

Collaborative Conference on 3D & Materials Research (CC3DMR) 2015
15 - 19 June 2015
BEXCO, Busan, South Korea

DAY 1 (Monday 15 June)

Room 211 (CC3DMR 2015)			
Time	Page	Speaker	Talk Title
			Chair: Min-Chul Park
09:00-09:30	1	Yasuhiro Takaki	Scanning holographic displays using MEMS SLM
09:30-10:00	4	Yue Liu	Objective Fatigue Evaluation of Stereoscopic 3D Display
10:00-10:30	6	Keita Takahashi	Generating Live Free-Viewpoint Video from Multi-view Cameras
10:30-11:00	<i>Session Break</i>		
			Chair: Yasuhiro Takaki
11:00-11:30	9	YongKeun Park	Wavefront shaping techniques for enhancing penetration depth in optical coherence tomography
11:30-12:00	10	Terumitsu TANAKA	GPU-accelerated micromagnetic calculation for design of magnetic storage devices
12:00-12:30	11	Min-Chul Park	Overview of the Reconstruction Methods for Binary Holograms
12:30-14:00	<i>Lunch Break</i>		
			Chair: Lu Rong
14:00-14:30	12	Wen-Liang Hwang	Extend Depth of Field from a Blurred Image
14:30-15:00	14	Canhui Cai	Data reuse multiple description coding scheme and its application in 3D video coding
15:00-15:30	15	Yo-Sung Ho	High Resolution Depth Map Generation Using Depth Sensors
15:30-16:00	<i>Session Break</i>		
			Chair: Canhui Cai
16:00-16:30	17	Lu Rong	Terahertz Holography for Biological Imaging
16:30-17:00	18	J. H. Song	Transmission-type volume-holographic lens arrays for three-dimensional displaying of integral images
17:00-17-15	20	Tien-Thong Nguyen Do	SSVEP-based Brain-Computer Interface for Hologram Interaction
18:30-Night	<i>Conference Reception in SEA LIFE Busan Aquarium</i>		

Collaborative Conference on 3D & Materials Research (CC3DMR) 2015
15 - 19 June 2015
BEXCO, Busan, South Korea

DAY 1 (Monday 15 June)

Room 212 (CC3DMR 2015)			
Time	Page	Speaker	Talk Title
			Chair: Sharifah Bee
09:00-09:30	22	Zhisong Wang	From Biomaterials to Nanoscale Track-Walking Motors
09:30-10:00	23	Liqun Zhang	The new biobased, biodegradable and low temperature printed polymer materials for 3D printing
10:00-10:30	474	Douglas B. Chrisey	High-Throughput Manufacturing of Polymer-Ceramic Nanocomposite Dielectric Capacitors Designed for Energy Storage
10:30-11:00	<i>Session Break</i>		
			Chair: Zhisong Wang
11:00-11:30	25	Sharifah Bee	Role of Catalyst in nanostructuring of carbon
11:30-12:00	26	Jim P. Zheng	A Walk with Ions: NMR Studies of Energy Storage Devices
12:00-12:30	27	Jiang Jianwen	Ionic Liquids for Cellulose Pre-treatment and Carbon Capture: A Computational Perspective
12:30-14:00	<i>Lunch Break</i>		
			Chair: Tetsuo Tsuchiya
14:00-14:30	28	Satoshi Yasuda	Carbon Nanotube Electrocatalyst for Oxygen Reduction Reaction
14:30-15:00	29	Uwe Erb	Advances in electrodeposited nanostructured materials
15:00-15:30	31	Jordina Fornell	Orientation dependence in superelastic Cu-Al-Mn-Ni micropillars
15:30-16:00	<i>Session Break</i>		
			Chair: Satoshi Yasuda
16:00-16:30	33	Tetsuo Tsuchiya	Oxide thin films by Photo Reaction of Chemical Solution Process for a Future Devices
16:30-17:00	34	Antonio Martins Figueiredo Neto	Magnetic and Structural Study of Electric Double Layered Ferrofluid with MnFe ₂ O ₄ @-Fe ₂ O ₃ Nanoparticles of Different Mean Diameters: Determination of the Magnetic Correlation Distance
17:00-17:30	35	Qiang Wang	High magnetic field controlled structure evolution and magnetic properties of the Ni-Fe nano-films
18:30-Night	<i>Conference Reception in SEA LIFE Busan Aquarium</i>		

Collaborative Conference on 3D & Materials Research (CC3DMR) 2015
15 - 19 June 2015
BEXCO, Busan, South Korea

DAY 1 (Monday 15 June)

Room 213 (CC3DMR 2015)			
Time	Page	Speaker	Talk Title
			Chair: Yutaka Wakayama
09:00-09:30	36	Carlo Montemagno	The Nexus of Energy, Water, Health and Food: Exercising a New Paradigm to Solve Global Quality of Life Challenges
09:30-10:00	38	Marco Rolandi	Biopolymer-based protonics: protonic diode, transistor, synaptic memory and enzymatic logic
10:00-10:30	39	Donglei Fan	High Performance Rotary Nano/Micromotors Assembled from Nanoscale Building Blocks
10:30-11:00	<i>Session Break</i>		
			Chair: Carlo Montemagno
11:00-11:30	42	Yutaka Wakayama	Molecular functions in Si-based tunneling devices
11:30-12:00	43	Masa-aki Haga	Fabrication and Functions of Multi-Layered Molecular Devices Based on Surface Coordination Chemistry
12:00-12:30	46	Toshihiro Nakamura	Resistive switching in metal-manganite interfaces
12:30-14:00	<i>Lunch Break</i>		
			Chair: Mo Li
14:00-14:30	47	Hyun-Joong Kim	Temporary Bonding and Debonding Adhesives for 3D Multi-chip Packaging Process
14:30-15:00	48	Yi-Tsung Chang	Infrared Gas Sensing of MEMS with Shock Effect
15:00-15:30	51	Rebecca Cheung	Micro-resonator devices and systems
15:30-16:00	<i>Session Break</i>		
			Chair: Hyun-Joong Kim
16:00-16:30	52	Mo Li	Quantification of 3D microstructures from experiment and theory and their applications
16:30-17:00	53	Kyeongjae Cho	First Principles Modeling of 2D Materials
17:00-17-30	55	Masahiko Higuchi	Dynamical Current-Density Functional Theory for Metamaterials
18:30-Night	<i>Conference Reception in SEA LIFE Busan Aquarium</i>		

Collaborative Conference on 3D & Materials Research (CC3DMR) 2015

15 - 19 June 2015

BEXCO, Busan, South Korea

DAY 1 (Monday 15 June)

Room 214 (CC3DMR 2015)			
Time	Page	Speaker	Talk Title
			Chair: Eiji Kobayashi
09:00-09:30	56	Tetsuya Yamamoto	Characteristics of carrier transport of highly transparent conductive Al or Ga-doped ZnO films for wide applications; electrodes, plasmonics and chemical sensors
09:30-10:00	60	Koichi Nagamoto	GZO:In Thin Films Deposited on Gas Barrier Substrates for Flexible Transparent Conductive Electrodes
10:00-10:30	63	Seungjun Oh	Uniform ordering of ZnO nanorods and nitrogen plasma treatment for improving ZnO-P3HT hybrid photovoltaic devices performance
10:30-11:00	Session Break		
			Chair: Tetsuya Yamamoto
11:00-11:30	65	Jer-Chyi Wang	Anions detection and interference of samarium oxide sensing membrane with nitrogen PIII treatment
11:30-12:00	67	Eiji Kobayashi	Hydrogen-codoping effects on electronic states of cerium species and electrical properties of cerium-doped indium oxides prepared by dc-arc discharge ion-plating at low process temperature
12:00-12:30	70	Lei Bi	Silicon integrated magnetic oxide thin films for on-chip nonreciprocal photonic device applications
12:30-14:00	Lunch Break		
			Chair: Stuart Tessmer
14:00-14:30	72	Zhongchang Wang	Polymorphism of dislocation core structures at the atomic scale
14:30-15:00	74	Bing Yan	Systematic Exploration for a Better Modulation of Nano-Bio Interactions
15:00-15:30	75	Yong-Chang Han	Super energy transfer in the collision of fast H atom with acetylene
15:30-16:00	Session Break		
			Chair: Zhongchang Wang
16:00-16:30	76	Stuart Tessmer	Probing the Topological Insulator Proximity Effects
16:30-17:00	77	Susanne Mueller	Non-local magnetotransport in the 2D topological insulator candidate InAs/GaSb
17:00-17:30	79	Nguyen Hoa Hong	Magnetic oxide semiconductors
18:30-Night	Conference Reception in SEA LIFE Busan Aquarium		

Collaborative Conference on 3D & Materials Research (CC3DMR) 2015

15 - 19 June 2015

BEXCO, Busan, South Korea

DAY 1 (Monday 15 June)

Room 215 (CC3DMR 2015)			
Time	Page	Speaker	Talk Title
			Chair: Toshihiro Okamoto
09:00-09:30	80	Yousuke Ooyama	Development of D- π -Cat Dye Sensitizers with Catechol Group for Type-II Dye-Sensitized Solar Cells
09:30-10:00	82	Zhou Yang	Design and synthesis of organic dyes for optoelectronics and biomedical applications
10:00-10:30	83	Xingyu Gao	Synchrotron based study of Organic and Perovskite Solar Cells
10:30-11:00	<i>Session Break</i>		
			Chair: Yousuke Ooyama
11:00-11:30	84	Toshihiro Okamoto	Solution Processable High Performance Organic Semiconductors Based on Chalcogen-bridged Bent-Shaped π -Conjugated Cores
11:30-12:00	85	Yun Yan	Coordination facilitated isomerization of izobenzene and its Self-Assembly
12:00-12:30	86	Anderson Shum	Biomimetic materials by all-aqueous-emulsion-templating
12:30-14:00	<i>Lunch Break</i>		
			Chair: Han-Yong Jeon
14:00-14:30	87	Yi Wang	Nanoencapsulation of anti-cancer drugs by natural materials
14:30-15:00	88	David G. Churchill	Fluorescent "crowdoxidation" molecular probes for intended neurodegenerative disease purposes
15:00-15:30	89	Chen Yu	Study on the wound dressing with hemostatic properties from chitosan
15:30-16:00	<i>Session Break</i>		
			Chair: Yi Wang
16:00-16:30	90	Han-Yong Jeon	Evaluation of Effects of UV Degradation and Stress Crack behavior on Serviceability of Geomembranes
16:30-17:00	91	Yongchang Liu	Multiple Pinning Effects and Enhanced Critical Current Density in Glycine-doped MgB ₂ Bulks Underwent Two-step Sintering
17:00-17:30	92	Noaman Ul-Haq	Synthesis of Water-Soluble Methotrexate Conjugated Fluorescent Carbon Nanoparticles and Their In-Vitro Evaluation as Drug Delivery System for Human Lung Cancer
18:30-Night	<i>Conference Reception in SEA LIFE Busan Aquarium</i>		

Collaborative Conference on 3D & Materials Research (CC3DMR) 2015

15 - 19 June 2015

BEXCO, Busan, South Korea

DAY 2 (Tuesday 16 June)

Room 211 (CC3DMR 2015)			
Time	Page	Speaker	Talk Title
			Chair: Lung-Chien Chen
09:00-09:30	94	Xianghua Wang	Material growth and processing involving 3D architectures with two enabling technologies
09:30-10:00	96	Haim Weissman	Self-Assembly of 1, 2 and 3D structures - Noncovalent Systems in Aqueous Medium
10:00-10:30	98	Hiroyuki Shima	Geometry, Mechanics, and Electronics of Carbon Nanocoils
			Chair: Haim Weissman
10:30-11:00	99	Lung-Chien Chen	Properties of DSSCs with graphene sandwich structure prepared by different methods
11:00-11:30	101	Qi-Ye Wen	Manipulation of Terahertz Wave with Large-Area Graphene
11:30-12:00	102	Wei-Chen Tu	Semi-transparent graphene photodetectors by solution process
12:00-12:30	103	Toyoko Imae	Synthesis of Magnetic Graphene towards Energy Systems
12:30-14:00	Lunch Break		
			Chair: Jing-Jing Fang
14:00-14:30	105	Nobuyoshi Koshida	Functional applications of nanostructured silicon
14:30-15:00	107	Rolf Lortz	Superconductivity in reduced dimensionality
15:00-15:30	108	Satoshi Okuma	Non-equilibrium Phase Transitions in Driven Vortices of Amorphous Superconducting Films
15:30-16:00	Session Break		
			Chair: Nobuyoshi Koshida
16:00-16:30	110	Jing-Jing Fang	A Novel Orthognathic Surgical Planning Device for Facial Asymmetry Correction
16:30-17:00	113	Theerapong Puangmali	Capture efficiency of biocompatible magnetic nanoparticles in arterial flow: a computer simulation for magnetic drug targeting
17:00-17-15	114	Runguo Wang	Research of Bio-based Elastomers Based on Itaconic Aacid Resource
17:15-17-30	116	Thodsaphol Loonoo	The capture efficiency of magnetic drug targetting in different blood vessels
19:30-21:30	Evening Activity (Dongbaek island and Haundae walk)		

Collaborative Conference on 3D & Materials Research (CC3DMR) 2015

15 - 19 June 2015

BEXCO, Busan, South Korea

DAY 2 (Tuesday 16 June)

Room 212 (CC3DMR 2015)			
Time	Page	Speaker	Talk Title
			Chair: Hiroshi Katagiri
09:00-09:30	117	Masahiko Kondow	Proposal of high-density light source with 10 Pbps/cm ² for intra-chip optical-interconnections
09:30-10:00	118	Shulin Sun	High-efficiency Photonic spin-hall effect and surface plasmon meta-coupler
10:00-10:30	119	Xiangdong Xu	DAST-based Materials for Optoelectronic Applications
10:30-11:00	<i>Session Break</i>		
			Chair: Masahiko Kondow
11:00-11:30	121	Hiroshi Katagiri	Sulfonylanilines: A New Class of Fluorescent Dyes
11:30-12:00	122	Dong Hee Son	Photophysical properties of atomically thin colloidal 2-D layered nanocrystals
12:00-12:30	124	Jeff F. Young	Applications of photonic crystal microcavities in integrated silicon photonic circuits; from optical trapping to single photon detection
12:30-14:00	<i>Lunch Break</i>		
			Chair: Guy Makov
14:00-14:30	126	Michael Herman	Semiclassical Methods for Highly Accurate and Efficient Surface Hopping Calculations of Nonadiabatic Transition Probabilities
14:30-15:00	127	Shoko KUME	Enhanced H ₂ Evolution from Copper Surface Covered with Organic Network
15:00-15:30	129	Makoto Sakurai	Potential effects in the interaction of highly charged ions with solid surfaces
15:30-16:00	<i>Session Break</i>		
			Chair: Michael Herman
16:00-16:30	130	Guy Makov	Liquids: Transitions, thermophysical anomalies and structure
16:30-17:00	132	Xiaoli Fan	Catalytic activity in chemical exploited MoS ₂ for hydrogen evolution: Active site and strain effect
17:00-17:30	133	Yingwei Li	Metal-organic frameworks for heterogeneous catalysis
19:30-21:30	<i>Evening Activity (Dongbaek island and Haundae walk)</i>		

Collaborative Conference on 3D & Materials Research (CC3DMR) 2015
15 - 19 June 2015
BEXCO, Busan, South Korea

DAY 2 (Tuesday 16 June)

Room 213 (CC3DMR 2015)			
Time	Page	Speaker	Talk Title
			Chair: Xiangzhan Wang
09:00-09:30	134	RUSLI E	High Efficiency Hybrid SiNW Solar Cell With Surface Passivation
09:30-10:00	135	Akira Ishibashi	Clean unit system platforms (CUSPs) for processing new solar cells and for medical/hygienic applications
10:00-10:30	139	Edwin Y.B. Pun	Photonic applications of rare earth doped materials
10:30-11:00	Session Break		
			Chair: RUSLI E
11:00-11:30	140	Xiangzhan Wang	Stress attenuation and localization in strained-silicon MOSFETs
11:30-12:00	142	Heon-Jin Choi	CMOS compatible 2D nanomaterial silicon nanosheets as building blocks for advanced energy applications
12:00-12:30	475	Jong-Lam Lee	Polymer-related Transparent Electrodes for Flexible Photovoltaics
12:30-14:00	Lunch Break		
			Chair: A.B. M. Helal Uddin
14:00-14:30	145	Yasuhisa Tezuka	Electronic structure study of Transition Metal Compounds using X-ray Raman scattering
14:30-15:00	148	Alfonso Ngan	Nanostructured Metallic and Oxide Actuating Materials
15:00-15:30	149	Limei Rong	Microstructures and Mechanical Properties of Microwave Garnet Ferrite Material
15:30-16:00	Session Break		
			Chair: Yasuhisa Tezuka
16:00-16:30	150	A.B. M. Helal Uddin	Bio-analytical method for generic formulation: An IIUM Pharmaceutical Manufacturing Plant Experience
16:30-17:00	151	Hyo-Jick Choi	Development of long-term stable, solid influenza vaccine formulations
17:00-17:30	153	Kyu Back Lee	Development of Gradient Nanopatterns and Their Applications for the Optimization of Stem Cell Behavior Control
19:30-21:30	Evening Activity (Dongbaek island and Haundae walk)		

Collaborative Conference on 3D & Materials Research (CC3DMR) 2015

15 - 19 June 2015

BEXCO, Busan, South Korea

DAY 2 (Tuesday 16 June)

Room 214 (CC3DMR 2015)			
Time	Page	Speaker	Talk Title
			Chair: Stephane Albon Boubanga Tombet
09:00-09:30	155	Jwo-Huei Jou	Enabling Lighting Renaissance via Blue Hazard Free OLEDs
09:30-10:00	156	Peiheng Zhou	Design and Analysis of Metamaterial-based Infrared Selective Emitters
10:00-10:30	159	Yong Soo Cho	Printing Technology of Remote Phosphor Layer for High Performance White LED
10:30-11:00	<i>Session Break</i>		
			Chair: Jwo-Huei Jou
11:00-11:30	160	Stephane Albon Boubanga Tombet	Plasmon-Resonant Terahertz Emitters and Detectors and their System Applications
11:30-12:00	164	Chuan-Pu Liou	Self-powered photodetector based on MgZnO thin films improved by alloying-enhanced piezo-phototronic
12:00-12:30	165	D. Darminto	Development of magnetic fluids and gels containing Fe ₃ O ₄ nanoparticles
12:30-14:00	<i>Lunch Break</i>		
			Chair: Long-Li Lai
14:00-14:30	166	Young-Kyun Kwon	Strain-Induced Topological Phase Transition in Phosphorene Oxides
14:30-15:00	167	Takeru Ito	Inorganic-organic hybrid crystals comprising oxide clusters and surfactants toward solid electrolyte
15:00-15:30	169	M. A. Jafar Mazumder	Synthesis, Characterization and Morphology of Self-cross-linking Polyelectrolyte Complexes
15:30-16:00	<i>Session Break</i>		
			Chair: Young-Kyun Kwon
16:00-16:30	170	Long-Li Lai	Design of Peripheral Functionality in Constructing Unconventional Porous Dendrimers Based on Triazine Unit for CO ₂ adsorption
16:30-17:00	172	Pei Wenli	FePt nanomaterials synthesized by wet chemical method
17:00-17:30	174	Maria Cecilia Salvadori	Surfaces modifications and some applications
19:30-21:30	<i>Evening Activity (Dongbaek island and Haundae walk)</i>		

Collaborative Conference on 3D & Materials Research (CC3DMR) 2015
15 - 19 June 2015
BEXCO, Busan, South Korea

DAY 2 (Tuesday 16 June)

Room 215 (CC3DMR 2015)			
Time	Page	Speaker	Talk Title
			Chair: Yasuhiro Sugawara
09:00-09:30	177	Ioan Baldea	Limitations of current approaches to the charge transport at nanoscale
09:30-10:00	178	Yusuke Ide	New TiO ₂ Systems Exhibiting Extremely Stable Photoinduced Charge Separation
10:00-10:30	179	Karthik Shankar	TiO ₂ nanotube arrays: A platform to explore interesting optical and electronic phenomena & devices
10:30-11:00	<i>Session Break</i>		
			Chair: Ioan Baldea
11:00-11:30	182	Yasuhiro Sugawara	Atomic-resolution imaging of topography and optical near-field on the sapphire α -Al ₂ O ₃ (0001) surface
11:30-12:00	184	Zonghoon Lee	Atomic-scale Research on 2D Materials using Aberration-corrected TEM
12:00-12:30	185	Boyun Jang	Various approaches to synthesis of Si nanoparticles
12:30-14:00	<i>Lunch Break</i>		
			Chair: Jing Liang
14:00-14:30	186	Masaki KOBAYASHI	Origin of the Anomalous Mass Enhancement of the Subbands in Strongly-correlated Oxide Quantum Well structures
14:30-15:00	187	Masatoshi Kozaki	Construction of well-organized assemblies of dendrimers
15:00-15:30	190	Yuji Kuwahara	Nanoscale Investigation on Chiral Molecular systems
15:30-16:00	<i>Session Break</i>		
			Chair: Masatoshi Kozaki
16:00-16:30	191	Jing Liang	Direct Laser Deposition of Wear Resistant Graded Composite Coatings on Ti-6Al-4V
16:30-17:00	193	Jian-Zhang Chen	Ultrafast atmospheric-pressure-plasma-jet materials sintering processes
17:00-17:30	194	Zhenyang Zhong	Toward feasible and promising modulation of self-assembled GeSi nanostructures via heteroepitaxy on miscut Si (001) substrate
19:30-21:30	<i>Evening Activity (Dongbaek island and Haundae walk)</i>		

Collaborative Conference on 3D & Materials Research (CC3DMR) 2015

15 - 19 June 2015

BEXCO, Busan, South Korea

DAY 2 (Tuesday 16 June)

Room 216 (CC3DMR 2015)			
Time	Page	Speaker	Talk Title
			Chair: David Barba
09:00-09:30	196	Qingchen Dong	Metallopolymer Precursors to Ferromagnetic Metal Alloy NPs for Ultra-high Density Data Storage By Nanoimprint Lithography
09:30-10:00	198	Jae W. Hahn	High-resolution Plasmonic Lithography and Fabrication of High-aspect-ratio Nanoimprint Masters with Multi-scale patterns
10:00-10:30	200	Roman Engel-Herbert	Vanadium based correlated oxides: Prospects and realization of novel optoelectronic devices
10:30-11:00	<i>Session Break</i>		
			Chair: Qingchen Dong
11:00-11:30	201	David Barba	Nanoclustering for improving the stability of Erbium and Germanium in silicon-rich silicon oxide
11:30-12:00	202	Yonggang Zhao	Evolution of Ni nanofilaments and electromagnetic coupling in the resistive switching of NiO
12:00-12:30	203	Ekaphan Swatsitang	Magnetic and optical properties of Cu _{1-x} Fe _x O nanosheets prepared by hydrothermal method
12:30-14:00	<i>Lunch Break</i>		
			Chair: Byungchul Kim
14:00-14:30	207	S. Suasmoro	Characterizations of varied grain size Mg _{0.7} Zn _{0.3} TiO ₃ in the frequency range 1 Hz - 7.7 GHz
14:30-15:00	208	Shigetoshi Ohshima	Introduction of Artificial Pinning Centers in YBa ₂ Cu ₃ O ₇₋₈ Films by a Nano-Dots Decoration Method on MgO Substrate
15:00-15:30	211	Chao Liang -Chiun	Photoluminescent and photosensing properties of ZnO nanowires
15:30-16:00	<i>Session Break</i>		
			Chair: S. Suasmoro
16:00-16:30	213	Byungchul Kim	The physical properties of carbon nano felt prepared from electrospun pitch
16:30-17:00	216	ChangKyu Yoon	Thin Film Origami Inspired 3D Micro and Nanofabrication
17:00-17:30	217	Zeid Abdullah Alothman	Synthesis and characterization of hybrid nano-composite adsorbent for the removal of bivalent heavy metals ions
19:30-21:30	<i>Evening Activity (Dongbaek island and Haundae walk)</i>		

Collaborative Conference on 3D & Materials Research (CC3DMR) 2015

15 - 19 June 2015

BEXCO, Busan, South Korea

DAY 3 (Wednesday 17 June)

Room 211 (CC3DMR 2015)			
Time	Page	Speaker	Talk Title
			Chair: Minoru Sasaki
09:00-09:30	218	Masaharu Oshima	Soft X-ray nano-spectroscopy for ReRAM, graphene FET and organic FET by 3D Nano-ESCA
09:30-10:00	220	Yanqing Yang	STEM-HAADF 3D tomography of heterogeneous precipitation in Al alloys
10:00-10:30	221	Tsuyoshi Tsujioka	Novel metal patterning method using vacuum evaporation on organic surfaces for electronics/photonics applications
10:30-11:00	Session Break		
			Chair: Masaharu Oshima
11:00-11:30	223	Minoru Sasaki	3D photolithography based on the resist spray coating and realized devices
11:30-12:00	228	Rongshan Qin	3D Visual Analyse of Materials Processing Models
12:00-12:30	229	Do Hyun Kim	3D printed functional module assembly for various reaction systems
12:30-14:00	Lunch Break		
			Chair: Kyeong-Sik Min
14:00-14:30	231	Tsuyoshi Minami	Development of Chemical Sensors and Biosensors based on Organic Transistors
14:30-15:00	232	Makoto Kasu	Diamond Transistors –Present Status and Future Prospects
15:00-15:30	235	Jae Kyeong Jeong	Origin of photo-bias-thermal instabilities in a-InZnSnO thin film transistors
15:30-16:00	Session Break		
			Chair: Tsuyoshi Minami
16:00-16:30	236	Kyeong-Sik Min	Efficient Training of Nano-Scale Memristors for Synaptic Plasticity
16:30-17:00	238	Man-kit Leung	Novel Electron-Transporting Type and Bipolar Type Host to Achieve Highly Efficient Blue PHOLED Device
17:00-17:30	240	Junichi Kurawaki	Facile preparation and luminescence studies of Au and Ag clusters with fatty-acid based benzene thiols
18:30-Night	Conference Banquet and Poster Session in BEXCO		

Collaborative Conference on 3D & Materials Research (CC3DMR) 2015

15 - 19 June 2015

BEXCO, Busan, South Korea

DAY 3 (Wednesday 17 June)

Room 212 (CC3DMR 2015)			
Time	Page	Speaker	Talk Title
			Chair: Daniel Esque-de los Ojos
09:00-09:30	241	Jordi Sort Vinas	Comparative study of the nanomechanical properties of amorphous and crystalline nanowires with respect to thick films with analogous microstructure
09:30-10:00	242	Pengchao Kang	Synthesis of SiC nanostructured coating and SiC nanowire by in situ reaction with milled Si and C powder
10:00-10:30	244	Goro Mizutani	Nonlinear optical properties of metallic nanowire arrays with controlled cross sectional shapes
10:30-11:00	Session Break		
			Chair: Jordi Sort Vinas
11:00-11:30	245	Daniel Esque-de los Ojos	Mechanical properties of microporous and nanoporous alloys: experimental and theoretical (finite element modelling) points of view
11:30-12:00	248	Cristine Villagonzalo	Spin-orbit coupled effects on the transport of two-dimensional electron systems and nanowires
12:00-12:30			
12:30-14:00	Lunch Break		
			Chair: Asif Mahmood
14:00-14:30	249	Sakir Erkoc	Structural Properties of Indium Phosphide Nanorods under mechanical effects and heat treatment
14:30-15:00	250	Sylwia Ptasinska	Dynamic Chemistry Involved in Oxidation of Gallium Phosphide Surface Tracked by Near Ambient Pressure XPS
15:00-15:30	251	Yoshiaki Ito	On Chemical state based on x-ray emission spectroscopy
15:30-16:00	Session Break		
			Chair: Sakir Erkoc
16:00-16:30	252	Asif Mahmood	Magnetic and photocatalytic response of Ag-doped ZnFeO nano-composites for photocatalytic degradation of reactive dyes in aqueous solution
16:30-17:00	253	Tetsuji Okuda	Hole doping effect on the magnetic property of triangular lattice antiferromagnetic CuCrO ₂
17:00-17:30	254	Joseph Poon	Magnetic States of Amorphous Ferrimagnet Films
18:30-Night	Conference Banquet and Poster Session in BEXCO		

Collaborative Conference on 3D & Materials Research (CC3DMR) 2015

15 - 19 June 2015

BEXCO, Busan, South Korea

DAY 3 (Wednesday 17 June)

Room 213 (CC3DMR 2015)			
Time	Page	Speaker	Talk Title
			Chair: Lei Jiang
09:00-09:30	255	Salvador Pané	Magnetic Micro- and Nanorobots: fabrication and manipulation strategies
09:30-10:00	257	Iskandar Yahya	Solution processed post-synthesis separation of carbon nanotubes based on electronic type and post-separation tube defect evaluation
10:00-10:30	258	Jerry Bernholc	Electronic Structure and Electron Transport in Carbon-Based Nanosystems
10:30-11:00	Session Break		
			Chair: Salvador Pané
11:00-11:30	259	Lei Jiang	Bioinspired interfacial materials with super-wettability
11:30-12:00	260	Kunihiko Koike	Modification of the interface nanostructure and magnetic properties in Nd-Fe-B thin films
12:00-12:30	263	Guosong Wu	Bioinspired and biobased surface modification of magnesium alloys
12:30-14:00	Lunch Break		
			Chair: Yuen Hong TSANG
14:00-14:30	264	Natkrita Prasoetsopha	Enhancement of electrochemical properties of Ca ₃ Co ₄ O ₉ as anode materials for Li-ion batteries by transition metals doping
14:30-15:00	265	Masashi Hasegawa	High Pressure Synthesis and Characterization of Transition Metal Nitrides
15:00-15:30	267	Masayoshi Takase	Synthesis and physical properties of Pyrrole-containing functional pi-electron system
15:30-16:00	Session Break		
			Chair: Masayoshi Takase
16:00-16:30	268	Yuen Hong TSANG	Preliminary study of MoS ₂ based saturable absorber used for crystal based mode locking laser system
16:30-17:00	271	Yan Zhang	Metasurface materials for THz wavefront modulation
17:00-17:30	273	Akira Yamakata	Behaviors of Photogenerated Charge Carriers in SrTiO ₃ Photocatalysts Studied by Time-Resolved Absorption Spectroscopy
18:30-Night	Conference Banquet and Poster Session in BEXCO		

Collaborative Conference on 3D & Materials Research (CC3DMR) 2015

15 - 19 June 2015

BEXCO, Busan, South Korea

DAY 3 (Wednesday 17 June)

Room 214 (CC3DMR 2015)			
Time	Page	Speaker	Talk Title
			Chair: Michael Guiver
09:00-09:30	275	Yasuo Koide	Diamond Field Effect Transistor, Deep-UV sensor, and MEMS Devices
09:30-10:00	277	Chih-Hung Chen	The impact of material property on the noise performance of future nanoscale field-effect-transistors
10:00-10:30	281	Ryo Nouchi	Field-effect surface chemistry: Gate-controlled photo-oxidation of graphene
10:30-11:00	<i>Session Break</i>		
			Chair: Yasuo Koide
11:00-11:30	283	Michael Guiver	Designing membranes with ion-conducting nanochannels
11:30-12:00	284	Masahide Terazima	Time-resolved detection of driving force of protein reactions.
12:00-12:30	285	Yia-Chung Chang	Microscopic imaging ellipsometry for optical metrology of 3D micro/nano scale objects
12:30-14:00	<i>Lunch Break</i>		
			Chair: Yuji Furukawa
14:00-14:30	287	Fujino Tatsuya	Application of CdTe nanoparticles for laser ionization of small molecules
14:30-15:00	289	Chuanbao Cao	Two dimensional nanomaterials: synthesize and energy storage/conversion applications
15:00-15:30	290	Shi Feng	Supramolecular Assembly of Macroscopic Building Blocks towards Fabrication of 3D Ordered Structures
15:30-16:00	<i>Session Break</i>		
			Chair: Fujino Tatsuya
16:00-16:30	291	Yuji Furukawa	NMR studies of the iron pnictide superconductors $\text{Ca}(\text{Fe}_{1-x}\text{Co}_x)_2\text{As}_2$
16:30-17:00	292	Eran Ginossar	Quantum optics of hybrid superconducting devices
17:00-17:30	293	Grosfeld Eytan	Fermion parity measurement and control in Majorana circuit quantum electrodynamics
18:30-Night	<i>Conference Banquet and Poster Session in BEXCO</i>		

Collaborative Conference on 3D & Materials Research (CC3DMR) 2015

15 - 19 June 2015

BEXCO, Busan, South Korea

DAY 3 (Wednesday 17 June)

Room 215 (CC3DMR 2015)			
Time	Page	Speaker	Talk Title
			Chair: Yuanfei Han
09:00-09:30	294	Naoto Mausuo	Low-Temperature Crystallization of Si, Ge and Si-Nanocrystal by Soft X-Ray Irradiation
09:30-10:00	297	Tomi T. Li	Thermal CVD method for coating SiC on graphite suceptor of MOCVD reactor
10:00-10:30	298	Hiroshi Fukuoka	High-pressure synthesis, structures, and properties of new germanides
10:30-11:00	Session Break		
			Chair: Naoto Mausuo
11:00-11:30	300	Yuanfei Han	Experimental investigations of the microstructure and mechanical properties of (TiB+TiC)/Ti6Al4V titanium matrix composite by equal channel angular pressing
11:30-12:00	301	Tomohiko Okada	Ion-exchangeable core-shell spherical particles derived from silica and silicates
12:00-12:30	303	Eng Soon TOK	Island-Shape Transition; Metal Silicides Nanostructures on Si (001) Surface
12:30-14:00	Lunch Break		
			Chair: Kang Hway Chuan
14:00-14:30	304	Jimmy Xu	Interband Dominated Strong Mid-infrared Absorption in Graphene Salisbury Screen
14:30-15:00	305	Kazutoshi TAKAHASHI	Excited electron dynamics in epitaxial graphene on SiC studied by time-resolved two-photon photoemission spectroscopy
15:00-15:30	307	Junho Choi	Friction Properties of Fluorinated Graphene at the Macroscale
15:30-16:00	Session Break		
			Chair: Zhijun Liu
16:00-16:30	308	Kang Hway Chuan	Structure and interaction of water clusters confined in graphene
16:30-17:00	310	Hsien-chung Kao	Long range electron-electron interactions in graphene make its electrostatics nonlocal
17:00-17:30			
18:30-Night	Conference Banquet and Poster Session in BEXCO		

Collaborative Conference on 3D & Materials Research (CC3DMR) 2015

15 - 19 June 2015

BEXCO, Busan, South Korea

DAY 3 (Wednesday 17 June)

Room 216 (CC3DMR 2015)			
Time	Page	Speaker	Talk Title
			Chair: Chiko Otani
09:00-09:30	311	Yasufumi FUJIWARA	Present Understanding of Eu Luminescent Centers in Eu-Doped GaN
09:30-10:00	314	Yong-Hoon Cho	GaN-based quantum nanophotonics
10:00-10:30	315	Yanjun Li	Identification of Al Atoms Sites on Ultrathin Al ₂ O ₃ on NiAl(110) Surface by NC-AFM
10:30-11:00	<i>Session Break</i>		
			Chair: Yasufumi FUJIWARA
11:00-11:30	318	Chiko Otani	Development of Microwave Kinetic Inductance Detectors (MKIDs) for Cosmic Microwave Background (CMB) Observations
11:30-12:00	320	Naoki Shinohara	Application of Microwave Heating to Rubble Processing of the Great East Japan Earthquake
12:00-12:30	322	Hung-Wing Li	Development of Biomolecular Detection Assays
12:30-14:00	<i>Lunch Break</i>		
			Chair: Seong Chan Jun
14:00-14:30	323	Yu-Shu Wu	Valley filters for graphene-based valleytronics
14:30-15:00	324	Richard B. Jackman	Graphene-Nanodiamond Heterostructures and their application to High Current Devices
15:00-15:30	326	Alok Shukla	Theory of Electronic Structure and Optical Properties of Graphene Quantum Dots
15:30-16:00	<i>Session Break</i>		
			Chair: Yu-Shu Wu
16:00-16:30	327	Seong Chan Jun	Hybrid porous electrode for supercapacitor
16:30-17:00	328	Shi-Jin Ding	Engineering of High Permittivity Nano-laminated Dielectrics for High Performance Metal-Insulator-Metal Capacitors
17:00-17:30	329	Irati Golvano-Escobal	Synthesis, electrocatalytic and other physico-chemical properties of electrodeposited rhodium-iron: nanoparticles versus films
18:30-Night	<i>Conference Banquet and Poster Session in BEXCO</i>		

Collaborative Conference on 3D & Materials Research (CC3DMR) 2015

15 - 19 June 2015

BEXCO, Busan, South Korea

DAY 4 (Thursday 18 June)

Room 211 (CC3DMR 2015)			
Time	Page	Speaker	Talk Title
			Chair: Norio Tagawa
09:00-09:30	331	Naoki Takada	Real-time spatiotemporal division multiplexing electro-holography utilizing movie features
09:30-10:00	335	Lambertus Hesselink	Novel 3D Differential Phase Contrast Imaging System
10:00-10:30	337	HuiChi Chen	Three-dimesional holographic optical tweezers for manipulation and orientation control of rodshape microsample
10:30-11:00	<i>Session Break</i>		
			Chair: Lambertus Hesselink
11:00-11:30	339	Norio Tagawa	Depth from motion based on multi-scale belief propagation
11:30-12:00	340	Ryuji Hirayama	Optically Controlled Volumetric Display Exhibiting Multiple Patterns
12:00-12:30	342	M. W. Kwon	Real-time generation of holographic videos of three-dimensional scenes using the object tracking mask-based novel-look-up-table on graphics processing units
12:30-14:00	<i>Lunch Break</i>		
			Chair: Raman Vedarajan
14:00-14:30	344	Yusheng Shi	Research and development of the powder materials for laser additive manufacturing
14:30-15:00	345	Valery I. Levitas	Melt dispersion mechanism for oxidation of aluminum nano- and microscale particles
15:00-15:30	348	Zhou Wei	Hierarchical CuS Microsubstrates Loading Ni NPs with Enhanced Catalytic Properties
15:30-16:00	<i>Session Break</i>		
			Chair: Yusheng Shi
16:00-16:30	349	Raman Vedarajan	Development of polymer electrodes for dye sensitized photo electrochemical water splitting
16:30-17:00	350	Tung-Yuan Yung	Graphene Nanocomposites for Electrocatalysis Applications
17:00-17:30	351	Masayoshi Higuchi	Stimuli-responsive metallo-supramolecular polymers

Collaborative Conference on 3D & Materials Research (CC3DMR) 2015

15 - 19 June 2015

BEXCO, Busan, South Korea

DAY 4 (Thursday 18 June)

Room 212 (CC3DMR 2015)			
Time	Page	Speaker	Talk Title
			Chair: Kenji Shiraishi
09:00-09:30	352	Jie Sun	Chemical vapor deposition of graphene and its application in GaN based optoelectronics
09:30-10:00	354	Richard Spontak	Morphological Studies of Charged Triblock Copolymers Used in Organic Photovoltaics
10:00-10:30	355	Tae Hee Kim	Magnetic field effects on Electroluminescence in Spin-based Organic Light Emitting Diodes
10:30-11:00	<i>Session Break</i>		
			Chair: Jie Sun
11:00-11:30	356	Kenji Shiraishi	First Principles Study of Silicene
11:30-12:00	357	Kun Yang	Bulk Thermoelectric and Thermodynamic Probes of non-Abelian Anyons in Topological States of Matter
12:00-12:30	358	Hiroataka Nakayama	Variable structure changing two-dimensional plane to three-dimensional solid and its applications
12:30-14:00	<i>Lunch Break</i>		
			Chair: Susumu Shimomura
14:00-14:30	360	Norikazu Tomita	Metallic states induced by quantum fluctuations in the one-dimensional SSH+U system
14:30-15:00	364	Chia Chen Hsu	Guided mode resonance enhanced nonlinear optical upconversion light-mater interactions
15:00-15:30	24	Fei Zeng	Ion dependent frequency filtering and learning of semiconducting polymer/electrolyte composite
15:30-16:00	<i>Session Break</i>		
			Chair: Norikazu Tomita
16:00-16:30	365	Yoichi Takanishi	Chiral doping effect on the superstructure of the bent-core liquid crystalline phase observed by resonant X-ray scattering
16:30-17:00	367	Susumu Shimomura	X-ray diffraction and diffuse scattering studies of charge-density-wave transitions in RNiC ₂
17:00-17:30	369	Milind Kunchur	Short-timescale and high-current effects in superconductors

Collaborative Conference on 3D & Materials Research (CC3DMR) 2015

15 - 19 June 2015

BEXCO, Busan, South Korea

DAY 4 (Thursday 18 June)

Room 213 (CC3DMR 2015)			
Time	Page	Speaker	Talk Title
			Chair: Hidekazu Kumano
09:00-09:30	370	Jun Yamamoto	Design and realization of the slippery interfaces for low voltage driving of fast ferroelectric liquid crystal
09:30-10:00	371	Tetsuo Kodera	Spin-Based Quantum Information Technologies Using Group IV Materials
10:00-10:30	372	Yasutaka Nakajima	High-throughput fabrication of nanowire-gratings on substrate by femtosecond laser irradiation
10:30-11:00	<i>Session Break</i>		
			Chair: Jun Yamamoto
11:00-11:30	375	Hidekazu Kumano	Single and entangled biphoton generation from semiconductor quantum dot for secure cryptographic telecommunication
11:30-12:00	377	Hiroyuki Awano	Current driven domain wall motion of (Rare-earth Transition metal)/Pt hetero structure magnetic wire
12:00-12:30	380	Jeonghoon Yoo	Metamaterial Design in RF Electromagnetic Fields
12:30-14:00	<i>Lunch Break</i>		
			Chair: Jin Zhang
14:00-14:30	381	Jin Zhang	Template-assisted electrodeposition and magnetic properties of multi-segmented hard ferromagnetic (FM)/spacer/soft FM PtCo/Cu/Ni nanowires
14:30-15:00	383	Nobuyasu Adachi	Enhancement of MO effect of Bismuth Iron Garnet and Gariumu substituted Bismuth Iron Garnet with Au-Ag nanoparticles
15:00-15:15	384	Mouhamadou SARR	Elaboration and physical characterizations of multiphases nanocomposites materials
15:15-15:30	385	Mao Sui	Controllable fabrication of porous GaN by thermal annealing
			<i>Session Break</i>
			Chair: Jihoon Lee
16:00-16:30	387	Ming-Yu Li	The Configuration, Size and Density Control of the Self-assembled Au Nanostructures on 4H-SiC (0001) via Deposition Amount, Annealing Temperature, and Dwelling Time
16:30-16:45	388	Hongli SUO	Influence of the Heat Treatment Process on Cube Texture Formation of Ni-8at.%W Alloy Substrates by Spark Plasma Sintering Technique
16:45-17:00	389	Wancheng Zhou	Improvement of oxidation resistance of carbonyl iron powder through cobalt-coating

Collaborative Conference on 3D & Materials Research (CC3DMR) 2015

15 - 19 June 2015

BEXCO, Busan, South Korea

DAY 4 (Thursday 18 June)

Room 214 (CC3DMR 2015)			
Time	Page	Speaker	Talk Title
			Chair: Paola Barbara
09:00-09:30	390	Yasufumi Enami	Electro-Optic Polymer/TiO ₂ Vertical Slot Waveguide Modulators
09:30-10:00	392	Min-Hsiung Shih	Photonic Crystal Nanorods Tunable Laser for C-Band Communication
10:00-10:30	393	Paola Barbara	Carbon quantum dots as THz detectors
10:30-11:00	<i>Session Break</i>		
			Chair: Yasufumi Enami
11:00-11:30	394	Yasuaki Tokudome	Hierarchical porous layered double hydroxides for enhanced adsorption affinity of anion species
11:30-12:00	396	Katsuhiko Higuchi	Electronic structures of the crystalline silicon immersed in the magnetic field
12:00-12:15	397	Vladimir Saveljev	Estimation of Probability of the Moiré Effect
12:15-12:30	399	Puran Pandey	Shape and Size Evolution of Au nanoparticles: From Spherical to Facet Nanoparticles
12:30-14:00	<i>Lunch Break</i>		
			Chair: Steven Mullens
14:00-14:30	401	Steven Mullens	Ceramic processing and surface modification technologies for sustainable chemistry and health care applications
14:30-14:45	403	Mengmeng Song	Converting Chemical Energy into Electricity through a Functionally Cooperating Device with Diving-Surfacing Cycles
14:45-15:00	404	Quanzhen Zhang	Effect of Annealing Temperature on the Evolution of the Self-Assembled Au nanostructures on N-type 4H-SiC (0001)
15:00-15:15	406	Qian Zhao	In-situ synthesis of Ni and C nanoparticles and their cooperative doping effects on reaction mechanism and superconducting properties of MgB ₂
			<i>Session Break</i>