

Collaborative Conference on 3D & Materials Research (CC3DMR) 2016
20 – 24 June 2016
Songdo Convensia, Incheon/Seoul, South Korea

DAY 1 (Monday 20 June)

Room 107			
Time	Page	Speaker	Talk Title
			Chair: Yingying Zong
09:30-10:00	1	Say Chye Joachim LOO	Nanotheranostics and Nanotoxicology – The Nexus of Nano & Bio
10:00-10:30	3	Jae Woong Yoon	Guided-mode resonance nanophotonics: Review and applications
10:30-11:00	<i>Session Break</i>		
			Chair: Say Chye Joachim LOO
11:00-11:30	5	Sang-Yup Lee	Applications of Biomimetic Bolaamphiphile Molecules in Catalysis and Energy Harvesting
11:30-12:00	7	Chang-Dong Yeo	Molecular Dynamics (MD) Modeling and Simulation to Investigate Bonding Preference of Outgassed Hydrocarbon Molecules to Lubricated and Bare Carbon Surfaces
12:30-14:00	<i>Lunch Break</i>		
			Chair: Xucai Yu
14:00-14:30	9	Timur Shegai	Plasmonic nanoantennas for manipulating optics at nanoscale
14:30-15:00	12	Judy Wu	Controlling Interfaces in Photonic and Plasmonic Carbon Nanostructure Optoelectronics: Towards High Performance and Low Cost
15:00-15:30	14	Zonghoon Lee	Atomic-scale Dynamics of Defect Formation in 2D Materials
15:30-16:00	<i>Session Break</i>		
			Chair: Timur Shegai
16:00-16:30	15	Shih-Shuo Tung	All-in-Focus and Depth from A Defocus Image
16:30-17:00	17	Xucai Yu	Optical industry profile measurement based on laser lock-in imaging
17:30-18:00	<i>Poster Session (Ballroom in Convensia, 2F)</i>		
18:00- Night	<i>Conference Reception (Ballroom in Convensia, 2F)</i>		

Collaborative Conference on 3D & Materials Research (CC3DMR) 2016

20 – 24 June 2016

Songdo Convensia, Incheon/Seoul, South Korea

DAY 1 (Monday 20 June)

Room 108			
Time	Page	Speaker	Talk Title
			Chair: Hiroshi Fukuoka
09:30-10:00	18	Yongli Gao	Interface Formation and Surface Degradation of Trihalide Perovskite Materials
10:00-10:30	19	Yoichi Okimoto	Photonic phase control in cobalt perovskite
10:30-10:45	21	Yu-Yun Pan	First-Principles Study on Electronic Structures of FAPbX ₃ (X = Cl, Br, I) Hybrid Perovskites
10:45-11:00	<i>Session Break</i>		
			Chair: Yongli Gao
11:00-11:30	22	Hiroshi Fukuoka	Structure and Electrical Properties of Ge-substituted Rhodium and Cobalt Antimony Skutterudites
11:30-12:00	24	Serena A. Corr	Probing the structure and dynamics of nanomaterials for battery applications
12:00-12:30	26	Gabriel Luiz Cruz de Souza	Probing electron scattering cross sections for molecules of technological importance
12:30-14:00	<i>Lunch Break</i>		
			Chair: Yousuke Ooyama
14:00-14:30	27	Stuart H. Taylor	Catalyst discovery using preparation by supercritical antisolvent precipitation: Georgite as a precursor for highly active copper zinc oxide catalysts
14:30-15:00	30	Tetsuo Tsuchiya	Fabrication of the Flexible Oxide Films by Photo-Induced Chemical Solution Process
15:00-15:30	32	Yu-Chiang Chao	The control of crystallinity in polymer and perovskite solar cells
15:30-16:00	<i>Session Break</i>		
			Chair: Yu-Chiang Chao
16:00-16:30	33	Yousuke Ooyama	Photovoltaic Performance of Dye-Sensitized Solar Cells Based on Diphenylamino-Carbazole Substituted BODIPY Dyes
16:30-17:00	35	Tooru Tanaka	ZnTeO-based multiple band gap semiconductors for intermediate band solar cells
17:30-18:00	<i>Poster Session (Ballroom in Convensia, 2F)</i>		
18:00- Night	<i>Conference Reception (Ballroom in Convensia, 2F)</i>		

Collaborative Conference on 3D & Materials Research (CC3DMR) 2016
20 – 24 June 2016
Songdo Convensia, Incheon/Seoul, South Korea

DAY 1 (Monday 20 June)

Room 109			
Time	Page	Speaker	Talk Title
			Chair: Shlomo Berger
09:30-10:00	38	Young L. Kim	Biogenic light trapping in natural fibers toward scalable photocatalysis
10:00-10:30	40	Xue Jiang	Bottom-up design of 2D organic photocatalysts for visible-light driven hydrogen evolution
10:30-11:00	<i>Session Break</i>		
			Chair: Young L. Kim
11:00-11:30	41	Shlomo Berger	Formation and Characterization of Dielectric nano-Crystals for Highly Sensitive Pyroelectric Thermal Detectors
11:30-12:00	42	Yong Soo Cho	Piezoelectric Energy Harvesting Performance of Nanofiber Composites
12:00-12:30	43	Andrew Grimsdale	New Materials for charge storage applications
12:30-14:00	<i>Lunch Break</i>		
			Chair: Rolf Lortz
14:00-14:30	44	Tetsuya Yamamoto	High-Hall-mobility transparent conductive oxide films: Key factors limiting carrier transport for wide applications
14:30-15:00	47	Satoshi Okuma	Non-equilibrium Transitions in Driven Vortex Matter of Amorphous Superconducting Films
15:00-15:30	49	Tsofar Maniv	Self-consistent Bogoliubov-de Gennes theory of strong type-II superconductivity in 2D electron systems at high magnetic fields.
15:30-16:00	<i>Session Break</i>		
			Chair: Tetsuya Yamamoto
16:00-16:30	51	Rolf Lortz	Large gap, a pseudogap and proximity effect in the Bi ₂ Te ₃ /Fe _{1+y} Te interfacial superconductor
16:30-17:00	52	Masaru Aniya	Evaluation of Grüneisen Parameters of Ionic Conductors
17:30-18:00	<i>Poster Session (Ballroom in Convensia, 2F)</i>		
18:00- Night	<i>Conference Reception (Ballroom in Convensia, 2F)</i>		

Collaborative Conference on 3D & Materials Research (CC3DMR) 2016
20 – 24 June 2016
Songdo Convensia, Incheon/Seoul, South Korea

DAY 1 (Monday 20 June)

Room 110			
Time	Page	Speaker	Talk Title
			Chair: Thuat T. Trinh
09:30-10:00	53	Hiroshi Watanabe	Practical Modeling of floating nanodot with no fitting parameter in Device Simulation
10:00-10:30	56	Masahiko Higuchi	Energy band structures of the crystalline silicon immersed in the magnetic field
10:30-11:00	<i>Session Break</i>		
			Chair: Hiroshi Watanabe
11:00-11:30	58	Thuat T. Trinh	The Small System Method To Compute Thermodynamic Data For 3D And 2D System
11:30-12:00	59	Shohei Watabe	Many-body theory of an interacting Bose-Einstein condensate at finite temperatures
12:00-12:30	60	Rongshan Qin	3D Visual Analyse of Materials Processing
12:30-14:00	<i>Lunch Break</i>		
			Chair: Lan-Chang Liang
14:00-14:30	62	Ifat Kaplan-Ashiri	SEM beyond imaging – in situ SEM experiments
14:30-15:00	63	Salvador Pane i Vidal	Magnetically Guided Micro- and Nanomachines
15:00-15:30	65	Yan Jun Li	Investigation of Pd nanoparticles on Al ₂ O ₃ /NiAl(110) under CO gas by AFM/ KPFM
15:30-15:45	68	Quanzhen Zhang	Systematic Control of the Size, Density and Configuration of Pt Nanostructures on Sapphire (0001) by the Variation of Deposition Amount and Dwelling Time
15:45-16:00	<i>Session Break</i>		
			Chair: Ifat Kaplan-Ashiri
16:00-16:30	70	Lan-Chang Liang	Synthesis of well-defined 3D printing and biocompatible polymers by living ring-opening polymerization
16:30-17:00	71	Johann Faccelo Osma Cruz	Continuous stereolithographic bottom-up 3D printing by means of a liquid-liquid interface for manufacturing functionalized polymeric films
17:30-18:00	<i>Poster Session (Ballroom in Convensia, 2F)</i>		
18:00- Night	<i>Conference Reception (Ballroom in Convensia, 2F)</i>		

Collaborative Conference on 3D & Materials Research (CC3DMR) 2016
20 – 24 June 2016
Songdo Convensia, Incheon/Seoul, South Korea

DAY 1 (Monday 20 June)

Room 111			
Time	Page	Speaker	Talk Title
			Chair: Paz Vaqueiro
09:30-10:00	72	Eddie Cussen	Solid State Lithium Conduction and Disorder in Complex Oxides
10:00-10:30	73	Hisashi Kitami	Control of the ratio of incident flux of ions to neutral species onto substrates to achieve high-carrier-mobility transparent conductive oxide films deposited by a high-growth-rate Reactive Plasma Deposition
10:30-11:00	<i>Session Break</i>		
			Chair: Eddie Cussen
11:00-11:30	77	Paz Vaqueiro	Layered oxychalcogenides as promising thermoelectric materials
11:30-12:00	79	Anthony V. Powell	Thermoelectric Materials for Energy Harvesting from Waste Heat
12:00-12:30	82	Helmut Baumgart	Advances in Thermoelectric Materials with Improved Figure of Merit
12:30-14:00	<i>Lunch Break</i>		
			Chair: Masahiko Kondow
14:00-14:30	85	Reshef Tenne	Inorganic nanotubes and fullerene-like nanoparticles at the crossroad between materials science and nanotechnology and their applications
14:30-15:00	86	Junichi Kurawaki	Development of Novel Synthetic Method of Glucose-Binding Silver Nanoparticles and Biosensing Applications
15:00-15:30	88	Shoko Kume	On-metal Framing of Organic-contact Cathode with High Proton Reduction Activity
15:30-16:00	<i>Session Break</i>		
			Chair: Reshef Tenne
16:00-16:30	90	Masahiko Kondow	Stimulated emission from photonic crystal cavity with AlO _x cladding layer
16:30-17:00	92	Yasufumi Fujiwara	Enhanced red emission from Eu ions embedded in a GaN resonant optical microcavity
17:30-18:00	<i>Poster Session (Ballroom in Convensia, 2F)</i>		
18:00- Night	<i>Conference Reception (Ballroom in Convensia, 2F)</i>		

Collaborative Conference on 3D & Materials Research (CC3DMR) 2016
20 – 24 June 2016
Songdo Convensia, Incheon/Seoul, South Korea

DAY 2 (Tuesday 21 June)

Room 107			
Time	Page	Speaker	Talk Title
			Chair: Nikolai Perov
09:30-10:00	96	Klaus Muller-Buschbaum	Luminescent N-functionalized MOFs and Coordination Networks for Novel Sensing Applications and Lighting
10:00-10:30	99	Jwohuei Jou	Good light based on candlelight OLED
10:30-11:00	<i>Session Break</i>		
			Chair: Klaus Muller-Buschbaum
11:00-11:30	100	Nikolai Perov	Ferromagnetic nanoparticles in topochemical transformations
11:30-12:00	101	Bingwu Wang	Theoretical Studies on the Slow Magnetic Relaxation of Single-Molecule Magnets
12:00-12:30	123	Masaki Nakano	PLD-fabricated Nd-Fe-B thick-film magnets deposited on Si substrates
12:30-14:00	<i>Lunch Break</i>		
			Chair: Omar F. Mohammed
14:00-14:30	105	Hagay Shpaisman	Directed Formation By Optical And Acoustic Forces
14:30-15:00	106	Michael F. Herman	An Approximate Semiclassical Method that Uses Real Valued Trajectories for Time Dependent Tunneling Calculations
15:30-16:00	<i>Session Break</i>		
			Chair: Hagay Shpaisman
16:00-16:30	107	Omar F. Mohammed	Mapping Carrier Dynamics on Material Surfaces in Space and Time using 4D Electron Microscopy
16:30-17:00	108	Hani E. Elsayed-Ali	Ultrafast electron diffraction studies of lattice dynamics of femtosecond laser-excited bismuth and antimony nanoparticles and thin films
19:20-21:00	<i>Evening Activity (BIBAP at Tribowl)</i>		

Collaborative Conference on 3D & Materials Research (CC3DMR) 2016
20 – 24 June 2016
Songdo Convensia, Incheon/Seoul, South Korea

DAY 2 (Tuesday 21 June)

Room 108			
Time	Page	Speaker	Talk Title
			Chair: Takeo Hyodo
09:30-10:00	109	Yonglai Lu	Carbon Nanotubes Reinforced Rubber Composites and Their Promising Application in High Performance Tires
10:00-10:30	112	Yusheng Shi	Polymer based composites for selective laser sintering additive manufacturing
10:30-11:00	<i>Session Break</i>		
			Chair: Yonglai Lu
11:00-11:30	113	Takeo Hyodo	Development of gas sensors by utilizing well-developed porous materials
11:30-12:00	117	Yoke Leng Sim	Nanoporous Biomaterials in Uremic Toxin Adsorption
12:00-12:30	118	Yingwei Zhang	Controllable construction of mesoscopic DNA pattern by combining precise magnetic manipulation and DNA-driven assembly
12:30-14:00	<i>Lunch Break</i>		
			Chair: Yiliang Liao
14:00-14:30	119	Gladius Lewis	Use of magnesium-based alloys for stents: current status and future research directions
14:30-15:00	122	Hideo Kaiju	Large magnetocapacitance effect in magnetic tunnel junctions at room temperature
15:00-15:30	102	Asif Mahmood	Magnetic and photocatalytic response of Ag-doped ZnFeO nano-composites for photocatalytic degradation of reactive dyes in aqueous solution
15:30-16:00	<i>Session Break</i>		
			Chair: Gladius Lewis
16:00-16:30	124	Yiliang Liao	The mechanisms of thermal engineered laser shock peening for enhanced fatigue performance
16:30-17:00	125	Yasuya Nakayama	Strain Mode of General Flow: Characterization and Implications for Flow Pattern Structures
19:20-21:00	<i>Evening Activity (BIBAP at Tribowl)</i>		

Collaborative Conference on 3D & Materials Research (CC3DMR) 2016
20 – 24 June 2016
Songdo Convensia, Incheon/Seoul, South Korea

DAY 2 (Tuesday 21 June)

Room 109			
Time	Page	Speaker	Talk Title
			Chair: Akira Ishibashi
09:30-10:00	126	Seong Jin Koh	Cold-Electron Transport at Room Temperature: Toward Ultralow Energy Consumption Electronics
10:00-10:30	127	Huizhen Wu	CdTe/PbTe heterostructure: A new 2DEG system
10:30-11:00	<i>Session Break</i>		
			Chair: Seong Jin Koh
11:00-11:30	128	E Rusli	Thin film Silicon Nanowire/PEDOT:PSS Hybrid Solar Cells with Surface Treatment
11:30-12:00	129	Akira Ishibashi	Multi-striped Orthogonal Photon-Photocarrier-Propagation Solar Cells (MOP3SC) with Redirection Waveguide
12:00-12:30	132	Takefumi Kamioka	Next generation of high-efficient heterojunction crystalline silicon solar cells
12:30-14:00	<i>Lunch Break</i>		
			Chair: Q. Jane Wang
14:00-14:30	134	Hong Wang	Analysis of Interface Thermal Stability of High-k ZrO ₂ on GaN and AlGaN
14:30-15:00	138	Fredrik Karlsson	InGaN quantum dots on GaN micropylramids for polarized photon emission
15:00-15:30	140	Ching-Ling Hsu	Temperature-dependent morphology of annealed gold films on silicon surfaces
15:30-16:00	<i>Session Break</i>		
			Chair: Hong Wang
16:00-16:30	141	Q. Jane Wang	Additive Manufacturing and Investigation of Novel Grooved Micro Heat Pipes
16:30-17:00	142	Yu Yang	Durable and Efficient Packing Materials for Green Subcritical Water Chromatography
19:20-21:00	<i>Evening Activity (BIBAP at Tribowl)</i>		

Collaborative Conference on 3D & Materials Research (CC3DMR) 2016
20 – 24 June 2016
Songdo Convensia, Incheon/Seoul, South Korea

DAY 2 (Tuesday 21 June)

Room 110			
Time	Page	Speaker	Talk Title
			Chair: Manohar Kumar
09:30-10:00	143	Katsuhiko Higuchi	Pair-Density Functional Theory for Superconductors
10:00-10:30	145	Masayuki Hashisaka	Fractional Quasiparticles in a Local Quantum Hall System
10:30-11:00	<i>Session Break</i>		
			Chair: Masayuki Hashisaka
11:00-11:30	147	Manohar Kumar	Breakdown of quantum Hall effect in graphene: Noise studies
11:30-12:00	148	Beat Braem	Local Investigations in the Fractional Quantum Hall Regime using Scanning Gate Microscopy
12:00-12:30	150	Makoto Sakurai	Toward quantum bit generation using single highly charged ion implantation
12:30-14:00	<i>Lunch Break</i>		
			Chair: Alejandro Gomez Roca
14:00-14:30	152	Yujun Shi	Growth of Crystalline Metal Carbides on the Catalyst Surface in Hot Wire Chemical Vapor Deposition
14:30-15:00	154	Yasuhiro Sugawara	Atomic-scale Imaging of Electronic Properties of the Surface by Electrostatic Force Microscopy
15:00-15:30	159	Mao Sui	Evolution of Pd Nanostructures on c-plane Sapphire by the Control of Annealing Temperature and Duration
15:30-16:00	<i>Session Break</i>		
			Chair: Yujun Shi
16:00-16:30	155	Alejandro Gomez Roca	Magneto-Plasmonic Nanostructures for Theranostic Applications
16:30-17:00	157	Hémadi Miryana	Magnetic nanoparticles for drug internalization by the iron-acquisition pathway
19:20-21:00	<i>Evening Activity (BIBAP at Tribowl)</i>		

Collaborative Conference on 3D & Materials Research (CC3DMR) 2016
20 – 24 June 2016
Songdo Convensia, Incheon/Seoul, South Korea

DAY 2 (Tuesday 21 June)

Room 111			
Time	Page	Speaker	Talk Title
			Chair: Hendrik Heinz
09:30-10:00	161	W.G. van der Wiel	Evolution of a designless nanoparticle network into reconfigurable Boolean Logic
10:00-10:30	162	Nobuhiko Nakano	On-Chip Nonvolatile Memory for Standalone System using 0.18 μm Standard CMOS Technology
10:30-11:00	<i>Session Break</i>		
			Chair: W.G. van der Wiel
11:00-11:30	164	Hendrik Heinz	Understanding Molecular Recognition and Assembly at Biological-Inorganic Interfaces to Engineer New Functional Materials: Catalysts, Sensors, and Biominerals
11:30-12:00	166	Phillip Choi	Molecular Dynamics Study of Diffusion in Polymers
12:00-12:15	167	Kuan-Syun Wang	Magnetic Two-Dimensional Nanosheets for Rapid Separation of Water Pollutants
12:15-12:30	168	Jeongsik Yun	How simple are the models of Na intercalation in aqueous media?
12:30-14:00	<i>Lunch Break</i>		
			Chair: Zerihun Assefa
14:00-14:30	170	Masayoshi Higuchi	Electrochromic Devices with Metallo-Supramolecular Polymers
14:30-15:00	171	Yasufumi Enami	High Speed Electro-Optic Polymer/TiO ₂ Vertical Slot Waveguide Modulators
15:00-15:30	174	Takeharu Haino	Development of Supramolecular Polymers based on Unique Molecular Recognition Motifs
15:30-16:00	<i>Session Break</i>		
			Chair: Masayoshi Higuchi
16:00-16:30	176	Zerihun Assefa	The designing of coordination polymers consisting of late-transition metals and lanthanide ions for luminescence enhancement
16:30-17:00	178	Tomoyasu Hirai	Preparation of Polymer with Perylene diimide Side Chain and Characterization of Its Nanostructure
19:20-21:00	<i>Evening Activity (BIBAP at Tribowl)</i>		

Collaborative Conference on 3D & Materials Research (CC3DMR) 2016
20 – 24 June 2016
Songdo Convensia, Incheon/Seoul, South Korea

DAY 3 (Wednesday 22 June)

Room 107			
Time	Page	Speaker	Talk Title
			Chair: Yong Hyub Won
09:30-10:00	181	Osman Bakr	Hybrid Perovskite Single Crystals: Properties, Growth Design, and Device Applications
10:00-10:30	182	Jhinhwan Lee	Atomic scale visualization of topological dynamics of plaquette antiferromagnetic order and interfacial phonons in tetragonal FeAs layer encapsulated in perovskite layers using spin-polarized STM
10:30-11:00	<i>Session Break</i>		
			Chair: Osman Bakr
11:00-11:30	183	Yong Hyub Won	Multiview 3D Display Using Varifocal Lenticular Liquid Lens Array
11:30-12:00	184	Hiroyuki Takagi	Three-dimensional Magneto-optic Spatial Light Modulator Composed of Artificial Magnetic Lattice
12:00-12:30	186	HuiChi Chen	Three-dimensional holographic optical tweezers
12:30-14:00	<i>Lunch Break</i>		
			Chair: Yo Sung Ho
14:00-14:30	189	Lambertus Hesselink	Novel 3D Differential Phase Contrast Imaging System
14:30-15:00	191	Samuel Choi	3D Tomographic Measurement of Interior Surface Vibrations in Thick Biological Tissues Using Multifrequency Sweepable Optical Comb
15:00-15:30	193	Kohei SOGA	Application of Rare-Earth Doped Ceramics for Transparent Imaging Devices
15:30-16:00	<i>Session Break</i>		
			Chair: Lambertus Hesselink
16:00-16:30	194	Yo Sung Ho	Analysis of 3D Reconstruction System Using Hand-held RGB-D Camera
16:30-17:00	197	Norio Tagawa	Selection of Consecutive Two Frames for Shape from Random Camera Motions
18:00- Night	<i>Conference Banquet (Ballroom in Convensia, 2F)</i>		

Collaborative Conference on 3D & Materials Research (CC3DMR) 2016
20 – 24 June 2016
Songdo Convensia, Incheon/Seoul, South Korea

DAY 3 (Wednesday 22 June)

Room 108			
Time	Page	Speaker	Talk Title
			Chair: Charles H. Patterson
09:30-10:00	199	Yasushi Morita	Molecular Spin Battery Composed of Air-stable Neutral Radicals and Graphite
10:00-10:30	201	Leon L. Shaw	Enhancing the Capacitive Energy Storage of Activated Carbon through Mechanical Activation
10:30-11:00	<i>Session Break</i>		
			Chair: Yasushi Morita
11:00-11:30	204	Charles H. Patterson	Au at the Si(111) surface: silicene and Au nanowires probed by optical spectroscopy
11:30-12:00	206	Masashi Hasegawa	Ultra-High Pressure Synthesis, Stability, Physical Properties and Electronic Structure of Nitrogen-rich Transition Metal Nitrides
12:00-12:30	207	Ming-Yu Li	Evolution of Configuration and Size of Self-assembled Pt Nanoparticles on Sapphire (0001) Controlled with a Systematic Variation of thermal treatment
12:30-14:00	<i>Lunch Break</i>		
			Chair: Jong-in Hahm
14:00-14:30	209	Akira Yamakata	Behavior of Photogenerated Electrons and Holes on Anatase and Rutile TiO ₂ Powders
14:30-15:00	212	Giwan Yoon	Piezoelectric ZnO Thin Films & Their Application for Micro Energy Harvesting Devices
15:00-15:30	214	Edgar Knobloch	Soft Matter Quasicrystals in Two and Three Dimensions
15:30-16:00	<i>Session Break</i>		
			Chair: Akira Yamakata
16:00-16:30	217	Jong-in Hahm	Fundamental Study of Nanoscale Protein-Polymer Interactions and Potential Contributions to Solid-state Protein Nanoarrays
16:30-17:00	218	Liqiang Wang	Microstructural characteristics and mechanical properties of biomedical titanium alloy during friction stir processing
18:00- Night	<i>Conference Banquet (Ballroom in Convensia, 2F)</i>		

Collaborative Conference on 3D & Materials Research (CC3DMR) 2016
20 – 24 June 2016
Songdo Convensia, Incheon/Seoul, South Korea

DAY 3 (Wednesday 22 June)

Room 109			
Time	Page	Speaker	Talk Title
			Chair: Kenta Arima
09:30-10:00	219	Werner Karl Schomburg	Ultrasonic fabrication of microfluidic systems from thermoplastic polymers
10:00-10:30	222	Guy Makov	Thermodynamic properties from ab-initio calculations – Ti and other case studies
10:30-11:00	<i>Session Break</i>		
			Chair: Werner Karl Schomburg
11:00-11:30	223	Kenta Arima	Ion Segregation in Deliquesced Droplets of Alkali Halide Nanocrystals on SiO ₂ Approached by both Surface Science Techniques and Electrical Characteristics
11:30-12:00	229	Gerhard Eder	On the Existence of Stable Clusters in Polymer Melts: Consequences for Nucleation under Processing Conditions
12:30-14:00	<i>Lunch Break</i>		
			Chair: Gyungsu Byun
14:00-14:30	230	Minoru Sasaki	3D devices realized by photolithography using spray coating of photoresist
14:30-15:00	233	Juan Wu	4d Imaging of Polymer Electrolyte Membrane Fuel Cell Cathodes by Scanning Transmission X-Ray Microscopy
15:00-15:30	236	Li-Hsin Chan	Effect of Side Chains on Photovoltaic Performance of Two-Dimensional Conjugated Copolymers
15:30-16:00	<i>Session Break</i>		
			Chair: Minoru Sasaki
16:00-16:30	238	Gyungsu Byun	Energy-efficient I/O Interface and Clock Distribution for 3D-stacked Mobile Devices
16:30-17:00	239	Kyeong-Sik Min	Memristor crossbars for pattern recognition
18:00- Night	<i>Conference Banquet (Ballroom in Convensia, 2F)</i>		

Collaborative Conference on 3D & Materials Research (CC3DMR) 2016
20 – 24 June 2016
Songdo Convensia, Incheon/Seoul, South Korea

DAY 3 (Wednesday 22 June)

Room 110			
Time	Page	Speaker	Talk Title
			Chair: Louisa Meshi
09:30-10:00	300	Aliaksandr S. Bandarenka	Design of improved electrocatalysts for energy provision
10:00-10:30	241	Ghazanfar Abbas	Electrochemical Study of Nano-composite Anode for Energy Conversion Applications (Solid Oxide Fuel Cell)
10:30-11:00	Session Break		
			Chair: Guy Makov
11:00-11:30	243	Louisa Meshi	Structure determination of aluminides applying state of the art electron crystallography methods
11:30-12:00	244	Yuanfei Han	Fabrication and characterization of laminated titanium matrix composite
12:00-12:30	246	Yingying Zong	Research on the Elastic-Plastic Deformation Mechanism of Ti-H System
12:30-14:00	Lunch Break		
			Chair: Alok Shukla
14:00-14:30	249	Masao Nagase	Single-crystal graphene growth on SiC by infrared rapid thermal annealing
14:30-15:00	252	Kibog Park	Epitaxial Graphene Grown on Hexagonal SiC at Reduced Temperature with Mo-Plate Capping: Crystallinity and Carrier Transport
15:00-15:30	254	Monica Craciun	High quality graphene for advanced applications
15:30-15:45	255	Zong Han Lu	Graphene oxidation fabricated by low damage atmospheric pressure plasma treatments
15:45-16:00	Session Break		
			Chair: Masao Nagase
16:00-16:15	257	Iddo Amit	Controlling and Probing the Band-Gap of Graphene and Graphene-Related Materials
16:15-16:30	258	Po Chen Wu	Edges of Graphene Nanoribbons Healed by Low Damage Plasma Treatment for Future Nanoelectronic Devices
16:30-17:00	260	Alok Shukla	Theory of Electronic, Optical, and Magnetic Properties of Graphene Nanodisks
18:00- Night	Conference Banquet (Ballroom in Convensia, 2F)		

Collaborative Conference on 3D & Materials Research (CC3DMR) 2016
20 – 24 June 2016
Songdo Convensia, Incheon/Seoul, South Korea

DAY 3 (Wednesday 22 June)

Room 111			
Time	Page	Speaker	Talk Title
			Chair: Rebecca Cheung
09:30-10:00	261	Kuei-Fang Hsu	New Nonlinear Optical Materials of Metal Chalcogenides with Promising SHG Signals
10:00-10:30	262	Fan Weijun	Electrical and optical properties of GaAsNBi/GaAs quantum wells
10:30-11:00	<i>Session Break</i>		
			Chair: Kuei-Fang Hsu
11:00-11:30	263	Rebecca Cheung	Micro-resonator devices and systems
11:30-12:00	265	Dao Hua Zhang	Split ring resonators from Infrared to UV range
12:00-12:30	266	Toshihiro Okamoto	Split-ring resonator metamaterial fabricated by nanosphere lithography
12:30-14:00	<i>Lunch Break</i>		
			Chair: Huaming Li
14:00-14:30	267	Imane Khalil	Uncertainty Quantification using Polynomial Chaos Expansion in Numerical Simulations of Spent Nuclear Fuel Assemblies
14:30-15:00	269	Qi-Huo Wei	Plasmonic Photopatterning of Topological Defects in Liquid Crystals as Templates for Directed Colloidal Assembly
15:00-15:30	271	Qing-Hua Xu	Plasmon Enhanced Two-photon Photoluminescence of Metal nanoparticles
15:30-16:00	<i>Session Break</i>		
			Chair: Qi-Huo Wei
16:00-16:30	273	Huaming Li	Thermodynamic properties by Equation of state of liquid sodium under pressure
16:30-17:00	274	Song-You Hong	A new atmospheric model with a cubed-sphere grid for numerical weather prediction
18:00- Night	<i>Conference Banquet (Ballroom in Convensia, 2F)</i>		

Collaborative Conference on 3D & Materials Research (CC3DMR) 2016
20 – 24 June 2016
Songdo Convensia, Incheon/Seoul, South Korea

DAY 4 (Thursday 23 June)

Room 108			
Time	Page	Speaker	Talk Title
			Chair: Choon Young Lee
09:30-10:00	275	Kensuke Naka	Element-Block Polymers Based on T8-caged Silsesquioxanes
10:00-10:30	277	Yun Yan	Electrostatic self-Assembly: Possibilities to retain the porphyrin monomer properties in aggregates
10:30-11:00	<i>Session Break</i>		
			Chair: Kensuke Naka
11:00-11:30	278	Choon Young Lee	Dendritic macromolecular antioxidants
11:30-12:00	279	Yongchang Han	Molecular photoassociation and photodissociation dynamics by femtosecond lasers
12:00-12:15	280	Fatang Liu	Robust Superhydrophobic Sponge with Excellent Anti-Icing Properties
12:15-12:30	282	Chen Ning	Facile Fabrication of ultralight foams
12:30-14:00	<i>Lunch Break</i>		
			Chair: Masaharu Oshima
14:00-14:30	284	Xiangyu Quan	Application of a dual-excitation multi-modal digital holographic microscope to biological imaging
14:30-15:00	286	Yoonchan Jeong	On the Coherence Characteristics of Fiber-Based Noise-Like Pulsed Laser Sources
15:00-15:30	287	Masaharu Oshima	Soft X-ray Resonant, Nano and Operando Spectroscopy for Lithium Ion Batteries
15:30-15:45	289	Shao-Chieh Weng	Synthesis of MnO _x /reduced graphene oxide nanocomposite as a negative electrode for lithium-ion battery
15:45-16:00	<i>Session Break</i>		
			Chair: Yoonchan Jeong
16:00-16:30	291	Pei Wenli	Synthesis of one dimensional FePt nanomaterials under high magnetic field
16:30-17:00	294	Puran Pandey	Fabrication and evolution of various configuration and size of Pt nanostructures on GaN (0001): Voids, Hillocks, Nanoparticles, Nanoclusters, Porous Pt Network and Porous GaN

Collaborative Conference on 3D & Materials Research (CC3DMR) 2016

20 – 24 June 2016

Songdo Convensia, Incheon/Seoul, South Korea

DAY 4 (Thursday 23 June)

Room 109			
Time	Page	Speaker	Talk Title
			Chair: Kenneth K.W. Kwan
09:30-10:00	296	Bing Yan	A Systematic Exploration of Nano-Bio Interactions: the Story of Carbon Nanotubes
10:00-10:30	297	Wenzhi Li	Electrochemical Lithiation of Individual Cobalt Sulfide Nanowire-filled Carbon Nanotube
10:30-11:00	<i>Session Break</i>		
			Chair: Bing Yan
11:00-11:30	301	Kenneth K.W. Kwan	The Electrochemical Actuation of Nanoporous Nickel
11:30-11:45	303	Chin-Fung Su	Electrochemical Surface-Enhanced Raman Spectroscopy of detecting Endocrine disruptor chemicals
12:00-12:15	304	Chia-Wei Chang	Exfoliation of MoS ₂ via Sonication and Examination of MoS ₂ Nanosheets
12:30-14:00	<i>Lunch Break</i>		
			Chair: Niklas Hedin
14:00-14:30	305	Alexander Brown	New Phosphorescent Materials: Insights from Computational Chemistry
14:30-15:00	306	Charles Jaffe	Transition States: The Geometry of Reaction Dynamics
15:00-15:30	307	Masatomo Yashima	Precise Structure Analysis of Materials for Energy and Environment
15:30-16:00	<i>Session Break</i>		
			Chair: Alexander Brown
16:00-16:30	308	Niklas Hedin	Microporous polymers for CO ₂ capture and heterogeneous catalysis
16:30-16:45	309	Qin Yan	Preparation of UV cured long fiber reinforced polymer films and Study on its laminate properties

Collaborative Conference on 3D & Materials Research (CC3DMR) 2016
20 – 24 June 2016
Songdo Convensia, Incheon/Seoul, South Korea

DAY 4 (Thursday 23 June)

Room 110			
Time	Page	Speaker	Talk Title
			Chair: Toshihiro Nakamura
09:30-10:00	311	Hiroshi Okamoto	Self-organized nanostructure formation of III-V and group IV semiconductors by using bismuth
10:00-10:30	314	Andreas Fissel	Si twinning superlattices on atomically flat mesas: Epitaxial growth and electrical characterization
10:30-11:00	<i>Session Break</i>		
			Chair: Hiroshi Okamoto
11:00-11:30	317	Toshihiro Nakamura	Impedance spectroscopic study on metal-manganite interfaces exhibiting resistance switching
11:30-12:00	318	Kazuaki Akaiwa	Conductivity Control of Sn-Doped Corundum-Structured Ga ₂ O ₃ Films on Sapphire
12:00-12:30	321	Masatomo Yashima	Novel Oxide-Ion Conductors based on a New Structure Family NdBaInO ₄
12:30-14:00	<i>Lunch Break</i>		
			Chair: Fei Zeng
14:00-14:30	322	Koichi Yamaguchi	Fabrication of Ultrahigh-Density GaAsSb/InAsSb Quantum Dots and Their Photovoltaic Applications
14:30-14:45	324	Yu-Shan Su	Comparison of YPO ₄ : Tb ³⁺ , Yb ³⁺ and YVO ₄ : Tb ³⁺ , Yb ³⁺ Phosphors as Quantum Cutting by Cooperative Energy Transfer from Visible Light to Near Infrared emission
14:45-15:00	325	Yuan-Liang Zhong	Triangular MoS ₂ Transistor
15:00-15:30	240	Pooi See Lee	Flexible and Stretchable Conductors for Electrochemical Energy Conversion Devices
15:30-16:00	<i>Session Break</i>		
			Chair: Koichi Yamaguchi
16:00-16:30	227	Fei Zeng	Ion dependent frequency filtering and learning of semiconducting polymer/electrolyte composite
16:30-17:00	4	Yilong HAN	Melting and Premelting of Colloidal Crystals

Collaborative Conference on 3D & Materials Research (CC3DMR) 2016
20 – 24 June 2016
Songdo Convensia, Incheon/Seoul, South Korea

DAY 4 (Thursday 23 June)

Room 111			
Time	Page	Speaker	Talk Title
			Chair: Masato Sone
09:30-10:00	326	Norio Kawakami	Many-body proximity effects in f-electron superlattices
10:00-10:30	327	Philip Pong	Spintronic Sensors, Internet of Things, and Smart Living
10:30-11:00	<i>Session Break</i>		
			Chair: Norio Kawakami
11:00-11:30	328	Masato Sone	Nanoscale Wiring by Cu Electrodeposition in Supercritical Carbon Dioxide Emulsified Electrolyte toward 3D Integrated Circuits
11:30-12:00	331	ZhiJun Liu	Composite Right/Left-Handed Transmission-line Metamaterials in the Mid-IR Region
12:00-12:15	333	Sharif Iqbal Mitu Sheikh	Novel Magnetically Tunable Microstrip Antenna
12:15-14:00	<i>Lunch Break</i>		
			Chair: Katharine Moore Tibbetts
14:00-14:30	335	Katharine Moore Tibbetts	Controlling the size and shape of uncapped Au nanostructures with femtosecond laser-assisted synthesis
14:30-15:00	338	Hong Li	Void shrinking and interfacial grain boundary migration in the diffusion bonding of 1Cr11Ni2W2MoV steel
15:00-15:15	339	Sundar Kunwar	Configuration, size and density evolution of Pd nanostructures on sapphire (0001) by the control of deposition amount at various annealing temperature
15:15-15:30	341	Changjun Han	Preparation and characterization of pure titanium/hydroxyapatite nanocomposites manufactured via selective laser melting