo Institute of Materials Technology and Engineering, Chinese Academy of Sciences, China</i></p>	<p>behavior of plasma Cr-Ni alloying on Ti6Al4V alloy based on double glow plasma surface metallurgy technology D.B. Wei*, P.Z. Zhang, Z.J. Yao, X.F. Wei, J.T. Zhou, X.H. Chen <i>Nanjing University of Aeronautics and Astronautics, China</i></p>	<p>solar fuel generation J.G. Yu <i>Wuhan University of Technology, China</i></p>	<p>LIPSS formation induced by accumulative UV picosecond laser beam D.H. Huynh, G.S. Savriama, N.S. Semmar* et al <i>GREMI-UMR7344-CNRS-University of Orléans, France</i></p>
10:20-10:40	<p>[O1.17] Influences of post-treatment on the structure and properties of CdMnTe films grown from CSS method H.H. Ji*, L. Wang, J.N. Wang, J.M. Lai, J. Huang, R. Xu, J.J. Zhang, Y. Shen, J.H. Min, L.J. Wang <i>School of Materials Science and Engineering, Shanghai University, China</i></p>	<p>[O2.17] Vacuum brazing of Nb-1Zr alloy and surface modification Al₂O₃ ceramic by electroless plated Ni W.G. Wang*, W.Y.L. Wang, D.M.Y. Dong <i>State Key Laboratory of Advanced Welding and Joining Harbin Institute of Technology, China</i></p>		<p>[O4.17] Sputtered and carbon nanotube-based materials for solid phase microextraction and thin layer chromatography M.R.L. Linford <i>Brigham Young University, USA</i></p>
10:40-11:00	<p>[O1.18] Adhesion and permeation properties of aluminum barrier layers coated on polyethylene substrate pretreated by DBD plasma H.B. Zhang*, H. Li, Z.D. Wang, L.J. Sang, Q. Chen <i>Beijing Institute of Graphic Communication, China</i></p>	<p>[O2.18] Surface layers nano-structuration in low-temperature gas atmosphere - a potential new way of developing technologies for enhancement of metallic alloys surface parameters C. Sarbu <i>National Institute for Materials Physics, Romania</i></p>	<p>[O3.16] Catalysis over metal surface under graphitic cover Q. Fu <i>Dalian Institute of Chemical Physics, CAS, China</i></p>	<p>[INV06] Structure sensitivity in redox and acid-base reactions catalyzed by CeO₂ nanoshapes Z. Wu <i>Oak Ridge National Laboratory, USA</i></p>
11:00-11:20	<p>[O1.19] The effect of modifying agent on surface modification of magnesium oxide whisker Y. Zhao^{1,2}, B. Liu¹, C. You^{1,2}, M.F. Chen^{*1,2} ¹Tianjin University of Technology, China, ²Key Laboratory of Display Materials and Photoelectric Device (Ministry of Education), China</p>	<p>[O2.19] Picosecond Nd:YAG laser ablation of cyclic olefin polymer substrates for sensing platform fabrication R. McCann^{*1,2}, K. Bagga^{1,2}, A. Stalcup^{1,2}, M. Vázquez^{1,2}, D. Brabazon^{1,2} ¹Dublin City University, Ireland, ²Irish Separation Science Cluster, Ireland</p>	<p>[O3.17] Enhanced photocatalytic activity of propylene oxidation on Pd-loaded anatase TiO₂ nanotubes C. Li*, L.L. Zong, J.W. Zhang, Q.Y. Li, J.J. Yang, Z.S. Jin <i>Henan University, China</i></p>	

11:20-11:40	[O1.20] ALD Al₂O₃ Coating PET for the High Barrier Properties M. Fang*, L.J. Sang, H.Y. Cao, L.Z. Yang, Q. Chen et al <i>Beijing Institute of Graphic Communication, China</i>	[O2.20] Fabrication of superhydrophobic surfaces by thermal spray deposition with mechanical stability and easy reparability X.Y. Chen*, X.K. Suo, Y.F. Gong, H. Li <i>Ningbo Institute of Materials Technology and Engineering, Chinese Academy of Sciences, China</i>	[O3.18] Segregation and mixing patterns of Au-Pd nanoalloys: strain-induced dealloying in icosahedral motif L. Deng* ¹ , J.F. Tang ^{1,2} , X.M. Zhang ¹ , H.Q. Deng ² , S.F. Xiao ² , W.Y. Hu ² ¹ Hunan Agricultural University, China, ² Hunan University, China	[O4.18] Nanoparticle layer deposition (NPLD) for highly controlled multilayer formation based on high-coverage monolayers of nanoparticles Y. Liu, M.G. Williams, T.J. Miller, A.V. Teplyakov* <i>University of Delaware, USA</i>
11:40-12:00	[O1.21] Thickness effects on the electrical conductivities of sputtered YSZ films with columnar microstructure Q.Q. Yang*, B. Meng, X.K. Zhu, Z. Yu, X.L. Liang, H.M. Zhou <i>Kunming University of Science & Technology, China</i>	[O2.21] Influence of duty ratio on structure and tribological performance of ZrN coatings deposited by pulsed bias arc ion plating Z.Q. Fu*, W. Yue, Z.L. Miao, C.B. Wang, J.J. Kang, L.N. Zhu <i>China University of Geosciences (Beijing), China</i>	[O3.36] Photoelectrochemistry at the p-GaInP₂(100)/aqueous HCl solution interface: synchrotron photoemission spectroscopy study on emersed electrodes M.V. Lebedev* ¹ , W. Calvet ² , B. Kaiser ³ , W. Jaegermann ³ ¹ Ioffe Institute, St. Petersburg, Russia, ² Helmholtz-Zentrum Berlin, Germany, ³ Darmstadt University of Technology, Germany	[O4.19] MP-SPR - new optical characterization method for molecular interaction and ultrathin films N.M. Granqvist*, A.J. Jokinen, W.M. Albers, J.W. Sadowski <i>BioNavis Ltd., Finland</i>
12:00-14:00	Lunch Break and Poster Session 2 Room: Mandarin Hall			
Rooms	Mandarin Hall	Yellow River Hall	3C\3D	3H\3I\3J
14:00-16:00	Functional Surfaces and Coatings Session Chair: <u>Henrik Rudolph</u>	Surface Engineering and Functionalization Session Chair: <u>Andrew Teplyakov</u>	Biointerfaces 1 Session Chair: <u>Peter Kingshott</u>	Electrochemistry at Surfaces and Corrosion Protection Strategies Session Chair: <u>Fátima Montemor</u>
14:00-14:20	[O1.22] Anti-reflection characteristics of periodically nano-patterned si structures for light emitting devices W.Y. Shao*, P. Lu, W. Li, J. Xu, L. Xu <i>Nanjing University, China</i>	[O2.22] Study on bending fretting fatigue damages of 17CrNiMo6 Steel J.F. Peng* ¹ , Z.B. Xu ¹ , Z.B. Cai ¹ , Y.J. Zhang ² , Y.G. Wang ² , L.J. Ma ² , M.H. Zhu ¹ ¹ Southwest Jiaotong University, China, ² Qingdao Sifang Locomotive and Rolling Stock Co. Qingdao, China	[INV07] Biomedical device coatings inspired by prebiotic chemistry H. Thissen <i>CSIRO Manufacturing Flagship, Australia</i>	[O4.20] The sealing effect of ammonium paramolybdate on the organic anion intercalated hydrotalcite-like coating on the surface of aluminum alloy X.Y. Pan*, X.X. Hou, X. Zhong, Y.L. Liu et al <i>Hunan University, China</i>
14:20-14:40	[O1.23] Antibacterial implant surfaces by simple immobilization of PLGA microspheres D. Wang*, Q. Liu, K. Duan, X. Lu, J. Weng	[O2.23] Microstructure and tribological properties of low-pressure plasma-sprayed Mo-Cu-WC coatings at elevated temperatures J.H. Ouyang*, Z.G. Liu, Y.J. Wang, Y.M.		[O4.21] Macrocyclic compound as an effective corrosion inhibitor for N80 steel in CO₂ saturated 3.5% NaCl solution A. Singh* ^{1,2} , Y. Lin ¹

	<i>Southwest Jiaotong University, China</i>	Wang <i>Harbin Institute of Technology, China</i>		¹ <i>Southwest Petroleum University, China</i> , ² <i>Lovely Professional University, India</i>
14:40-15:00	[O1.24] Simple fabricating superamphiphobic polymer composite coatings with self-cleaning, heat-resistance, and wear-resistance H.Y. Wang*, Z.J. Liu, Y.J. Zhu, Y. Meng, H. Wang, E.Q. Wang <i>Northeast Petroleum University, China</i>	[O2.24] Enhancement of mechanical and corrosion properties of Al-Cu-Mg-Li alloy by high-pressure torsion processing M. Nie*, S. Goh, S.C. Wang, N. Gao <i>University of Southampton, UK</i>	[O3.19] Surface chemical state of Ti powders and its alloys: Effect of alloy composition and storage conditions E. Hryha* ¹ , R. Shvab ¹ , M. Bram ² , M. Bitzer ² , L. Nyborg ¹ ¹ <i>Chalmers University of Technology, Sweden</i> , ² <i>Forschungszentrum Jülich GmbH, Germany</i>	[O4.22] Tribocorrosion behaviour of MAO Ca/P coating on Nano grained Mg alloy processed by ultrasonic cold forging technology Y. Gu* ¹ , L. Chen ² , W. Yue ³ , L. Zhang ⁴ , S. Liu ¹ , B. Hou ³ ¹ <i>Beijing Institute of Petrochemical Technology, China</i> , ² <i>Beijing University of Chemical Technology, China</i> , ³ <i>China University of Geosciences, China</i> , ⁴ <i>University of Alaska Fairbanks, USA</i>
15:00-15:20	[O1.25] Improving tribology properties of Ti-5Zr-3Sn-5Mo-15Nb alloy using double glow plasma surface alloying L.L. Guo*, L. Qin, H. Yi, F.Y. Kong <i>Taiyuan University of Technology, China</i>	[O2.25] The tribochemistry behavior of eutectoid steel during the rolling contact friction Y. Zhou, J.F. Peng, Z.B. Cai, M.H. Zhu* et al <i>Southwest Jiaotong University,, China</i> ,	[O3.20] In Vitro Study of 3D PLGA/n-HAp/β-TCP composite scaffolds with etched oxygen plasma surface modification in bone tissue engineering H.S. Roh* ¹ , M.S. Kook ² , S.C. Jung ³ , B.H. Kim ¹ ¹ <i>Chosun University, Republic of Korea</i> , ² <i>Chonnam National University, Republic of Korea</i> , ³ <i>Sunchon National University, Republic of Korea</i>	[O4.23] Electrochemically-enhanced surface plasticity of steels Y.B. Unigovski ¹ , E.M. Gutman ¹ , R. Shneck ¹ , F. Ye* ² , Y-F. Liang ² ¹ <i>Ben-Gurion University of the Negev, Israel</i> , ² <i>University of Science and Technology-Beijing, China</i>
15:20-15:40	[INV08] Nano composites materials with mono-dispersed noble metal nanoparticles as useful catalysts S. Yang, P. Li, Z. Chen, H. Liu, P. Li, C. Cao, W. Song* <i>Chinese Academy of Sciences, China</i>	[O2.26] Study of polycrystalline silicon thin films by aluminum induced crystallization on Self-Assembled Monolayers (SAMs) modified substrate Q-Y. Huang*, T. Yian <i>National Taiwan University of Science and Technology, Taiwan</i>	[O3.21] Effect of BMP-2 immobilization on propionaldehyde plasma polymerized high density polyethylene 3D-printed scaffolds S.Y. Kim* ¹ , S.C. Jung ² , M.S. Kook ³ , B.H. Kim ¹ ¹ <i>Chosun University, Republic of Korea</i> , ² <i>Sunchon National University, Republic of Korea</i> , ³ <i>Chonnam National University, Republic of Korea</i>	[O4.24] Thermal stability and chemical resistance of the metal-ceramic nanostructured coatings (Ti,Al)N-Cu and (Ti,Al)N-Ni D.S. Belov*, I.V. Blinkov, A.O. Volkhonskii, D.V. Kuznetsov <i>National University of Science and Technology MISIS, Russia</i>
15:40-16:00		[O2.27] Improved interfacial properties of carbon fiber/epoxy composites	[O3.22] Surface Modification of 3D PCL scaffolds by using the atmospheric	[O4.25] Mechanical polishing, surface roughness, near-surface deformation

		through grafting dendritic poly(amido amine) on carbon fiber surface <i>F. Zhao, J.F. Sun*, Y. Yao, Y.D. Huang Harbin Institute of Technology, China</i>	pressure cold plasma jet Y.O. Park*, Y.S. Hwang, Y.H. Hwang, B.H. Kim <i>Chosun University, Republic of Korea</i>	and electrochemical corrosion of alloy 690TT F. Arjmand*, L. Zhang <i>Shanghai Jiao Tong University, China</i>
16:00-16:30	Coffee Break Room: Mandarin Hall			
Rooms	Mandarin Hall	Yellow River Hall	3C\3D	3H\3I\3J
16:30-18:10	Functional Surfaces and Coatings <i>Session Chair: <u>Henrik Rudolph</u></i>	Surface Engineering and Functionalization <i>Session Chair: <u>Guido Grundmeier</u></i>	Surface Science Applied to Energy Conversion and Storage <i>Session Chair: <u>Jiaquo Yu</u></i>	Electrochemistry at Surfaces and Corrosion Protection Strategies <i>Session Chair: <u>Fátima Montemor</u></i>
16:30-16:50	[O1.26] Effect of electrolyte resistivity on pore characteristic of nanoporous anodic alumina oxide (AAO) layer V. Rizkia* ^{1,2} , J.W. Soedarsono ¹ , B. Munir ¹ , B. Suharno ¹ ¹ University of Indonesia, Indonesia, ² State Polytechnic of Jakarta, Indonesia	[O2.28] Experimental study of contact angle hysteresis on micro periodic grooved surface by laser beam machining L.M Shu*, L.D. Liang, C. Fu, F.B. He, P. Zeng, H.Y. Zou <i>Dalian University of Technology, China</i>	[O3.23] In-situ formation of Ni(OH)₂ film on nickel for supercapacitors with super long-life by a gavanostatic charge/discharge route X.B. Xiong*, M.M. Cheng, C. Yi, J. Ma, X.R. Zeng <i>Shenzhen Univeristy, China</i>	[INV09] Confined electrochemically active species for self-healing corrosion protection M.G.S. Ferreira* ¹ , J. Tedim ¹ , M. L. Zheludkevich ^{1,2} ¹ University of Aveiro, Portugal, ² Helmholtz-Zentrum Geesthacht, Germany
16:50-17:10	[O1.27] Design of a superhydrophobic and superoleophilic film using cured fluoropolymer@silica hybrid H. Yang*, C.P. Su, H.P. Zhao, Z. Lu, R. Chen <i>Wuhan Institute of Technology, China</i>	[O2.29] Microstructural evolution and surface properties of nanostructured copper-based alloy by ultrasonic nanocrystalline surface modification technique A. Amanov*, Y-S. Pyun <i>Sun Moon University, Republic of Korea</i>	[O3.24] Fast lithium storage performance of black anatase H-TiO₂ nanoparticles Y. Yan* ¹ , B. Hao ² , D. Wang ¹ , G. Chen ² , P. Schaaf ¹ ¹ TU Ilmenau, Germany, ² Beijing University of Technology, China	
17:10-17:30	[INV10] Interface-controlled mechanical behavior of nanoscale metal films and multilayers G.P. Zhang*, X.M. Luo, X. Li, J.W. Yan <i>Institute of Metal Research, Chinese Academy of Sciences, China</i>	[O2.30] Surface Engineering with Colloidal Crystals P. Kingshott* <i>Swinburne University of Technology, Australia</i>	[O3.25] Slightly hydrogenated TiO₂ with enhanced photocatalytic performance Y. Yong* ¹ , M.Y. Han ² , D. Wang ¹ , G. Chen ² , P. Schaaf ¹ ¹ TU Ilmenau, Germany, ² Beijing University of Technology, China	[O4.26] Corrosion resistance of superhydrophobic coatings on aluminum in different corrosion-active media L.B. Boinovich*, A.M. Emelyanenko, A.D. Modestov, O.V. Dvoretzkaya, K.A. Emelyanenko <i>A.N. Frumkin Institute of Physical Chemistry and Electrochemistry, Russia</i>
17:30-17:50			[O3.26] Hydrophobic light-to-heat conversion membranes for interfacial heating: Towards enhanced solar desalination	[O4.27] Surface composition effect of nitrating Ni-free stainless steel for bipolar plate of polymer electrolyte fuel cell

			P. Wang*, L.B. Zhang <i>King Abdullah University of Science and Technology, Saudi Arabia</i>	S. Shironita* ¹ , Y. Yu ¹ , K. Nakatsuyama ² , K. Souma ^{1,3} , M. Umeda ¹ <i>¹Nagaoka University of Technology, Japan, ²Nakatsuyama Heat Treatment Co., Ltd., Japan, ³Hitachi Industrial Equipment Systems Co., Ltd., Japan</i>
17:50-18:10			[O3.27] Questing for silicon-based ternary compound within ultra-thin layer of SIS interface region by PES Z.Q. Ma*, Y.Z. Wan, H.W. Du, M. Gao, S.M. Chen, Y.B. Gao, Y. Li, Y.H. Li, F. Xu <i>Shanghai University, China</i>	[O4.28] Effect and simulation of working distance on PEO coatings of AM50 magnesium alloy X. Ma*, D. Höche, C. Blawert, X. Lu, M. Zheludkevich <i>Helmholtz-Zentrum Geesthacht Zentrum, Germany</i>
19:00-22:00	Conference dinner Lost Heaven <i>Coaches leaving from Lobby of Oriental Riverside Hotel</i>			
Thursday, 30th July 2015				
07:30-08:40	Registration Room: Mandarin Hall			
Room	Mandarin Hall			
08:40-08:45	Welcome Address			
08:45-09:30	[PLN03] Self-organizing electrochemistry: Formation and Functional Features of TiO2 nanotube arrays P. Schmuki <i>University of Erlangen-Nuremberg, Germany</i>			
09:30-10:00	Coffee Break Room: Mandarin Hall			
Rooms	Mandarin Hall	Yellow River Hall	3C\3D	3H\3I\3J
10:00-12:00	Functional Surfaces and Coatings <i>Session Chair: <u>Peter Schaaf</u></i>	Advanced Surface and Interface Analytical Techniques <i>Session Chair: <u>James Whitten</u></i>	Surface Science Applied to Energy Conversion and Storage <i>Session Chair: <u>Hikaru Kobayashi</u></i>	Electrochemistry at Surfaces and Corrosion Protection Strategies <i>Session Chair: <u>Mario Rocca</u></i>
10:00-10:20	[O1.28] Preparation of super hard Ni-W/diamond nanocomposite coatings J. Qin* ^{1,2} , X. Zhang ² , R. Hao ² , M.K. Das ¹ , A. Thuepoy ¹ , S. Limpanart ¹ , Y. ongmaneerat ¹ , M. Ma ² , R. Liu ² <i>¹Metallurgy and Materials Science Research Institute, Chulalongkorn University, Thailand, ²State Key Laboratory of Metastable Materials</i>	[INV11] Application of Helium Ion Microscopy to surface science problems G. Hlawacek* ¹ , V. Veligura ² , M. Jankowski ³ , R.V. Gastel ² , H. Wormeester ² , H.J.W Zandvliet ² , B. Poelsema ² <i>¹Institute for Ion Beam Physics and Materials Research, Germany, ²University of Twente, The Netherlands, ³ID03 Surface Diffraction Beamline, ESRF–The European</i>	[O3.28] Surface tuning for Eu3+ activated BiOCl nanomaterial as efficient phosphor Y.Y. Guo*, W. Yang <i>Dongguk University, Republic of Korea</i>	[O4.29] Electrodeposition of aluminum on the surface of cerium from ionic liquid and its corrosion resistance Y.D. Jiang*, J.J. Ding, C. Liao et al <i>Chengdu Green Energy and Green Manufacturing R&D Centre, China</i>

	<i>Science and Technology, Yanshan University, China</i>	<i>Synchrotron, France</i>		
10:20-10:40	[O1.29] Electrical properties of Zr-doped BaTiO₃ thin films by sol-gel process L.H. Huang*, Y.D. Dai, H.X. Xiao <i>Wuhan University of Technology, China</i>		[O3.29] Photoelectrochemical characteristics of CuInS₂ quantum dots with different surface states and its quantum dot-sensitized photoelectrodes Z.Y. Peng, Y.L. Liu*, Y.H. Zhao, K.Q. Chen, W. Chen <i>Wuhan University of Technology, China</i>	[O4.30] Growth mechanism of oxidation film on a Co-Cr-Ni-Nb-Fe superalloy at high temperatures L. Liu* ¹ , Y. Dong ¹ , S. Wu ¹ , G. Yu ² , S. Lü ¹ ¹ <i>Huazhong University of Science and Technology, China</i> , ² <i>Wuhan Iron and Steel Corporation, China</i>
10:40-11:00	[O1.30] Selective detection of acetone by WO₃ gas sensor with zeolite coatings Z.H. Hua*, H.M. Tian, W. Wang, R.X. Yang <i>Hebei University of Technology, China</i>	[O2.31] An experimental UHV AFM/STM device for characterizing surface nanostructures under increasing stress at variable temperatures C. Coupeau*, B. Douat, M. Drouet, J. Bonneville <i>University of Poitiers, France</i>	[O3.30] Fabrication and electrochemical properties of hydrogenated TiO₂ nanotube arrays with high conductivity Q. Zhang ¹ , K. Du ¹ , G.H. Liu* ¹ , C.P. Yang ² , K.Y. Wang ^{1,2} ¹ <i>Buskerud and Vestfold University College, Norway</i> , ² <i>HuBei University, China</i>	[O4.31] Bioinspired fabrication of superhydrophobic WO₃@TiO₂ nanoflake surface against electrochemical corrosion with controllable photoelectrons storage and release S.Q. Yu*, Y.H. Ling, J. Zhang, W.B. Gao, C. Zeng, Y.K. Bai <i>Tsinghua University, China</i>
11:00-11:20	[O1.31] Fabrication and high temperature properties of plasma-sprayed nanostructured yttria stabilized zirconia thermal barrier coatings J.H. Ouyang*, Z.G. Liu, J. Xiang, H.Z. Liu, Y.M. Wang, Y.J. Wang <i>Harbin Institute of Technology, China</i>	[O2.32] Detection and distribution of Lithium in Mg-Li-Al based Alloy by ToF-SIMS V. Kumar <i>Malaviya National Institute of Technology Jaipur, India</i>	[O3.31] Synthesis of phenolic-based resist materials for photolithography M. Sutikno*, S. Sugianto, M.L. Hakim <i>Semarang State University, Indonesia</i>	[O4.32] Hydrothermal corrosion of the second phase intermetallic compounds in Zr-4 Y.K. Bai* ¹ , Y.H. Ling ¹ , S.P. Xing ² , W. Ma ² ¹ <i>Tsinghua University, China</i> , ² <i>Inner Mongolia University of Technology, China</i>
11:20-11:40	[O1.32] Development of smart coatings for corrosion protection of aluminium alloys for aeronautical application M.F. Montemor*, S.V. Lamaka, D. Snihirova <i>Instituto Superior Tecnico, Portugal</i>	[O2.33] Wetting experiment as a tool to characterize the physicochemical processes during contact of hydrophobic and superhydrophobic materials with aqueous media L. Boinovich*, A. Emelyanenko <i>A.N. Frumkin Institute of Physical Chemistry and Electrochemistry, Russia</i>	[O3.32] Spray pyrolysis synthesis of carbon-hybridized LiMPO₄ and Li₂MSiO₄ (M=Fe, Mn) nanoparticles in cathode of Li-ion batteries H. Sasaki* ¹ , A. Nemoto ¹ , M. Moriya ¹ , M. Miyahara ¹ , M. Hokazono ¹ , S. Katayama ¹ , Y. Akimoto ¹ , A. Nakajima ² , S. Hirano ³ ¹ <i>Shoei Chemical Inc, Japan</i> , ² <i>Tokyo Institute of Technology,</i>	[O4.33] The sealing effect of ammonium paramolybdate on the organic anion intercalated hydrotalcite-like coating on the surface of aluminum alloy X.Y. Pan*, X.X. Hou, X. Zhong, Y.L. Liu <i>Hunan University, China</i>

			Japan, ³ Shanghai Jiao Tong University, China	
11:40-12:00		[O2.34] Ultrasensitive detection of chiral molecules by tunnelling current recognition through core-satellite gold nanoparticles Y.C. Zhang ^{*1,2} , J.Q. Liu ³ , D. Li ¹ , X. Wang ² , W.R. Yang ¹ ¹ Deakin University, Australia, ² Ocean University of China, China, ³ Qingdao University, China	[O3.33] Optimize the dispersion of conductive agents for enhancing electrode performance M.Y. Han*, G. Chen Beijing University of Technology, China	[O4.34] Corrosion resistance enhancement of Ti-6Al-4V Alloy by pulsed electron irradiation for biomedical applications M. Nie ^{*1} , J.C. Walker ¹ , R.B. Cook ¹ , J.W. Murray ² , A.T. Clare ² ¹ University of Southampton, UK, ² University of Nottingham, UK
12:00-13:00	Lunch Break Room: Mandarin Hall			
Room	Mandarin Hall			
12.10 – 12.55	[WORKSHOP] Surface Analysis from Thermo Scientific: Theory, Technology, Aspects and Applications R.G White Thermo Fisher Scientific, China			
Rooms	Mandarin Hall	Yellow River Hall	3C\3D	3H\3I\3J
13:00-15:00	Functional Surfaces and Coatings Session Chair: <u>Peter Schaaf</u>	Advanced Surface and Interface Analytical Techniques Session Chair: <u>Matthew Linford</u>	Surface Science Applied to Energy Conversion and Storage Session Chair: <u>Hikaru Kobayashi</u>	Electrochemistry at Surfaces and Corrosion Protection Strategies Session Chair: <u>Mario Rocca</u>
13:00-13:20	[O1.33] Nanoporous anodic oxide films on Ti-Al alloy N.M. Yakovleva ^{*1} , K.V. Stepanova ¹ , A.N. Kokatev ¹ , H. Pettersson ² , E.A. Chupakhina ¹ ¹ Petrozavodsk State University, Russia, ² Halmstad University, Sweden	[O2.35] Hunting for filaments in resistive organic memories Y. Busby, J.J. Pireaux* University of Namur, Belgium	[INV12] Recent progress of CIGS solar cells at AIST-JAPAN H. Shibata National Institute of Advanced Industrial Science and Technology, Japan	[O4.35] Highly sensitive electrochemiluminescence detection of Pb²⁺ on graphene/AuNPs modified electrode J. Li, L-P. Lu* Beijing University of Technology, College of Environmental and Energy Engineering, China
13:20-13:40	[O1.34] Tactile friction of laser textured surfaces X. Zeng*, S. Zhang, A. Rodrigues Urribarri, E. van der Heide University of Twente, The Netherlands	[O2.36] Interfacial reaction control for epitaxial growth of high-quality AlN films on various substrates G. Li*, W. Wang, W. Yang, H. Wang South China University of Technology, China		[O4.36] Study of corrosion behaviors of Q235 carbon steel and 304 SS in simulation concrete pore solutions Y.M. Tang*, B. Lin, Y.C. Dun, X.H. Zhao, Y. Zuo Beijing University of Chemical Technology, China
13:40-14:00	[O1.35] Ion mixed SiC coating on graphite for oxidation protection in	[O2.37] Recent progress on quantitative sputter depth profiling	[O3.34] Double shell TiO₂ hollow spheres encapsulating SnO₂ layer for	[O4.37] Studies on ionic liquids confined by gold electrodes

	case of air ingress at the high temperature J.W. Park*, E.S. Kim, J.U. Kim <i>Korea Atomic Energy Research Institute, Republic of Korea</i>	J.Y. Wang* ¹ , Y. Liu ¹ , W. Jian ¹ , H.L. Kang ¹ , S. Hofmann ² ¹ <i>Shantou University, China</i> , ² <i>Max Planck Institute for Intelligent Systems, Germany</i>	high performance lithium ion battery H.M. Wang*, G. Chen <i>College of Environmental & Energy Engineering, Beijing University of Technology, China</i>	M.N.D.S. Cordeiro*, E.S. Ferreira, C.M. Pereira, D.J.V.A. dos Santos <i>University of Porto, Portugal</i> ,
14:00-14:20		[O2.38] Surface and edge electroluminescence study of as-grown VCSEL structures Y.M. Zhao* ^{1,2} , Y.R. Sun ¹ , Y. He ^{1,2} , S.Z. Yu ¹ , Y. Song ¹ , J.R. Dong ¹ ¹ <i>Chinese Academy of Sciences (CAS), China</i> , ² <i>University of Chinese Academy of Sciences, China</i>	[O3.35] Ultra-low reflectivity crystalline Si surfaces fabricated by use of SSCT method and application to high efficiency Si solar cells K. Imamura*, D. Irishika, T. Nonaka, H. Kobayashi <i>Osaka University, Japan</i>	[O4.38] Early corrosion behavior of pipeline steel with titanium addition in sea water environment Z.G. Liu* ¹ , X.H. Gao ¹ , L.X. Du ¹ , J.P. Li ¹ , P.J. Hao ² , Y. Kuang ³ , B. Wu ⁴ ¹ <i>Northeastern University, China</i> , ² <i>Shijiazhuang Vocational College for Scientific and Technical Engineering, China</i> , ³ <i>Neptune Offshore Engineering Development Co., Ltd, China</i> , ⁴ <i>Tianjin Iron and Steel Group Co., Ltd., China</i>
14:20-14:40		[O2.39] The evolution of restructure and defects in the implanted Si surface: Inspecting by reflective second harmonic generation S.B. Brahma, C.W.L. Liu, K.Y.L. Lo* <i>National Cheng Kung University, Taiwan</i>		
14:40-15:00		[O2.40] Extracting quantitative nanomechanical properties from tapping mode AFM measurements D.E. Beck*, R. Proksch, M. Kocun, A. Labuda, J. Yao, P. Cheng <i>Oxford Instruments Asylum Research, Inc., USA</i>	[O3.37] Thin film silicon based tandem cells as photocathodes for water splitting: Improved stability with metal oxide layers F. Yang* ¹ , J. Ziegler ¹ , F. Urbain ² , J.-P. Becker ² , F. Finger ² , B. Kaiser ¹ , W. Jaegermann ¹ ¹ <i>Technische Universität Darmstadt, Germany</i> , ² <i>Forschungszentrum Jülich, Germany</i>	
15:00-15:30	Coffee Break Room: Mandarin Hall			
Rooms	Mandarin Hall	Yellow River Hall	3C\3D	3H\3I\3J
15:30-16:50	Author Workshop: How To Get Published	Advanced Surface and Interface Analytical Techniques Session Chair: <u>Matthew Linford</u>	Surface Science Applied to Energy Conversion and Storage Session Chair: <u>Fátima Montemor</u>	Biointerfaces 2 Session Chair: <u>Helmut Thissen</u>

15:30-15:50		<p>[O2.41] Chemical analysis of "P-N" film by XPS depth profiling with a cluster ion source. D. Aureau*, C. Njel, M. Bouttemy, A.M. Gonçalves, A. Etcheberry <i>Institut Lavoisier, France</i></p>	<p>[O3.38] Synthesis and electrochemical performance of Mesoporous SiO₂-carbon nanofibers composite as anode material for lithium secondary battery Y.R. Hyun*, J.Y. Choi, H.K. Park, C.S. Lee <i>Keimyung University, Republic of Korea</i></p>	<p>[O4.39] Effects of scaffold surface morphology on cell adhesion and survival rate in vitreous cryopreservation of tenocyte-scaffold constructs Z. Wang^{1,2}, Q. Qing*¹, C.J. Liu¹, X. Chen¹, J.C. Luo¹, J.L. Hu³, T.W. Qin¹ ¹West China Hospital of Sichuan University, China, ²Sichuan Medical University, China, ³The Hong Kong Polytechnic University, China</p>
15:50-16:10		<p>[O2.42] Nanoparticle-biomolecular interactions in aqueous solutions probed by surface selective nonlinear spectroscopy R. Feng, X. Li, Z. Zhang, Y. Guo, Z. Lu* <i>Institute of Chemistry, Chinese Academy of Sciences, China</i></p>	<p>[O3.39] Synthesis of Carbon nanofibers on electroplated Co-Ni and Co-Cu/C-fiber textiles for anode material of Li secondary batteries K.H. Jang*¹, S.H. Lee¹, Y.J. Han², S.H. Yoon², C.S. Lee¹ ¹Keimyung University, Republic of Korea, ²Kyushu University, Japan</p>	<p>[O4.40] Double step hybridization of dna molecules on single-walled carbon nanotube surfaces K. Umemura*, R. Toyofuku, S. Oura, M. Ito, Y. Homma <i>Tokyo University of Science, Japan</i></p>
16:10-16:30		<p>[O2.43] Mueller matrix ellipsometry: A powerful tool for nanostructured surface metrology S.Y. Liu*, X.G. Chen, C.W. Zhang, H. Jiang <i>Huazhong University of Science and Technology, China</i></p>	<p>[O3.40] Investigation of surface interference between LIPSS and nanopores in case of mesoporous silicon induced by pico and femto-second laser beams A.T. Talbi¹, N.S. Semmar*¹ et al ¹GREMI-UMR7344-CNRS-University of Orléans, France, ²GREMAN-UMR7347-CNRS-University of Tours, France</p>	
16:30-16:50			<p>[O3.41] Well-dispersed molybdenum oxides on ordered mesoporous carbon and their electrochemical properties for supercapacitor C.X. Zhao*, J.S. Li, W. Chen, X.Y. Lv <i>Wuhan University of Technology, China</i></p>	
16:50-17:10	<p>Closing Ceremony <i>Room: Mandarin Hall</i></p>			