

Program for EMN Auckland Meeting

December 17 to 21, 2018

Crowne Plaza Auckland HOTEL & RESORTS, in Auckland, New Zealand

Monday, December 17

Registration

Time: 14:00-17:30PM

Tuesday morning, December 18

Session: Titanium-Oxides I

Chair: Judy Z. Wu

9:00-9:25AM	01: TiO ₂ memristor: a nano-device or a manifestation of natural principle?	Dalibor Bielek University of Defence, Czech Republic
9:25-9:50AM	02: Oxide nanoparticles prepared via plasma rapid cooling processes: phase selection, transformation and functionalization	Takamasa Ishigaki Hosei University, Japan
9:50-10:15AM	03: The Evolution of Cervical Spine Implant Materials: Focusing on Artificial Disc	Hsi-Kai Tsou Taichung Veterans General Hospital, Taiwan
10:15-10:35AM	Session Break	
Session: Titanium-Oxides II		Chair: Takamasa Ishigaki
10:35-11:00AM	04: Beyond Shape Engineering of TiO ₂ Nanoparticles: Post-Synthesis Treatment Dependence of Surface Hydration, Hydroxylation, Lewis Acidity and Photocatalytic Activity of TiO ₂ Anatase Nanoparticles with Dominant {001} or {101} Facets	Gianmario Martra University of Torino, Italy
11:00-11:25AM	05: TiO ₂ Based Photocatalyst for Environmental Remediation Using the Concept of Interfacial Charge Transfer Driven by Visible Light	Masahiro Miyauchi Tokyo Institute of Technology, Japan
11:25-11:50AM	06: Ionic conductivity and electrode catalyst developed by LaNiO ₃ -based heterostructure composite materials	Senlin Yan & Yuzheng Lu Nanjing Xiaozhuang University, China
Lunch Break		

Tuesday afternoon, December 18

Session: Supramolecular Materials I

Chair: Li Niu

14:30-14:55PM	07: Glyco-nanocarriers Based on Host-Guest Complexation for Targeted Drug Delivery	Zhichao Pei Northwest A&F University, China
14:55-15:20PM	08: Supramolecular assembly of nitrogen-embedded curved π -conjugated molecules	Satoru Hiroto Kyoto University, Japan
15:20-15:45PM	09: Glyco-nanocarriers Based on Self-assembly of Amphiphilic Lactose Derivative for Targeted Drug Delivery	Yuxin Pei Northwest A&F University, China
15:45-16:05PM	Session Break	
Session: Titanium-Oxides III Chair: Gianmario Martra		
16:05-16:30PM	10: Fabrication and applications of titanium-oxides to fiber-shaped optoelectronic devices	Dechun Zou Peking University, China
16:30-16:55PM	11: Anodic TiO ₂ Nanotube Layers: Excellent Platform for Secondary Materials	Jan Macák Brno University of Technology, Czech Republic
16:55-17:20PM	12: Observations on the Interfacial Redox Reactions in Metal-Oxide Memristive Devices	Atsushi Tsurumaki-Fukuchi Hokkaido University, Japan
18:00PM	Dinner Social	

Wednesday morning, December 19

Session: Supramolecular Materials II

Chair: Zhichao Pei

9:00-9:25AM	13: RNA Hydrogel	Li Niu State University of New York (SUNY)- Albany, USA
9:25-9:50AM	14: Top down preparation of supramolecular polymers and their membrane performances	Toshiki Aoki Niigata University, Japan
9:50-10:15AM	15: Nature-inspired on-surface synthesis of graphene nanoribbons	Shunpei Nobusue Kyoto University, Japan
10:15-10:35AM	Session Break	
Session: Titanium-Oxides IV		
Chair: Marco Fronzi		
10:35-11:00AM	16: Hybrids of carbon nanostructures and semiconductor nanocrystals for high-performance renewable energy devices	Judy Z. Wu The University of Kansas, USA
11:00-11:25AM	17: Fabrication of Zn- and Al-doped TiO ₂ Nanotubes by Atomic Layer Deposition and Their Photocatalytic Performances	Tsong-Pyng Perng National Tsing Hua University, Taiwan
11:25-11:50AM	18: Photocatalytic degradation of organics on TiO ₂ treated by in-liquid plasma	Chiaki Terashima Tokyo University of Science, Japan
Lunch Break		

Wednesday afternoon, December 19

Session: General

Chair: Satoru Hiroto

14:00-14:25PM	19: Graphene - Mixed Transition Metal Oxide (MTMO) Nanocomposite: Synthesis, Characterization and Application in Electrochemical Capacitor	Poi Sim Khiew University of Nottingham Malaysia Campus, Malaysia
14:25-14:50PM	20: Electric and Magnetic Properties of Magnetic (CoFeTaB) _(100-x) O _x Films	Xiaozhong Zhang Tsinghua University, China
Session: Supramolecular Materials III		Chair: Satoru Hiroto
14:50-15:15PM	21: Multivalency: a special type of supramolecular interaction	Walter Knapp Free University of Berlin, Germany
15:15-15:40PM	22: Supramolecular-based materials: Functions and Applications	Hirokuni Jintoku National Institute of Advanced Industrial Science and Technology (AIST), Japan
Session: Titanium-Oxides V		Chair: Jan Mac ák
15:40-16:05PM	23: TiO ₂ -based mixed anion materials for solar fuel production	Kazuhiko Maeda Tokyo Institute of Technology, Japan
16:05-16:30PM	24: Reactivity of metal oxide nanocluster modified rutile and anatase TiO ₂ : Oxygen vacancy formation and CO ₂ interaction	Marco Fronzi Xi'an Jiaotong University, China
16:30-18:00PM	Poster Session & Session Break	
18:10PM	Dinner Social	

Thursday morning, December 20

Session: Titanium-Oxides VI

Chair: Tsong-Pyng Perng

9:00-9:25AM	25: Formation of Black TiO ₂ Nanowire Arrays for Enhanced Photocatalytic Activities by Various Hydrogenated Treatments	Chih-Chieh Wang Feng Chia University, Taiwan
9:25-9:50AM	26: Titanium Oxide Nanoheterostructures for Photoconversion Applications	Yan-Gu Lin National Synchrotron Radiation Research Center, Taiwan
9:50-10:15AM	27: Boron-doped hierarchical rutile submicrosphere TiO ₂ for Lithium ion batteries	Weiqiang Han Zhejiang University, China
10:15-10:35AM	Session Break	

Session: Titanium-Oxides VII

Chair: Tsong-Pyng Perng

10:35-11:00AM	28: Pulsed Laser Deposition of Pure Rutile and Pure Anatase phases of TiO ₂	Farida Selim Bowling Green State University, USA
11:00-11:25AM	29: Identification and Characterization of Metal-oxide Particles with Energy-resolved Distribution of Electron Traps	Bunsho Ohtani Hokkaido University, Japan
11:25-11:50AM	30: Three-Dimensional Porous Graphene Aerogel Embedded Superbly Dispersive Titanium Oxide Nanoparticles/Sulfur Cathode for Advanced Lithium-Sulfur Batteries	Aishui Yu Fudan University, China

Lunch Break

Friday, December 21
One-day Excursion

Poster Session

Wednesday afternoon, December 19

16:30-18:00PM

P-01	Modeling of tunneling effects and complex dynamics in titanium oxide memristive devices	Viera Biolkova Brno University of Technology, Czech Republic
P-02	Antipollution cosmetic application of surface modified titanium oxides for fine-dust protection	Jeong Ho Chang KICET, Korea
P-03	Leverage of convergence bioceramic materials for beauty-care applications	Jeong Ho Chang KICET, Korea
P-04	Electromagnetic interference shielding properties based on ligand-exchanged silver nanocrystal films	Ji-Hyuk Choi Korea Institute of Geoscience and Mineral Resources, Korea
P-05	Metal-organic Frameworks for Topical Delivery of Brimonidine to the Eye	Young Bin Choy Seoul National University, Korea
P-06	A dual-responsive supramolecular nanovesicles based on complex of cystamine dihydrochloride capped pillar arene and galactose derivative for targeted drug delivery	Hai Dong Huazhong University of Science and Technology, China
P-07	Characteristics of Hyperbranched Thermoplastic Polyurethanes with Vegetable Oil-based Polyols via Thiol-ene Reaction	Jeong Hyeon Jang Sejong University, Korea
P-08	Multifunctional Nanoparticulate Systems for On-Demand Drug Delivery and Image-Guided Thermal Therapy	Yong Yeon Jeong Chonnam National University Hwasun Hospital, Korea
P-09	Encapsulation of color pigment for active camouflage electronic paper display by polymer assembling	Hyoung-Joon Jin Inha University, Korea
P-10	Triple-layer Structured Composite Separator Membranes for Semi-flexible Dye-sensitized Solar Cells	HeeJu Kim Sejong University, Korea
P-11	Bioengineered stem cell membrane functionalized nanocarriers for therapeutic targeting of severe hindlimb ischemia	Soo-Hong Lee Dongguk University, Korea
P-12	Cyclodextrin-modified reduced graphene oxide membrane with the function of ultrafast organic pollutant removal	Yun Lu Nanjing University, China
P-13	Multifunctional Nanoparticulate Systems for On-Demand Drug Delivery and Image-Guided Thermal Therapy	In-Kyu Park Chonnam National University Medical School, Korea
P-14	Modulation of Hyaluronic Based Hydrogels with Poly lysine modified gelatin nanoparticles	Hansoo Park Chung-Ang University, Korea