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Arab, Abbas	George Mason Univ
Krylyuk, Sergiy	Univ. of Maryland
Davydov, Albert	National Inst. of Standards and Tech
Zaghloul, Mona	George Washington Univ

15:30-16:15 WePPP.4

Zero-Valent Iron Based Nanoparticles Selectively Inhibit Cancerous Cells through Mitochondria-Mediated Autophagy, pp. 168-170.

Shieh, Dar-Bin	National Cheng Kung Univ
Yang, Li-Xing	Inst. of Basic Medical Sciences, National Cheng Kung Univ

Lee, Wei-Ting	Inst. of Basic Medical Science, National Cheng Kung Univ
Huang, Kuang-Jing	Inst. of Basic Medical Sciences, National Cheng Kung Univ
Wu, Ya-Na	Inst. of Oral Medicine and Department of Stomatology, Nation

Su, Wu-Chou Department of Internal Medicine, National Cheng Kung Univ

Chen, Don-Hwang Inst. of Chemical Engineering, National Cheng Kung Univ

Tsang, Benjamin K. Ottawa Hospital Res. Inst. Ottawa, ON, K1H 8L6, Canada

15:30-16:15 WePPP.5

Numerical Modeling and Simulation of Stable Nanowire CdS-CdTe Solar Cells, pp. 171-176.

Dang, Hongmei	Univ. of the District of Columbia
Ososanya, Esther	Univ. of the District of Columbia
Zhang, Nian	Univ. of the District of Columbia
Singh, Vijay	Univ. of Kentucky

15:30-16:15 WePPP.6

FDTD Modeling of Plasmonic Enhancement in Two-Dimensional Gold Lattice Structures, pp. 177-182.

Norville, Casey	West Virginia Univ
Smith, Kyle	West Virginia Univ
Dawson, Jeremy	West Virginia Univ
Gadde, Akshitha	West Virginia Univ

15:30-16:15 WePPP.7

Effects of the Growth Parameters on the Hydrothermal Synthesis of ZnO Nano-Rods and Their Application to GaN Based LEDs, pp. 183-184.

Hong, In Yeol	Sunchon National Univ
Cha, Yu-Jung	Sunchon National Univ
Kim, Tae Kyoung	Sunchon National Univ
Oh, Seung Kyu	Sunchon National Univ
Kwak, Joon Seop	Sunchon National Univ

15:30-16:15 WePPP.8

On Cylindrical Hammock Networks, pp. 185-188.

Cowell, Simon	UAE Univ
Beiu, Valeriu	"Aurel Vlaicu" Univ. of Arad
Daus, Leonard	United Arab Emirates Univ
Poulin, Philippe	American Univ. in Dubai

15:30-16:15 WePPP.9

Coupled Acousto-Optical Phonons in Wurtzites: Micro-To-Nano-Scale Bridging, pp. 189-192.

Datta, Debopam	Univ. of Illinois at Chicago
Dutta, Mitra	Univ. of Illinois at Chicago
Stroscio, Michael	Univ. of Illinois at Chicago

15:30-16:15 WePPP.10

Metal-Insulator-Metal Tunneling Diode Using Vertical Metal Cylinder Structure, pp. 193-195.

HEO, SUJIN	Daegu Gyeongbuk Inst. of Science and Tech
Shin, Jeong Hee	DGIST
Jang, Jae Eun	Department of Information & Communication Engineering, Daegu Gye

15:30-16:15	WePPP.11		
<i>Nanocrystalline and Amorphous FeAlSn Alloy Prepared by Mechanical Alloying*</i> , pp. 1065-1068			
Zineb, Hamlati	Aeronautic Department, Univ. Obf Blida1		
15:30-16:15	WePPP.12		
<i>Compare Investigation of Lithiation, Sodiation, and Magnesian Ion Adsorptions and Diffusions on Monolayer MoS2 for Energy Storages Using First-Principles</i> , pp. 196-199.			
Li, Minglin	Fuzhou Univ		
Luo, Jing	Fuzhou Univ		
Wang, Weidong	Xidian Univ		
15:30-16:15	WePPP.13		
<i>Gate Tunable Graphene Break Junction Spin Filter</i> , pp. 200-203.			
Jiang, Liming	The Univ. of Melbourne		
Hossain, Md Sharafat	Univ. of Melbourne		
Qiu, Wanzhi	The Univ. of Melbourne		
Al-Dirini, Feras	Univ. of Melbourne		
Evans, Robin	Univ. of Melbourne		
Skafidas, Efstratios	Univ. of Melbourne		
15:30-16:15	WePPP.14		
<i>Analysis of Brownian Particle Considering Nonrigidity of Matter-A Langevin Equation Approach</i> , pp. 204-207.			
Shringi, Savitashva	Manipal Univ. Jaipur		
Sharma, N.N	Manipal Univ. Jaipur		
15:30-16:15	WePPP.15		
<i>Computational Nanotechnology to Predict Photocatalysis of Titania Nanoparticles in Cement-Based Materials</i> , pp. 208-213.			
Cerro-Prada, Elena	Univ. Pol. De Madrid		
Escolano, Félix	Univ. Pol. De Madrid		
Varela, Fernando	Univ. Pol. De Madrid		
15:30-16:15	WePPP.16		
<i>Magnetic Nanocomposites (SR/IRON) Type Isotropic MRE Directed to Vibration Absorption Systems</i> , pp. 214-217.			
Bellucci, Felipe Silva	Faculdade De Engenharia De Ilha Solteira (FEIS-UNESP), Univ		
Fukushima, Jeferson Camargo	Faculdade De Engenharia De Ilha Solteira (FEIS-UNESP)		
Obata, Daniel Henrique de Sousa	Faculdade De Engenharia De Ilha Solteira (FEIS-UNESP)		
Almeida, Fabricio César Lobato de	Departamento De Engenharia De Biosistemas (Tupã-UNESP)		
Job, Aldo Eloizo	Faculdade De Ciência E Tecnologia (FCT-UNESP)		
Paschoalini, Amarildo Tabone	Faculdade De Engenharia De Ilha Solteira (FEIS-UNESP)		
15:30-16:15	WePPP.17		
<i>Multi-Dimensional and Multi-Functional Hierarchical Nanostructure for High Performance Sensing to Trace-Level Dopamine Molecules*</i> .			
Xu, Pengcheng	Shanghai Inst. of Microsystem and Information Tech. Ch		
Li, Xinxin	Shanghai Inst. of Microsystem and Information Tech. Ch		
15:30-16:15	WePPP.18		
<i>Hollow Spheroid Formation by Cells at the Mechanical Interface of Hyaluronic Acid Hydrogels in Three Dimensions</i> , pp. 218-222.			
Zhu, Xiaolu	Hohai Univ		
Yang, Yifei	Hohai Univ		
15:30-16:15	WePPP.19		
<i>Control of DNA Origami Mechanisms Via Gold Nanoparticles</i> , pp. N/A.			
Johnson, Joshua	The Ohio State Univ		
Castro, Carlos	The Ohio State Univ		
Winter, Jessica	The Ohio State Univ		
Dehankar, Abhilasha	The Ohio State Univ		
15:30-16:15	WePPP.20		
<i>Coarse-Grained Molecular Dynamic Simulation of DNA-Linked Nanoparticle Building Blocks on a GPU*</i> .			
Fochtman, Tyler	Univ. of Arkansas		
Hendricks, Jacob	University of Wisconsin, River Falls		
Patitz, Matthew	Univ. of Arkansas		
Han, Haewook	Pohang Univ. of Science and Tech		
Kim, Jin-Woo	Univ. of Arkansas		
15:30-16:15	WePPP.21		
<i>Quantum Dot Solar Cells</i> , pp. 225-229.			
Bedi, Guneet	Clemson Univ		
Singh, Rajendra	Clemson Univ		
15:30-16:15	WePPP.22		
<i>Multi-Scale Manufacture for Bio-Inspired Structure Enabled by Variable Voxel Stereolithography</i> , pp. 230-231.			
Li, Yuanrui	Univ. of Southern California		
Hu, Pan	Univ. of Southern California		
Huachao, Mao	Univ. of Southern California		
Hermes, Mark	Univ. of Southern California		
Zhang, Lucas	Singapore American School		
Lim, Haneol	Univ. of Southern California		
Luhar, Mitul	Univ. of Southern California		
Yoon, Jongseung	Univ. of Southern California		
Yong, Chen	Univ. of Southern California		
Wu, Wei	Univ. of Southern California		
15:30-16:15	WePPP.23		
<i>Guar Gum Derived Nanotherapy for Oral Delivery of Neem Leaf Protein against Colon Cancer</i> , pp. N/A.			
Chaudhary, Suman	Deakin Univ		
Kanwar, Rupinder Kaur	Deakin Univ		
Kanwar, Jagat Rakesh	Deakin Univ		
15:30-16:15	WePPP.24		
<i>Antibacterial Surfaces*</i> .			
Kayes, Md Imrul	Univ. of Pittsburgh		
Kashkoush, Mohamed	Univ. of Pittsburgh		
Galante, Anthony	Univ. of Pittsburgh		
Leu, Paul	Univ. of Pittsburgh		
15:30-16:15	WePPP.25		
<i>Improving the Immunity of SET/MOS Hybrid A/D Converters Using Boltzmann Machine Networks</i> , pp. 233-236.			
zhang, zihan	Univ. of Windsor		
Chen, Chunhong	Univ. of Windsor		

15:30-16:15	WePPP.26
<i>Enhanced Dielectric Properties and Thermal Conductivity of Sandwich-Structured PVDF Composites by Spin Coating</i> , pp. 237-241.	
Zhang, Dong-li	Univ. of Science and Tech. Beijing
Wang, Si-jiao	Tsinghua Univ
Zha, Jun-Wei	Univ. of Science and Tech. Beijing
Dang, Zhi-min	Tsinghua Univ
Li, Chao Qun	Univ. of Hainan
Li, Wei Kang	Global Energy Interconnection Res. Inst
15:30-16:15	WePPP.27
<i>The Effect of Ionic Strength on the Sensing Performance of Liquid-Gated Biosensors</i> , pp. 242-245.	
Wu, Guangfu	City Univ. of HongKong
TANG, Xin	City Univ. of Hong Kong
LIN, Zihong	City Univ. of Hong Kong
Meyyappan, M.	NASA Ames Res. Center
Lai, King Wai Chiu	City Univ. of Hong Kong
15:30-16:15	WePPP.28
<i>Effects of Uniaxial Strain on Polar Optical Phonon Scattering and Electron Transport in Monolayer MoS₂ FETs</i> , pp. 246-249.	
Khair, Khadija	Southern Illinois Univ. at Carbondale
Ahmed, Shaikh	Southern Illinois Univ. at Carbondale
15:30-16:15	WePPP.29
<i>Impact of Dielectric Material and Oxide Thickness on the Performance of Carbon Nanotube Field Effect Transistor</i> , pp. 250-254.	
Shaukat, Ayesha	Balochistan Univ. of Information and Tech
15:30-16:15	WePPP.30
<i>Room Temperature Electrical Control of Spin and Valley Hall Effect in Monolayer WSe₂ Transistors for Spintronic Applications</i> , pp. 255-255.	
Incorvia, Jean Anne	Stanford Univ
Barre, Elyse	Stanford Univ
Kim, Suk Hyun	Stanford Univ
McClellan, Connor	Stanford Univ
Pop, Eric	Stanford Univ
Wong, H. -S. Philip	Stanford Univ
Heinz, Tony	Stanford Univ
15:30-16:15	WePPP.31
<i>A New Computing Architecture Using Ising Spin Model Implemented on FPGA for Solving Combinatorial Optimization Problems</i> , pp. 256-258.	
Kihara, Yusuke	Tokyo Univ. of Agriculture and Tech
Ito, Mitsuki	Tokyo Univ. of Agriculture and Tech
Saito, Takanari	Tokyo Univ. of Agriculture and Tech
Shiomura, Masayuki	Tokyo Univ. of Agriculture and Tech
Sakai, Shotaro	Tokyo Univ. of Agriculture and Tech
Shirakashi, Jun-ichi	Tokyo Univ. of Agriculture and Tech

15:30-16:15	WePPP.32
<i>Surface-Tension-Confined Fluidics on Parylene C Coated Paper Substrate</i> , pp. 259-262.	
Scarpa, Elisa	Istituti Italiano Di Tecnologia
Dattoma, Tommaso	Istituto Italiano Di Tecnologia (IIT)
Calcagnile, Paola	Istituto Italiano Di Tecnologia
Blasi, Laura	CNR-Nanotec
Qualtieri, Antonio	Istituto Italiano Di Tecnologia (IIT)
Rizzi, Francesco	Istituto Italiano Di Tecnologia (IIT)
De Vittorio, Massimo	Istituto Italiano Di Tecnologia
15:30-16:15	WePPP.33
<i>Electronic Devices within Single Atomic Layer*</i> .	
Jr-Hau, He	KAUST
WeO201	Grand Ballroom #1
Special Sessions: Nanomaterials: Nanodielectrics (Invited Session)	
Chair: Fréchette, Michel	Hydro-Québec
Co-Chair: Min, Daomin	Xi'an Jiaotong Univ
16:15-16:45	WeO201.1
<i>Optimization of Space Charge Accumulation in LDPE Nanocomposites Containing Graphene Oxide</i> , pp. 263-266.	
Angela, Camprini	DEI - Univ. of Bologna
Fabiani, Davide	Univ. of Bologna
Vanga-Bouanga, Christele	Hydroquebec
Fréchette, Michel	Hydro-Québec
16:45-17:00	WeO201.2
<i>Electrical Breakdown of Polymer Nanocomposites Modulated by Space Charges</i> , pp. 267-269.	
Min, Daomin	Xi'an Jiaotong Univ
Yan, Chenyu	Xi'an Jiaotong Univ
Wang, Weiwang	Xi'an Jiaotong Univ
Xie, Dongri	Xi'an Jiaotong Univ
Fréchette, Michel	Hydro-Québec
Li, Shengtao	Xi'an Jiaotong Univ
17:00-17:15	WeO201.3
<i>Development and Study of the Influence of Surface Modification of ZnO Nanoparticle in Polyethylene Nanocomposite</i> , pp. N/A.	
Mohan, Anu	Univ. Du Québec à Chicoutimi
Sarkar, Dilip	Univ. Du Québec à Chicoutimi
Fréchette, Michel	Hydro-Québec
17:15-17:30	WeO201.4
<i>Dielectric Properties of Polyethylene/MgO Nanocomposites Fabricated Using Ball-Milling</i> , pp. 276-279.	
Fréchette, Michel	Hydro-Québec
17:45-18:00	WeO201.6
<i>Hysteresis Effect in the Electrical Conductivity of Graphene-Enhanced Polyethylene Composites</i> , pp. 280-283.	
David, Eric	ETS
Fréchette, Michel	Hydro-Québec
Rosi, Gian Filippo	Univ. of Bologna
Moghimi, Nima	Nanoxplora

WeO202	Grand Ballroom #2
Nanorobotics and Automation (Oral Session)	
Chair: Bedewy, Mostafa	Univ. of Pittsburgh
Co-Chair: Ichikawa, Akihiko	Meijo Univ
16:15-16:45	WeO202.1
<i>Visible-Light Controlled Catalytic Cu₂O-Au Micromotors</i> , pp. N/A.	
Zhou, Dekai	Harbin Inst. of Tech
Li, Longqiu	Harbin Inst. of Tech
Chu, Guanghao	Harbin Inst. of Tech
16:45-17:00	WeO202.2
<i>Precision Control of Nanoparticle Monolayer Assembly: Optimizing Rate and Crystal Quality</i> , pp. 286-289.	
Bedewy, Mostafa	Univ. of Pittsburgh
Hu, Jingjie	Princeton Univ
Hart, A. John	MIT
17:00-17:15	WeO202.3
<i>Reversible Actuation of Folded Multilayered Graphene by Electrostatic Forces for Nano-Gripper Application</i> , pp. 290-292.	
Fujiwara, Takafumi	Meijo Univ
Nakajima, Masahiro	Nagoya Univ
Ichikawa, Akihiko	Meijo Univ
Hasegawa, Yasuhisa	Nagoya Univ
Fukuda, Toshio	Meijo Univ
17:15-17:30	WeO202.4
<i>Characterising of Mobile Vortex-Like Paramagnetic Nanoparticle Swarm: From a Single Vortex to Multiple Vortices</i> , pp. 293-296.	
Yu, Jiangfan	The Chinese Univ. of Hong Kong
Zhang, Li	The Chinese Univ. of Hong Kong
17:30-17:45	WeO202.5
<i>Higher Precision Rotational Manipulation of C. Elegans by Microchannel</i> , pp. 297-298.	
Nakajima, Masahiro	Nagoya Univ
Igarashi, Yu	Nagoya Univ
Takeuchi, Masaru	Nagoya Univ
Hisamoto, Naoki	Nagoya Univ
Hasegawa, Yasuhisa	Nagoya Univ
Fukuda, Toshio	Meijo Univ
17:45-18:00	WeO202.6
<i>Multi Template Matching-Based Drift Compensation for Electron Beam Induced Deposition</i> , pp. 299-302.	
Klauser, Waldemar	Univ. of Oldenburg
Bartenwerfer, Malte	Univ. of Oldenburg
Fatikow, Sergej	Univ. of Oldenburg

WeO203	Grand Ballroom #3
Nanobiology and Nanomedicine (Oral Session)	
Chair: Barros, Michael	TSSG/Waterford Inst. of Tech
Co-Chair: Wei, Li	The Univ. of Sydney
16:15-16:45	WeO203.1
<i>Antibacterial Performance of Graphene Oxide Complemented with Pluronic F-127 on Physiologically Mature Gram-Negative Bacteria</i> , pp. 303-308.	
Karahan, H. Enis	Nanyang Tech. Univ

Wiraja, Christian	Nanyang Tech. Univ. School of Chemical and Biomed
Binte Nasrun, N. Farahin	Nanyang Tech. Univ. School of Chemical and Biomed
Toh, Silvana H. J.	Nanyang Tech. Univ. School of Chemical and Biomed
Goh, Min Hao	Singapore Inst. of Manufacturing Tech
Wei, Li	The Univ. of Sydney
Xu, Chenjie	Nanyang Tech. Univ. School of Chemical and Biomed
Wei, Jun	Singapore Inst. of Manufacturing Tech
Chen, Yuan	The Univ. of Sydney, School of Chemical and Biomolecular En

16:45-17:00	WeO203.2
<i>Cell Electroporation and Intracellular Delivery by Mean of 3D Vertical Hollow Nanoelectrodes</i> , pp. 309-310.	
Caprettini, Valeria	Univ. of Genoa - Istituto italiano Di Tecnologia
Cerea, Andrea	Istituto Italiano Di Tecnologia
Carrara, Angelica	Istituto Italiano Di Tecnologia
Bruno, Giulia	Istituto Italiano Di Tecnologia
Melle, Giovanni	Istituto Italiano Di Tecnologia
Iovato, Laura	Istituto Italiano Di Tecnologia
Dipalo, Michele	Istituto Italiano Di Tecnologia

17:00-17:15	WeO203.3
<i>Integration of Au Nano-Pillars and SAM Enables Protein Patterning with Designed Spacing at Single Molecule Level</i> , pp. 311-314.	
Taikopaul, Kaneko	Kyoto Univ
Sasakura, Kazushi	Kyoto Univ
Furuta, Ken'ya	NICT
Oiwa, Kazuhiro	NICT
Shintaku, Hirofumi	Kyoto Univ
Kotera, Hidetoshi	Kyoto Univ
Yokokawa, Ryuji	Kyoto Univ

17:15-17:30	WeO203.4
<i>Set Point Regulation of Astrocyte Intracellular Ca²⁺ Signalling</i> , pp. 315-320.	

Barros, Michael	TSSG/Waterford Inst. of Tech
Dey, Subhrakanti	Uppsala Univ

17:30-17:45	WeO203.5
<i>Can the Nano Level Electrodynamics Explains the Very Early Diagnosis of Diabetic Nephropathy in Type-2 Diabetes Patients?</i> , pp. 321-325.	

Nieto-Chaupis, Huber	Univ. De Ciencias Y Humanidades
Unluturk, Bige	Georgia Inst. of Tech

WeO204	Grand Ballroom #4
Modeling and Simulation of Nanostructures and Nanodevices II (Oral Session)	
Chair: Aksamija, Zlatan	Univ. of Massachusetts-Amherst
Co-Chair: Chu, Zhongyi	Beihang Univ
16:15-16:45	WeO204.1
<i>Thermal Conductivity of Graphene in the Hydrodynamic Regime</i> , pp. 326-329.	
Majee, Arnab	Univ. of Massachusetts-Amherst

Aksamija, Zlatan	Univ. of Massachusetts-Amherst
16:45-17:00	WeO2O4.2
<i>Optimization Design of Microstroke Table for Gecko Adhesives Actuating</i> , pp. 330-333.	
Ye, Jiayu	Beijing Univ. of Tech
Chu, Zhongyi	Beihang Univ
Cui, Jing	Beijing Univ. of Tech
17:00-17:15	WeO2O4.3
<i>Numerical Simulation Investigation of Near-Field Enhancement and Field-Induced Effect on Nanoprobe Irradiated by Annular Laser Beam</i> , pp. 334-338.	
yang, Iijun	Harbin Inst. of Tech
Lu, Xiwen	Harbin Inst. of Tech
17:15-17:30	WeO2O4.4
<i>First-Principles Modeling of SiGe Alloys and Devices</i> , pp. 339-340.	
Blom, Anders	QuantumWise
Khomyakov, Petr A.	QuantumWise
Stradi, Daniele	QuantumWise
Stokbro, Kurt	QuantumWise
17:30-17:45	WeO2O4.5
<i>Design and Simulation of Si/SiC Quantum Dot Superlattice Solar Cells with Al₂O₃ Passivation Layer</i> , pp. 341-344.	
Tsai, Yi-Chia	National Chiao Tung Univ
Lee, Ming-Yi	National Chiao Tung Univ
Li, Yiming	National Chiao Tung Univ
Samukawa, Seiji	Tohoku Univ
17:45-18:00	WeO2O4.6
<i>Recombination Dynamics in Quantum-Dot Infrared Photodetectors with Spherical and Lens-Shaped Potential</i> , pp. 345-348.	
Rani, Sweta	Indian Inst. of Tech. (Indian School of Mines), Dhanbad
Hussain, Saddam	IIT(ISM)
Mech, Bhupen Chandra	IIT(ISM)
Kumar, Jitendra	IIT(ISM)
WeO2O5 Grand Ballroom #5	
Nanoelectronics II (Oral Session)	
Chair: Piazza, Gianluca	Carnegie Mellon Univ
Co-Chair: Amer, Moh	UCLA and KACST
16:15-16:45	WeO2O5.1
<i>Pulse-Activated Piezo-NEMS Shuttle Relay</i> , pp. 349-350.	
Best, James	Carnegie Mellon Univ
Piazza, Gianluca	Carnegie Mellon Univ
16:45-17:00	WeO2O5.2
<i>Excellent Field Emission Properties of VO₂ (A) Nanoemitters in Air</i> , pp. 351-354.	
Liu, Meng	Chinese Acad. of Sciences
LI, TIE	The Chinese Acad. of Sciences
Wang, Yuelin	Chinese Acad. of Sciences
17:00-17:15	WeO2O5.3
<i>Solution Processed ZnS-MoS₂ for Optoelectronic Applications</i> , pp. 355-357.	
Thanga Gomathi, P	Indian Inst. of Tech. Hyderabad, India

Sahatiya, Parikshit	Indian Inst. of Tech. Hyderabad, India
Badhulika, Sushmee	Indian Inst. of Tech. Hyderabad, India
17:15-17:30	WeO2O5.4
<i>Novel SRAM Cells Using Dual-Threshold Independent-Gate FinFETs</i> , pp. 358-359.	
Yang, Huishan	Ningbo Univ
Hu, Jianping	Ningbo Univ
Zhu, Haotian	Ningbo Univ
17:30-17:45	WeO2O5.5
<i>Electron Transport of Suspended Quasi-Metallic Carbon Nanotube Transistors in Split Gate Configuration</i> , pp. 360-363.	
Amer, Moh	UCLA and KACST
Alhussain, Abdulrahman	KACST
cronin, Steve	USC
17:45-18:00	WeO2O5.6
<i>Statistical Evaluation of Critical Path Delay in CNFET-Based Circuits in the Presence of CNT Fabrication Imperfections</i> , pp. 364-369.	
Vendra, Satya Keerthi	Portland State Univ
Chrzanowska-Jeske, Malgorzata	Portland State Univ
ashraf, rehman	Portland State Univ
WeO2O6 City Center A	
Nano-Metrology and Characterization II (Oral Session)	
Chair: Niu, Jianjun	Health Canada
Co-Chair: Lan, Fei	Univ. of Pittsburgh
16:15-16:45	WeO2O6.1
<i>Improve the Resolution of Kelvin Probe Force Microscopy Images</i> , pp. N/A.	
Lan, Fei	Univ. of Pittsburgh
Jiang, Minlin	Univ. of Pittsburgh
Li, Guangyong	Univ. of Pittsburgh
16:45-17:00	WeO2O6.2
<i>Amplitude Calibration of Quartz Tuning Fork (QTF) Force Sensor with an Atomic Force Microscope</i> , pp. 373-378.	
Hussain, Danish	STUDENT
Zhang, Hao	Harbin Inst. of Tech
Song, Jianmin	Harbin Inst. of Tech
Wen, Yongbing	Harbin Inst. of Tech
MENG, Xianghe	State Key Lab. of Robotics and Systems, Harbin Inst. O
Fan, Xinjian	Harbin Inst. of Tech
Xie, Hui	Harbin Inst. of Tech
17:00-17:15	WeO2O6.3
<i>The Characterization of Defects States and Charge Injection Barriers in Perovskite Solar Cells</i> , pp. 379-382.	
Lan, Fei	Univ. of Pittsburgh
Jiang, Minlin	Univ. of Pittsburgh
Li, Guangyong	Univ. of Pittsburgh

17:15-17:30	WeO2O6.4
<i>Electrospray-Dynamic Mobility Analysis for Characterization of Engineered Nanomaterials in Aqueous Samples*</i> , pp. 383-388.	
Niu, Jianjun	Health Canada
Rasmussen, Pat E	Health Canada

17:30-17:45	WeO2O6.5
<i>A Simple Implementation of Scanning Tunneling Potentiometry with a Standard STM</i> , pp. 389-390.	
Xie, Ting	Univ. of Maryland, Coll. Park
Dreyer, Michael	Univ. of Maryland
Bowen, David	Lab. for Physical Sciences
Hinkel, Dan	Lab. for Physical Sciences
Butera, R.E.	Lab. for Physical Sciences
Krafft, Charles	Lab. for Physical Sciences
Mayergoyz, Isaak	Univ. of Maryland

17:45-18:00	WeO2O6.6
<i>Effect of Synthesis Conditions on ZnO Thin Film Photosensitivity Via Msilar Technique</i> , pp. 391-396.	
Thomas, Deepu	Res. and Development Centre, Bharathiar Univ. Coimbatore
Sadasivuni, Kishor Kumar	Department of Mechanical and Industrial Engineering, Qatar Univ
Augustine, Simon	Department of Physics, St.Thomas Coll. Pala, Kottayam, India
Cabibihan, John-John	Department of Mechanical and Industrial Engineering, Qatar Univ

WeO2O7	City Center B
DNA Nanotechnology (Oral Session)	
Chair: Liu, Haitao	Univ. of Pittsburgh
Co-Chair: Smolyanitsky, Alex	National Inst. of Standards and Tech

16:15-16:45	WeO2O7.1
<i>Nanofabrication Using Unmodified DNA Nanostructures</i> , pp. 397-399.	
Liu, Haitao	Univ. of Pittsburgh

16:45-17:00	WeO2O7.2
<i>Functionalizing Cell Membranes with DNA Nanodevices</i> , pp. N/A.	
Akbari, Ehsan	The Ohio State Univ
Mollica, Molly	The Ohio State Univ
Lucas, Christopher	The Ohio State Univ
Bushman, Sarah	The Ohio State Univ
Patton, Randy	The Ohio State Univ
Song, Jonathon	The Ohio State Univ
Castro, Carlos	The Ohio State Univ

17:00-17:15	WeO2O7.3
<i>Nanoelectromechanical Systems for Accurate High-Speed DNA Sequencing</i> , pp. 402-403.	
Smolyanitsky, Alex	National Inst. of Standards and Tech

17:15-17:30	WeO2O7.4
<i>Reconfigurable DNA Nanostructures for Detection of Multiple DNA and Enzymatic Inputs</i> , pp. 404-405.	
Buckhout-White, Susan	US Naval Res. Lab

Brown, Carl
Goldman, Ellen
Ancona, Mario
Medintz, Igor

George Mason Univ
US Naval Res. Lab
US Naval Res. Lab
US Naval Res. Lab

Thursday July 27, 2017

ThKYPL	Grand Ballroom
Keynote I (Plenary Session)	
Chair: Hu, Walter	Univ. of Texas at Dallas
Co-Chair: Zhang, Mingjun	The Ohio State Univ
09:45-10:15	ThKYPL.2
<i>Enhanced Micro/Nano Robotics: From Super Resolution Real-Time Visual Feedback to On-Line BioManufacturing (I)*.</i>	
Liu, Lianqing	Shenyang Inst. of Automation, Chinese Acad. of Sciences
ThAPPL	Grand Ballroom
Award Session II (Plenary Session)	
Chair: Chrzanowska-Jeske, Malgorzata	Portland State Univ
Co-Chair: Wu, Wei	Univ. of Southern California
10:30-10:45	ThAPPL.1
<i>Modeling and Analysis of Living Beating Cardiomyocyte in Sub-Cell Scale</i> , pp. 406-410.	
Zhang, Chuang	Shenyang Institute of Automation, Chinese Acad. of Sciences
Wang, Wenxue	Shenyang Inst. of Automation, Chinese Acad. of Sciences
Xi, Ning	Michigan State Univ
Wang, Yuechao	State Key Lab. of Robotics, Shenyang Institute of Automation
Liu, Lianqing	Shenyang Inst. of Automation, Chinese Acad. of Sciences
10:45-11:00	ThAPPL.2
<i>Piezo-Resistive Properties of Graphene Based PVDF Composite Films for Strain Sensing</i> , pp. 411-415.	
Cheraghi Bidsorkhi, Hossein	Sapienza Univ. of Rome
D'Aloia, Alessandro Giuseppe	Sapienza Univ. of Rome, DIAEE, CNIS
Tamburrano, Alessio	Sapienza Univ. of Rome, DIAEE, CNIS
De Bellis, Giovanni	Sapienza Univ. of Rome, DIAEE, CNIS
Bracciale, Maria Paola	Sapienza Univ. of Rome
Santarelli, Maria Laura	Sapienza Univ. of Roma
Sarto, Maria Sabrina	Sapienza Univ. of Rome
11:00-11:15	ThAPPL.3
<i>Modeling and Simulation of Small CCMV Virus Detection by Means of High Frequency Impedance Spectroscopy at Nanoelectrodes</i> , pp. 416-419.	
Cossettini, Andrea	Univ. of Udine
Dalla Longa, Matteo	Infineon Tech. Austria AG
scarbolo, paolo	Univ. of Udine
selmi, luca	Univ. of Udine
11:15-11:30	ThAPPL.4
<i>Tape-Based Flexible Metallic and Dielectric Nanophotonic Devices and Metamaterials</i> , pp. 420-425.	
Wang, Qiugu	Iowa State Univ
Han, Weikun	Iowa State Univ
Wang, Yifei	Iowa State Univ
Lu, Meng	SRU Biosystems

Dong, Liang	Iowa State Univ
11:45-12:00	ThAPPL.6
<i>Energy Harvesting from Ambient Light Using PVDF with Highly Conductive and Transparent Silver Nanowire/PEDOT: PSS Hybride Electrodes</i> , pp. 426-429.	
Bobinger, Marco Rudolf	Tech. Univ. of Munich
Hinterleuthner, Stefan	TUM
Keddis, Sherif	Tech. Univ. of Munich
Becherer, Markus	Tech. Univ. München
Schwesinger, Norbert	TU Munich
Lugli, Paolo	Tech. Univ. Muenchen
11:45-12:00	ThAPPL.6
<i>Exact Inversion of Discrete Preisach Model for Compensating Complex Hysteresis in AFM Based Nanomanipulator</i> , pp. 430-433.	
Sun, Zhiyong	Univ. of Hong Kong, Northeastern Univ. (CN), Michigan
Xi, Ning	Michigan State Univ
Cheng, Yu	Michigan State Univ
CHEN, Liangliang	Michigan State Univ
ThO1O1	Grand Ballroom #1
Nano-Acoustics I (Invited Session)	
Chair: Jiang, Xiaoning	North Carolina State Univ
Co-Chair: Spicer, James B.	Johns Hopkins Univ
14:00-14:30	ThO1O1.1
<i>Nanotechnology in Multimodal Theranostic Capsule Endoscopy (I)</i> , pp. 434-435.	
Cochran, Sandy	Univ. of Glasgow
Button, Tim	Univ. of Birmingham
Cox, Ben	Univ. of Dundee
Cumming, David	Univ. of Glasgow
Gourevich, Dana	Univ. of Dundee
Lay, Holly	Univ. of Glasgow
Mulvana, Helen	Univ. of Glasgow
Nathke, Inke	Univ. of Dundee
Stewart, Fraser	Univ. of Dundee
14:30-14:45	ThO1O1.2
<i>Nano-Acoustic Resonators for Sensing Near-Particle Environments in Polymer Matrix Nanocomposites</i> , pp. 436-438.	
Spicer, James B.	Johns Hopkins Univ
Zeng, Fan	Johns Hopkins Univ
14:45-15:00	ThO1O1.3
<i>Photoacoustic Transduction Efficiency Evaluation of Candle Soot Nanoparticles/PDMS Composites</i> , pp. 439-442.	
Chang, Wei-Yi	North Carolina State Univ
Zhang, A. Xu	North Carolina State Univ
Kim, Jinwook	NC State Univ
Huang, Wenbin	State Key Lab. of Mechanical Transmissions, Chongqing Univ
Chang, Chih-Hao	North Carolina State Univ
Jiang, Xiaoning	North Carolina State Univ

15:00-15:15	ThO1O1.4
<i>Near-Field Optical Detection of Acoustic and Nanomechanical Vibrations Using Localized Surface Plasmon Polaritons</i> , pp. 443-448.	
Balogun, Oluwaseyi	Northwestern Univ
Chen, Xiang	Northwestern Univ

ThO1O2	Grand Ballroom #2
Nanoelectronics: Graphene and Other 2D Materials, CNTs and NWs I (Oral Session)	

Chair: Dong, Liang	Iowa State Univ
Co-Chair: wang, chen	UCLA (Univ. of California, Los Angeles)

14:00-14:30	ThO1O2.1
<i>Impact Ionization in a Graphene/SiO₂/Si Structure under High-Field Pulsed Drive</i> , pp. 449-452.	
Liu, Siyang	Univ. of Pittsburgh
Kim, Hong Koo	Univ. of Pittsburgh

14:30-14:45	ThO1O2.2
<i>Enhanced Electrical Characteristics of Black Phosphorus by Polyaniline and Protonic Acid Surface Doping</i> , pp. 453-455.	
wang, chen	UCLA (Univ. of California, Los Angeles)
Huang, Yu	UCLA (Univ. of California, Los Angeles)
Duan, Xiangfeng	UCLA

14:45-15:00	ThO1O2.3
<i>Building Functional Nanodevices Using 2D Semiconductor (I)*.</i>	
wang, chen	UCLA (Univ. of California, Los Angeles)

15:00-15:15	ThO1O2.4
<i>Tubular Graphene Sensors Formed within Planar and Helical Microfluidic Channels</i> , pp. 456-458.	
Oren, Seval	Iowa State Univ
Ceylan, Halil	Iowa State Univ
Dong, Liang	Iowa State Univ

15:15-15:30	ThO1O2.5
<i>Processing-Induced Strain in Dual-Gated Graphene FETs</i> , pp. 459-462.	
Darwish, Mohamed	Carnegie Mellon Univ
Saha, Dipanjan	Carnegie Mellon Univ
Malen, Jonathan	Carnegie Mellon Univ
Weldon, Jeffrey	Carnegie Mellon Univ

ThO1O3	Grand Ballroom #3
Nano/Molecular Sensors, Actuators, and Systems I (Oral Session)	

Chair: Gray, Bonnie L.	Microinstrumentation Lab, Simon Fraser Univ
Co-Chair: Liang, Yuchen	The Univ. of Texas at Dallas

14:00-14:30	ThO1O3.1
<i>Fluorescent Peptide Nanoparticles to Monitor Aβ Oligomers</i> , pp. 463-465.	
Yin, Kun	The Ohio State Univ
Zhang, Mingjun	The Ohio State Univ

14:30-14:45	ThO1O3.2
<i>Maximizing Deflection in MEMS and Microfluidic Actuators Fabricated in Permanently Magnetic Composite Polymers</i> , pp. 466-470.	
Rahbar, Mona	Microinstrumentation Lab, Engineering Science, Simon Fraser Univ
Gray, Bonnie L.	Microinstrumentation Lab, Simon Fraser Univ

14:45-15:00	ThO1O3.3
<i>Self-Assembled Honeycomb-Like Silicon Nanowire Network for a High Performance Hydrogen Sensor</i> , pp. N/A.	
Gao, Min	Korea Advanced Inst. of Science and Tech. (KAIST)
Cho, Minkyu	Korea Advanced Inst. of Science and Tech. (KAIST)
Park, Inkyu	KAIST

15:00-15:15	ThO1O3.4
<i>Reinforced Standing Multi-Walled Carbon Nanotube Film for Stretchable Strain Sensor</i> , pp. 474-478.	
Zhang, Shuo	Peking Univ
Wang, Huan	Peking Univ
Wen, Lei	Peking Univ. Shenzhen Graduate School
Zhu, Kai	Peking Univ
Liao, Zhiqiang	Peking Univ
Deng, Yanyan	Peking Univ. Shenzhen Graduate School
Zhang, Min	Peking Univ

15:15-15:30	ThO1O3.5
<i>Polyvinyl Chloride-Coated Interdigitated Microelectrode Array to Detect Water Quality towards IoT Applications</i> , pp. 479-483.	
Liang, Yuchen	The Univ. of Texas at Dallas
Liu, Yang	Fudan Univ
Kirkpatrick, Brandi	Univ. of Texas at Dallas
Song, Fengquan	Univ. of Texas at Dallas
Xue, Leo	OneChip Co. Ltd
Sun, Wendy	Wei.sun@one-chip.com
Liu, Ran	Fudan Univ
Tao, jun	Fudan Univ
Zeng, Xuan	Fudan Univ
Zhou, Dian	Univ. of Texas at Dallas
Hu, Walter	Univ. of Texas at Dallas

ThO1O4	Grand Ballroom #4
Nanofabrication I (Oral Session)	

Chair: Gu, Qing	The Univ. of Texas at Dallas
Co-Chair: Stanchina, William	Univ. of Pittsburgh

14:00-14:30	ThO1O4.1
<i>Solution-Manufacturing of 1D/2D Functional Nanomaterials for Self-Powered Smart Skin (I)</i> , pp. N/A.	
Wu, Wenzhuo	Purdue Univ

14:30-14:45	ThO1O4.2
<i>Nanofabrication of Beta-Ga₂O₃ Nanowires for Device Implementation</i> , pp. 485-488.	
Erickson, John	Univ. of Pittsburgh
Tan, Susheng	Univ. of Pittsburgh

Stanchina, William	Univ. of Pittsburgh
14:45-15:00	ThO1O4.3
<i>Sub-15 Nm Nanowires Enabled by Cryo Pulsed Self-Aligned Nanotrench Ablation on Carbon Nanotubes</i> , pp. 489-490.	
Deshmukh, Sanchit	Stanford Univ
Lian, Feifei	Stanford Univ
Yalon, Eilam	Stanford Univ
Pitner, Gregory	Stanford Univ
Wong, H. -S. Philip	Stanford Univ
Pop, Eric	Stanford Univ
15:00-15:15	ThO1O4.4
<i>Atomic Layer Deposition of HfO₂ Gate Dielectric with Surface Treatments and Post-Metallization Annealing for Germanium MOSFETs</i> , pp. 491-494.	
Lu, Qifeng	Xi'an Jiaotong-Liverpool Univ
Lam, Sang	Xi'an Jiaotong-Liverpool Univ
Mu, Yifei	Xi'an Jiaotong-Liverpool Univ
Zhao, Ce Zhou	Xi'an Jiaotong-Liverpool Univ
Zhao, Yinchao	Xi'an Jiaotong-Liverpool Univ
Fang, Yuxiao	Xi'an Jiaotong-Liverpool Univ
Yang, Li	Xi'an Jiaotong-Liverpool Univ
Taylor, Steve	Univ. of Liverpool
Chalker, Paul	Univ. of Liverpool
15:15-15:30	ThO1O4.5
<i>Fabrication and Characterization of Carbon Nanotube Field Emitter Arrays with Doped Silicon Ballast Resistor</i> , pp. 495-498.	
Li, Yunhan	Univ. of Waterloo
Sun, Yonghai	Univ. of Waterloo
Yeow, John T.W.	Univ. of Waterloo

ThO1O5	Grand Ballroom #5
Nanoelectronics III (Oral Session)	
Chair: Rao, Madhav	International Inst. of Information Tech. Bangalore
Co-Chair: Zhang, Min	Peking Univ
14:00-14:30	ThO1O5.1
<i>Optimization of Experimental Parameters for Fabrication of Atomic Junctions Using Ground-State Searches of Ising Spin Computing</i> , pp. 499-501.	
Sakai, Shotaro	Tokyo Univ. of Agriculture and Tech
Iwata, Yuma	Tokyo Univ. of Agriculture and Tech
Katogi, Yu	Tokyo Univ. of Agriculture and Tech
Shiomura, Masayuki	Tokyo Univ. of Agriculture and Tech
Kihara, Yusuke	Tokyo Univ. of Agriculture and Tech
Ito, Mitsuki	Tokyo Univ. of Agriculture and Tech
Shirakashi, Jun-ichi	Tokyo Univ. of Agriculture and Tech
14:30-14:45	ThO1O5.2
<i>Transparent All Carbon -Nanotube Thin-Film Transistors</i> , pp. 502-505.	
Du, Chunhui	Peking Univ

Deng, Yanyan	Peking Univ. Shenzhen Graduate School
Zhu, Kai	Peking Univ
Gao, Yubo	Peking Univ
Zhang, Min	Peking Univ
14:45-15:00	ThO1O5.3
<i>Electrical Modeling of Copper/Multiwalled Carbon Nanotubes for 3D IC Applications</i> , pp. 506-511.	
Rao, Madhav	International Inst. of Information Tech. Bangalore
15:00-15:15	ThO1O5.4
<i>A Neural Network Based on Synchronized Pairs of Nano-Oscillators</i> , pp. 512-514.	
Vodenicarevic, Damir	C2N, CNRS, Univ. Paris-Sud, Univ. Paris-Saclay, 91405 Orsay
Locatelli, Nicolas	C2N, CNRS, Univ. Paris-Sud, Univ. Paris-Saclay, 91405 Orsay
Querlioz, Damien	Univ. Paris-Sud, CNRS
15:15-15:30	ThO1O5.5
<i>Low-Power Flip-Flops Operating in Low Voltages and Their Performance Variations Considering Process Deviations</i> , pp. 1043-1046	
Xiong, Yang	Ningbo Univ
Zhu, Haotian	Ningbo Univ
Hu, Jianping	Ningbo Univ

ThO1O6	City Center A
Nanomaterials I (Oral Session)	
Chair: Thomas, Sylvia	USF Coll. of Engineering
Co-Chair: Mallick, Govind	U.S. Army Res. Lab
14:00-14:30	ThO1O6.1
<i>On the Secondary Electron Emission Phenomenon When Originating from Very Thin Layers</i> , pp. 515-516.	
Makasheva, Kremena	LAPLACE, Univ. of Toulouse
Belhaj, Mohamed	ONERA-The French Aerospace Lab, Toulouse, France
Teyssedre, Gilbert	LAPLACE, Univ. of Toulouse
Rigoudy, Charles	LAPLACE, Univ. of Toulouse
Dadouch, Sarah	ONERA-The French Aerospace Lab, Toulouse, France
Boudou, Laurent	LAPLACE, Univ. of Toulouse
14:30-14:45	ThO1O6.2
<i>Recent Advancement of Nanocellulose Based Renewable Smart Materials</i> , pp. N/A.	
Kim, Jaehwan	Inha Univ
14:45-15:00	ThO1O6.3
<i>Scanning Tunneling Spectroscopy of Hydrothermally Synthesized NiO Nanoparticles</i> , pp. 518-521.	
Mallick, Govind	U.S. Army Res. Lab
labh, Jyotsna	Allahabad Univ
Giri, Lily	Army Res. Lab
Pandey, Avinash	Allahabad Univ
Karna, Shashi	US Army Res. Lab
15:00-15:15	ThO1O6.4

<i>Spray Deposition of Polymeric Thin-Films for the Inline Encapsulation of Organic Photodiodes</i> , pp. 522-525.	
Falco, Aniello	Free Univ. of Bolzano - Bozen

Gerlt, Michael	Swiss Federal Inst. of Tech. in Zurich
Loghin, Florin	Tech. Univ. of Munich
Bobinger, Marco Rudolf	Tech. Univ. of Munich
Lugli, Paolo	Tech. Univ. Muenchen
15:15-15:30	ThO1O6.5
<i>Performance Comparison of Plasmonic Solar Cell Employing Aluminum and Silver Nano Particles</i> , pp. 526-530.	
Khan, Ridita	Univ. of South Florida
Chowdhury, Fahima	San Francisco State Univ
Devisetty Subramanyam, Manopriya, M. Devisetty Subramanyam	Univ. of South Florida
Thomas, Dr.	USF Coll. of Engineering
ThO1O7	City Center B
Nanophotonics (Oral Session)	
Chair: Hu, Walter	Univ. of Texas at Dallas
Co-Chair: Hu, Juejun	MIT
14:00-14:30	ThO1O7.1
<i>Chalcogenide Glass-On-Graphene Integrated Photonics (I)*</i> .	
Hu, Juejun	MIT
14:30-14:45	ThO1O7.2
<i>Diode Laser Mode Selection Via Periodic Arrays of Adjacent Nanoscale Metallic Structures</i> , pp. 531-533.	
Liang, Joe	Carnegie Mellon Univ
Bain, James	Carnegie Mellon Univ
14:45-15:00	ThO1O7.3
<i>Amplified Spontaneous Emission in Nanoimprinted Perovskite Nanograting Metasurface</i> , pp. 534-536.	
Gharajeh, Abouzar	Univ. of Texas at Dallas
Wang, Honglei	Univ. of Texas at Dallas
Li, Zitong	The Univ. of Texas at Dallas
Moon, Jiyoung	The Univ. of Texas at Dallas
Haroldson, Ross	The Univ. of Texas at Dallas
Balasubramaniam, Balachandran	The Univ. of Texas at Dallas
Zhao, Deyin	The Univ. of Texas at Arlington
Liu, Shih-Chia	Univ. of Texas at Arlington
Zhou, Weidong	Univ. of Texas at Arlington
Makarov, Sergei	ITMO Univ
Zakhidov, Anvar	The Univ. of Texas at Dallas
Hu, Walter	Univ. of Texas at Dallas
Gu, Qing	The Univ. of Texas at Dallas
15:00-15:15	ThO1O7.4
<i>Design and Fabrication of Si₃N₄ Surface Normal Photonic Crystal Filters and Reflectors</i> , pp. 537-538.	
Chowdhury, Farhan	Univ. of Texas at Arlington
Ge, Xiaochen	Univ. of Texas at Arlington
Zhao, Deyin	The Univ. of Texas at Arlington
Zhou, Weidong	Univ. of Texas at Arlington
15:15-15:30	ThO1O7.5
<i>Tapered Fibers for Optogenetics: From Wide Volume to Site-Selective Optical Control of Neural Activity in the Mouse Brain</i> , pp. 539-541.	
Pisanello, Ferruccio	Istituto Italiano Di Tecnologia,

Mandelbaum, Gil	Center for Biomolecular Nanotec
Pisanello, Marco	Harvard Medical School
Pisano, Filippo	Istituto Italiano Di Tecnologia
Oldenburg, Ian	Istituto Italiano Di Tecnologia (IIT)
Leonardo, Sileo	Harvard Medical School
Bellistri, Elisa	Italian Inst. of Tech
Spagnolo, Barbara	Istituto Italiano Di Tecnologia (IIT)
Markowitz, Jeffrey	Istituto Italiano Di Tecnologia
Ralph, Peterson	Harvard Medical School
Maglie, Emanuela	Harvard Medical School
Haynes, Trevor	Istituto Italiano Di Tecnologia (IIT)
Emara, Mohamed	Harvard Medical School
Datta, Sandeep R	Harvard Medical School
Sabatini, Bernardo L	Harvard Medical School
De Vittorio, Massimo	Istituto Italiano Di Tecnologia

ThPPP2	Marquis Ballroom Foyer
Poster II (Poster Session)	
15:30-16:15	ThPPP2.1
<i>Enabling Energy-Efficient Ternary Logic Gates Using CNFETs</i> , pp. 542-547.	
Tabrizchi, Sepehr	Inst. for Res. in Fundamental Sciences (IPM)
Sharifi, Fazel	New Mexico State Univ
Badawy, Abdel-Hameed	New Mexico State Univ
Saifullah, Z. M.	New Mexico State Univ
15:30-16:15	ThPPP2.2
<i>Flexible Vertical Field-Effect Transistor Based on Graphene/Silicon Heterostructure with Ion-Gel Gate</i> , pp. 548-549.	
chen, zefeng	CUHK
Xu, Jian-Bin	The Chinese Univ. of Hong Kong
15:30-16:15	ThPPP2.3
<i>Electrically Conductive, Polymer Nanofibers Fabricated by Electrospinning and Electroless Copper Plating</i> , pp. 550-554.	
Shara, Kailey	Case Western Res. Univ
Choi, Youngju	Case Western Res. Univ
Sui, Yongkun	Case Western Res. Univ
Zorman, Christian	Case Western Res. Univ
15:30-16:15	ThPPP2.4
<i>Memristor-Based 3D Neuromorphic Computing System and Its Application to Associative Memory Learning</i> , pp. 555-560.	
An, Hongyu	Univ. of Kansas
Zhou, Zhen	Intel Corp
Yi, Yang	Univ. of Kansa
15:30-16:15	ThPPP2.5
<i>Fabrication of Multilayered Hepatic Lobule Tissues Using Ca-Alginate Hydrogel Platforms</i> , pp. 561-564.	
Liu, Zeyang	Nagoya Univ
Lu, Minmin	Nagoya Univ
Nakajima, Masahiro	Nagoya Univ
Takeuchi, Masaru	Nagoya Univ
Hasegawa, Yasuhisa	Nagoya Univ
Fukuda, Toshio	Nagoya Univ
Huang, Qiang	Beijing Inst. of Tech

15:30-16:15	ThPPP2.6		
<i>Carbon Nanotube Thin Films As Photoemissive Ionization Source</i> , pp. 565-568.			
Qiao, Junfeng	Peking Univ. Shenzhen Graduate School		Tech. Inst. Of
Li, Lingfeng	Zhejiang Univ		The State Key Lab. of Transducer
Wu, Yongzhi	Zhejiang Univ		Tech. Inst. Of
Nie, Zanxiang	Shenzhen Zinergy Tech. Company Limited		Inst. of Electronics, Chinese Acad. of Sciences,
wang, xiaozhi	Zhejiang Univ		
ZHOU, HANG	PEKING Univ. SHENZHEN GRADUATE SCHOOL		
Liu, Xiyuan	Peking Univ. Shenzhen Graduate School		
15:30-16:15	ThPPP2.7		
<i>Ferroelectric Thin Film for Mid-Infrared Integrated Photonics</i> , pp. 569-571.			
lin, pao	Texas A&M Univ		
15:30-16:15	ThPPP2.8		
<i>Resistive Communications Based on Neuristors</i> , pp. 572-575.			
PIZZO, DAVID A	Univ. De Palermo		
15:30-16:15	ThPPP2.9		
<i>An Area-Efficient Ternary Full Adder Using Hybrid SET-MOS Technology</i> , pp. 576-578.			
Li, Lin	Univ. of Windsor		
zhang, zihan	Univ. of Windsor		
Chen, Chunhong	Univ. of Windsor		
15:30-16:15	ThPPP2.10		
<i>Charge-Trapping Characteristics of BaTiO3 with Various Zr Contents for Flash Memory Applications</i> , pp. 579-580.			
Li, F	Southeast Univ		
huang, XD	Southeast Univ		
15:30-16:15	ThPPP2.11		
<i>Prompt Decision Method for Ground-State Searches of Natural Computing Architecture Using 2D Ising Spin Model</i> , pp. 581-583.			
Ito, Mitsuki	Tokyo Univ. of Agriculture and Tech		
Shiomura, Masayuki	Tokyo Univ. of Agriculture and Tech		
Saito, Takanari	Tokyo Univ. of Agriculture and Tech		
Kihara, Yusuke	Tokyo Univ. of Agriculture and Tech		
Sakai, Shotaro	Tokyo Univ. of Agriculture and Tech		
Shirakashi, Jun-ichi	Tokyo Univ. of Agriculture and Tech		
15:30-16:15	ThPPP2.12		
<i>Label-Free Electrochemical Detection of Brain-Derived Neurotrophic Factor Based on a Novel Immune Microelectrode Array</i> , pp. 584-589.			
Xu, Huiren	Inst. of Electronics, Chinese Acad. of Sciences		
Luo, Jinping	The State Key Lab. of Transducer Tech. Inst. Of		
Wang, Yang	The State Key Lab. of Transducer Tech. Inst. Of		
Song, Yilin	The State Key Lab. of Transducer		
15:30-16:15	ThPPP2.13		
<i>Metal-Organic Framework (MOF) Nanocrystals for Ultra-Sensitive Detection of Ppb-Level CO with Resonant Microcantilever*</i> .			
Li, Xinxin	Shanghai Inst. of Microsystem and Information Tech. Ch		
Xu, Pengcheng	Shanghai Inst. of Microsystem and Information Tech. Ch		
15:30-16:15	ThPPP2.14		
<i>Alternative Architecture for Highly Performing AIN Vibrational Energy Harvester</i> , pp. 590-593.			
Guido, Francesco	Istituto Italiano Di Tecnologia (IIT), Center for Biomolecular N		
Todaro, Maria Teresa	Istituto Di Nanotecnologia of CNR		
Qualtieri, Antonio	Istituto Italiano Di Tecnologia (IIT)		
Epifani, Gianmichele	Istituto Di Nanotecnologia of CNR		
Algieri, Luciana	Istituto Italiano Di Tecnologia (IIT), Center for Biomolecular N		
Maruccio, Claudio	Dip. Ingegneria Dell'innovazione, Univ. Del Salento		
De Vittorio, Massimo	Istituto Italiano Di Tecnologia		
15:30-16:15	ThPPP2.15		
<i>Dissipation in Neuromorphic Computing: Fundamental Bounds for Feedforward Networks</i> , pp. 594-599.			
Ganesh, Natesh		Mr	
Anderson, Neal	Univ. of Massachusetts Amherst		
15:30-16:15	ThPPP2.16		
<i>3d Nano-Sculpturing and Nano-Sintering of Silk Proteins Using Electron Beam Lithography</i> , pp. N/A.			
Qin, Nan	Shanghai Inst. of Microsystem and Information Tech. Ch		
Zhang, Shaoqing	Department of Mechanical Engineering, the Univ. of Texas At		
Tao, Hu	Shanghai Inst. of Microsystem and Information Tech. Ch		
15:30-16:15	ThPPP2.17		
<i>Colloidal Stability and Spectral Properties of Carbazole-Based Fluorescent Nanoaggregates</i> , pp. N/A.			
Svechkarev, Denis	Univ. of Nebraska Medical Center		
Payne, William	Univ. of Nebraska Medical Center		
Mohs, Aaron	Univ. of Nebraska Medical Center		
15:30-16:15	ThPPP2.18		
<i>Simulations of Electromagnetic Propagation through Nanowire Arrays of Varying Geometric Arrangements</i> , pp. 603-606.			
Hawk, Nathaniel	The Univ. of Akron		
Luettmer-Strathmann, Jutta	Univ. of Akron		
Toonen, Ryan	Univ. of Akron		
15:30-16:15	ThPPP2.19		
<i>A Facile Solvothermal Synthesis of NiFe2O4/RGO and Its Enhanced Catalytic Activity on Thermal Decomposition of Ammonium Perchlorate</i> , pp. 607-610.			
Chen, Teng	Nanjing Univ. of Science and Tech		
Jiang, Wei	Nanjing Univ. of Science and Tech		

15:30-16:15	ThPPP2.20
<i>Hierarchical Core-Shell MoO₃@SnO₂ Nanobelts for Anodes of Supercapacitors</i> , pp. 611-616.	
Wang, Shijie	The Chinese Univ. of Hong Kong
Tang, Pengyi	The Chinese Univ. of Hong Kong
Cai, Yaojun	The Chinese Univ. of Hong Kong
Zhang, Li	The Chinese Univ. of Hong Kong
15:30-16:15	ThPPP2.21
<i>Research of Nano WS₂ Filled Composite Used As Field Grading Material</i> , pp. 617-621.	
Han, Peng	Univ. of Science and Tech. Beijing
Zheng, Ming-Sheng	Univ. of Science and Tech. Beijing
Zha, Jun-Wei	Univ. of Science and Tech. Beijing
Dang, Zhi-min	Tsinghua Univ
15:30-16:15	ThPPP2.22
<i>Optimization of CdSe Nanocrystals with a Microfluidic Reactor Using a Combinatorial Synthesis System</i> , pp. 622-625.	
Hong, Myung Hwan	Inst. for Advanced Engineering
Joo, So Yeong	Inst. for Advanced Engineering
Kang, Lee-Seung	Inst. for Advanced Engineering
Lee, Chan Gi	Inst. for Advanced Engineering
15:30-16:15	ThPPP2.23
<i>Device Synthesis Topology for Zinc Oxide Nanowire Sensors</i> , pp. 626-629.	
Kim, Bruce	City Univ. of New York/CCNY
Gupta, Anurag	The Univ. of Alabama-Tuscaloosa
15:30-16:15	ThPPP2.24
<i>Ternary Chalcogenide Based Hybrid Nanostructured Materials for Advanced Oxidative Degradation Process*</i> .	
Kshirsagar, Anuraj	DIAT, Pune , Maharashtra, India
Khanna, Pawan	DIAT, Pune , Maharashtra, India
15:30-16:15	ThPPP2.25
<i>Integrating Black Silicon with Thin Film Silicon to Increase Light Trapping Characteristics*</i> .	
Pafchek, Bradley	Univ. of Pittsburgh
Leu, Paul	Univ. of Pittsburgh
15:30-16:15	ThPPP2.26
<i>Functionality Modification of SWCNT for Improved Methanol Oxidation Reaction</i> , pp. 630-631.	
Kota, V. M. K. Kireeti	Inst. of Chemical Tech
Jha, Neetu	Inst. of Chemical Tech. Mumbai
15:30-16:15	ThPPP2.27
<i>Two-Phase Brust-Schiffrin Synthesis of Gold Nanoparticles Dispersion in Organic Solvent on Glass Microfluidic Device</i> , pp. 632-635.	
Hamamoto, Mao	Kanto Gakuin Univ
Yagyu, Hiromasa	Kanto Gakuin Univ
15:30-16:15	ThPPP2.28
<i>Exploring a New Strategy for Modular Self-Assembly of Arbitrary 3-Dimensional Nanoparticle Structures with DNA-Linked Nanoparticle Building Blocks (nBLOCKS)*</i> .	
Hockman, Jakob	Univ. of Arkansas
Sinha, Arvind	Unviersity of Arknasas
Han, Haewook	Pohang Univ. of Science and Tech
Kim, Jin-Woo	Univ. of Arkansas

15:30-16:15	ThPPP2.29
<i>Flying Qubit Investigations for Heterostructure-Based Qubit Implementations</i> , pp. 636-640.	
Ayres, Virginia	Michigan State Univ
Dong, Haozhi	Michigan State Univ
Panda, Gaurab	Michigan State Univ
Xie, Kan	Michigan State Univ
Shaw, Harry	NASA Goddard Space Flight Center
Preston, Deborah	Univ. of Maryland Coll. Park
Deshpande, Manohar	NASA Goddard Space Flight Center
15:30-16:15	ThPPP2.30
<i>Interband and Intraband Optical Transition in Mercury Chalcogenide Colloidal Quantum Dots</i> , pp. 641-644.	
TANG, Xin	City Univ. of Hong Kong
Wu, Guangfu	City Univ. of HongKong
Lai, King Wai Chiu	City Univ. of Hong Kong
15:30-16:15	ThPPP2.31
<i>Emerging Ethical Issues in Nanotechnology Application</i> , pp. 645-650.	
Schaeffer, Donna	Marymount Univ
Olson, Patrick	National Univ
15:30-16:15	ThPPP2.32
<i>Experimental Study on Helical Propulsion System of Artificial Nanoswimmer: Low Reynolds Number</i> , pp. 651-656.	
Varghese, Paul	Birla Inst. of Tech. and Science, Pilani
Nain, Shivani	Birla Inst. of Tech. and Science, Pilani
Rathore, Jitendra	Birla Inst. of Tech. and Science, Pilani
Sharma, N.N	Manipal Univ. Jaipur
15:30-16:15	ThPPP2.33
<i>Dynamics and Transfer of Entanglement between an Isolated Atom and an Atom Interacting with a Reservoir*</i> .	
Liao, Qinghong	Department of Electronic Information Engineering, Nanchang Univ
Ye, Yang	Department of Electronic Information Engineering, Nanchang Univ
15:30-16:15	ThPPP2.34
<i>An Improved Quantum Genetic Algorithm for Grouping Strategy</i> , pp. 657-662.	
Yumin, Dong	Qingdao Univ. of Tech
15:30-16:15	ThPPP2.35
<i>Effect of Quantum Noise on Deterministic Joint Remote State Preparation of a Qubit State Via a GHZ Channel*</i> .	
Wang, Ming-Ming	Xi'an Pol. Univ.
Qu, Zhi-Guo	Nanjing Univ. of Information Science & Tech.

ThO2O1	Grand Ballroom #1
Nano-Acoustics II (Invited Session)	
Chair: Chen, Nelson	National Chiao Tung Univ
Co-Chair: wang, lidai	City Univ. of Hong Kong
16:15-16:45	ThO2O1.1
<i>Microgels Integrated with Nanocapsules for Ultrasound-Triggered Insulin Delivery (I)*.</i>	
Di, Jin	Univ. of North Carolina at Chapel Hill and North Carolina S
Yu, Jicheng	Univ. of North Carolina at Chapel Hill and North Carolina S
Jing, Yun	North Carolina State Univ
Gu, Zhen	Univ. of North Carolina at Chapel Hill and North Carolina S
16:45-17:00	ThO2O1.2
<i>High Temperature Piezoelectric Bulk Acoustic Wave Mass Sensor for Thermogravimetric Analysis of Nano-Layer Polymer</i> , pp. 663-667.	
Zu, Hongfei	Univ. of Pittsburgh
Wang, Qing-Ming	Univ. of Pittsburgh
Zheng, Yanqing	Shanghai Inst. of Ceramics Chinese Acad. of Sciences
17:00-17:15	ThO2O1.3
<i>Coherent Acoustic Phonons of Indium-Tin-Oxide Nanorod Arrays (I)*.</i>	
Schaller, Richard	Argonne National Lab
Guo, Peijun	Argonne National Lab
Chang, Robert	Northwestern Univ
Ketterson, John	Northwestern Univ
17:15-17:30	ThO2O1.4
<i>Fiber-Laser-Based Ultrasound Sensor for Photoacoustic Imaging</i> , pp. 668-671.	
wang, lidai	City Univ. of Hong Kong
17:30-17:45	ThO2O1.5
<i>Investigation of Nanoparticle-Assisted Ultrasound Therapy for Treating Implanted Breast Tumors in Mice</i> , pp. 672-674.	
Kosheleva, Olga	Acad. Sinica
Lai, Tsung-Ching	Acad. Sinica
Chen, Nelson	National Chiao Tung Univ
Chan, Yung-Chieh	Acad. Sinica
Hsiao, Michael	Acad. Sinica
Ng, Shok-Li	Acad. Sinica
Chen, Chung-Hsuan	Acad. Sinica
ThO2O2	Grand Ballroom #2
Nanoelectronics: Graphene and Other 2D Materials, CNTs and NWs II (Oral Session)	
Chair: Wang, Han	USC
Co-Chair: Liu, Siyang	Univ. of Pittsburgh
16:15-16:45	ThO2O2.1
<i>Improving DMMP (Salin Simulant) Sensing Characteristics of TFQ Functionalized Graphene Chemiresistive Sensors</i> , pp. 675-677.	
Lee, Jeong-Soo	POSTECH
Jeong, Saebyuk	POSTECH
Kim, Donghoon	POSTECH
Park, ChanOh	POSTECH
BAEK, ROCK-HYUN	POSTECH

Jin, Bo	Div. of IT Convergence Engineering, Pohang Univ. of Sci
16:45-17:00	ThO2O2.2
<i>Graphene-Silicon Carbide Phototransistors with Nonlocal, Position Sensitive and Large-Area Photodetection at Room Temperature*.</i>	
Chung, Ting Fung	Purdue Univ
Sarker, Biddut K.	Purdue Univ
Cazalas, Edward	The Pennsylvania State Univ
Childres, Isaac	Purdue Univ
Jovanovic, Igor	Univ. of Michigan, Ann Arbor
Chen, Yong P.	Purdue Univ. Department of Physics
17:00-17:15	ThO2O2.3
<i>Intrinsic Water Wettability of Vertical Aligned Carbon Nanotube*.</i>	
Zhou, Ziyu	Univ. of Pittsburgh
Gao, Tongchuan	Univ. of Pittsburgh
Leu, Paul	Univ. of Pittsburgh
17:15-17:30	ThO2O2.4
<i>Novel Electronic Devices Based on Low-Symmetry Two-Dimensional Materials</i> , pp. 678-679.	
Yan, Xiaodong	USC
Wang, Han	USC
17:30-17:45	ThO2O2.5
<i>Polarity Dependence of Oxide Breakdown in a Graphene/SiO2/Si Structure under Pulsed Voltage Drive</i> , pp. 680-683.	
Liu, Siyang	Univ. of Pittsburgh
Kim, Myungji	Univ. of Pittsburgh
Kim, Hong Koo	Univ. of Pittsburgh
17:45-18:00	ThO2O2.6
<i>On-Current Tunable Carbon Nanotube Thin-Film Transistor by SiO2 Passivation Layer</i> , pp. 684-687.	
Liao, Zhiqiang	Peking Univ
Gao, Yubo	Peking Univ
Deng, Yanyan	Peking Univ. Shenzhen Graduate School
Du, Chunhui	Peking Univ
Zhang, Shuo	Peking Univ
Lin, Qingping	Peking Univ
Zhang, Min	Peking Univ

ThO2O3	Grand Ballroom #3
Nano/Molecular Sensors, Actuators, and Systems II (Oral Session)	
Chair: Que, Long	Iowa State Univ
Co-Chair: Zhou, Debao	Univ. of Minnesota Duluth
16:15-16:45	ThO2O3.1
<i>Fabrication and Test of a Tube Shaped E-Skin Sensor on a Colon Simulator</i> , pp. 688-693.	
Sun, Yuhang	Univ. of Minnesota Twin Cities
Bai, Jing	Univ. of Minnesota
Zhou, Debao	Univ. of Minnesota Duluth
16:45-17:00	ThO2O3.2
<i>A Flexible Transparent Nanopore Device for Pressure Sensing and Drug Release</i> . pp.1047-1050	
Que, Long	Iowa State Univ

Song, Chao	Iowa State Univ
Deng, Pan	Iowa State Univ
17:00-17:15	ThO2O3.3
<i>An Approach to Detect and Mitigate Neural Disorders Using Swarm of Bionanomachines</i> , pp. 694-698.	
Nasif, Ahmed	Univ. of Wisconsin-Oshkosh
Mahfuz, Mohammad Upal	Univ. of Wisconsin-Green Bay
17:15-17:30	ThO2O3.4
<i>Development and Characterization of Hydrogel Films with Thermal Response for Biomedical Sensor Application</i> , pp. N/A.	
López Barriguete, Jesús Eduardo	Nuclear Science Inst. UNAM
Isoshima, Takashi	RIKEN
Bucio, Emilio	Nuclear Science Inst. UNAM
17:30-17:45	ThO2O3.5
<i>Elastin-Like Polypeptide-Based Hydrogel Actuator for Cardiac Tissue Engineering</i> , pp. 701-704.	
Lo, Yu-Chih	National Chiao Tung Univ
Chiang, Min-Yu	National Chiao Tung Univ
Chen, Wen-Liang	Department of Biological Science and Tech. National Chiao
Chen, San-Yuan	National Chiao Tung Univ. Department of Materials Science
ThO2O4 Grand Ballroom #4	
Nanofabrication II (Oral Session)	
Chair: Liang, Xiaogan	Univ. of Michigan
Co-Chair: Mote, Rakesh	Indian Inst. of Tech. Bombay
16:15-16:45	ThO2O4.1
<i>Multi-Bit Memories Fabricated through Mechanical and Plasma Induced Deformation of Layered Semiconductors (I)</i> , pp. 705-706.	
Chen, Mikai	Univ. of Michigan
Liang, Xiaogan	Univ. of Michigan
16:45-17:00	ThO2O4.2
<i>FIB Fabrication of Highly Ordered Vertical Gaussian Pillar Nanostructures on Silicon</i> , pp. 707-712.	
Garg, Vivek	IITB Monash Res. Acad
Mote, Rakesh	Indian Inst. of Tech. Bombay
Fu, Jing	Monash Univ
17:00-17:15	ThO2O4.3
<i>Nanoimprinted Perovskite for Optoelectronics (I)</i> , pp. 713-714.	
Wang, Honglei	Univ. of Texas at Dallas
Balasubramaniam, Balachandran	The Univ. of Texas at Dallas
Haroldson, Ross	The Univ. of Texas at Dallas
Gharajeh, Abouzar	Univ. of Texas at Dallas
Zhao, Deyin	The Univ. of Texas at Arlington
Li, Zhitong	The Univ. of Texas at Dallas
Moon, Jiyoung	The Univ. of Texas at Dallas
Liu, Shih-Chia	Univ. of Texas at Arlington
Chan, Julia Y.	The Univ. of Texas at Dallas
Zhou, Weidong	Univ. of Texas at Arlington
Makarov, Sergei	ITMO Univ
Gu, Qing	The Univ. of Texas at Dallas

Zakhidov, Anvar	The Univ. of Texas at Dallas
Hu, Walter	Univ. of Texas at Dallas
17:15-17:30	ThO2O4.4
<i>Nylon-6 Based Nanocomposite Films for Capacitor Applications</i> , pp. 1031	
Mahadevegowda, Amoghavarsha	Univ. of Oxford
Johnston, Colin	Univ. of Oxford
Grant, Patrick S	Univ. of Oxford
17:30-17:45	ThO2O4.5
<i>Fabricating Multi-Material Nanofabrics Using Rotary Jet Spinning</i> , pp. 715-719.	
Sinatra, Nina Rose	Harvard Univ
Lind, Johan	Harvard Univ
Parker, Kevin Kit	Harvard Univ
17:45-18:00	ThO2O4.6
<i>Confocal Imaging Characterization of Two-Photon Lithography Microstructures for Cell Cultures</i> , pp. N/A.	
Lemma, Enrico Domenico	Istituto Italiano Di Tecnologia
Spagnolo, Barbara	Istituto Italiano Di Tecnologia
Rizzi, Francesco	Istituto Italiano Di Tecnologia (IIT)
Sergio, Sara	Istituto Italiano Di Tecnologia
Pisanello, Marco	Istituto Italiano Di Tecnologia
De Vittorio, Massimo	Istituto Italiano Di Tecnologia
Pisanello, Ferruccio	Istituto Italiano Di Tecnologia, Center for Biomolecular Nanotec

ThO2O5 Grand Ballroom #5	
Nanoelectronics IV (Oral Session)	
Chair: Sanchez-Soares, Alfonso	Tyndall National Inst
Co-Chair: Jaszczak, John	Michigan Tech. Univ
16:15-16:45	ThO2O5.1
<i>Semimetal Nanowire Electronics: Harnessing the Computing Power of Nanostructures Based on Bulk Semimetals</i> , pp. N/A.	
Sanchez-Soares, Alfonso	Tyndall National Inst
Greer, Jim	Tyndall National Inst
16:45-17:00	ThO2O5.2
<i>Paper Based Large Area Graphene/MoS2 Visible Light Photodetector</i> , pp. 728-730.	
Sahatiya, Parikshit	Indian Inst. of Tech. Hyderabad, India
Gopalakrishnan, Arthi	Indian Inst. of Tech. Hyderabad
Badhulika, Sushmee	Indian Inst. of Tech. Hyderabad, India
17:00-17:15	ThO2O5.3
<i>Aligned Carbon Nanotube Field Effect Transistors by Repeated Compression-Expansion Cycles in Langmuir-Blodgett</i> , pp. 731-734.	
Gao, Yubo	Peking Univ
Deng, Yanyan	Peking Univ. Shenzhen Graduate School
Zhang, Min	Peking Univ
Liao, Zhiqiang	Peking Univ

17:15-17:30	ThO2O5.4
<i>Azurin Based Flexible Device for Resistive Switching Memory Application</i> , pp. 735-738.	
Moudgil, Akshay	IIT Delhi
Kalyani, Neeti	IIT Delhi
Das, Samaresh	IIT Delhi
Mishra, Prashant	IIT Delhi

17:30-17:45	ThO2O5.5
<i>Efficient Physics-Based Modeling of a Representative Semiconducting Quantum Dot Single Electron Device</i> , pp. 739-744.	
khanmohammadi hazaveh, paniz	Michigan Tech. Univ
Bergstrom, Paul L.	Michigan Tech. Univ
Jaszczak, John	Michigan Tech. Univ

17:45-18:00	ThO2O5.6
<i>Polarity-Controllable 2-Dimensional Transistors: Experimental Demonstration and Scaling Opportunities</i> , pp. N/A.	
Resta, Giovanni	EPFL
Balaji, Yashwanth	IMEC
Agarwal, Tarun	IMEC
Radu, Iuliana P.	IMEC
Lin, Dennis	IMEC
Catthoor, Francky	IMEC and KU-Leuven
Gaillardon, Pierre-Emmanuel	Univ. of Utah
De Micheli, Giovanni	EPFL

ThO2O6	City Center A
Nanomaterials II (Oral Session)	
Chair: Parsa, Nitin	The Univ. of Akron
Co-Chair: Isakov, Kirill	Aalto Univ
16:15-16:45	ThO2O6.1
<i>Grass-Like Al2O3 for Conformal, Scalable, Omnidirectional, Broadband Anti-Reflective Coating on Glass by Atomic Layer Deposition</i> , pp. N/A.	
Isakov, Kirill	Aalto Univ
Kauppinen, Christoffer	Aalto Univ
16:45-17:00	ThO2O6.2
<i>Millimeter-Wave Faraday Rotation from Ferromagnetic Nanowires</i> , pp. 749-751.	
Parsa, Nitin	The Univ. of Akron
Hawk, Nathaniel	The Univ. of Akron
Gasper, Michael	Univ. of Akron
Toonen, Ryan	Univ. of Akron
17:00-17:15	ThO2O6.3
<i>Synthesis of High-Strength and Electronically Conductive Triple Network Gel with Self-Healing Properties by the Restraint Method</i> , pp. 752-754.	
Shunsuke, Nagahama	Waseda Univ
Migita, Kayo	WASEDA Univ
Sugano, Shigeki	Waseda Univ

17:15-17:30	ThO2O6.4
<i>Conductive Clay Containing Graphene Layers</i> , pp. 755-756.	
Ouellet-Plamondon, Claudiane	ETS
boussaboun, zakariae	Ec. De Tech. Supérieure

17:30-17:45	ThO2O6.5
<i>Electrical Conductivity of Commercial Graphene Polyethylene Nanocomposites</i> , pp. 757-761.	
Moghimian, Nima	Nanoxplore
Saeidlou, Sajjad	Ec. De Tech. Supérieure -ETS
Lentzakis, Helen	NanoXplore
Rosi, Gian Filippo	Univ. of Bologna
Song, Naiheng	NanoXplore
David, Eric	ETS

17:45-18:00	ThO2O6.6
<i>Superparamagnetic, Nanocrystalline Cobalt Ferrite Thin Films As Magnetic Core of Integrated RF Inductors</i> , pp. 762-767.	
Sangeneni, Neelima	Indian Inst. of Science
Bhat, Navakanta	Indian Inst. of Science, Bangalore
Shivashankar, Srinivasarao A	Indian Inst. of Science

ThO2O7	City Center B
Nano-Optics, Nano-Optoelectronics (Oral Session)	
Chair: Das, Kausik S	Univ. of Maryland Eastern Shore
Co-Chair: lin, pao	Texas A&M Univ
16:15-16:45	ThO2O7.1
<i>Electrically Driven Ultraviolet ZnO Nanolasers (I)*</i> .	
Liu, Jianlin	UC Riverside
16:45-17:00	ThO2O7.2
<i>Mid-Infrared Aluminium Nitride Waveguides for Label-Free Sensing</i> , pp. 768-770.	
lin, pao	Texas A&M Univ
17:00-17:15	ThO2O7.3
<i>Anomalous Electrical Response in Ethanol-Adsorbed Zinc Oxide Thin Films under Visible Light</i> , pp. 771-774.	
Barnes, Benjamin	Univ. of Maryland Eastern Shore
Das, Kausik S	Univ. of Maryland Eastern Shore

17:15-17:30	ThO2O7.4
<i>Improvement of Transmittance in Silicone at Vacuum Ultraviolet Region by Irradiation with 172nm Xe2* Lamp</i> , pp. 775-780.	
Hashimoto, Yuki	Tokyo Inst. of Tech
Yamamoto, Takatoki	Tokyo Inst. of Tech
Matsuzawa, Satoshi	Ushio INC

17:30-17:45	ThO2O7.5
<i>Investigations of CoO-ATO Coatings for Silicon Solar Cells</i> , pp. 781-783.	
Thomas, Sylvia	USF Coll. of Engineering
Devisetty Subramanyam, Manopriya, M. Devisetty Subramanyam	Univ. of South Florida
Roy, Nirmita, N. Roy	Univ. of South Florida
Khan, Ridita	Univ. of South Florida

17:45-18:00	ThO2O7.6
<i>Fast Photo-Response of Black Phosphorus Photodetectors</i> . pp.1060-1064	
Hou, Chaojian	Harbin Inst. of Tech. and Michigan State Univ
yang, Iijun	Harbin Inst. of Tech
Wang, Haojun	Michigan State Univ
CHEN, Liangliang	Michigan State Univ
Wang, Yang	Mechanical and Electrical

Yang, Zhan	Engineering, Harbin Inst. of Tech
Song, Bo	Soochow Univ
	Department of Electrical and
	Computer Engineering, Michigan
	State
Dong, Lixin	Michigan State Univ

Friday July 28, 2017

FrO1O1		Grand Ballroom #1
Nanofluidics (Oral Session)		
Chair: Qin, Zhang		South China Univ. of Tech
Co-Chair: Liang, Xiaogan		Univ. of Michigan
14:00-14:30	FrO1O1.1	
<i>Electrically Activated Nanofluidic Diodes</i> , pp. 784-787.		
Kim, Sungho		Carnegie Mellon Univ
Ozalp, Ece Isenbike		Carnegie Mellon Univ
Darwish, Mohamed		Carnegie Mellon Univ
Weldon, Jeffrey		Carnegie Mellon Univ
14:30-14:45	FrO1O1.2	
<i>A Nanofluidics Study on Nanoscale Gas Bubble Defects in Dispensing-Based Nanoimprint Lithography</i> , pp. 788-791.		
Da, Li		Univ. of Michigan
Ma, Xiaobai		Univ. of Michigan
Li, Nan		Univ. of Michigan
Hossein, Rokbi		Univ. of Michigan
Wei, Lu		Univ. of Michigan
Yu, Zhaoning		Seagate Tech. PLC
Liang, Xiaogan		Univ. of Michigan
14:45-15:00	FrO1O1.3	
<i>Experimental and Numerical Study of Thermomagnetic Convection Around a Current Carrying Wire*</i> .		
vatani, ashkan		Griffith Univ. Australia
15:00-15:15	FrO1O1.4	
<i>Performance Analysis and Experimental Study of Particle Control Based on Fluid</i> , pp. 792-796.		
Qin, Zhang		South China Univ. of Tech
Jibin, Fan		South China Univ. of Tech
Jianmin, Chen		South China Univ. of Tech
15:15-15:30	FrO1O1.5	
<i>Monte-Carlo Simulation of Biomolecules' Fluid-Dynamics in Electrolyte Facing Nanowires Biosensor</i> , pp. 797-800.		
Lee, Che-An		National Chiao Tung Univ
TERAMOTO, AKINOBU		Tohoku Univ
Watanabe, Hiroshi		National Chiao Tung Univ
FrO1O2		Grand Ballroom #2
Nanomaterials for Energy (Oral Session)		
Chair: Leu, Paul		Univ. of Pittsburgh
Co-Chair: Dong, Binghai		Hubei Univ
14:00-14:30	FrO1O2.1	
<i>Silicon Nanowire Based Thermoelectric Device for Energy Harvesting (I)</i> , pp. 801-803.		
Kim, Kihyun		Pohang Univ. of Science and Tech
Baek, Chang-Ki		POSTECH
14:30-14:45	FrO1O2.2	
<i>Nanostructured Fused Silica with High Transmission and High Haze*</i> .		
Haghanifar, Sajad		Univ. of Pittsburgh
Gao, Tongchuan		Univ. of Pittsburgh
Pafchek, Bradley		Univ. of Pittsburgh
Leu, Paul		Univ. of Pittsburgh

14:45-15:00	FrO1O2.3	
<i>Role of Halide Anions in Perovskite/Graphene Oxide Photovoltaics</i> , pp. 804-806.		
ACIK, MUGE	Argonne National Lab	
Sankaranarayanan, Subramanian	Argonne National Lab	
Rosenberg, Richard A	Argonne National Lab	
15:00-15:15	FrO1O2.4	
<i>Catalytic Evaluation of Ni-Based Nano-Catalysts in Dry Reformation of Methane</i> . pp.1051-1055		
Khader, Mahmoud	Qatar Univ	
Al-Marri, Mohammed J.	Gas Processing Center, Qatar Univ	
sardar, ali	Gas Processing Center, Qatar Univ	
Abdelmonem, Ahmed Gamal	Qatar Univ. Gas Processing Centre	
Kumar, Anand	Qatar Univ	
Saad, Mohammed Ali H. S.	Qatar Univ	
Soliman, Ahmed Mohamed	Senior Chemist at Gas Processing Center /Qatar Univ	
15:15-15:30	FrO1O2.5	
<i>Electrospinning TiO2 Nanofibers, Nanoparticle/nanofibers As a Photoanode for High Performance Dye Sensitized Solar Cell</i> , pp. 807-808.		
Dong, Binghai	Hubei Univ	
Yang, Xiaojie	Hubei Univ	
FrO1O3		Grand Ballroom #3
Nanofabrication III (Oral Session)		
Chair: Dong, Liang	Iowa State Univ	
Co-Chair: Li, Wen-Di	The Univ. of Hong Kong	
14:00-14:30	FrO1O3.1	
<i>Solution-Processed Metallic Micro and Nanostructures for Transparent Electrodes and Plasmonic Sensors</i> , pp. 809-810.		
Li, Wen-Di	The Univ. of Hong Kong	
Cai, Jingxuan	The Univ. of Hong Kong	
Zhang, Cuiping	The Univ. of Hong Kong	
Khan, Arshad	Department of Mechanical Engineering, the Univ. of Hong Kon	
Liang, Chuwei	The Univ. of Hong Kong	
Li, Shijie	The Univ. of Hong Kong	
Zhu, Zhouyang	The Univ. of Hong Kong	
Min, Siyi	The Univ. of Hong Kong	
14:30-14:45	FrO1O3.2	
<i>Characterizing the Resonant Behavior and Quality Factors of 3C-SiC Diaphragms Using Frequency Analysis and the Ring-Down Technique</i> , pp. 811-815.		
Sui, Yongkun	Case Western Res. Univ	
Chong, Hao	Case Western Res. Univ	
Shara, Kailey	Case Western Res. Univ	
Zorman, Christian	Case Western Res. Univ	
14:45-15:00	FrO1O3.3	
<i>Hydrothermal Synthesis of Triangular and Hexagonal Gold Nanoplates with Different Size Ranges</i> , pp. 816-817.		
LIU, Yanting	City Univ. of Hong Kong	

shen, yajing	City Univ. of Hong Kong
15:00-15:15	FrO1O3.4
<i>Nanomanipulation of a Single Carbon Nanotube for the Fabrication of a Field-Effect Transistor</i> , pp. 818-821.	
Yu, Ning	Beijing Inst. of Tech
Shi, Qing	Beijing Inst. of Tech
Nakajima, Masahiro	Nagoya Univ
Wang, Huaping	Beijing Inst. of Tech
Yang, Zhan	Soochow Univ
Huang, Qiang	Beijing Inst. of Tech
Fukuda, Toshio	Nagoya Univ
15:15-15:30	FrO1O3.5
<i>Fabrication of Nanoscale Features on Ultra-Thin Glass-Based Dielectrics Via Self-Masking and Preferential Etching to Enhance Capacitance</i> , pp. 1035-1038	
Mahadevegowda, Amoghavarsha	Univ. of Oxford
Johnston, Colin	Univ. of Oxford
Grant, Patrick S	Univ. of Oxford
FrO1O4	Grand Ballroom #4
NEMS and Micro-To-Nano-Scale Bridging (Oral Session)	
Chair: Roy, Avisek	The Univ. Coll. of Southeast Norway
Co-Chair: Zhu, Junhao	Iowa State Univ
14:00-14:30	FrO1O4.1
<i>Investigation of Contact Resistance of TiN-TiN Contacts for Nanoswitches</i> , pp. 822-824.	
Oh, Changho	Carnegie Mellon Univ
14:30-14:45	FrO1O4.2
<i>Evolution of Electrified Nano-Contacts and the Localized Generation of Contaminant Film</i> , pp. N/A.	
Stovall, Charles	Univ. of Pennsylvania
Streller, Frank	Univ. of Pennsylvania
Lefever, Joel	Univ. of Pennsylvania
Carpick, Robert W.	Univ. of Pennsylvania
14:45-15:00	FrO1O4.3
<i>Design Considerations of CMOS Micro-Heaters to Directly Synthesize Carbon Nanotubes for Gas Sensing Applications</i> , pp. 828-833.	
Roy, Avisek	The Univ. Coll. of Southeast Norway
Ender, Ferenc	Budapest Univ. of Tech. and Ec
Azadmehr, Mehdi	Univ. Coll. of SouthEast Norway
Ta, Bao Quoc	Vestfold Univ. Coll
Aasmundtveit, Knut	Univ. Coll. of Southeast Norway
15:00-15:15	FrO1O4.4
<i>NEMS-Based Asymmetric Split Ring Resonators for Thermomechanically Tunable Infrared Metamaterials</i> , pp. 834-837.	
Wang, Qiugu	Iowa State Univ
Mao, Depeng	Iowa State Univ
Zhu, Junhao	Iowa State Univ
Dong, Liang	Iowa State Univ
15:15-15:30	FrO1O4.5
<i>Highly Tunable NEMS Shallow Arches</i> , pp. 838-843.	

Kazmi, Syed N. R.	King Abdullah Univ. of Science and Tech
Hajjaj, Amal Z.	King Abdullah Univ. of Science and Tech
Costa, Pedro M. F. J.	King Abdullah Univ. of Science and Tech
Younis, Mohammad I.	King Abdullah Univ. of Science and Tech. (KAUST)

FrO1O5	Grand Ballroom #5
Nanoelectronics: Memristors (Oral Session)	
Chair: Bain, James	Carnegie Mellon Univ
Co-Chair: Jha, Sumit Kumar	Univ. of Central Florida
14:00-14:30	FrO1O5.1
<i>An Ultrafast Nanoscale Thermal Characterization System for Evaluating Transformation Kinetics of Phase Change Chalcogenides*</i> .	
Xu, Min	Carnegie Mellon Univ
Yeoh, Phoebe	Carnegie Mellon Univ
Skowronski, Marek	Carnegie Mellon Univ
Bain, James	Carnegie Mellon Univ
14:30-14:45	FrO1O5.2
<i>3D ReRAM Arrays and Crossbars: Fabrication, Characterization and Applications</i> , pp. 844-849.	
Adam, Gina Cristina	National Inst. for R&D in Microtechnologies (IMT)
Chrakrabarti, Bhaswar	Univ. of California, Santa Barbara
Nili, Hussein	Univ. of California, Santa Barbara
Hoskins, Brian	Univ. of California, Santa Barbara
Lastras-Montaño, Miguel	Univ. of California, Santa Barbara
Madhavan, Advait	Univ. of California, Santa Barbara
Payvand, Melika	Univ. of California, Santa Barbara
Ghofrani, Amirali	Univ. of California, Santa Barbara
Cheng, Kwang-Ting	Univ. of California, Santa Barbara
Theogarajan, Luke	Univ. of California, Santa Barbara
Strukov, Dmitri	UCSB
14:45-15:00	FrO1O5.3
<i>Phase Based Boolean Computation Using GeTe6 Oscillators</i> , pp. 850-854.	
Kesim, Yunus Emre	Carnegie Mellon Univ
Gala, Darshil	Carnegie Mellon Univ
Bain, James	Carnegie Mellon Univ
Weldon, Jeffrey	Carnegie Mellon Univ
15:00-15:15	FrO1O5.4
<i>In-Memory Flow-Based Stochastic Computing on Memristor Crossbars Using Bit-Vector Stochastic Streams</i> , pp. 855-860.	
Raj, Sunny	UCF
Chakraborty, Dwaipayan	UCF
Jha, Sumit Kumar	Univ. of Central Florida
15:15-15:30	FrO1O5.5
<i>Unipolar Magnetoelectric Magnetic Tunnel Junction (UMMTJ) Devices and Circuits</i> , pp. 861-865.	
Sharma, Nishtha	Univ. of Texas at Dallas
Marshall, Andrew	Univ. of Texas at Dallas
Dowben, Peter	Univ. of Nebraska, Lincoln

FrO106	City Center A
Nanomaterials III (Oral Session)	
Chair: Yeom, Junghoon	Michigan State Univ
Co-Chair: Lin, Huacan	The Ohio State Univ
14:00-14:30	FrO106.1
<i>Integrating Tea Nanoparticle with Short Peptides to Generate Tunable Hydrogel Scaffolds for Diabetic Ulcer</i> , pp. 866-867.	
Zhang, Mingjun	The Ohio State Univ
Lin, Huacan	The Ohio State Univ
14:30-14:45	FrO106.2
<i>Development of Nanofiber Filters with High PM2.5 Removal Efficiency and Low Air Resistance</i> , pp. 868-872.	
bian, ye	The Univ. of Hong Kong
Chen, Chun	The Chinese Univ. of Hong Kong
Zhang, Li	The Chinese Univ. of Hong Kong
14:45-15:00	FrO106.3
<i>ZnO Nanowire and Silicon Nanocrystal Heterostructures for Photocatalytic Applications</i> , pp. 873-876.	
Yeom, Junghoon	Michigan State Univ
Zhang, Yaozhong	Michigan State Univ
15:00-15:15	FrO106.4
<i>Nanotechnology Applications in Food and Agriculture</i> , pp. 877-878.	
Khan, Ahmed	DeVry Univ
15:15-15:30	FrO106.5
<i>Self-Ion Irradiation Study of a Thermally Stable Nano-Crystalline Alloy and Its Implications for Development of Irradiation Resistant Alloys</i> , pp. 879-880.	
Singh, Prince	Carnegie Mellon Univ
FrO107	City Center B
Plasmonics (Oral Session)	
Chair: Kim, Hong Koo	Univ. of Pittsburgh
Co-Chair: Wei, Jianjun	Univ. of North Carolina at Greensboro
14:00-14:30	FrO107.1
<i>Plasmonic Nano-Additives for Polymer Composites: Preservation of Tailored Functionality</i> , pp. 881-884.	
Griep, Mark	Us Arl
Boyne, Devon	Us Arl
Orlicki, Joshua	U.S. Army Res. Lab
14:30-14:45	FrO107.2
<i>Silver Nanowires (AgNWs) Growth In-Situ on Chitosan Polymer Matrix Film for SERS Application</i> , pp. 885-889.	
Chevva, Harish	Univ. of North Carolina at Greensboro
Chandran, Rakkiyappan	Univ. of North Carolina at Greensboro
LaJeunesse, Dennis	Univ. of North Carolina at Greensboro
Wei, Jianjun	Univ. of North Carolina at Greensboro
14:45-15:00	FrO107.3
<i>Low-Loss Plasmonic Metamaterial Waveguides</i> , pp. 890-893.	
Shi, Yu	Univ. of Pittsburgh
Kim, Hong Koo	Univ. of Pittsburgh

15:00-15:15	FrO107.4
<i>Graphene for Surface Enhanced Raman Scattering (SERS) Molecular Sensors</i> , pp. 894-896.	
Chen, Ying Ren	National Cheng Kung Univ
Chen, Wai Leong	National Cheng Kung Univ
Tzeng, Yonhua	National Cheng Kung Univ
15:15-15:30	FrO107.5
<i>Semiconductor-Free Microelectronic Devices Using Optical Metasurfaces (I)*.</i>	
Forati, Ebrahim	TDK
Piltan, Shiva	Univ. of California San Diego
Sievenpiper, Dan	Univ. of California San Diego
FrO201	Grand Ballroom #1
Nanopackaging (Oral Session)	
Chair: Raj, P Markondeya	Georgia Inst. of Tech
Co-Chair: SUGANUMA, Katsuaki	Osaka Univ
15:45-16:15	FrO201.1
<i>Development of Low-Temperature Sintering Nano-Ag Pastes Using Resin Reinforcement and Low Modulus Technology</i> , pp. 897-902.	
Sasaki, Koji	NAMICS Corp
Mizumura, Nortisuka	NAMICS Corp
Araujo, Kenneth	NAMICS Tech. Inc
16:15-16:30	FrO201.2
<i>Effects of Oxygen Containing Groups on Barrier Layer on the Stability of Silver Nanowire Transparent Electrodes</i> , pp. 903-906.	
Li, Lingying	The Inst. of Scientific and Industrial Res. (ISIR), Osaka
Li, Wanli	The Inst. of Scientific and Industrial Res. (ISIR), Osak
Jiu, Jinting	The Inst. of Scientific and Industrial Res. (ISIR), Osak
SUGANUMA, Katsuaki	Osaka Univ
16:30-16:45	FrO201.3
<i>Study of Carbon Nanotube Array Antenna for Submillimeter Wave Wireless Interconnect</i> , pp. 907-910.	
ROUX-LEVY, Philippe	XLIM UMR 7252, Univ. of Limoges
Baillargeat, Dominique	Univ. of Limoges
16:45-17:00	FrO201.4
<i>Nanostructured Artificial Magnetic Conductors (AMC) for High-Performance Antennas in 5G, IoT, and Smart-Skin Applications</i> , pp. 911-915.	
Lin, TongHong	Georgia Inst. of Tech
Raj, P Markondeya	Georgia Inst. of Tech
watanabe, Atom	Georgia Inst. of Tech
Sundaram, Venky	Georgia Inst. of Tech
Tummala, Rao	Georgia Inst. of Tech
Tentzeris, Manos M.	Georgia Inst. of Tech
17:00-17:15	FrO201.5
<i>Nanotechnology for Electronics Packaging, Interconnect, and Assembly (I)*.</i>	
Bauer, Charles E.	Tech. Corp.

FrO2O2		Grand Ballroom #2
Nanomaterials: 2D Atomic Crystal Materials (Oral Session)		
Chair: Zhang, Yan	Beijing Inst. of Nanoenergy and Nanosystems, Chinese Acad. of Sciences	
Co-Chair: Xiong, Feng	Univ. of Pittsburgh	
15:45-16:15	FrO2O2.1	
<i>Electronic, Thermal, and Unconventional Applications of 2D Materials</i> , pp. 916-917.		
Pop, Eric	Stanford Univ	
16:15-16:30	FrO2O2.2	
<i>Study of the Strain Effect on the Monolayer MoS₂</i> , pp. 918-920.		
Deng, Shuo	Wuhan Univ. of Tech	
Zhang, Yan	Beijing Inst. of Nanoenergy and Nanosystems, Chinese Acad	
Li, Lijie	Swansea Univ	
16:30-16:45	FrO2O2.3	
<i>TDDFT Studies on Effects of the Size on Optoelectronic Properties of 2D Germanene Sheets</i> , pp. 921-924.		
Bhandari, Aashka	1994	
Alfalah, S.	Qatar Univ	
Hassan, Walid	Qatar Univ	
Al-Hashimi, N.	Qatar Univ	
Patil, Sunil	COEP, Pune	
Nekovei, Reza	Texas A&M Univ	
Verma, Amit	Texas A&M Univ. - Kingsville	
16:45-17:00	FrO2O2.4	
<i>Black Phosphorus Flexible Thin Film Transistors and GHz Circuit Applications</i> , pp. 925-927.		
Zhu, Weinan	The Univ. of Texas at Austin	
Akinwande, Deji	Univ. of Texas, Austin	
17:00-17:15	FrO2O2.5	
<i>A Three-Dimensional Numerical Study of Transport Characteristics of Silicene Nanoribbon TFETs in Comparison to GNR TFETs</i> , pp. 928-931.		
Mech, Bhupen Chandra	IIT(ISM)	
SAHA, SUMIT	IIT(ISM), Dhanbad	
Hussain, Saddam	IIT(ISM)	
Kumar, Jitendra	IIT(ISM)	

FrO2O3		Grand Ballroom #3
Nano/bio-Systems (Oral Session)		
Chair: Aravamudhan, Shyam	North Carolina A&T State Univ	
Co-Chair: Cohen-Karni, Tzahi	Carnegie Mellon Univ	
15:45-16:15	FrO2O3.1	
<i>Label-Free Monitoring of Alzheimer's Disease Biomarkers in Cerebrospinal Fluid*</i> . pp. 1069-1072		
Que, Long	Iowa State Univ	
Deng, Pan	Iowa State Univ	
Song, Chao	Iowa State Univ	
16:15-16:30	FrO2O3.2	
<i>Versatile Upconversion Surfaces Evaluation Platform for Bio-Nano Surface Selection for Nervous System</i> , pp. 932-933.		
fu, libing	Macquarie Univ	

16:30-16:45	FrO2O3.3
<i>Nanoelectrodes to Differentiate Adipose Derived Stem Cells into Neural Lineage</i> , pp. 934-937.	
Garde, Komal	North Carolina A&T State Univ
Aravamudhan, Shyam	North Carolina A&T State Univ
16:45-17:00	FrO2O3.4
<i>Graphene Electrode Arrays for Recording Neuronal Electrical Activity*</i> .	
Rastogi, Sahil	Carnegie Mellon Univ
Raghavan, Guruprasad	Carnegie Mellon Univ
Yang, Ge	Carnegie Mellon Univ
Cohen-Karni, Tzahi	Carnegie Mellon Univ
17:00-17:15	FrO2O3.5
<i>Studies of Single Neuron Cell Growth on Nanoporous Surface and under Transcranial Magnetic Stimulation</i> . pp. 1056-1059	
Que, Long	Iowa State Univ
che, xiangchen	Iowa State Univ
Boldrey, Joseph	Iowa State Univ
Zhong, Xiaojing	Iowa State Univ
Schneider, Ian	Iowa State Univ
Jiles, David	Iowa State Univ
17:15-17:30	FrO2O3.6
<i>Three Dimensional Nanodevice Arrays for Exploring Cellular Communication in Excitable Tissues</i> , pp. N/A.	
Kalmykov, Anna	Carnegie Mellon Univ
Huang, Changjin	Carnegie Mellon Univ
Abdullah, Arif	Carnegie Mellon Univ
Mataev, Elnatan	Carnegie Mellon Univ
Hsia, K Jimmy	Carnegie Mellon Univ. Mechanical Engineering
Cohen-Karni, Tzahi	Carnegie Mellon Univ

FrO2O4		Grand Ballroom #4
Nanomanufacturing and Nanoassembly (Oral Session)		
Chair: Yang, Zhan	Soochow Univ	
Co-Chair: Liu, Lianqing	Shenyang Inst. of Automation, Chinese Acad. of Sciences	
15:45-16:15	FrO2O4.1	
<i>Submicron Processing Using Laser-Induced Photonic Nanojet</i> , pp. 940-941.		
wen, yangdong	Shenyang Inst. of Automation	
Wang, Feifei	Shenyang Inst. of Automation, Chinese Acad. of Sciences	
Yu, Haibo	Chinese Acad. of Sciences	
Wang, Yuechao	State Key Lab. of Robotics, Shenyang Institute of Automation	
Liu, Lianqing	Shenyang Inst. of Automation, Chinese Acad. of Sciences	
Li, Wen Jung	City Univ. of Hong Kong	
16:15-16:30	FrO2O4.2	
<i>Novel Method for the Synthesis of Conjugated Polymer - Single-Wall Carbon Nanotube Nanowires</i> , pp. 942-945.		
Costa, Lino	Center for Laser Applications, Univ. of Tennessee Space Ins	
Al-Hashimi, Mohammed	Department of Chemistry, Texas A&M Univ. at Qatar, P.O. Box	
Lansford, K.	Center for Laser Applications,	

Terekhov, A.	Univ. of Tennessee Space Ins Center for Laser Applications, Univ. of Tennessee Space Ins
Hofmeister, W.	Center for Laser Applications, Univ. of Tennessee Space Ins
Jeyakumar, R.	Materials and Devices Div. National Physical Lab. Ne
Verma, Amit	Texas A&M Univ. - Kingsville

16:30-16:45 FrO2O4.3

Design, Fabrication, Characterization and Packaging of Bottom Gate and Nano-Porous TiO₂ Based FET, pp. 946-950.

DWIVEDI, PRIYANKA	Indian Inst. of Tech. (IIT), New Delhi – 110016, India
Chauhan, Neha	Toyo Univ
Dhyani, Veerendra	Centre for Applied Res. in Electronics, Indian Inst. Of
Kumar, Sakthi	Toyo Univ
Dhanekar, Saakshi	IIT Delhi

16:45-17:00 FrO2O4.4

Surfactant-Assisted Synthesis and Characterization of Hydroxyapatite Nanoparticles, pp. 951-955.

Abburi, Aditya	Bennett Univ
Abburi, Visweswara Rao	AV Tech. Consultants Private Limited

17:00-17:15 FrO2O4.5

Direct Current Induced Multi-Walled Carbon Nanotubes-Graphene Layer Fusion, pp. 956-960.

Shen, Daming	Soochow Univ. Univ. of Science and Tech
Chen, Donglei	Soochow Univ
Yang, Zhan	Soochow Univ
Chen, Tao	Soochow Univ
Sun, Lining	Soochow Univ
Fukuda, Toshio	Nagoya Univ

FrO2O5 Grand Ballroom #5
Nanoelectronics: Devices – SET, RTD, QD, Molecular (Oral Session)

Chair: Kim, Hong Koo	Univ. of Pittsburgh
Co-Chair: Al-Dirini, Feras	Univ. of Melbourne

15:45-16:15 FrO2O5.1

Fabrication of Nanoscale Quantum-Dot Organic Light-Emitting Devices on Si Substrate, pp. 961-964.

Emon, Daud Hasan	Univ. of Pittsburgh
Kim, Hong Koo	Univ. of Pittsburgh

16:15-16:30 FrO2O5.2

Negative Differential Resistance in Planar Graphene Quantum Dot Resonant Tunneling Diodes, pp. 965-968.

Al-Dirini, Feras	Univ. of Melbourne
Mohammed, Mahmood A.	McGill Univ
Jiang, Liming	The Univ. of Melbourne
Hossain, Md Sharafat	Univ. of Melbourne
Nasr, Babak	The Univ. of Melbourne
Hossain, Faruque M.	Univ. of Melbourne
Nirmalathas, Ampalavanapillai	Univ. of Melbourne
Skafidas, Efstratios	Univ. of Melbourne

16:30-16:45 FrO2O5.3

Light Emission from Vertically Aligned Carbon Nanotube Field Emitters During Joule Heating Enhanced Field Emission, pp. 969-973.

Li, Yunhan	Univ. of Waterloo
Sun, Yonghai	Univ. of Waterloo
Yeow, John T.W.	Univ. of Waterloo

16:45-17:00 FrO2O5.4

Suspended Nano Scale QD-OLED on Si Substrate, pp. 974-978.

Emon, Daud Hasan	Univ. of Pittsburgh
Kim, Hong Koo	Univ. of Pittsburgh

17:00-17:15 FrO2O5.5

Effect of Low-Energy Electron Beam Irradiation on the Current-Voltage Characteristics of Single-Walled Carbon Nanotube Field Effect Transistors, pp. 979-982.

Choi, Daniel So Ri	US Army Res. Lab
Mallick, Govind	U.S. Army Res. Lab
Karna, Shashi	US Army Res. Lab

17:15-17:30 FrO2O5.6

QCA Based FIR Serial Multiplier Using Cut-Set Algorithm, pp. 983-988.

Karuppiah, Pandiammal	Jerusalem Engineering Coll. Chennai
Deivasigamani, Meganathan	Madras Inst. of Tech. Anna University

FrO2O6 City Center A
Nanomaterials IV (Oral Session)

Chair: Weiss, Keith	Brinks Gilson & Lione
Co-Chair: Hou, Kai-Ting	National Chiao Tung Univ

15:45-16:15 FrO2O6.1

Nanowire Templated Growth of Three-Dimensional Graphene Electrodes, pp. N/A.

Garg, Raghav	Carnegie Mellon Univ
Rastogi, Sahil	Carnegie Mellon Univ
Lamparski, Michael	Rensselaer Pol. Inst
de la Barrera, Sergio C.	Carnegie Mellon Univ. Physics
Pace, Gordon Taylor	Carnegie Mellon Univ
Nuhfer, Noel Thomas	Carnegie Mellon Univ
Hunt, Benjamin M	Carnegie Mellon Univ. Physics
Meunier, Vincent	Rensselaer Pol. Inst
Cohen-Karni, Tzahi	Carnegie Mellon Univ

16:15-16:30 FrO2O6.2

A Comparison of the Impact of Metal-Ion Containing and Metal-Ion Free Photoresist Developers on Graphene Field-Effect Transistors, pp. 991-994.

Darwish, Mohamed	Carnegie Mellon Univ
Saha, Dipanjan	Carnegie Mellon Univ
Malen, Jonathan	Carnegie Mellon Univ
Weldon, Jeffrey	Carnegie Mellon Univ

16:30-16:45 FrO2O6.3

Synthesis of Functional Ceramic Nanocrystals (SiC, TiC, TiN) by Arc-Discharge Plasma Process, pp. 995-998.

gao, jian	Dalian Univ. of Tech
Liang, Jing Shuang	Dalian Univ. of Tech
Yang, wenfei	Dalian Univ. of Tech

Lu, Shan Shan	Dalian Univ. of Tech
Wang, Zi Ming	Dalian Univ. of Tech
Dong, Xing Long	Dalian Univ. of Tech
Yu, jieyi	Dalian Univ. of Tech

16:45-17:00 FrO2O6.4

Magnetic Amphiphilic Gelatin Microcapsules for Cartilage Tissue Engineering, pp. 999-1002.

Hou, Kai-Ting	National Chiao Tung Univ
Chen, San-Yuan	National Chiao Tung Univ. Department of Materials Science

17:00-17:15 FrO2O6.5

Competitive Intelligence - Understanding Current Trends in the Patent Landscape for Nanomaterials, pp. 1003-1009.

Weiss, Keith	Brinks Gilson & Lione
Almeda, Lawrence	Brinks Gilson Lione

FrO2O7	City Center B
Nanomagnetics and Spintronics (Oral Session)	

Chair: Xie, Yunkun	Univ. of Virginia
Co-Chair: Taniyama, Tomoyasu	Tokyo Inst. of Tech

15:45-16:15 FrO2O7.1

Energy-Delay-Reliability of Present and Next Generation STT-RAM Technology, pp. 1010-1013.

Ganguly, Samiran	Univ. of Virginia
Xie, Yunkun	Univ. of Virginia
Ghosh, Avik W	Univ. of Virginia

16:15-16:30 FrO2O7.2

A Core-Shell-Surface Layer Model to Explain the Size Dependence of Effective Magnetic Anisotropy in Magnetic Nanoparticles, pp. 1014-1018.

Singh, Sobhit	Department of Physics and Astronomy, West Virginia Univ. M
Pisane, K. L	Department of Physics and Astronomy, West Virginia Univ. M
Seehra, Mohindar Singh	West Virginia Univ

16:30-16:45 FrO2O7.3

Exploring the Readability of Nano-Magnetic Energy Minimizing Co-Processor, pp. 1019-1022.

Roxy, Kawsher	Univ. of South Florida
Bhanja, Sanjukta	Univ. of South Florida

17:00-17:15 FrO2O7.5

Thermally Driven Magnetization Switching of Perpendicularly Magnetized Multilayers, pp. 1023-1026.

Taniyama, Tomoyasu	Tokyo Inst. of Tech
Shirahata, Yasuhiro	Univ. of Shiga Prefecture
Shiina, Ryota	NTT Corp
Wada, Eiji	Toho Univ
Itoh, Mitsuru	Tokyo Inst. of Tech

17:15-17:30 FrO2O7.6

Strained MTJs with Latch-Based Sensing for Stochastic Computing, pp. 1027-1030.

Bhuin, Sudipta	Carnegie Mellon Univ
Biswas, Ayan	Carnegie Mellon Univ
Pileggi, Lawrence	Carnegie Mellon Univ