



## [CC3DMR 2011 Conference Program for Registered Speakers]

### [3D sessions]

<b>Tuesday June 28</b>	<b>3D Research Session I</b>	<b>Chair: Eun-Soo Kim</b>	
8:30-9:00	Incoherent computer-generated holography based on 3-D Fourier spectrum synthesis	<b>Toyohiko Yatagai</b>	Utsunomiya University, Japan
9:00-9:30	Optical 3D micro-nanoscope based on off-axis interferometry	<b>Daesuk Kim</b>	Chonbuk National University, Korea
9:30-10:00	Imaging and Display System for Integral 3D Television	<b>Makoto Okui</b>	NHK (Japan Broadcasting Corporation)
10:00-10:30	<i>Session Break</i>		
<b>Tuesday June 28</b>	<b>3D Research Session II</b>	<b>Chair: Makoto Okui</b>	
10:30-11:00	Research activities on digital holographic 3D displays in Japan	<b>Hiroshi Yoshikawa</b>	Nihon Univ, Japan
11:00-11:30	Dense and Efficient Ray Acquisition for FTV	<b>Masayuki Tanimoto</b>	Nagoya University, Japan
11:30-12:00	Computational approaches for fast generation of digital 3-D video holograms using the N-LUT method	<b>Seung-Cheol Kim</b>	Kwangwoon University, Korea
12:00-13:30	<i>Lunch Break</i>		
<b>Tuesday June 28</b>	<b>3D Research Session III</b>	<b>Chair: Masayuki Tanimoto</b>	
13:30-14:00	Development of Polarization-sensitive Materials for Polarization and Angular Multiplexed Volume Holographic Recording	<b>Takashi Fukuda</b>	Advanced Industrial Science and Technology, Japan



14:00-14:30	Ultra-Sensitive Detection of Microbial Cellulolytic Activity by 3D Topographical Imaging	<b>Shigeru Deguchi</b>	Japan Agency for Marine-Earth Science and Technology, Japan
14:30-15:00	SMALL FORM FACTOR FOR HOLOGRAPHIC 3D DISPLAY PRODUCT	<b>Gerald Fütterer</b>	SeeReal Technologies GmbH, Germany
15:00-15:30	<i>Session Break</i>		
<b>Tuesday June 28</b>	<b>3D Research Session IV</b>	<b>Chair: Takashi Fukuda</b>	
15:30-16:00	Digital Holography based on the Principle of Self Reference	<b>Claas Falldorf</b>	Bremer Institut für Angewandte Strahltechnik, Germany
16:00-16:30	3D visual system using electronic holography and ray-based image sensors toward ultra-realistic communication	<b>Kenji Yamamoto</b>	National Institute of Information and Communications Technology, Japan
16:30-17:00	Design of Interactive 3D Calculator for 3D Contents Generation	<b>Min-Chul Park</b>	Korea Institute of Science and Technology, Korea
17:00-17:30	Luminescence Characteristic of Phosphor for 3D Display Applications	<b>Dae-Ho Yoon</b>	Sungkyunkwan University, Korea
17:30-Night	<i>Dinner and Activities Recommended</i>		
<b>Wednesday June 29</b>	<b>3D Research Session V</b>	<b>Chair: Osamu Matoba</b>	
8:30-9:00	Three-dimensional display by using concave half mirror array	<b>ByoungHo Lee</b>	Seoul National University, Korea



9:00-9:30	Holographic femtosecond laser processing for producing a three-dimensional structure in a transparent material	<b>Yoshio Hayasaki</b>	Utsunomiya University, Japan
9:30-10:00	3D Laser Scanning Displays	<b>Hakan Urey</b>	Koç University, Turkey
10:00-10:30	<i>Session Break</i>		
<b>Wednesday June 29</b>	<b>3D Research Session VI</b>	<b>Chair: ByoungHo Lee</b>	
10:30-11:00	Correlation based interpolation technique for accurate 3-D and range estimation via projection of axially varied patterns	<b>Zeev Zalevsky</b>	Bar-Ilan University, Israel
11:00-11:30	Direct and computer synthesized pick up methods in integral imaging	<b>Fushou Jin</b>	Jilin university, China
11:30-12:00	Metal Injection Molding as a Mass Production Technology of 3-Dimensional Small Precision Components: A Review	<b>Tae Shik Yoon</b>	Bestner Inc, Korea
12:00-13:30	<i>Lunch Break</i>		
<b>Wednesday June 29</b>	<b>3D Research Session VII</b>	<b>Chair: Fushou Jin</b>	
15:30-16:00	Three-dimensional Measurement by Digital Holography and Optical Three-dimensional Visualization based on Phase Modulation	<b>Osamu Matoba</b>	Kobe University, Japan
16:00-16:30	Three-dimensional image capture and display with light ray field frequency analysis	<b>Jae-Hyeung Park</b>	Chungbuk National University, Korea
16:30-17:00	Study on Viewing Comfort in Stereoscopic Display and True 3D Display	<b>Yue Liu</b>	Beijing Institute of Technology, China
17:00-17:30	3D DISPLAY DESIGN	<b>Putilin Andrew</b>	Russian Academy of Sciences, Russia



18:00-Night	<i>Conference Banquet</i>		
	<i>Highlight Talk, Kee-Young Kim, PhD</i>		
	<i>Intro Session: Korean Spirit and Culture Series</i>		
<b>Thursday June 30</b>	<b>Material Research Session XIII</b>	<b>Chair: Michael E. Flatté</b>	
8:30-9:00	Molecular Imaging of Cancer Biomarkers in Live Cells Using Nano-Probe Based Raman Detection Technique	<b>Jaebum Choo</b>	Hanyang University, Korea
9:00-9:30	Design of Novel 3D Biocompatible Interfaces using Self-Organization to Control Cancer Cell behavior	<b>Masaru Tanaka</b>	Yamagata University, Japan
9:30-10:00	Artificial Spores: Individual Encapsulation of Living Cells	<b>Insung S. Choi</b>	KAIST, Korea
10:00-10:30	<i>Session Break</i>		
<b>Thursday June 30</b>	<b>Materials Research Session XIV</b>	<b>Chair: Jaebum Choo</b>	
10:30-11:00	Infrared spectroscopic studies of nanofilms and nanostructures	<b>Annemarie Pucci</b>	Heidelberg University, Germany
11:00-11:30	Controlling Color and Optical Reflection with Nanoparticles at a Liquid-Liquid Interface	<b>Michael E. Flatté</b>	University of Iowa, USA
11:30-12:00	Top-Down Processed Nano structures in Silicon Carbide by AFM-Assisted Lithography	<b>Jung-Joon Ahn1</b>	Kwangwoon University, Korea
12:00-13:30	<i>Lunch Break</i>		
<b>Thursday June 30</b>	<b>Materials Research Session XV</b>	<b>Chair: Jihoon Lee</b>	
13:30-14:00	Tetragonal Heusler-like alloys for spintronics memory application	<b>S. Mizukami</b>	Tohoku University, Japan



14:00-14:30	Spin damping monopoles in spin pumping + inverse spin Hall systems	<b>Gen Tatara</b>	Tokyo Metropolitan University, Japan
14:30-15:00	3-dimensional spintronics for ultrahigh density data storage	<b>Dorothee Petit</b>	Cambridge University, UK
15:00-15:30	<i>Session Break</i>		
<b>Thursday June 30</b>	<b>3D Research Session VIII</b>	<b>Chair: Jihoon Lee</b>	
15:30-16:00	Magneto-optic collinear holography with nano-clustered ferromagnetic garnet films for rewritable hologram memories	<b>Mitsuteru Inoue</b>	Toyohashi University of Technology, Japan
16:00-16:30	An Omni-directional multi-focus 3D display system	<b>Sung-Kyu Kim</b>	Korea Institute of Science and Technology, Korea
16:30-17:00	Volumetric Video Systems based on Acoustooptical Recording of Electronic Holograms	<b>Vladimir V.Petrov</b>	Saratov State University, Russia
17:00-Night	<i>Dinner and Activities Recommended</i>		

### [Material sessions]

<b>Tuesday June 28</b>	<b>Material Research Session I</b>	<b>Chair: Gregory Salamo</b>	
8:30-9:00	Quantum Nanostructures Fabrication by Pulsed Droplet Epitaxy	<b>Stefano Sanguinetti</b>	Università di Milano Bicocca, Italy
9:00-9:30	Pyramidal quantum dots: a versatile template for quantum dot engineering	<b>E. Pelucchi</b>	Tyndall National Institute, Ireland



9:30-10:00	cQED in Quantum Dot Micropillar Cavities – Fundamental Studies and Novel Device Concepts	<b>S. Reitzenstein</b>	Universität Würzburg, Germany
10:00-10:30	<i>Session Break</i>		
<b>Tuesday June 28</b>	<b>Materials Research Session II</b>	<b>Chair: S. Reitzenstein</b>	
10:30-11:00	Fabrication of Quantum Dots and Electrochemical Biosensing	<b>Jun-Jie Zhu</b>	Nanjing University, China
11:00-11:30	Multi-functionality of Quantum-sized Nanosilicon	<b>Nobuyoshi Koshida</b>	Tokyo University of A & T, Japan
11:30-12:00	Opto-Electronic Properties of TiO <sub>2</sub> Composites with Nano-mesoporosity	<b>Yong-Rok Kim</b>	Yonsei University, Korea
12:00-13:30	<i>Lunch Break</i>		
<b>Tuesday June 28</b>	<b>Materials Research Session III</b>	<b>Chair: Ping Sheng</b>	
13:30-14:00	Mass production of reduced graphene oxides and their possible applications	<b>Hyoyoung Lee</b>	Sungkyunkwan University, Korea
14:00-14:30	Novel concepts of optoelectronic devices based on multiple-graphene structures	<b>V. Ryzhii</b>	University of Aizu, Japan
14:30-15:00	Synthesis and Characterization of Nano Layered Carbon Materials	<b>Sung-Jin Kim</b>	Ewha Womans University, Korea
15:00-15:30	<i>Session Break</i>		
<b>Tuesday June 28</b>	<b>Materials Research Session IV</b>	<b>Chair: V. Ryzhii</b>	
15:30-16:00	Intrinsic Superconductivity in Arrays of 4-Angstrom Carbon Nanotubes Embedded in AFI Zeolite	<b>Ping Sheng</b>	Hong Kong University of Science and Technology, China
16:00-16:30	Unfolding the third dimension in electrical measurements	<b>Hagai Cohen</b>	The Weizmann Institute of Science, Israel



16:30-17:00	A photoresponsive single electron transistor prepared from oligothiophene molecules and gold nanoparticles in a nanogap electrode	<b>Kenji Matsuda</b>	Kyoto University, Japan
17:00-17:30	Key Requirements for Imaging and Analyzing 3D Nano-Patterns Using CD-AFM in Industrial Applications.	<b>Sang-Joon Cho</b>	Park Systems, Korea
17:30-Night	<i>Dinner and Activities Recommended</i>		
<b>Wednesday June 29</b>	<b>Material Research Session V</b>	<b>Chair: Hiroyuki Mayama</b>	
8:30-9:00	Assemblies of Inorganic Nanoparticles in Microphase-separation of Spherically Confined Block-copolymers and Polymer Blends	<b>Hiroshi Yabu</b>	Tohoku University, Japan
9:00-9:30	From Surface-Confined Molecular Self-Assembly to Two-Dimensional Polymers	<b>Rico Gutzler</b>	Université du Québec, Canada
9:30-10:00	Aspects of organic chromophore self-assembly	<b>Jonathan P. Hill</b>	National Institute for Materials Science, Japan
10:00-10:30	<i>Session Break</i>		
<b>Wednesday June 29</b>	<b>Materials Research Session VI</b>	<b>Chair: Jonathan P. Hill</b>	
10:30-11:00	Fractal in material	<b>Hiroyuki Mayama</b>	Hokkaido University, Japan
11:00-11:30	Ordered mesoporous magnetic materials	<b>Eva Pellicer</b>	Universitat Autònoma de Barcelona, Spain



11:30-12:00	Stretchable and Foldable Integrated Circuits	<b>Tsuyoshi Sekitani</b>	The University of Tokyo, Japan
12:00-13:30	<i>Lunch Break</i>		
<b>Wednesday June 29</b>	<b>Materials Research Session VII</b>	<b>Chair: Eva Pellicer</b>	
13:30-14:00	Proximity effect in crystalline nanowires and topological insulators	<b>Jian Wang</b>	The Pennsylvania State University, USA
14:00-14:30	Nanostructure designing of self-assembled molecular wire of a pentacene derivative	<b>Yutaka Wakayama</b>	Shizuoka University, Japan
14:30-15:00	The electrical transport properties and electronic and optoelectronic devices of 1-D oxide semiconductor nanostructures	<b>Zuliang Du</b>	Henan University, China
15:00-15:30	<i>Session Break</i>		
<b>Wednesday June 29</b>	<b>Materials Research Session VIII</b>	<b>Chair: Yutaka Wakayama</b>	
15:30-16:00	Electrochromic Display Devices with Organic-Metallic Hybrid Polymer	<b>Masayoshi Higuchi</b>	National Institute for Materials Science, Japan
16:00-16:30	Supramolecular Nanodevices Based On $\pi$ -conjugate Assemblies	<b>Penglei Chen</b>	Institute of Chemistry, CAS, China
16:30-17:00	Self-Assembled Organic Materials Leading to Solid-State Lasers	<b>Seiichi Furumi</b>	National Institute for Materials Science, Japan
17:00-17:30	Nano-composite barrier coatings for flexible displays	<b>Wolfgang Sigmund</b>	University of Florida, USA
17:30-Night	<i>Conference Banquet</i>		
	<i>Highlight Talk, Kee-Young Kim, PhD</i>		





	<i>Intro Session: Korean Spirit and Culture Series</i>		
<b>Thursday June 30</b>	<b>Material Research Session XI</b>	<b>Chair: Torsten Fritz</b>	
8:30-9:00	Highly conductive thin films based on alkylammonium-Au(dmit) <sub>2</sub> salt fabricated by Langmuir-Blodgett technique	<b>Yasuhiro F. Miura</b>	Toin University of Yokohama, Japan
9:00-9:30	Nanostructure Dielectric Films Grown by Aerosol Deposition	<b>Song-Min Nam</b>	Kwangwoon University, Korea
9:30-10:00	Vapor Detection and Evaluation of Thin Film Deposition Using a Hybrid Sensor of Quartz Crystal Microbalance and Optical Waveguide Spectroscopy	<b>K. Shinbo</b>	Niigata University, Japan
10:00-10:30	<i>Session Break</i>		
<b>Thursday June 30</b>	<b>Materials Research Session X</b>	<b>Chair: Yasuhiro F. Miura</b>	
10:30-11:00	Alignment control of organic semiconductor molecules by photo-aligned polyimide films and its device applications	<b>Kenji Sakamoto</b>	National Institute for Materials Science, Japan
11:00-11:30	Formation of Organic-on-Organic Heteroepitaxial Layers	<b>Torsten Fritz</b>	Institute of Solid State Physics, Germany
11:30-12:00	Strain-Tunable Quantum Dot Devices	<b>Rinaldo Trotta</b>	Institute for Integrative Nanosciences, Germany
12:00-13:30	<i>Lunch Break</i>		
<b>Thursday June 30</b>	<b>Materials Research Session XI</b>	<b>Chair: Ki-Bong Song</b>	



13:30-14:00	Towards protein evolution in a microchip	<b>Yonggang Zhu</b>	Victoria University, Australia
14:00-14:30	Construction of DNA Self-Organization toward Molecular Electronics	<b>Y. Ohya</b>	Kansai University, Japan
14:30-15:00	9G DNAchip: A Platform for the Efficient Hybridization of the Target DNA's based on the Lateral Spacing	<b>Taisun Kim</b>	Hallym University, Korea
15:00-15:30	<i>Session Break</i>		
<b>Thursday June 30</b>	<b>Materials Research Session XII</b>	<b>Chair: Yonggang Zhu</b>	
15:30-16:00	Nanostructured Group IV Elements for Energy Storage	<b>Bingqing Wei</b>	University of Delaware, USA
16:00-16:30	High Efficient CuInGaSe <sub>2</sub> Thin Film Solar Cells by the use of Non-Vacuum Direct Chemical Spray Technique	<b>Ki-Bong Song</b>	Electronics and Telecommunications Research Institute, Korea
16:30-17:00	Sol-gel silica waveguide for electro-optic modulators and biophotonic sensors	<b>Yasufumi Enami</b>	Hiroshima University, Japan
17:00-17:30	Enhanced electrical properties of buried oxide thin film transistors	<b>Sang Yeol Lee</b>	Korea Institute of Science and Technology, Korea
17:30-18:00	Mechanical resonators based on monolayer graphene at dilution refrigerator temperatures	<b>Joel Moser</b>	University of Barcelona, Spain
18:00- Night	<i>Dinner and Activities Recommended</i>		



## ❖ Conference Schedule

- ❖ 27th June: afternoon 2:00PM-6:00PM on-site registration;  
Poster Session from 6:00PM - posters should stay until the end of the conference.  
Conference Reception from 7:00PM  
*Welcoming address by conference chairs*
- ❖ 28th June: full day oral presentations  
*Evening activities for attendees from 7:00PM*
- ❖ 29th June: full day oral presentations  
Conference Banquet from 7:00PM  
*Highlight Talk, Kee-Young Kim, PhD*  
*Intro Session: Korean Spirit and Culture Series*
- ❖ 30th June: full day oral presentations  
*Evening activities for attendees from 7:00PM*
- ❖ 1st July: scientific excursion (transportation & tickets covered by the conference)