

NANO KOREA 2017 Symposium_Oral Presenters List

No	Session	Abstract No.	Presentation Type	Presenter (발표자)	Affiliation	Presentation Title
1	TS01	O1701_0005	Oral	Jeong-Eun Park	Seoul National University	Intense plasmonic photoluminescence from interior gap-engineered gold nanocubes
2	TS01	O1701_0023	Oral	Sang-Soo Chee	Gwangju Institute of Science and Technology (GIST)	Modulation of electrical and structural properties of tungsten disulfide using molecular doping
3	TS01	O1701_0024	Oral	Gi-Cheol Son	Gwangju Institute of Science and Technology (GIST)	High-performance, solution-processed Li-doped ZnO thin-film transistors with well-dispersed, chemically-functionalized carbon nanotubes
4	TS01	O1701_0034	Oral	Muhammad Arslan Shehzad	Sejong University	Liquid Crystal based planar optics on 2D materials
5	TS01	O1701_0164	Oral	Hyungjin Kim	Seoul National University	A DRAM Cell Based on Gated-Thyristor with Surrounding Gate Structure for High Scalability
6	TS01	O1701_0166	Oral	Gwang Hyuk Shin	Korea Advanced Institute of Science and Technology (KAIST)	Tunneling field-effect transistor based on MoS ₂ -Si vertical hetero-structure
7	TS01	O1701_0231	Oral	Seung Geun Jung	Korea University	Simulation of Sub-10nm n-Germanium Junctionless Field-Effect-Transistor Using Metal-Interlayer-Semiconductor Source/Drain Structure
8	TS01	O1701_0265	Oral	Byung Chul Jang	Korea Advanced Institute of Science and Technology (KAIST)	Flexible memristive logic-in-memory circuit toward low power flexible electronic systems
9	TS01	O1701_0271	Oral	Junyoung Lee	Pohang University of Science and Technology (POSTECH)	Fabrication and Electrical Characteristics of Low-Temperature Polysilicon(LTPS) Thin-Film-Transistors in Submicron Regimes
10	TS01	O1701_0352	Oral	Daehong Min	Korea Polytechnic University	Novel growth of in-situ GaN nanostructure for phosphor-free white light emitters

11	TS01	O1701_0359	Oral	Jun-Sik Yoon	Pohang University of Science and Technology (POSTECH)	Silicon Tunneling Field-Effect Transistors having Core-Shell Structure
12	TS01	O1701_0380	Oral	Sung Tae Lee	Seoul National University	An electronic synapse device based on NAND flash memory for neural network
13	TS01	O1701_0414	Oral	Gwang-Sik Kim	Korea University	Study of Thermal Stability of Metal-Interlayer-Semiconductor Structure for Metal/n-Ge Contact
14	TS01	O1701_0478	Oral	Jeong-Jun Lee	Seoul National University	Demonstration of Neuromorphic system with HfO ₂ -based RRAM
15	TS01	O1701_0500	Oral	Faraz Najam	Hankyong National University	Compact model of L-shaped tunnel field-effect-transistor including corner-effect
16	TS01	O1701_0714	Oral	Sol Yoon	Pohang University of Science and Technology (POSTECH)	Investigation of Nano-Scale Grain Boundary Effect on Polysilicon Near-Infrared Photodetector
17	TS01	O1701_0723	Oral	Dong Keun Lee	Seoul National University	Area Dependency of Operating Voltages in Nano-Wedge Resistive Random Access Memory
18	TS01	O1701_0741	Oral	Jeeyoung Lee	Yonsei University	Laser fragmentation process for converting Au powders to highly stable nanoparticles with a narrow size distribution
19	TS01	O1701_0777	Oral	Sam Hyeon Lee	Yonsei University	Origin of negative permittivity of metamaterials
20	TS01	O1701_0779	Oral	Hyun-Min Kim	Seoul National University	A study of volatile and nonvolatile characteristics of asymmetric dual-gate thyristor RAM fabricated vertically with polycrystalline silicon
21	TS01	O1701_0893	Oral	Hwi Kim	Korea University	Metasurfaces for complex optical field modulation with subwavelength spatial resolution
22	TS01	O1701_0904	Oral	Faisal Ahmed	Sungkyunkwan University	Super-Linear behavior in Black Phosphorus Field Effect Transistor
23	TS01	O1701_0907	Oral	Deshun Qu	Sungkyunkwan University	Controllable carrier modulation of MoTe ₂ field effect transistors by using chemical doping

24	TS01	O1701_0963	Oral	Kitae Lee	Seoul National University	Suppression of ambipolar current by controlling gate oxide thickness in Tunnel FET
25	TS01	O1701_0996	Oral	Muhan Choi	Kyungpook National University	Designing graded index dielectric microcavities based on transformation optics using subwavelength holes
26	TS01	O1701_1039	Oral	Muhammad Ejaz Khan	Korea Advanced Institute of Science and Technology (KAIST)	Development of an effective mass approach for CdS quantum rods based on first-principles data
27	TS02	O1702_0074	Oral	DaeGwi Kim	Osaka City University	Experimental verification of Förster energy transfer and quantum resonance between semiconductor quantum dots
28	TS02	O1702_0075	Oral	Young-Seok Shon	California State University Long Beach	Alkanethiolate-Capped Colloidal Metal Nanoparticles as Partially Poisoned Selective Nanocatalysts
29	TS02	O1702_0081	Oral	Byeong-Ju Park	Chungnam National University	Wrinkle- and Defect-Free Graphene Grown Directly using Chemical Vapor Deposition at 150 °C
30	TS02	O1702_0149	Oral	Bongsik Choi	Kookmin University	High-performance top-gated 99% semiconducting carbon nanotube network transistor with high device yield and uniformity
31	TS02	O1702_0158	Oral	Soon-Gil Yoon	Chungnam National University	Enhanced Energy Powers via Composites of Piezoelectric CH ₃ NH ₃ PbI ₃ and Flexoelectric Zn-Al:LDH nanosheets
32	TS02	O1702_0165	Oral	Woonggi Hong	Korea Advanced Institute of Science and Technology (KAIST)	Synthesis of Graphene - MoS ₂ Lateral Heterostructure and its FET Application
33	TS02	O1702_0187	Oral	Hamin Park	Korea Advanced Institute of Science and Technology (KAIST)	Atomic scale etching of hexagonal boron nitride for two-dimensional integrated circuits
34	TS02	O1702_0230	Oral	Tae Hong Im	Korea Advanced Institute of Science and Technology (KAIST)	Xenon Flash lamp-Induced Multilayer Graphene Growth for Roll-to-Roll application

35	TS02	O1702_0303	Oral	Jung Hwan Park	Korea Advanced Institute of Science and Technology (KAIST)	Plasmonic-Tuned Flash Cu Nanowelding for Ultrafast Photochemical-Reducing and Interlocking on Flexible Plastics
36	TS02	O1702_0310	Oral	Myung-Hyun Park	Soongsil University	Enhanced adhesion properties of conducting super-hydrophobic surface through the use of metal base coupling agent
37	TS02	O1702_0523	Oral	Yonghun Kim	Korea Institute of Materi	Alloyed 2D van der Waals heterojunctions; Schottky barrier lowering and interface states reduction
38	TS02	O1702_0583	Oral	Chakkaphan Wattanawikkam	King Mongkut's Institute of Technology Ladkrabang	X ray absorption analysis and photocatalytic activity of co-doping transition metal Co-Zn and Mn-Zn on TiO ₂ nanoparticles prepared by sonochemical method
39	TS02	O1702_0656	Oral	Seung Zeon Han	Korea Institute of Materials Science (KIMS)	Simultaneous increasing strength and its trade-off properties in Al alloy by control nano-morphology of second phase
40	TS02	O1702_0745	Oral	Dongwoon Shin	Korea Institute of Machinery and Materials (KIMM)	Shape modification of indium phosphide colloidal quantum dots
41	TS02	O1702_0771	Oral	Yu-ki Lee	Seoul National University	Fabrication of complex 3-Dimensional shaped devices using computational kirigami for wearable application
42	TS02	O1702_0801	Oral	Min-Gi Jin	Seoul National University	Impact of the Cation-Stoichiometry on the Structural Relaxation-Induced Alteration of the Electrical Conductivity of Amorphous Oxide Semiconductors
43	TS02	O1702_0831	Oral	Heonjin Ha	Seoul National University	Electrochemical "Active Chlorine" Generation Catalyzed by Co ₃ O ₄ Nanoparticles for Efficient Water Treatment
44	TS02	O1702_0833	Oral	Kang Hee Cho	Seoul National University	Capillary Regulated Two Step Intermediate Cycle for Low Overpotential Water Splitting

45	TS02	O1702_0838	Oral	Ki Chang Kwon	Seoul National University	Efficient photoelectrochemical hydrogen production using wafer-scale, defect-engineered transition metal disulfide thin film catalysts
46	TS02	O1702_0865	Oral	Ji Bong Joo	Konkuk University	Tailored Synthesis of Nanoscale shell based Hollow Nanostructures for Catalytic Applications
47	TS02	O1702_0874	Oral	Lee Young A	Korea Institute of Science and Technology (KIST)	Nano-structured anti-oil fouling surface for collecting the spilled oil on water
48	TS02	O1702_0920	Oral	Young-Sang Cho	Korea Polytechnic University	Synthesis of Macroporous Silica Particles by Continuous Generation of Droplets for Insulating Materials
49	TS02	O1702_0923	Oral	Min-Woo Jeong	Seoul National University	Improvement Metal-Thermoelectric Material Contact properties with Thermodynamic Prediction
50	TS02	O1702_0925	Oral	Md. Anzan-Uz-Zaman	Korea Institute of Machinery and Materials (KIMM) and University of Science and Technology (UST)	Study on Acoustic Metamaterials for Subwavelength Imaging
51	TS02	O1702_0929	Oral	Jaeho Choi	Seoul National University	Memristive behavior of organic-inorganic hybrid perovskite thin films
52	TS02	O1702_0933	Oral	Seong Yeol Pak	Seoul National University	Influence of Morphological Property on Physical Property of Graphene Nanoplatelet Embedded Poly(Vinyl Alcohol) Aerogel
53	TS02	O1702_1003	Oral	Dr. Martin Amlung	INM - Leibniz Institute for New Materials	Development and evaluation of glass-like protection coatings for metals, alloys, steel and glass
54	TS02	O1702_1008	Oral	Peter W. Oliveira	INM-Leibniz Institute of New Materials	Transparent and conductive coatings through wet chemical process
55	TS03	O1703_0035	Oral	Seonghwan Kim	University of Calgary	Nanoscale subsurface imaging by ultrasonic scanning probe microscopy
56	TS03	O1703_0053	Oral	Vladimir Saveljev	Myongji University	Physical model of the moiré effect in nanoparticles

57	TS03	O1703_0100	Oral	Van Vuong Hoang	Chungnam National University	Strain mapping in the nanoscale-triangular SiGe pattern by dark-field electron holography with medium high-resolution magnification mode
58	TS03	O1703_0274	Oral	Seung Hwan Ko	Seoul National University	Stretchable two dimensional strain sensor fabrication by metal nanowire percolation networks
59	TS03	O1703_0304	Oral	Hyunse Kim	Korea Institute of Machinery and Materials (KIMM)	Finite Element Analysis and Fabrication of an Ultrasonic Waveguide for Microchip Cooling
60	TS03	O1703_0309	Oral	Min-Seung Jo	Korea Advanced Institute of Science and Technology (KAIST)	Wet-chemical digital etching of nanogratings for realization of size controlled nanowires
61	TS03	O1703_0423	Oral	Byeongwan Kim	Yonsei University	Diketopyrrolopyrrole based Nanostructures for Fluorescence Chemical Sensors
62	TS03	O1703_0485	Oral	Jae Hong Park	National Nonofabrication Center (NNFC)	Reversible Nano Lithography with Commercial Approaches for Multi-Functional Nanostructure-Applications
63	TS03	O1703_0738	Oral	Junil Lee	Seoul National University	Novel Method to Fabricate SiGe Nanowire Tunnel Field-effect Transistors with Low Temperature Dopant Activation by Ni Silicidation
64	TS03	O1703_0767	Oral	Min-Woo Kwon	Seoul National University	Low power Integrate-and-Fire neuron circuit using positive feedback field effect transistor
65	TS03	O1703_0805	Oral	Narathon Khemasiri	King Mongkut's Institute of Technology Ladkrabang	Influence of Substrate Temperature on Formation of Al-doped ZnO Thin Film Prepared by Pulsed Laser Deposition System
66	TS03	O1703_0903	Oral	Velu Arasu	Sungkyunkwan University	Multi-layered DNA Thin Films: Fabrication and Physical Characterization
67	TS03	O1703_0950	Oral	Hyekyoung Choi	Korea Institute of Machinery and Materials (KIMM)	Spray-Coated Lead Sulfide Quantum Dot Ink Solar Cells
68	TS03	O1703_0957	Oral	Jun Kyu Han	Gwangju Institute of Science and Technology (GIST)	Modification of the differential bridge method for elimination of background heat transfer and sensitivity improvement

69	TS03	O1703_0986	Oral	Ju Ho Lee	Dankook University	Transformation of carbon material to crystallized graphene
70	TS03	O1703_1002	Oral	Mohsin Ali Badshah	Chung-Ang University	Enhanced fluorescence observation of biomolecular binding events at Ag nanorod microarray substrate
71	TS03	O1703_1033	Oral	Junhyuk Choi	Korea Institute of Machinery and Materials (KIMM)	Nanoimprint-defined Metal Transfer and Its applications to Plasmonic Optoelectronics
72	TS03	O1703_1035	Oral	Hyeonjin Eom	Korea Institute of Industrial Technology (KITECH)	Adhesion characteristics of metal-polymer interface based on the nanostructuring of the polymer substrate by using nanoimprint lithography
73	TS03	O1703_1041	Oral	Jihye Lee	Korea Institute of Machinery and Materials	Fabrication of nanopatterned cerium oxide thin film using sol-gel derived nanoimprint lithography
74	TS04	O1704_0105	Oral	Jinmyoung Joo	University of Ulsan College of Medicine	Targeted nanomedicine that interacts with host biology
75	TS04	O1704_0189	Oral	Abhinav V Raut	D Y Patil University	Intelligent Photoassisted Chitosan/TiO ₂ (CS-CT) hybrid Scaffold for Enhancing Wound Healing
76	TS04	O1704_0348	Oral	Jinhwan Kim	Pohang University of Science and Technology (POSTECH)	DNA decorated dynamic nanoparticles for pH-responsive chemotherapy
77	TS04	O1704_0921	Oral	Jae-Hyung Jang	Yonsei University	Biomaterial-mediated viral gene delivery technologies for gene-cell therapy applications
78	TS05	O1705_0202	Oral	Vinayak S. Kale	Seoul National University	Efficient Oxygen Evolution Reaction Electrocatalyst from Sulfur-Modified Graphitic Carbon Nitride Nanostructures
79	TS05	O1705_0207	Oral	Dong Hyun Kim	Korea Advanced Institute of Science and Technology (KAIST)	In vivo Self-Powered Wireless Transmission Using Biocompatible Flexible Energy Harvesters
80	TS05	O1705_0226	Oral	Kathleen Maleski	Drexel University	Nanofabrication of Microelectronic Devices with Two-Dimensional MXene

81	TS05	O1705_0251	Oral	Tran Van Dang	Chungnam National University	Dual-functionage solar and piezoelectric energy harvesting in one cell structure based on Lead-halide Perovskite
82	TS05	O1705_0254	Oral	Hee Seung Wang	Korea Advanced Institute of Science and Technology (KAIST)	Performance Enhanced Triboelectric Nanogenerator via wafer-scale defect-free nanograting enabled by multistep pattern downscaling
83	TS05	O1705_0286	Oral	Swathi Ippili	Chungnam National University	Lead free MASnI ₃ perovskite based Flexible Piezoelectric Energy Generator
84	TS05	O1705_0289	Oral	Venkatraju Jella	Chungnam National University	Halide ion doped CH ₃ NH ₃ PbI _{3-x} Y _x (Y=Cl, Br) Perovskite based Thin Films for Flexible Piezoelectric Generators
85	TS05	O1705_0379	Oral	Jun-Sik Park	Hanyang University	Intense pulsed light sintering of yttrium stabilized zirconia fabricated by chemical solution deposition process
86	TS05	O1705_0393	Oral	S.V.N.Pammi	Chungnam National University	Fabrication of Pure and doped MAPbI ₃ thin films by one step chemicalvapor deposition method for energy harvesting applications
87	TS05	O1705_0405	Oral	Seungho Lee	Pohang University of Science and Technology (POSTECH)	Thermal conductivity Anaysis of Vertical Si Nanowire Array using Differential 3w method
88	TS05	O1705_0427	Oral	Ratna Frida Susanti	Parahyangan Catholic University	Delignification, carbonization temperature and carbonization time effects on the hydrothermal conversion of salacca peel into high surface area of activated carbon
89	TS05	O1705_0444	Oral	Jinwon Cho	Korea Institute of Science and Technology (KIST)	Role of Heteronuclear Interactions in Selective H ₂ Formation from HCOOH Decomposition on Bimetallic Pd/M (M=Late Transition FCC Metals) Catalysts
90	TS05	O1705_0456	Oral	Donghun Kim	Korea Institute of Science and Technology (KIST)	Dissimilar anisotropy of electron versus hole bulk transport in anatase TiO ₂ : Implications for photocatalysis

91	TS05	O1705_0471	Oral	Sung Jin Pai	Korea Institute of Science and Technology (KIST)	3-Methyl-1, 2-BN-cyclopentane molecule and easy catalysts for liquid phase hydrogen storage material: ReaxFF and ab initio approach
92	TS05	O1705_0504	Oral	Sujith Kalluri	Ulsan National Institute of Science and Technology (UNIST)	Highly loaded surface-engineered electrodes: To achieve high-energy Li-ion cells
93	TS05	O1705_0579	Oral	Jiyoung Ma	Ulsan National Institute of Science and Technology (UNIST)	Rational pore design of silicon-nanoparticle-distributed graphite to accommodate volume expansion for high-energy LIBs
94	TS05	O1705_0709	Oral	Seungkyu Park	Ulsan National Institute of Science and Technology (UNIST)	Conserving the secondary particle of Fe-Si composite anode for high energy Li-ion batteries via robust carbon layer
95	TS05	O1705_0732	Oral	Masahiro Hibi	The University of Tokyo	Wireless sensor network using low frequency vibration energy harvester on the basis of stochastic resonance
96	TS05	O1705_0810	Oral	Kyoungsoo Kim	Institute for Basic Science	Facile synthesis of ordered microporous carbon with graphenic framework using zeolite templates for electrochemical energy storage
97	TS05	O1705_0886	Oral	Paul Maldonado Nogales	Soonchunhyang University	Measurements of the columbic efficiency as a method for to identify the particle size influence in Li/FeS ₂ batteries
98	TS05	O1705_0911	Oral	jiangzhao chen	Sungkyunkwan University	Suppression of iodide migration for enhancing stability and reducing hysteresis of perovskite solar cell
99	TS05	O1705_0987	Oral	Sintayehu Nibret Tiruneh	Sungkyunkwan University	Nickel Cobalt Sulfide@Holey Graphene Hydrogel for Supercapacitors
100	TS05	O1705_1024	Oral	Chinmoy Basak Mukta	Yeungnam University	Synthesis of 3D copper-cobalt oxides with different morphologies for binder-free supercapacitor electrodes
101	TS05	O1705_1028	Oral	Su Geun Ji	Seoul National University	Observation of thermal degradation with methylammonium and formamidinium-based perovskite materials

102	TS05	O1705_1030	Oral	Dong Seok Lee	Seoul National University	Formation of CH ₃ NH ₃ PbI ₃ from electrodeposited PbO ₂ layer for p-i-n type planar perovskite solar cells
103	TS06	O1706_0612	Oral	Hyeri Jeong	KIST Europe	Mixture toxicity of silver ion combined with TiO ₂ and ZnO on Daphnia magna
104	TS07	O1707_0048	Oral	Jae Hyun Han	Korea Advanced Institute of Science and Technology (KAIST)	Flexible Inorganic-based Piezoelectric Acoustic Sensors Inspired by Human Cochlea
105	TS07	O1707_0160	Oral	Junsoo Kim	Electronics and Telecommunications Research Institute (ETRI)	Artificial Perspiration via Heterogeneous and Hierarchical Membrane
106	TS07	O1707_0195	Oral	Donghoon Kim	Pohang University of Science and Technology (POSTECH)	Enhanced Gas Sensing Performances of Novel Si-Nanonet-Channel Resistive Sensor
107	TS07	O1707_0203	Oral	Kyung-Ho Park	Korea Advanced Nano Fab Center (KANC)	Growth and fabrication of AlGa _N /Ga _N HEMT for sensor applications
108	TS07	O1707_0306	Oral	Jung Soo Rhim	Seoul National University	Composite Laminate Sandwich Plate Analysis with Piezoelectric Actuators
109	TS07	O1707_0350	Oral	Jong-Kwon Lee	National Nonofabrication Center (NNFC)	High-Sensitive Graphene Temperature Sensor
110	TS07	O1707_0372	Oral	Wooju Jeong	Pohang University of Science and Technology (POSTECH)	Gas sensitivity analysis of single ZnO nanowire gas sensor having different defect density, dimension and material properties
111	TS07	O1707_0487	Oral	Hyunjae Lee	Center for Nanoparticle Research (Institute for Basic Science) & Seoul National University	Sweat-based Glucose Treatment System
112	TS07	O1707_0581	Oral	Mi Kyung Kim	Korea Advanced Institute of Science and Technology (KAIST)	Implantable sensor for monitoring bladder volume using polypyrrole/agarose hydrogel composite
113	TS07	O1707_0620	Oral	Ryoongbin Lee	Seoul National University	Determination of Optimal Drive Voltage for Highly-Sensitive ISFET Considering CMOS Readout Circuit Applications

114	TS07	O1707_0635	Oral	Byung Jun Kim	Gwangju Institute of Science and Technology (GIST)	Measurement of hematocrit and blood viscosity on a microfluidic chip
115	TS07	O1707_0639	Oral	Taekeon Jung	Gwangju Institute of Science and Technology (GIST)	Droplet based microfluidic platform integrated with iridium oxide pH electrode for continuous pH monitoring of droplet
116	TS07	O1707_0661	Oral	Jung Heon Lee	Sungkyunkwan University	A significant enhancement of color transition from an on-off type achromatic colorimetric nanosensor for highly sensitive multi-analyte detection with the naked eye
117	TS07	O1707_0673	Oral	Ming Liang Jin	Korea Advanced Institute of Science and Technology (KAIST)	An unprecedented sensitivity of artificial visco-poroelastic mechanotransducer skin inspired by Piezo2 protein in mammalian Merkel cells
118	TS08	O1708_0033	Invited-Oral	Byungchan Han	Yonsei University	Multiscale Computational Framework for Discovery of High Functional Materials for Renewable Energy Devices
119	TS01	O1708_0447	Invited-Oral	Kwang-Ryeol Lee	Korea Institute of Science and Technology (KIST)	Recent Progress in the Development of Thematic Simulation Platform for Materials Design
120	TS01	O1708_0496	Invited-Oral	Byeong-Joo Lee	POSTECH	Surface energy of Pt – an atomistic simulation approach
121	TS01	O1708_0604	Invited-Oral	Aloysius Soon	Yonsei University	Exploring the science (and the art) of phosphorene kirigami
122	TS01	O1708_0884	Invited-Oral	Sang Soo Han	Korea Institute of Science and Technology (KIST)	Reactive Force Field Simulation for Design of Anodes and Electrolytes of Li-ion Batteries