Utilisation of microbiosensors for monitoring phenols in whisky fermentation process

Conference or Workshop Item

16th International Conference on Nanosciences and Nanotechnologies (NN19), 2-5 July 2019, Thessaloniki, Greece

08:00 – 09:00	**Registration**						
09:00-09:30	**Welcome and Opening Remarks** **S. Logothetidis,** NN19 Chairman **Room: Crystal Hall**						
09:30-10:00 **KEYNOTE**	**Tailoring functionality by micro/nano structuring** Nikolaos Kehagias Catalan Institute of Nanoscience and Nanotechnology, Spain					**09:30-11:00**	**Workshop on Open Innovation 2** **Chair: M. Kogia** **Room: Timber Hall 2**
10:00-11:00	**WS1: Nanoelectronics I** **Chair: S. Kassavetis** **Room: Crystal Hall**	**10:00-11:00**	**WS2: Thin Films, Surfaces & Interfaces** **Chair: L. Petrik** **Room: Dock Six 1**	**10:00-11:15**	**I3D 1 (Joined Session of NN19 & ISFOE19) 3D-Printing** **Chair: George Kenanakis** **Room: Dock Six 2**	**09:30-10:00** **INVITED**	**Printed Batteries – New Applications and Funding** M. Krebs Varta Microbattery, Germany
10:00-10:30 **INVITED**	**On-site Gas Sensing by Surface-Enhanced Raman Scattering** Zhengjun ZHANG Tsinghua University, China	**10:00-10:30** **INVITED**	**Structural and Optical Properties of Novel Nanoimprinted Photonic Architectures** **M. I. Alonso,** Institut de Ciència de Materials de Barcelona (ICMAB-CSIC), Spain	**10:00-10:30** **INVITED**	**Integrated Electronic Functionalities in 3D Printed Products** Merijn Giesbers TNO, Holst Centre, The Netherlands	**10:00-10:30** **INVITED**	**EQUINOX and OYSTER: results from two projects with different strategies to data production and data sharing** **P. Kavouras,** C. A. Charitidis School of Chemical Engineering, National Technical University of Athens, Greece
10:30-10:45	**Transient dynamics in organized small structures probed by laser-combined STM** H. Shigekawa University of Tsukuba, Japan	**10:30-10:45**	**Tunable conductivity in thin films of hematite, decorated with Cu nanoparticles** Aleksandra Szkudlarek AGH University of Science and Technology, Academic Centre for Materials and Nanotechnology, Krakow, Poland	**10:30-11:00** **INVITED**	**Laser Induced Forward Transfer: an advanced tool for 3D bioprinting** I. Zergioti National Technical University of Athens, Greece	**10:30-10:45** **PROJECT**	**Life-time considerations on additively manufactured medical devices** K. Foremny[1], U. P. Froriep[2], **T. Doll[1,2]** [1] Hannover Medical School, ORL Department, Hannover, Germany [2] Fraunhofer Institute for Toxicology and Experimental Medicine, Translational Biomedical Engineering, Hannover, Germany
10:45-11:00	**Nanoelectronic and spintronics devices based on molecular spin crossover materials** A. Rotaru Stefan cel Mare University, Romania	**10:45-11:00** **YRA** **CANDIDATE**	**2D oxide nanolayers obtained from liquid metal alloys based on gallium** A. Dobosz Science of Polish Academy of Sciences, Poland			**10:45-11:00** **PROJECT**	**Maturolife: Quality of life through quality of design** D. Shaw[1], J. Sellars[1], A. Cobley[2] [1] A-Gas Electronic Materials, UK [2] Coventry University, UK
				11:00-11:15	**Adhesion improvement of conductive poly-lactic acid filament 3D printed onto polyethylene terephthalate fabric through chemical bonding** Prisca Aude Eutionnat-Diffo ENSAIT, GEMTEX – Laboratoire de Génie et Matériaux Textiles, France		

11:00 – 11:30	**Coffee Break** **NN19 Poster 1 (SEE POSTER PROGRAMME) – Exhibition-Networking**

Tuesday 2 July 2019

	Keynote Talk **Chair** C. Evangeli **Room: Crystal Hall**			**11:30-13:30**	**I3D 2 (Joined Session of NN19 & ISFOE19)** **3D-Printing** **Chair: Merijn Giesbers** **Room: Dock Six 2**	**11:30-13:30**	**Workshop on In-line & Real-time Metrology and Quality Control 1** **Chair: M Gioti** **Room: Timber Hall 2**
11:30-12:00 **KEYNOTE**	**Organic light-emitting transistor as nanoscale light source for optical sensing** Stefano Toffanin Italian National Research Council, Institute for the Study of Nanostructured Materials(CNR-ISMN), Italy						
12:00-13:30	**WS1: Nanoelectronics II** **Chair: E. Paspalakis** **Room: Crystal Hall**	**12:00-13:30**	**WS2: Thin Films, Surfaces & Interfaces** **Chair: M. I. Alonso** **Room: Dock Six 1**	**11:30-12:00** **INVITED**	**2,3,4D printing: the next industrial revolution** S. Magdassi, The Hebrew University of Jerusalem, Israel	**11:30-12:00** **INVITED**	**R2R and S2S Equipment for Advanced Manufacturing of Flexible Electronics** S. Stan1 VDL Enabling Technologies Group, The Netherlands
12:00-12:30 **INVITED**	**Thermoelectric and Thermal transport in 2D nanostractures and Molecular Junctions** Charalambos Evangeli University of Oxford, UK	**12:00-12:30** **INVITED**	**Spin coating immobilisation of C-N-TiO2 co-doped nano catalyst on glass and application for photocatalysis or as electron transporting layer for perovskite solar cells** L. Petrik University of Western Cape, South Africa	**12:00-12:30** **INVITED**	**3D printed nanocomposite structures for energy and environmental applications** George Kenanakis FORTH IESL, Greece	**12:00-12:30** **INVITED**	**Upscaling R2R-Production Technology for flexible Electronics** N. Meyer, H. Rooms, T. Exlager, S.Madadi and T. Kolbusch Coatema Coating Machinery GmbH, Germany
12:30-13:00 **INVITED**	**Memristive Nanomaterials for Biological Integration** Jessamyn Fairfield	**12:30-12:45**	**Two-stage production and characterization of Cu2SnS3 absorber layers for thin film solar cell applications** Uğur Yorulmaz Eskisehir Osmangazi University, Turkey	**12:30-13:00** **INVITED**	**Inkjet fluid characterization and in-flight drop analysis using the FUJIFILM Dimatix Materials Printer** R. J A Ramirez FUJIFILM Dimatix, USA	**12:30-13:00** **INVITED**	**Production of Efficient Printed Organic Photovoltaic Panels with High Quality** E.M Pechlivani, Organic Electronic Technologies P.C. (OET), Greece
		12:45-13:00	**Development of Superhard, Nanocomposite Coatings on the Basis Nanostructured AlTiN and Diamondlike Coating-Orientant** V.A. Levchenko Lomonosov Moscow State University, Russia				
13:00-13:15	**Design, synthesis and study of new pyridyl end-capped Cyclophane-type tectons as new surface-confine architectures** D. Kreher Sorbonne Universite, France	**13:00-13:15**	**Synthesis of the Nanostructured Metal-Ceramic Xylan Coatings with High Functional Properties** V.A. Levchenko Lomonosov Moscow State University, Russia	**13:00-13:15**	**Photo-responsive polymers in 3D printing** M. Gastaldi Università di Torino, Italy	**13:00-13:30** **INVITED**	**Industrial-scale in-line and in-situ metrology for automated quality control** Christian Camus LayTec AG, Germany
13:15-13:30 **EU PROJECT**	**Cu nanoparticle catalysed metallisation process for preparing e-textiles** Shakiela Begum Coventry University, United Kingdom	**13:15-13:30**	**Tuning thin film TCO electronic properties by doping** Marcin Bartmański CBRTP – Research and Development Center of Technology for Industry, Poland	**13:15-13:30**	**3D printed chitosan-TiO2 scaffolds for the photocatalytic degradation of amoxicillin in wastewater** C. Graiff University of Parma, Italy		
		13:30-13:45	**Kinetic Modeling of Nanostructures Formation During Binary Thin Film Growth** A. Galdikas, Kaunas University of Technology, Lithuania	**13:30-13:45**	**3D Inkjet-printing of Smart Luminaires** F. Kemper 1 Fraunhofer Institute for Applied Optics and Precision Engineering (IOF), Germany		

13:45 – 15:00	**Lunch Break** **NN19 Posters (SEE POSTER PROGRAMME) – Exhibition – Networking** **BUSINESS FORUM**

15:00-17:30	**WS1: Nanoenergy** **Chair: C. Evangeli** **Room: Crystal Hall**	**15:00-17:30**	**WS2: Nanoparticles I** **Chair: P. Patsalas** **Room: Dock Six 1**	**15:00-17:30**	**Graphene I (Joined Session of NN19 & ISFOE19)** **Chair: V. Koutsos** **Room: Timber Hall 2**
15:00-15:30 **INVITED**	**Materials Science and Engineering toward Advanced Lithium-ion Batteries~ Bridging Their Innovation Gaps for Extremely High Performances ~** K. Teshima Shinshu University, Japan	**15:00-15:30** **INVITED**	**Origin of the collective magnetism in cubic ZnS quantum dots doped with Mn^{2+} ions. From myths to the harsh reality.** S. V. Nistor National Institute of Materials Physics, Romania	**15:00-15:30** **INVITED**	**Graphene electrically tuneable nonlinear optics** G. Soavi Friedrich-Schiller Universität Jena, Germany

Tuesday 2 July 2019

15:30-16:00 INVITED	**Toward Improved Environmental Stability of Polymer:Fullerene and Polymer:Non-fullerene Organic Solar Cells: A Common Energetic Origin of Light and Oxygen Induced Degradation** Dr. Emily Speller Italian Institute of Technology, Italy	**15:30-16:00 INVITED**	**Solution-Processed Ferroelectric Perovskite Colloidal Nanocrystals for Applications in Electronics and Data Storage** Gabriel Caruntu Central Michigan University, USA	**15:30-15:45**	**Quasienergy spectrum of graphene subjected to a bicircular laser field** J. Derlikiewicz University of Warsaw, Poland
				15:45-16:00	**Conductive inks based on graphene** V. Georgakilas University of Patras, Greece
16:00-16:15	**Enhancement of the Activity on Phosphor and Nitrogen Co-doped TiO2 for Polymer Electrolyte Fuel Cell Cathodes** M. Chisaka Hirosaki University, Japan	**16:00-16:30 INVITED**	**Chemical and Structural TEM Analyses on Carbon and Related Nanomaterials** R. Arenal U. Zaragoza, Spain Fundacion ARAID, Spain CSIC-U. Zaragoza, Spain	**16:00-16:15**	**Toward disorder-free growth of thin metal films on graphene by magnetron sputtering** N. Pliatsikas Linköping University, Linköping, Sweden
16:15-16:30	**Nanomaterials for a Future Hydrogen Economy** M. Trudeau Institut de Recherche d'Hydro-Québec (IREQ), Canada,			**16:15-16:30**	**Low-Temperature Synthesis and Spectroscopy of Fractal Graphene** N. Margaryan National Polytechnic University of Armenia, Armenia
16:30-16:45	**Nanocoatings For Enhanced Performance of PV Systems In SUPER PV PROJECT** J. Ulbikas Applied Research Institute for Prospective Technologies Vilnius, Lithuania	**16:30-16:45**	**Klebsiella oxytoca DSM 29614: a "machine" for making biogenerated metal nanoparticles for biotechnological applications** F. Baldi Foscari University, Italy.	**16:30-16:45**	**Monitoring water splitting at graphene edges in real-time: why humidity is essential for the lubricity of graphitic materials** P. Restuccia University of Modena and Reggio Emilia, and CNR Institute of Nanoscience Italy.
16:45-17:00 INVITED	**Concise and Single-step Synthesis of Sulfur-functionalized Graphene: Immobilization of Molecular Cluster and Battery Applications** Haruka Omachi	**16:45-17:00**	**Critical Factors of the Solution-Based Silica Mineralization on DNA Origami** Minh-Kha Nguyen Aalto University School of Science, Finland.	**16:45-17:00**	**Graphene synthesis by tribochemical reaction of methane with nickel: an ab initio molecular dynamics study** M. C. Righi University of Modena and Reggio Emilia, Italy
		17:00-17:15	**Radiation-induced near-cluster color centers in ionic crystals** A.N. Novikov, National Academy of Sciences of Belarus, Belarus	**17:00-17:15**	**Nitrogen-Doped Graphene Quantum Dots Exhibiting Fluorescence from Ultraviolet to Infrared Region** J. Gomez CEITEC Masaryk University, Czech Republic
		17:15-17:30	**Study of technical parameters to prepare graphene dispersions by liquid phase exfoliation** M. Cayambe Escuela Superior Politécnica de Chimborazo, Ecuador	**17:15-17:30**	**Modeling thermionic Graphene/Silicon Schottky IR photodetectors** S. Doukas University of Ioannina, Ioannina, Greece
		17:30-17:45 YRA CANDIDATE	**Nanomaterials for sustainable leather products** E. Rebba University of Torino, Italy		
		17:45-18:00	**Study of the Structural, Microstructural and Thermal Characterization of 5% Fe-doped ZnO Powder Nanostructures Prepared by Mechanical Alloying** S. Oudjertli Badji Mokhtar - Annaba University | UBMA, Algeria		

18:00 – 18:30	**Coffee Break** **NN18 Posters (SEE POSTER PROGRAMME) – Exhibition – Networking**

18:30 - 20:30	**PLENARY SESSION NANOTEXNOLOGY 2019 (Room: Grand Petra)**
18:30 – 19:00	**Introduction by Prof. S. Logothetidis**, ISFOE19 & NN19 Chairman
19:00 – 19:30 PLENARY	**Green Chemistry for Green Energy** **Prof. Mario Leclerc,** *Laval University, Canada*
19:30 – 20:00 PLENARY	**Novel two-dimensional materials** **Prof. Sokrates Pantelides,** *Vanderbilt University, USA*
20:00 – 20:30 PLENARY	**Intelligent, Recognitive, Nanoscale Systems for Advanced Therapeutic Agent Targeting and Delivery** **Prof. Nicholas Peppas,***The University of Texas at Austin, USA*
21:00	**DRINKS & OFFICIAL DINNER (ISFOE19 & NN19) PORTO PALACE CONFERENCE CENTRE & HOTEL - ROOF GARDEN**

Wednesday 3 July 2019

08:00 - 09:00	**Registration**				
	Keynote Talk **Chair** S. V. Nistor **Room: Crystal Hall**				**Keynote Talk** **Chair E. Lidorikis** **Room: Timber Hall 2**
09:00-09:30 **KEYNOTE**	**Linear dispersions in Q1D and Q2D crystalline structures** M. Damnjanović University of Belgrade, Serbia			**09:00-09:30** **KEYNOTE**	**Growth and microscopy of 2D nitride layers** B. Pécz Hungarian Academy of Sciences (MTA EK MFA) Hungary
09:30-11:00	**WS2: Nanocharacterization & Computational Modelling** **Chair: M. Damnjanović** **Room: Crystal Hall**	**09:30-11:00**	**WS3: Clinical Nanomedicine for CANCER** **Chair K.G.Kousoulas** **Room: Dock Six 1**	**09:00-11:00**	**Graphene 2 (Joined Session of NN19 & ISFOE19)** **Chair: E. Lidorikis** **Room: Timber Hall 2**
09:30-10:00 **INVITED**	**Spin Waves - Symmetry Based Study** I. Milosevic University of Belgrade, Serbia	**09:30-10:00** **INVITED**	**First Impression-the Potential of Altering Initial Host-Virus Interactions for Rational Design of Vaccines for Infectious Diseases and Cancer** G. Kousoulas Louisiana State University, USA	**09:30-10:00** **INVITED**	**Selected carbon allotropes: graphene and fullerene in organic electronic** Jaroslaw Jung, Lodz University of Technology, Poland
10:00-10:30 **INVITED**	**Anomalous electron-phonon coupling in layered structures** B. Nikolic, University of Belgrade, Serbia	**10:00-10:30** **INVTED**	**Tackling molecular heterogeneity to advance new drug development and therapeutic decisions in precision oncology** Ioannis S. Vizirianakis Aristotle University of Thessaloniki, Greece	**10:00-10:30** **INVITED**	**Two-dimensional materials and their heterostructures** **R. Kitaura** Department of Chemistry, Nagoya University Furo-cho, Nagoya, Aichi 466-0802, Japan
10:30-10:45	**Evaluation of Mechanical Properties, Color Stability and Surface Roughness of Pit and Fissure Sealants Reinforced with Organomodified Clay Nanoparticles** A.Nikolaidis Aristotle University of Thessaloniki, Greece	**10:30-10:45**	**Personalized approaches for nanomaterial delivery to tumors** B. B. Manshian KU Leuven, Belgium	**10:30-10:45**	**New 3D Janus Tectons equipped with Photoswitchable Chromophores : Looking for simultaneously controlling optical properties and 2D self-assembly** D. Kreher Sorbonne Universite, France
10:45-11:00	**Formation, optical and structural properties of magneto - plasmonic nanostructures dedicated for SERS measurements.** S. Sobańska **University of Warsaw, Poland**	**10:45-11:00**	**In silico design of degrading nanomaterials as a novel form of tumor therapy** S. J. Soenen KU Leuven, Belgium	**10:45-11:00**	**Solid State Supercapacitors Made by Gel Electrolytes** Tseung-Yuen Tseng National Chiao Tung University,Hsinchu 300, Taiwan

11:00-11:30 **Coffee Break**
NN19 Poster (SEE POSTER PROGRAMME) – Exhibition-Networking

	Keynote Talk **Chair** T. Duguet **Room: Crystal Hall**			**11:30-13:30**	**Graphene 3 (Joined Session of NN19 & ISFOE19)** **Chair: G. Deligiorgis** **Room: Timber Hall 2**	**11:30-13:30**	**Women in Nano Science & Technology 1** **Chair:** **Room: Dock Six 2**
11:30-12:00 **KEYNOTE**	**High Performance Solid Polymer Electrolytes for Energy Storage** S. H. Anastasiadis IESL, FORTH, Greece			**11:30-12:00** **INVITED**	**Combining nanomaterials towards ubiquitous next generation electronics** G. Deligeorgis FORTH IESL, Greece	**11:30-11:45**	**Opening and words of welcome**
12:00-13:30	**WS2: Polymers** **Chair: T. Duguet** **Room: Crystal Hall**	**11:30-13:30**	**WS3: Nanoparticles for Clinical Applications** **Chair: T. Mitsiadis** **Room: Dock Six 1**			**11:45-12:15** **INVITED**	**Two-Photon Absorption of Solvated Organic Chromophores: a Synergy between Experiment and Theory** C. Katan1 1 Univ Rennes, ENSCR, INSA Rennes, CNRS, ISCR, Rennes, FRANCE
12:00-12:30 **INVITED**	**Polymer Morphology and Chain Conformations in PEO nanocomposites** K. Chrissopoulou Foundation for Research and Technology Hellas, Heraklion Crete, Greece	**12:00-12:15**	**Industrial production and selling of nanomagnetic particles. Economic analysis and process development** Teresa Castelo-Grande Universidade do Porto, Portugal	**12:00-12:15**	**Extraordinary Conductivity in Polymer Composites by In-situ Reduction of Segregated Graphene Oxide Networks** Alan B. Dalton University of Sussex, United Kingdom	**12:15-12:45** **INVITED**	**Growing Functional Nanosurfaces for Organic Electronics** L. Sosa Vargas Sorbonne University, Paris, FRANCE

		12:15-12:30	**Magnetic Classification: Impact on Nanotechnological applications** Paulo A Augusto Universidad de Salamanca, Spain	**12:15-12:30**	**Printable Graphene/natural rubber composites for adhesive strain gauges** P. J. Lynch University of Sussex, United Kingdom		
12:30-13:00 INVITED	**Polymers on surfaces: A closer look** Vasileios Koutsos The University of Edinburgh, UK	**12:30-12:45**	**Magnetic Hyperthermia: Current Status, Actual Research and Future Prospects** Paulo A Augusto Universidad de Salamanca, Spain	**12:30-12:45**	**Surface-Confined Fluorescent self-assembled molecular monolayer on graphene** D. Kreher Sorbonne Universite, France	**12:45-13:15 INVITED**	**Thermoelectric and Optical Properties of PEDOT:PSS thin films** M. Kong, L. A. Pérez, O. Zapata, M. Campoy-Quiles, A. Mihi, J. S. Reparaz, and M. I. Alonso Institut de Ciència de Materials de Barcelona, ICMAB-CSIC, Campus de la UAB, Spain
		12:45-13:00 YRA CANDIDATE	**Encapsulation of silver nanoparticle in DPPC based liposome induces caspase dependent and ROS -independent apoptosis and suppresses nanoparticle associated inflammatory response)** A. Yusuf Technical University Dublin, Ireland	**12:45-13:00**	**Exotic morphology of MoS2 and WS2 for various applications** E. Mijowska West Pomeranian University of Technology, Poland		
13:00-13:15	**Synthesis and Characterization of 2-(1-imidazolyl) ethyl methacrylate (ImEMA) based diblock copolymers and their use for the preparation of microfibrous membranes for efficient water treatment** M. Rikkou-Kalourkoti Frederick University, Cyprus	**13:00-13:15**	**Precision Control of Large-Scale Green Synthesis of Biodegradable Gold Nanodandelions as Potential Radiotheranostics** Leu-Wei Lo National Health Research Institutes, Taiwan	**13:00-13:15**	**Interfacial assembly of liquid-exfoliated nanosheets** S. P. Ogilvie University of Sussex, United Kingdom	**13:15-13:45 INVITED**	**Density Functional Theory On Nanostructures With Potential Catalytic Applications** Ch.E. Lekka[1], M. Gialampouki[2] [1] Department of Materials Science & Engineering, Univ. of Ioannina, Ioannina, Greece [2] Institute of Condensed Matter and Nanosciences, Université catholique de Louvain, Belgium
13:15-13:30	**Electrospun nanofibers reinforced coatings for protection of Al surfaces against corrosion** I. C. Vladu Centre of Electrochemical Surface Technology (CEST), Austria	**13:15-13:30**	**Biocompatible nanostructures for medical applications requiring high-magnetic moments** R. Morales University of the Basque Country UPV/EHU, Spain.	**13:15-13:30**			

13:30-15:00 **Lunch Break**
NN19 Poster (SEE POSTER PROGRAMME)– Exhibition-Networking
BUSINESS FORUM

15:00-17:30	**WS1: Photonics & Plasmonics** **Chair: S. Kassavetis** **Room: Crystal Hall**	**15:30-18:00**	**WS3: Nanomedicine and Pharma: Novel Drug Delivery Nanosystems** **Chair: K.Komvopoulos, V.Karagkiozaki** **Room: Dock Six 1**	**15:30-18:00**	**Women in Nano Science & Technology 2** **Chair: C. Lekka, University of Ioannina, Greece** **Room: Dock Six 2**
15:00-15:30 INVITED	**Exploring Localized Exciton-Polaritons for Strong Coupling of Quantum Emitters with Applications in Quantum Technologies** Emmanuel Paspalakis University of Patras, Greece	**15:00-15:30 INVITED**	**Nose-to-Brain Controlled Drug Delivery for Treatment of Chronic Central Nervous System Disorders** C. Kiparissides Aristotle University of Thessaloniki & Centre for Research and Technology Hellas, Greece	**15:00-15:30 INVITED**	**Printed and Flexible Receive Coils for Magnetic Resonance Imaging: from research to market** Ana Claudia Arias Berkeley, EECS, USA
15:30-15:45	**Lanthanum Hexaboride (LaB6) – A Highly Efficient NIR-Absorber for Laser-Welding, Laser-Sintering and 3D-Printing** V. Yavuz Sindlhauser Materials GmbH, Germany	**15:30-16:00 INVITED**	**Exosome in cardiovascular diseases: a complex world full of hope.** Barbara Zavan, PhD University of Ferrara, Italy	**15:30-16:00 INVITED**	**Sustainability Driven: Electronic Integration with Materials into Novel Components** S.G. Avataneo CRF S.C.p.A., Corso Settembrini, 40, 10135 Torino (Italy)
15:45-16:00	**Polarization of light emitted from exciton-polariton Bose-Einstein condensates in CdZnTe and CdZnMnTe microcavities** S. Piotrowska, University of Warsaw, Poland				
16:00-16:15	**Subwavelength confinement of light in hyperbolic metamaterials with nanoparticle coupling** M. Bancerek University of Warsaw, Poland	**16:00-16:15**	**Glucose- and H2O2-responsives Drug Delivery System Based on The Boronic Acid Chemistry** S. Belbekhouche, University of Paris, France	**16:00-16:30 INVITED**	**A Novel Virtual Cluster for Nanosensors** Fazilet Vardar-Sukan, Director, Sabanci University, SUNUM Nanotechnology Research Centre, Istanbul , Turkey
16:15-16:30	**Gd2O3: Yb3+, Er3+ nanoparticles doped with selected metals displaying anti-Stokes emission as an alternative in bioimaging** A. Wosztyl	**16:15-16:30**	**Nanomedicine advances in Cardiovascular Disease treatment** Dr, V.Karagkiozaki, MD, Cardiologist LTFN, AUTh, Greece		

	Polish Academy of Sciences, Poland				
16:30-16:45	**Diodes based on Self-assembly of Carbon Nanotubes on sub 10 nm metal nanogaps** E. Yengel KAUST, Saudi Arabia	**16:30-17:00**	**The quest for Immortality. Introducing Metadichol ® a Novel Telomerase Activator** Raghavan P.R* Nanorx Inc., USA	**16:30-17:00 INVITED**	**Do science and technology have a gender?** Maria Kogia Granta Design, UK
16:45-17:00	**Planar Nanogap RF Diodes Produced via Combination of Laser Ablation and Adhesion Lithography** H. Faber KAUST, Saudi Arabia				
		17:00-18:00	**Nanotechnology & Ophthalmology Round-Table:** **Chair: I. Tsinopoulos** **Unmet Clinical Needs in Opthalmology** **Prof.I. Tsinopoulos MD, Opthalmologist, AUTh** **Cornea disorders** **Dr. M.Tsatsos, Opthalmologist, Lecturer, Corneal Consultant, AUTh** **Nanotechnology and retinal disorders** **Dr.A.Karamitsos, Opthalmologist, LTFN, AUTh** **Cataract surgery and nanotechnology** **Dr. L.Lamprogiannis, Opthalmologist, LTFN, AUTh**	**17:00-17:30 INVITED**	**Chondrogenesis and osteogenesis by short protein regions** Theodora Choli-Papadopoulou Chemistry Dept. AUTh, Greece
				17:30-17:45	**Nanoformulations of ZnO NPs and Eugenol or Pelargonic acid for agricultural applications** Ch. Gkanatsiou *Aristotle University of Thessaloniki, Greece*

20:00	**NANOTEXNOLOGY 2018 BEACH PARTY at the Beach Bar RIVIERA** **Start of transport from Porto Palace Hotel at 18:00, Start of Return from Beach Bar at 23:00**

Thursday 4 July 2019

08:00 - 9:00	**Registration**						
	Chair: **Francesco De Angelis** Room: Timber Hall 1						
9:00-9:30 **KEYNOTE**	**Interfacing with the Brain Using Organic Electronics** **G. Malliaras** **University of Cambridge, United Kingdom**						
09:30-11:00	**WS2: Polymers 2** **Chair: K. Chrissopoulou** **Room: Timber Hall 2**	**09:30-11:00**	**WS3: Basic Research in Nanomedicine towards Clinical Practice** **Chair : I.Vizirianakis, K.Kousoulas** **Room: Dock Six 1**	**09:30-11:00**	**Bioelectronics 1 (Joined Session of NN19 & ISFOE19)** **Chair:** Francesco De Angelis **Room: Timber Hall 1**	**09:30-11:00**	**I3D 3 (Joined Session of NN19 & ISFOE19) 3D-Bioprinting** **Chair: Aylin Sendemir-Urkmez** **Room: Dock Six 2**
9:30-10:00 **INVITED**	**Development of polymers surfaces models and their reactivity with gas** T. Duguet CNRS – Université de Toulouse, Toulouse (France)	**9:30-10:00** **INVITED**	**The role of extracellular nanovesicles in the pathogenesis of osteosarcoma** N. Baldini University of Bologna	**9:30-10:00** **INVITED**	**Physical Modulation of Tubulin Self-Assembly for Microtubule-Based Nanomaterials and Therapies** Djamel Eddine Chafai Czech Academy of Sciences, Czechia,	**9:30-10:00** **INVITED**	**Functional inks for co-axial 3D bioprinting** **C**.Toncelli Empa Lerchenfeldstrasse 5, 9014 St. Gallen
10:00-10:15	**Applying block copolymer organization methods for assembling liquid crystalline nanotubes** M. Wrońska University of Warsaw, Poland	**10:00-10:15**	**Development of smart TiO2 nanoparticles with photo-induced anticancer properties** M.-E. Kassalia National Technical University of Athens, Greece	**10:00-10:30** **INVITED**	**Conductive elastomer bioelectronics based on nanoparticulate PEDOT** R.A. Green Imperial College London, United Kingdom	**10:00-10:30** **INVITED**	**Bioinspired Heart Valve Prosthesis made by Silicone Additive Manufacturing** Fergal Coulter ETH Zurich, Switzerland
10:15-10:30	**Z-selective palladium-catalyzed semi-hydrogenation of alkynes** J. Wagner Polish Academy of Sciences, Poland	**10:15-10:30**	**Nanoelectrospray high resolution mass spectrometry for the discovery of glycolipid biomarkers in neurodevelopmental disorders** A.D. Zamfir National Institute for R&D in Electrochemistry and Condensed Matter, Romania				
10:30-10:45	**Nanostructured Adsorbents and Membranes for Carbon Capture** Georgios Karanikolos* Khalifa University of Science & Technology, UAE	**10:30-10:45**	**Activation of cancer cell growth from a synergetic interaction between integrins and nanoparticles.** V.Gavriil National Hellenic Research Foundation, Greece.	**10:30-10:45**	**Utilisation of microbiosensors for monitoring phenols in whisky fermentation process** S.D. Psoma The Open University Walton Hall, United Kingdom	**10:30-11:00** **INVITED**	**Alginate tubular scaffolds as models of the neural tube** Evangelos Delivopoulos University of Reading, UK
10:45-11:00	**Poly methyl methacrylate-assisted exfoliation of graphite and its use in acrylonitrile butadiene styrene composites** S. Gentiluomo Istituto Italiano di Tecnologia, Italy	**10:45-11:00**	**Dextran interaction with polycrystalline cerium oxide thin film towards therapeutic applications** X. Ju Charles University, Czech Republic	**10:45-11:00** **EU Project**	**Electrochemical and acoustics methods of detection proteases at surfaces** T. Hianik Comenius University, Slovakia		

11:00-11:30	**Coffee Break** **NN19 Poster (SEE POSTER PROGRAMME) – Exhibition-Networking**

11:30-12:00	**Keynote Talk** **Chair: T.A. Mitsiadis** **Room Dock Six 1**						
11:30-12:00	**Controversies and key nano insights in long standing physiological and biological dogmas** Yannis Missirlis, University of Patras, Patras, Greece						
12:00-13:30	**WS3: Nanodentistry** **Chair T.A. Mitsiadis** **Room: Dock Six 1**	**12:00-13:30**	**Bioelectronics 2 (Joined Session of NN19 & ISFOE19)** **Chair: R.A. Green** **Room: Timber Hall 1**	**12:00-13:30**	**WS1: Nanoelectronics** **Chair: Christou** **Room: Timber Hall 2**	**12:00-13:30**	**I3D 4 (Joined Session of NN19 & ISFOE19) 3D-Bioprinting** **Chair: C**.Toncelli **Room: Dock Six 2**

Thursday 4 July 2019

12:00-12:30 INVITED	**Novelties in Restorative and Regenerative Dental Treatments** G. Orsini Polytechnic University of Marche, Italy	**12:00-12:30 INVITED**	**Organic Neurotechnologies: Materials and Devices** M. Bianchi Istituto Italiano di Tecnologia, Italy	**12:00-12:30 INVITED**	**Deep learning nanometrology: Denoising Scanning Electron Microscope images toward Line Edge Roughness measurement with sub-nm accuracy** V Constantoudis Nanometrisis p.c., Greece	**12:00-12:30 INVITED**	**Optimization of cell viability in bioprinting** Aylin Sendemir-Urkmez Ege University, Tyrkey
12:30-13:00 INVITED	**Use of organoids and organ-on-chip devices in dentistry** T. Mitsiadis University of Zurich, Switzerland	**12:30-12:45**	**Heterojunction metal oxide transistors for real-time bio-chemical sensing** Wejdan Alghamdi KAUST, Kingdom of Saudi Arabia	**12:30-13:00 INVITED**	**Nanostructures and Crystal Defects in Wide Bandgap Semiconductors** A. Christou University of Maryland, USA	**12:30-13:00 INVITED**	**BIOINKS - Lynchpin of 3D-Bioprinting: Opportunities and Challenges** Prasad Shastri University of Freiburg, Germany
		12:45-13:00	**Smartphone imaging for (duplex-)lateral flow assays** C. Ruppert Medical & Life Sciences, Hochschule Furtwangen, Germany				
13:00-13:15	**Antibacterial and bioactive coatings for biomedical devices: Ionized Jet Deposition of ceramic and metallic thin films** G.Graziani IRCSS Istituto Ortopedico Rizzoli, Italy	**13:00-13:15**	**Transparent, graphene-based Organic Charge-Modulated Field-Effect Transistor for chemical sensing** S.Lai University of Cagliari, Italy	**13:00-13:15**	**Three-ion-beam nanofabrication of plasmonic devices.** T. Leißner, S. Chiriaev, J. Fiutowski, H.-G. Rubahn University of Southern Denmark, Denmark	**13:00-13:15**	**Reconstruction of tomographic images by the vetorization technique applied to the manufacture of prostheses through rapid prototypage** Coutinho G. K. B., Universidade Federal do Rio Grande do Norte, Brasil.
				13:15-13:30	**Superconductor-Bosonic Insulator Transitions in Nanodiamond Films** G. Zhang NanoSYD, Denmark		

13:30-15:00 **Lunch Break**
NN19 Poster (SEE POSTER PROGRAMME) – Exhibition-Networking
BUSINESS FORUM

15:00-17:00	**WS2: Nanoconstruction** **Chair: M. Stafanidou** **Room: Timber Hall 2**	**15:00-17:30**	**Bioelectronics 3 (Joined Session of NN19 & ISFOE19)** **Chair: M. Bianchi** **Room: Timber Hall 1**	**15:00-17:30**	**Graphene 4 (Joined Session of NN19 & ISFOE19)** **Chair: Jaroslaw Jung** **Room: Dock Six 2**
15:00-15:30 INVITED	**Effect of Alfa fibers on the mechanical and thermal properties of compacted earth bricks** L. Saadi Univ. Cadi Ayyad, Morrocco	**15:00-15:30 INVITED**	**3D plasmonic nanostructures for bio-sensing in living cells** Francesco De Angelis Italian Institute of Technology, Italy	**15:00-15:30 INVITED**	**Self-consistent modeling of a plasmonic graphene-based midIR photodetectors** E. Lidorikis University of Ioannina, Greece
15:30-16:00 INVITED	**In situ consolidation by nanolime in Slovenia: A case study of the ceiling painting in The Great Hall of Brežice Castle** Andreja Padovnik University of Ljubljana, Slovenia	**15:30-15:45**	**Sugar-tethered and Zwitterionic PEDOTs for Virus Detections and Antifouling Biosensing** T. Goda Tokyo Medical and Dental University, Japan	**15:30-15:45**	**Graphene-based flexible triboelectric nanogenerators** G. Pace Istituto Italiano di Tecnologia, Italy
		15:45-16:00	**PVD-derived silver nanopillars for plasmonic sensors** M. Suster University of Warsaw, Poland	**15:45-16:00**	**Wafer-Scale MoS2 Films from Epitaxial Precursor with Tunable Thickness and Properties** Xiangming Xu King Abdullah University of Science and Technology (KAUST), SA
16:00-16:15	**Using nano-particles for enhancing the durability of binding systems** **E-C Tsardaka** **Aristotle University of Thessaloniki, Greece**			**16:00-16:15 YRA CANDIDATE**	**SiO2 microspherical resonators refining 2D semiconductors PL emission: fine-tuning in WSe2 and intensity enhancement in InSe** D. Andres-Penares University of Valencia, Spain
16:15-16:30	**Effect on nano-SiO2 and nano-CaO in autogenous Self-healing efficiency** E. Tsampali Aristotle University of Thessaloniki, Greece				

NN19
2-5 July 2019

Friday 5 July 2019

nanotexnology 2019

08:00 - 9:00	**Registration**				
	Keynote Talk **Chair: M. Chatzinikolaidou** **Room Crystal Hall**			**09:00-11:00**	**EU-USA WORKSHOP** **Chair: S. Friedrichs** **Room: Timber Hall 2**
9:00-9:30	**Ultrasensitive biomarker detection using luminescent lanthanide-based nanoparticles** Antigoni Alexandrou Ecole Polytechnique, CNRS, Palaiseau, France				
09:30-11:00	**WS2: Nanocharacterization** **Chair: M. Gioti** **Room: Timber Hall 1**	**09:30-11:00**	**WS3: Nanoparticles in Nanomedicine 2** **Chair: M. Chatzinikolaidou** **Room: Crystal Hall**	**09:00-09:30 INVITED**	**Focus on Nano-Manufacturing: US Trends and Opportunities.** G. Kousoulas Louisiana State University, USA
09:30-10:00 INVITED	**Nano scale phase separation and the superconductivity in KxFe2−ySe2: The Raman scattering study** Zoran Popovic The University of Belgrade, Serbia	**09:30-10:00 INVITED**	**Structure and Self-Assembly of Biomolecules through Molecular Simulations** A.N. Rissanou Foundation for Research and Technology - Hellas, Greece		
10:00-10:15	**Application of Surface Enhanced Raman Scattering to cationic surfactants exhibiting low critical micelle concentration** G.A. Voyiatzis, Foundation for Research & Technology-Hellas (FORTH), Greece	**09:30-10:00 INVITED**	**Conductive 3D scaffolds based on Carbon Nanotubes for Electroactive Tissue Regeneration** Nuria Alegret CIC biomaGUNE, Spain	**09:30-10:00 INVITED**	**The ethical concern about Nanotechnology** Fernand Doridot ICAM of Lille, France
10:15-10:30	**Imaging on the Helium Ion Microscope: from spider silk to photocatalytic nanocomposites** J. Fiutowski University of Southern Denmark, Denmark				
10:30-10:45	**Rotation Electron Diffraction for Structure Determination and Refinement:Applications in Nanocrystalline Thermoelectrics** A. Delimitis University of Stavanger, Norway	**10:30-10:45**	**Tuning the size and composition of nanohydrogels using a "phantom monomer" for biological applications.** G. Byk Bar Ilan University, Israel	**10:00-10:15**	**Nanofabrication perspectives in the framne of H2020** G. Katalagarianakis
				10:15-10:30	**Current activities in EU Nanofabrication: CORNET & SMARTLINE projects** E. Elmpasidou HOPE-A
10:45-11:00	**3DNano: Traceable 3D nanometrology** V. Constantoudis NCSR Demokritos, Greece,	**10:45-11:00**	**Microfluidic synthesis of polymeric nanoparticles for innovative applications in plant drug delivery** L. Chronopoulou University of Rome La Sapienza, Italy	**10:30-11:00 INVITED**	**Presentation of the Horizon 2020 - Work Programme 2018-2020 for "Nanotechnologies, Advanced Materials, Biotechnology and Advanced Manufacturing and Processing –NMBP"** Dr. Mara Chachamidou, Al. National Delegate for NMBP Programme Committee, Managing Authority for RTDI, General Secretariat for Research and Technology/GSRT
11:00-11:15	**Investigating physical properties of matter at the level of attograms and zeptograms** A. Serghei University of Lyon, France				

11:00-11:30	**Coffee Break** **NN19 Poster (SEE POSTER PROGRAMME) – Exhibition-Networking**

11:30-13:30	**Keynote** **Chair: S. Kassavetis** **Room: Timber Hall 1**	**11:30-13:30**	**WS3: Translational Nanomedicine, Regulations** **Chair: S. Briffa** **Room: Crystal Hall**	**11:30-13:30**	**New Business Development & Commercialization Workshop** **Chair: E.M Pechlivani** **Room: Timber Hall 2**
11:30-12:00 KEYNOTE	**Cool photonic and electronic plastics for a greener world** Natalie Stingelin1 Georgia Institute of Technology, USA			**11:30-12:00 INVITED**	**Technology Transfer: From the Research Bench to Successful Commercialization** G. Kousoulas Louisiana State University, USA
12:00-13:30	**WS2: Nanoengineering** **Chair: S. Kassavetis**	**11:30-12:00**	**The ethical concern about Nanotechnology**		

Friday 5 July 2019

	Room: Timber Hall 1	**INVITED**	Fernand Doridot ICAM of Lille, France		
12:00-12:30 **INVITED**	**Isolation of Single-Wired Transition Metal Monochalcogenides by Carbon Nanotubes** Y. Nakanishi Tokyo Metropolitan University, Japan.	**12:00-12:30** **INVITED**	**Analytical innovation for nanomaterial characterisation in complex media** S. Briffa University of Birmingham, UK	**12:00-12:30** **INVITED**	**Materials - from R&D to commercialisation** A. Sells Goodfellow Cambridge Limited, Ermine Business Park, Huntingdon, PE29 6WR, Cambridgeshire, United Kingdom
12:30-13:00 **INVITED**	**Atomistic view on thin-film and nanostructure formation on weakly-interacting substrates** K. Sarakinos Linköping University, Sweden	**12:30-13:00** **INVITED**	**Defining Nanotechnology: Legal Aspects of Preparing for Commercialization of Nanosilverwire circuits on Paper and Nanopesticides** Ilise L Feitshans European Scientific Institute Archamsp Technopole	**12:30-13:00** **INVITED**	**OET's OPV Commercial Roll Outs – Brand-new Apollo Series** Mr Darios Dimitriou Organic Electronic Technologies P.C. (OET)
13:00-13:15	**Denoising line edge roughness measurements using Hidden Markov Models** G. Papavieros N.C.S.R. Demokritos, Greece Nanometrisis p.c., Greece	**13:00-13:15**	**A regulatory perspective on nanomaterials or engineering nanomaterials related to food additives in the European Union** Ana Maria Rincon, European Food Safety Authority, Italy	**13:00-13:30** **INVITED**	**The Strategy of Sabanci University Nanotechnology Research and Application Center - SUNUM for Business Development** M.U.Özkaynak Sabanci University Nanotechnology Research and Application Center, Turkey
13:15-13:30 **EU PROJECT**	**Multiscale modelling of nanomaterials properties and bionano interface** **K. Kotsis** **University College Ireland**	**13:15-13:30** **EU PROJECT**	**Translating Cardiovascular Nanomedicine : The EU "NanoAthero" Experience** D Letourneur Paris Diderot University, France,		
				13:30-14:00 **INVITED**	**The Greek Strategy for Research and Innovation. Implementation and forthcoming calls for 2021-2027** Dr. Asterios Chatziparadisis, General Secretariat of Research & Technology, Greece

13:30-15:00	**Lunch Break** **NN19 Poster (SEE POSTER PROGRAMME) – Exhibition-Networking**

15:00-17:00	**WS3: Regenerative Medicine** **Chair:Y. Missirlis** **Room: Crystal Hall**
15:00-15:30 **INVITED**	**Microarchitected Mechanical Metamaterials** K. Komvopoulos University of California, USA
15:30-16:00 **INVITED**	**Natural multifunctional biomaterials for bone regeneration** M. Chatzinikolaidou University of Crete, Greece
16:00-16:15	**The implication of a short region of TGF-β1 in chondrogeneseis** Maria Pitou Aristotle University of Thessaloniki. Thessaloniki, Greece
16:15-16:30	**Amphiphilic PDMAEMA/Polyester miktoarm star-shaped polymers – the role of composition and length of arms on self-assembly behavior** A. Mielańczyk Silesian University of Technology, Poland
16:30-16:45	**Polymeric propolis nanoparticles for controlled drug delivery** A. Mavromanoli, LTFN, Greece
16:45-17:00	**Tribocorrosion mechanisms and interaction of Ti-based wear debris with bone cells** L.A. Rocha Campus de Azurém, Portugal
17:00-17:15	**Modification of the flow properties of dental cements** Mozumder. Mozumder Sayem UAE University, UAE
17:15-18:00	**NN19 Closing Ceremony – Young Researcher Awards**

WS1 POSTER SESSION **Tuesday 2 July (15:00-18:00): Poster Display & Presentations** **Wednesday 3 July: Poster Display**	
P1-1	Simulation of Memristor-based Memory By Crossbar Architecture Meenal Negi, Seshan Srinivasan, Lili He Department of Electrical Engineering, San Jose State University One Washington Square, San Jose, California, USA
P1-2	Control of Surface Atomic Distribution of PtPb Hexagonal Nanoplates for Methanol Oxidation Electrocatalysis Hee Jin Kim, Sang-Il Choi* Department of Chemistry and Green-Nano Materials Research Center, Kyungpook National University, Daegu 41566, Korea
P1-3	Synthesis and Electrochemical Performance of New Vanadium-based Materials for Secondary Lithium Batteries Y. U. Jeong, J. S. Kim Department of Materials Science & Engineering, Kyungpook National University, 80 Daehak-ro, Buk-gu, Daegu 41566, Korea
P1-4	Slot waveguide by nanolayers: exact modeling and synthesis V. Zhurikhina[1], I. Reduto[1,2], O. Morozova[1], S. Pelisset[2], M. Roussey[2] [1]Institute of Physics, Nanotechnology and Telecommunications, Peter the Great St. Petersburg Polytechnic University, Russia [2] Institute of Photonics, University of Eastern Finland, Yliopistokatu 2, Joensuu 80101, Finland
P1-5	The formation of porous gold nanoparticle arrays with multifunctional properties I. Krishchenko, E. Manoilov, S. Kravchenko, B.Snopok V.E. Lashkaryov Institute of Semiconductor Physics, NAS of Ukraine,41, Pr. Nauki, Kyiv, Ukraine
P1-6	Hot-Spots Examination Method for Porous Gold Nanoparticle Arrays in SERS Aplication S. Kravchenko, I. Krishchenko, E. Manoilov, B.Snopok V.E. Lashkaryov Institute of Semiconductor Physics, NAS of Ukraine,41, Pr. Nauki, Kyiv, Ukraine
P1-7	Fully Inkjet-Printed Photodetector Using a Graphene/Perovskite/Graphene Heterostructure Amal M. AlAmri, Siu-Fung Leung, Mohammad Vaseem, Atif Shamim, and Jr-Hau He King Abdullah University of Science and Technology, Thuwal, Kingdom of Saudi Arabia
P1-8	Photoinduced charge-transfer in functionalized MoS2 with zinc phthalocyanine R. Canton-Vitoria[1], H. B. Gobeze[2], V. M. Blass-Ferrando[3], J. Ortiz[3], Y. Jang[2], F. Fernández-Lázaro[3], Á. Sastre-Santos[3], Y. Nakanishi[4], H. Shinohara[4], F. D'Souza[2], N. Tagmatarchis[1] [1] Theoretical and Physical Chemistry Institute, National Hellenic Research Foundation,48 Vassileos Constantinou Avenue, Athens 11635, Greece [2] Department of Chemistry, University of North Texas, 305070 Denton, TX 76203-5017, USA [3] Área de Química Orgánica, Instituto de Bioingeniería, Universidad Miguel Hernández,03202 Elche, Spain [4] Department of Chemistry, Nagoya University, Nagoya 464-8602, Japan
P1-9	Improvement of Proton Conduction Property for Polymer Electrolyte Membrane with Cellulose Nanocrystals **(YRA CANDIDATE)** T. Nohara[1], K. Tabata[1], K. Koseki[1], R. Sato[1], T. Arita[2], A. Masuhara[1] [1]Graduate School of Science and Engineering, Yamagata Univ., Japan. [2]Institute of Multidisciplinary Research for Advanced Materials (IMRAM), Tohoku Univ., Japan
P1-10	Separation of mono-dispersed CH3NH3PbBr3 perovskite nanocrystals via Ostwald ripening **(YRA CANDIDATE)** K. Umemoto[1], M. Takeda[1], Y. Tezuka[1], B. Lyu[1], S. Rodbuntum[1], T. Chiba[2,3], S. Asakura[4], A., Masuhara[1,3] [1]Graduate School of Science and Engineering, Yamagata Univ., 4-3-16, Jonan, Yonezawa, Yamagata, Japan. [2]Graduate School of Organic Material Science, Yamagata Univ., 4-3-16, Jonan, Yonezawa, Japan. [3]Research Center for Organic Electronics, Yamagata Univ., 4-3-16, Jonan, Yonezawa, Japan. [4]Ise Chemicals Corporation, 1-3-1 Kyobashi, Chuo-ku, Tokyo, Japan
P1-11	Subwavelength confinement of light in hyperbolic metamaterials with nanoparticle coupling M. Bancerek[1], K. Czajkowski[1], R. Kotyński[1], T. Antosiewicz[1] *[1]Faculty of Physics, University of Warsaw Pasteura 5, 02-093 Warsaw, Poland*
P1-12	Production and efficiencies optimization of organic photovoltaic solar cells with P3HT:PC61BM as the active layer M. Bartolewska, K. Fusiek, O. Kochanowska, W. Mech, M. Krajewski, A. Wincukiewicz, K. P. Korona, M. Kamińska Faculty of Physics, University of Warsaw, Pasteura 5 st. 02-093, Warsaw, Poland
P1-13	The role of disorder in polarization of exciton-polaritons BECs in CdTe based microcavities S. Piotrowska, M. Król, R. Mirek, K. Lekenta, B. Seredyński, W. Pacuski, J. Szczytko and B. Piętka Institute of Experimental Physics, Faculty of Physics, University of Warsaw, Pasteura 5, 02-093 Warsaw, Poland
P1-14	Tailoring of AuNP decorations on a U-type optical fiber by laser irradiation: Dependence on the laser parameters D. Spasopoulos *, S. Kaziannis, A. Ikiades, C. Kosmidis Department of Physics, Atomic and Molecular Physics Laboratory, University of Ioannina, Greece
P1-15	Tunable Morphological and Optical Properties of Nanofibers Produced by Electrospinning from Dye-Doped Polymer Solutions M. Enculescu, A. Evanghelidis, I. Enculescu National Institute of Materials Physics, Laboratory of Multifunctional Materials and Structures, Atomistilor 405A, PO Box MG-7, 077125, Magurele, Romania
P1-16	Photoacoustic electron confinement effect in ultrathin Ge nanocrystalline films N. Tetianenko, Yu. Shwarts, A. Nikolenko, S. Mamykin, P. Shepeliavyi, V. Borblik, A. Korchevoi, V. Strelchuk, M. Shwarts and B. Snopok V.E. Lashkarev Institute of Semiconductor Physics of NAS of Ukraine, 41 Nauky pr., 03028 Kyiv, Ukraine
P1-17	SERS substrates with porous gold films obtained by pulsed laser deposition for bio-imaging O.F. Kolomys, A.S. Nikolenko, P.M. Lytvyn, E.G. Manoilov, I.M. Krishchenko, V.V. Strelchuk, B.A. Snopok V.E. Lashkaryov Institute of Semiconductor Physics, NAS of Ukraine,41, Pr. Nauki, Kyiv, Ukraine

P1-18	Electron microscopy study of the thermoelectric NaPbmSbS2+m (m=2, 10, 18) composites S. Kozakos[1], N. Vouroutzis[1], Ch. B. Lioutas[1], N. Frangis[1], T. J. Slade[2] and M. G. Kanatzidis[2] [1]Department of Physics, Aristotle University of Thessaloniki, GR-54124 Thessaloniki, Greece [2]Department of Chemistry, Northwestern University, 2145 Sheridan Road, Evanston, Illinois 60208, United States
P1-19	A Memristor's case study by AC electrical measurements V.Gkesios, G. Georgiadis, I. Samaras Materials Physics & Technology, Physics Department, Aristotle University of Thessaloniki, Greece
P1-20	Fe Ratio Effect in Fe:ZnO Nanoparticles as an Anode for Li-ion Batteries F.Sarf Çanakkale Onsekiz Mart University, Turkey
P1-21	From the idea to the reality of ThessOLED: Lighting your life, lighting your future A. Mavromanoli, A. Orfanos, N. Valasidis, C. Lazaridis, G. Bizmpos, A. Papadopoulos Department of Physics, Aristotle University of Thessaloniki, Greece

WS2 POSTER SESSION **Tuesday 2 July (15:00-18:00), Thursday 4 July (17:30-20:00): Poster Display & Presentations** **Wednesday 3 July, Friday 5 July: Poster Display**	
P2-1	Bifunctional Nanoscale Pt (100) Surface Collaborated with Ni(OH)2 for Promoting Volmer Step toward Hydrogen Evolution Reaction in an Alkaline Electrolyte Youngmin Hong, Sang-Il Choi* Department of Chemistry and Green-Nano Materials Research Center, Kyungpook National University, Daegu 41566, Korea
P2-2	Electrocatalytic liquid fuel oxidation reactions of β-PdH nanocatalysts Jeonghyeon Kim, Sang-Il Choi* Department of Chemistry and Green-Nano Materials Research Center, Kyungpook National University, Daegu 41566, Korea
P2-3	Electric field assisted dissolution of copper, aluminum and silver compact layers Pervan P.**1, Blažek Bregović V. 2, Fabijanić I. 3, Janicki V. 4 Ruđer Bošković Institute, Division of materials physics, Laboratory for optics and optical thin films, Bijenička 54, 10000 Zagreb, Croatia
P2-4	Continuous microfluidic synthesis of Pd nanocubes and PdPt core-shell nanoparticles and their catalysis of NO2 reduction Pekkari A.[*1], Say Z.[2], Sussarey-Arce A.[2], Langhammer C.[2] Härelind H.[1] Sebastian V.[3,4] Moth-Poulsen K.[1] [1]Applied Chemistry, Department of Chemistry and Chemical Engineering, Chalmers University of Technology, 41296 Gothenburg, Sweden [2]Chemical Physics, Department of Physics, Chalmers University of Technology, 41296 Gothenburg, Sweden [3]Department of Chemical Engineering, Aragon Institute of Nanoscience (INA), University of Zaragoza, Spain 4Networking Research Center on Bioengineering, Biomaterials and Nanomedicine, CIBER-BBN, 28029-Madrid, Spain
P2-5	Magnetism and Magnetic Particles for Wastewater and Leachates Treatment. Paulo A Augusto [1], Teresa Castelo-Grande [2,*], Javer Rico [1], Roberto Iglesias [1], Jorge Marcos [1], Leticia Merchán [1], Lorenzo Hernández [1], Domingos Barbosa [2], Angel M Estevez [1] 1 Departamento de Ingeniería Química y Textil, Facultad de Ciencias Quimicas, Universidad de Salamanca, Spain 2 Departamento de Engenharia Química, Faculdade de Engenharia, Universidade do Porto, Portugal
P2-6	Infrared laser cleaning of books and manuscripts: research and development of advanced techniques V. Jandová[1], L. Mašková[1], M. Sokolová[2], A. Jadlovská[2], R. Fajgar[1], J. Smolík[1] [1]Institute of Chemical Process Fundamentals of the CAS, Rozvojová 135, Prague, Czech Republic [2]National Library of the Czech Republic, Klementinum 190, Prague, Czech Republic
P2-7	3D Perspectives on SnO2 based systems for gas sensing devices A. C. Kuncser[1], M. C. Istrate[1], V. A. Maraloiu[1], C. Radu[1], I. D. Vlaicu[1], S. Somacescu[2], C. Ghica[1] [1]National Institute of Materials Physics, 077125 Magurele, Romania [2]"Ilie Murgulescu" Institute of Physical Chemistry, 060021, Bucharest, Romania
P2-8	On the thermal stability of mesoporous metal oxide systems decorated with metallic nanoparticles for gas sensing applications M. C. Istrate[1], V. A. Maraloiu[1], C. Radu[1], I. D. Vlaicu[1], S. Somacescu[2], A. Kuncser[1], C. Ghica[1] [1]National Institute of Materials Physics, 77125 Magurele, Romania [2]"Ilie Murgulescu" Institute of Physical Chemistry, 060021, Bucharest, Romania
P2-9	Self-assembled monolayers of a xanthine derivative on few layer graphene and Au(111) studied by STM and LEED I. Baltaci1, M. Schulte1, C. Westphal1 (Experimentelle Physik 1, TU Dortmund), Otto-Hahn-Straße 4a, 44227 Dortmund, Germany
P2-10	Studies of low-temperature resistivity saturation in SmB6 thin films I. Baťko[1], M. Baťková[1], F. Stobiecki[2], B. Szymański[2], P. Kuświk[2], M. Mihalik[1] [1] Institute of Experimental Physics, Slovak Academy of Sciences, Watsonova 47, 040 01 Košice, Slovak Republic [2] Institute of Molecular Physics, Polish Academy of Sciences, ul. Smoluchowskiego 17, 60-179 Poznań, Poland
P2-11	Visualization of magnetic domains in permalloy based soft magnetic composites with a hybrid insulating coating composed of phenolic resin and ferrite nanofibers M. Baťková[1], I. Baťko[1], M. Strečková[2], J. Szabó[2] [1] Institute of Experimental Physics, Slovak Academy of Sciences, Watsonova 47, 040 01 Košice, Slovak Republic [2] Institute of Materials Research, Slovak Academy of Sciences, Watsonova 47, 040 01 Košice, Slovak Republic
P2-12	Stabilization of the MXene monolayers via 3-Aminopropyltriethoxysilane grafting M. Scheibe, V. Ranc, C. Aparicio, J. Kašlík, M. Otyepka, B. Scheibe Regional Centre for Advanced Technologies and Materials, Palacký University Olomouc, 17. listopadu 1192/12, 771 46, Olomouc, Czech Republic
P2-13	Synthesis of hybrid magnetic-plasmonic nanoresonators for SERS and SHINERS spectroscopy M. Zygielo, A. Królikowska, A. Kudelski 1Faculty of Chemistry, University of Warsaw,Pasteura 1, 02-093 Warsaw, Poland

P2-14	Relief nanostructures by etching of poled glasses A. Lipovskii[1,2], V. Kaasik[1], D. Rashodchikov[1], I. Reduto[1,2,3], V. Zhurikhina[1] [1]Institute of Physics, Nanotechnology and Telecommunications, Peter the Great St. Petersburg Polytechnic University, St. Petersburg 195251, Russia [2] Department of Physics and Technology of Nanostructures, St. Petersburg Academic University RAS, Khlopina 8/3, St. Petersburg 194021, Russia [3] Institute of Photonics, University of Eastern Finland, Yliopistokatu 2, Joensuu 80101, Finland
P2-15	Fabrication and characterization of electrospun plasma treated membrane based on Gum Arabic/PVA/silver nanoparticles Mayza Ibrahim[1], Michal Krejčík[2], Vinod V.T. Padil[1], Mohamed Eldessouki[2], and Miroslav Cerník[1] [1] Laboratory of Chemical Remediation Department, Institute for Nanomaterials, Advanced Technology and Innovation, Technical University of Liberec, Liberec, Czech Republic [2]Department of preparation and analysis of nanostructures, Institute for Nanomaterials, Advanced Technology and Innovation, Technical University of Liberec, Liberec, Czech Republic
P2-16	Gold Nanoparticles Synthesis and Investigation of their Effects on Vegetable Seeds Germination A. Cazacu[1], E. L. Ursu[2], G. C. Teliban[1], I. Bodale[1], V. Stoleru[1] [1]"Ion Ionescu de la Brad" University of Agricultural Sciences and Veterinary Medicine, Faculty of Horticulture, 3 M. Sadoveanu Alley, 700490, Iasi, Romania [2]"Petru Poni" Institute of Macromolecular Chemistry, Centre of Advanced Research in Bionanoconjugates and Biopolymers, 700487, Iasi, Romania
P2-17	Photodegradation of organic and inorganic wastewater pollutants by N-Se doped TiO2 L. Bergamonti[1], C. Graiff[1], L. Lazzarini[2], P.P. Lottici[3] [1]Department of Chemistry, Life Sciences and Environmental Sustainability, University of Parma, Parco Area delle Scienze 17/A, 43124 Parma, Italy [2]IMEM-CNR, Parco Area delle Scienze 37/A, 43124 Parma, Italy [3]Department of Mathematical, Physical and Computer Sciences, University of Parma, Parco Area delle Scienze 7/A, 43124 Parma, Italy
P2-18	Cellulose nanocrystals functionalized by silver nanoparticles for consolidation and preservation of paper Laura Bergamonti[1], Claudia Graiff[1], Marianna Potenza[1], Andrea Lorenzi[1], Anna Maria Sanangelantoni[1], Laura Lazzarini[2], Pier Paolo Lottici[3] [1]Department of Chemistry, Life Science and Environmental Sustainability, University of Parma, Parco Area delle Scienze 17/A, I-43124, Parma, Italy [2]Department of Mathematical, Physical and Computer Sciences, University of Parma, Parco Area delle Scienze 7/A, I-43124, Parma, Italy cIstituto dei Materiali per l'Elettronica ed il Magnetismo, IMEM, Consiglio delle Ricerche, Parco Area delle Scienze 37/A, I-43124, Parma, Italy
P2-19	Investigation of structural, morphological and electrical characterization of hot-wire metal oxides G. Papadimitropoulos[1,2], V. Tsouti[1], D. N. Kouvatsos[1], I. Kostis[2], D. Goustouridis[2], N. Stathopoulos[2], S. Kaminaris[2], D. Davazoglou[1] [1]NCSR Demokritos, Institute of Nanoscience and Nanotechnology, Terma Patriarchou Grigoriou, Aghia Paraskevi, Greece [2]University of West Attica, Faculty of Engineering, Department of Electrical and Electronics Engineering, Thivon Av. 250, Aegaleo, Greece
P2-20	Electrochemical deposition of simple and binary semiconductor nanowires and their properties A. Lazavenka, G. Gorokh, A. Zakhlebayeva, A. Poznyak R&D Lab 4.10 "Nanotechnologies", Department of Micro- and Nanoelectronics, Belarusian State University of Informatics and Radioelectronics, Belarus
P2-21	Multicomponent Sn–Mo–O-containing films formed in anodic alumina matrixes by ionic layer deposition A. Zakhlebayeva, A. Lazavenka, G. Gorokh R&D Lab 4.10 «Nanotechnologies», Department of Micro- and Nanoelectronics, Belarusian State, University of Informatics and Radioelectronics, Belarus
P2-22	Photocatalytic activity of silver modified TiO_2 nanostructures R. Drunka, J. Grabis, D. Jankovica, I. Steins, A.Krumina Institute of Inorganic Chemistry, Faculty of Applied Chemistry and Material Science, Riga Technical University, Paula Valdena street 7, Riga, Latvia
P2-23	Pd/N-3D electrode for non-enzymatic glucose electrochemical sensor A. Brouzgou[1], S. Jing2, Z.-X.Liang[3], C. Lo Vecchio[4], A. Seretis[1], V. Baglio[4], P. Tsiakaras[1,5,6,*] [1] Laboratory of Alternative Energy Conversion Systems, Department of Mechanical Engineering,School of Engineering, University of Thessaly, Volos, Greece. [2] School of Information and Control Engineering, China University of Mining and Technology, Xuzhou, Jiangsu, 221008, China [3] Key Laboratory of Fuel Cell Technology of Guangdong Province, School of Chemistry and Chemical Engineering, South China University of Technology, Guangzhou, P.R. China [4] Institute for Advanced Energy Technologies "Nicola Giordano", CNR-Consiglio Nazionale delle Ricerche, Messina, Italy. [5] Laboratory of Electrochemical Devices based on Solid Oxide Proton Electrolytes, Institute of High Temperature Electrochemistry, Yekaterinburg Russia. [6] Laboratory of Materials and Devices for Clean Energy, Ural Federal University, Yekaterinburg, Russia
P2-24	Oxygen Reduction Reaction on Novel Carbon Supported PtxIry And PtxPdy Electrocatalysts A. Seretis[1], A. Brouzgou[1], P. Tsiakaras[1,2,3,*] [1] Laboratory of Alternative Energy Conversion Systems, Department of Mechanical Engineering, School of Engineering, University of Thessaly, Volos, Greece. [2] Laboratory of Electrochemical Devices based on Solid Oxide Proton Electrolytes, Institute of High Temperature Electrochemistry, Yekaterinburg Russia. [3] Laboratory of Materials and Devices for Clean Energy, Ural Federal University, Yekaterinburg, Russia
P2-25	Pressure gradient effect on spin crossover compounds investigated by FORC diagram method I. Rusu[1], I. Gural'skiy[2,3], G. Molnar[4] and, A. Rotaru[1,*] [1]Faculty of Electrical Engineering and Computer Sci. & Research Center MANSiD, Stefan cel Mare University, Suceava, Romania (*aurelian.rotaru@usm.ro) [2]UkrOrgSyntez Ltd., 67 Chervonotkatska St., 02094 Kyiv, Ukraine. [3]Department of Chemistry, Taras Shevchenko National University of Kyiv, 64 Volodymyrska St., 01601 Kyiv, Ukraine [4]LCC, CNRS & Université de Toulouse (UPS, INP), Toulouse, France
P2-26	Development of a new superhydrophobic coating D. Portet[1], V.Delhorbe[1], O. Favrat[1], C. Delaite[2], S. Bistac[2], G. Garreffa[2] [1.] SurfactisTechnologies, Angers France [2.] Université de Haute-Alsace, LPIM, Mulhouse France
P2-27	Crystallization of PE-b-PEO copolymer thin films evidenced by FTIR surface spectroscopy and atomic force microscopy M. Brogly, D. Fischer, S. Bistac LPIM - Université de Haute Alsace, 3b rue Alfred Werner – 68093 Mulhouse, France
P2-28	Nanostructured permanent magnets: from materials and processes to geopolitical prospects and future challenges A. Filippas, G. Sempros*, C. Sarafidis, Dept. of Physics, Aristotle University of Thessaloniki, 54124 Thessaloniki, Greece

P2-29	Electrical properties of polymer matrix composites reinforced with graphene, mwcnts and the hybrid mixture A.T. Dimitrov E. Damjanovska and B. Andonovic, Faculty of Technology and Metallurgy, University SS Cyril and Methodius, Rudjer Boskovic 16, 1000 Skopje, Republic of North Macedonia
P2-30	1D Ferroic Nanostructures by a Novel Template-Assisted Solution-Based Process Using the Kirkendall Process Daniela Caruntu, Jacob Lentz2, Gabriel Caruntu Department of Chemistry & Biochemistry, Central Michigan University 1200, S. Franklin St., Mount Pleasant, MI, 48859, USA
P2-31	Entropic production rate drives five and six-fold convective micro/nano-patterns via Rayleigh- Bernard instabilities in curved and planar surfaces V. Gavriil, N. Spyropoulos-Antonakakis, A. C. Cefalas, Z. Kollia and E. Sarantopoulou Theoretical and Physical Chemistry Institute, National Hellenic Research Foundation, 48 Vassileos Constantinou Avenue, 11635 Athens, Greece
P2-32	DaNa2.0 Knowledge Base - Quality-approved information on Safety of Nanomaterials C. Marquardt[1], N. Bohmer[4], H. F. Krug[2], D. Kuehnel[3], A. Mattern[3], C. Steinbach[4], K. Nau[1] [(1)] Karlsruhe Institute of Technology (KIT), Institute for Automation and Applied Informatics, Hermann-von-Helmholtz-Platz 1, 76344 Eggenstein-Leopoldshafen, Germany [(2)] NanoCASE GmbH, St. Gallerstr. 58, 9032 Engelburg, Switzerland [(3)] Helmholtz-Centre for Environmental Research (UFZ), Department Bioanalytical Ecotoxicology, Permoserstrasse 15, 04318 Leipzig, Germany [(4)] DECHEMA e.V. Society for Chemical Engineering and Biotechnology, Theodor-Heuss-Allee 25, 60486 Frankfurt a. M., Germany
P2-33	Polymer/Carbon nanostructures composites for advanced gas applications A. Grozdanovr, P. Paunovik, I. Dimitrievska, G. Cepisevski, A. Dimitrov, Faculty of Technology and Metallurgy, University Ss Cyril and Methodius in Skopje, Ruger Boskovic 16, 1000 Skopje, republic of North Macedonia
P2-34	Mechanistic Object-oriented Modeling of Interfacial Dynamics: Cooperative Adsorption Described by Sticking Probability I. Krishchenko, E. Manoilov, S. Kravchenko, B.Snopok V.E. Lashkaryov Institute of Semiconductor Physics, NAS of Ukraine, 41, Pr. Nauki, Kyiv, Ukraine
P2-35	Z-selective palladium-catalyzed semi-hydrogenation of alkynes J. Wagner[1,2], R. Kusy[1], K. Grela[1] [1]Institute of Organic Chemistry, Polish Academy of Sciences, Kasprzaka 44/52, 01-224 Warsaw, Poland [2]Faculty of Physics, University of Warsaw, L. Pasteura 5, 02-093 Warsaw, Poland
P2-36	Synthesis of ultrasmall stabilised gold nanoparticles A.Wosztyl, A.Jędrych, M.Wójcik Laboratory of Organic Nanomaterials and Biomolecules, Faculty of Chemistry, University of Warsaw, Ludwika Pasteura 1, 2-093, Poland
P2-37	Applying block copolymer organization methods for assembling liquid crystalline nanotubes M. Wrońska[1,2], A. Leniart[2], A. Sitkiewicz[2], P.W. Majewski[2] [1]Faculty of Physics, University of Warsaw, Ludwika Paste0ura 5, 02-093 Warsaw, Poland [2]Faculty of Chemistry, University of Warsaw, Ludwika Pasteura 1, 02-093 Warsaw, Poland
P2-38	Synthesis of Sr2FeMoO6–δ nanostructures in the anodic alumina matrices by the sol-gel method G. Gorokh[1], A. Zakhlebaeva[1], M. Yarmolich[2], N. Kalanda[2] [1]R&D Lab 4.10 "Nanotechnologies", Department of Micro- and Nanoelectronics, Belarusian State University of Informatics and Radioelectronics, 220013 Minsk, Brovki Str. 6, Belarus [2]Scientific-Practical Materials Research Centre, NAS of Belarus, Minsk 220072, Belarus
P2-39	Tight Binding Hamiltonian for monolayer 2H-MoS_2 M. Nousi, E. Chatzikyriakou, P. Argyrakis Computational Physics Group, Department of Physics, Aristotle University of Thessaloniki, 54124 Thessaloniki, Greece
P2-40	Nanomechanical Characterization of Electrodeposited Nanocomposite Coatings K. Tsongas[1], G. Banias, D. Tzetzis[1,2], D. Bochtis[1] [1]Centre for Research and Technology-Hellas (CERTH), 6th km Charilaou-Thermi Rd, GR 57001 Thermi, Thessaloniki, Greece [2]International Hellenic University, School of Science and Technology, GR 57001 Thermi, Thessaloniki, Greece
P2-41	Nanosphere Lithography for ZnO Nanostructures Fabrication D. Tselekidou[1], N. Kalfagiannis[2], S. Kassavetis[3], M. Gioti [3], P. Patsalas[1] [1] Physics Department, Aristotle University of Thessaloniki, Thessaloniki, GR-54124, Greece [2]School of Science and Technology, Nottingham Trent University, Nottingham, NG11 8NS, United Kingdom [3] Nanotechnology Lab LTFN, Physics Department, Aristotle University of Thessaloniki, Thessaloniki, GR-54124, Greece
P2-42	Symmetry breaking effect on magnetism at Fe/Pt interfaces D. Karfaridis[1], Th. Kehagias[1], E. Th. Papaioannou[2], G. Vourlias[1] [1]Department of Physics, Aristotle University of Thessaloniki, 54124 Thessaloniki, Greece [2]Department of Physics and National Research Center OPTIMAS, Technical University of Kaiserslautern, 67663 Kaiserslautern, Germany
P2-43	Highly-sensitive exponential gauge factor strain sensors based on graphene-silicone emulsion composites Marcus O'Mara[1], Sean P. Ogilvie[1], Matthew J. Large[1], Aline Amorim Graf[1], Peter J. Lynch[1], Jonathan P. Salvage[2], Alice A. K. King[1], Alan B. Dalton[1] [1]Physics and Astronomy, University of Sussex, Brighton, UK [2] Pharmacy and Biomolecular Sciences, University of Brighton, Brighton, UK
P2-44	Antimicrobial Activity of Novel Organomodified Clay Nanoparticles for Dental Applications T. Vouzara[1], A. Nikolaidis[1], V. Economou[2], D.Achilias[3], E. Koulaouzidou[1] [1]School of Dentistry, Aristotle University of Thessaloniki,Thessaloniki 541 24, Greece [2] School of Veterinary Medicine, Aristotle University of ThessalonikiThessaloniki 541 24, Greece [3]Department of Chemistry, Aristotle University Thessaloniki, Thessaloniki 541 24, Greece
P2-45	Development of the synthetic methods towards the selected weakly coordinating anions M. Grochowska[1], T. Jaroń[2] [1]Faculty of Physics, University of Warsaw, Ludwika Pasteura 5, 02-093 Warsaw, Poland [2]Laboratory of Chemical Energy Carries, Centre of New Technologies, Stefana Banacha 2c, 02-097 Warsaw, Poland

P2-46	Nanofabrication of Titanium Nitride Plasmonic Surfaces S. Panos, D. Tselekidou, S. Kassavetis, P. Patsalas Physics Department, Aristotle University of Thessaloniki, Thessaloniki, GR-54124, Greece
P2-47	Nano precipitates of impurity defects in superhard cubic boron nitride crystals A.C. Joita[*1,2], S.V. Nistor[1,2], L.C. Nistor[1] [1]National Institute of Materials Physics, Atomistilor 405A, 077125, Magurele, Romania [2]University of Bucharest, Faculty of Physics, Atomistilor 405, 077125, Magurele, Romania
P2-48	Nanostructured impurities in superhard crystalline cubic boron nitride L. C. Nistor, S. V. Nistor, A. C. Joita National Institute of Materials Physics, Atomistilor 405A, Magurele-Ilfov, 077125 Romania
P2-49	SiC-based hydrogen sensor using tantalum oxide film composed of nano thickness S. Kim, Department of Electronic Engineering, Kyungnam University, Changwon, Kyungnam, South Korea
P2-50	Fabrication and Electrical characterization of smOLED devices Ankur Singh, Joep Geurts, Adil Malik, Xenofon Nikolaou ,Mathijis Van Kooten POCT Services Pvt Ltd 1, OLED Technologies B.V. 2,3,4,5
P2-51	Surface nano-patterning by bulk processes induced with focused ion beams S. Chiriaev[1], L. Tavares[1], V. Adashkevich[2], R. Taboryski[3], H-G. Rubahn[1] [1]Mads Clausen Institute, NanoSYD, University of Southern Denmark, Sønderborg, 6400, Denmark [2]Mads Clausen Institute, Centre for Industrial Electronics, University of Southern Denmark, Sønderborg, 6400, Denmark [3]National Centre for Nano Fabrication and Characterization, Technical University of Denmark, Kongens Lyngby, 2800, Denmark
P2-52	AFM as a nano-tool for investigation of morphological features and magneto-elastic properties of magnetic elastomers with nano-sized magnetic dopants G. E. Iacobescu [1], I.Tirca [1] ,I. Bica[2,3], [1]Department of Physics, University of Craiova, 200585 Craiova, Romania [2]Department of Electricity and Magnetism, West University of Timisoara, Timisoara, Romania [3]Joint Institute for Nuclear Research, 141980 Dubna, Russia
P2-53	Optical Properties of the Carbon Nitride Synthesized in Macroporous Silicon E. Chubenko, V. Gordyunin, V. Bondarenko, V. Borisenko Micro- and Nanoelectronics Department, Belarusian State University of Informatics and Radioelectronics P.Brovka str. 6, Minsk, Belarus
P2-54	Anodizing conditions influence on morphological parameters of niobium-oxide 3-D nanofilms Pligovka A.*, Gorokh G. R&D Lab 4.10 “Nanotechnologies”, Belarusian State University of Informatics and Radioelectronics, Brovka Str. 6, Minsk 220013, Republic of Belarus
P2-55	Metal oxides nanostructures; growth control and integration in chemical sensing devices Abderrahim Moumen1*, Dario Zappa1, Nicola Poli1, Elisabetta Comini1 SENSOR Laboratory, University of Brescia, Via D. Valotti 9, 25133 Brescia, Italy

WS3 POSTER SESSION **Thursday 4 July (17:30-20:00): Poster Display & Presentations** **Friday 5 July: Poster Display**	
P3-1	Label-free determination of prostate specific membrane antigen in human whole blood at nanomolar levels by magnetically assisted surface enhanced Raman spectroscopy Z. Chaloupková, A. Balzerová, J. Bařinková, Z. Medříková, P. Šácha, V. Ranc, J. Konvalinka, R. Zbořil Regional Centre of Advanced Technologies and materials, Faculty of Science, Palacký University in Olomouc, Šlechtitelů 27, CZ- 77146 Olomouc, Czech republic
P3-2	Nanotechnology and Vaccine Development D. Skavatsos, D. Charalambous Department of Pharmacy, School of Health Sciences, Frederick University, 7 Yianni Freiderickou, Pallouriotissa 1036, Nicosia, Cyprus
P3-3	Radiochemical synthesis and preclinical evaluation of 68Ga-labeled NODAGA-hydroxypropyl-beta-cyclodextrin I. Hajdu[1], G. Trencsényi[1], K. Csige[1], É. Fenyvesi[2], M. Malanga[2], L. Szente2, G. Vasvári3, J. Váradi3, M. Vecsernyés3, F. Fenyvesi3 1Division of Nuclear Medicine and Translational Imaging, Medical Imaging Department, University of Debrecen, Debrecen, Hungary, 2Cyclolab Cyclodextrin R&D Laboratory Ltd., Budapest, Hungary, 3Department of Pharmaceutical Technology, University of Debrecen, Debrecen, Hungary
P3-4	Mapping and sequencing of ganglioside in cerebellum by nanoelectrospray high resolution tandem mass spectrometry R. Ica[1], M. Sarbu[1], A. Petrut[1], C.V.A. Munteanu[2], A.J. Petrescu[2], A.D. Zamfir[1] [1] National Institute for R&D in Electrochemistry and Condensed Matter, Timisoara, Romania [2] Institute of Biochemistry of the Romanian Academy, Bucharest, Romania
P3-5	Determination of the structure and functions of glycophingolipids in human nucleus caudatus by Orbitrap multistage mass spectrometry M.Sarbu[1], R. Ica[1], A. Petrut[1], C.V.A. Munteanu[2], A.J. Petrescu[2], A.D. Zamfir[1] [1] National Institute for R&D in Electrochemistry and Condensed Matter, Timisoara, Romania [2] Institute of Biochemistry of the Romanian Academy, Bucharest, Romania
P3-6	Multifunctional hybrid magnetic nanoparticles as multimodal imaging agents: design and in vitro evaluation G. Dodi, C.M. Uritu, F. Cojocaru, V. Balan, I.L. Serban, B.I. Tamba, C.T. Mihai Grigore T. Popa University of Medicine and Pharmacy of Iasi, 16 University Street, Romania

P3-7	Green synthesis and characterization of silver nanoparticles (AgNPs) using plant extracts I. K. Siakavella[1], F. Lamari [2], E. Gianni[3], D. Papoulis[3], M. Orkoula[4], A. Kapnisi[4], V. Tangoulis[5], K. Avgoustakis[1], S. Hatziantoniou[1] [1]Laboratory of Pharmaceutical Technology, [2] Laboratory of Pharmacognosy & Chemistry of Natural Products [3] Department of Geology, University of Patras, 26504, Patras, Greece, [4] laboratory of Instrumental Pharmaceutical Analysis, Department of Pharmacy, School of Health Sciences, [5] Department of Chemistry, University of Patras, 26504, Patras, Greece
P3-8	Effect of Different Lipid Nanocarriers on Percutaneous Absorption of Curcumin A. Liakopoulou[1], E. Mourelatou[2], K. Avgoustakis[1] S. Hatziantoniou[1] [1] Department of Pharmacy, Health Sciences School, University of Patras, 265 04, Rion, Greece [2] Department of Life and Health Sciences, School of Sciences and Engineering, University of Nicosia, CY-1700, Nicosia, Cyprus
P3-9	Manuka Honey/L-arginine and propolis loaded nanofibers for wound healing applications O.M. Ionescu[1], A.T. Iacob[1], M. Dragan[1], A. Mignon[2], S. Van Vlierberghe[2], L. Profire[1] [1] Department of Pharmaceutical Chemistry, "Grigore T. Popa" University of Medicine and Pharmacy of Iași, 16 University Street, Iasi, Romania [2] Department of Organic and Macromolecular Chemistry, Ghent University, Krijgslaan 281 9000 Gent, Belgium
P3-10	Research on biological activity of sugar-centered star-shaped polymethacrylatic conjugates with doxorubicin against HCT-116 cancer cells Ł. Mielańczyk[1], A. Mielańczyk[2], M. Skonieczna[3], D. Neugebauer[2], R. Wojnicz[1] [1]. Department of Histology and Cell Pathology, School of Medicine with Division of Dentistry in Zabrze, Medical University of Silesia, Jordana 19, 41-808 Zabrze, Poland [2]. Department of Physical Chemistry and Technology of Polymers, Faculty of Chemistry, Silesian University of Technology, M. Strzody 9, 44-100, Gliwice, Poland [3]. Biosystems Group, Institute of Automatic Control, Silesian University of Technology, Akademicka 16, 44-100 Gliwice, Poland
P3-11	Devolopment of magnetic nanosystems as multifunctional entities for breast cancer therapy V. Balan, G. Dodi, S.Malihin, V.C. Ursachi, L. Verestiuc Grigore T. Popa University of Medicine and Pharmacy of Iasi, 16 University Street, Romania
P3-12	Hydroxyapatite nanoparticles influence on bone development and bone turnover biomarkers concentration. The in ovo study. A. Matuszewski[1], M. Lukasiewicz[1], E. Sawosz[2], J. Niemiec[1] [1]Department of Animal Breeding and Production, [2]Department of Animal Nutrition and Biotechnology, Warsaw University of Life Sciences Ciszewskiego 8, 02-786 Warsaw, Poland
P3-13	High-volume manufacturing of bioanalytical microfluidic lab-on-a-chip devices by Roll-to-Roll (R2R) imprinting S. Resch[1], C. Schimpel[1], G. Bijelic[2], N. Briz Iceta[2], A. Egizabal Luzuriaga[2], M. Smolka[3], J. A. Tamayo-Ramos[4], A. Falk[1] [1]BioNanoNet Forschungsgesellschaft mbH, Steyrergasse 17, 8010 Graz, Austria, [2] Tecnalia Research & Innovation, Leonardo Da Vinci, 11, Miñano, Spain, [3]JOANNEUM RESEARCH Forschungsgesellschaft mbH, MATERIALS – Institute for Surface Technologies and Photonics Weiz, Austria, [4]ICCRAM – Universidad de Burgos Plaza Misael Bañuelos s/n, 09001 Burgos, Spain
P3-14	Size and Charge Dependant Viability and Inflammatory Response Of Polymeric Nanoparticle Carriers Against Human Macrophages Nashwa Osman, Darren Sexton, Imran Saleem School of Pharmacy and Biomolecular Sciences, Liverpool John Moores University, Liverpool, UK
P3-15	Anti-inflammatory Nanoparticles against Inflammatory Bowel Diseases E. Papadopoulou, S. Dermenoudis, V. Karagiozaki, S. Logothetidis Nanotechnology Lab-LTFN, Aristotle University of Thessaloniki, Thessaloniki, Greece
P3-16	Evaluation of toxicological effects of 2D-MoS2 toward different biological models B. Domi[1], C. Rumbo Lorenzo[1,2], R. Santamaria San Martin[1], R. Quesada Pato[1,2], J.A. Tamayo-Ramos[1] [1]. International Research Center in Critical Raw Materials for Advanced Industrial Technologies (ICCRAM), University of Burgos, 09001 Burgos,Spain. [2]. Department of Chemistry, Faculty of Science, Universidad de Burgos, 09001, Burgos, Spain
P3-17	Tuning the size and composition of nanohydrogels using a "phantom monomer" for biological applications Sarin Palakkal, Gerardo Byk. Bar Ilan University (Department of Chemistry) Ramat gan, Israel
P3-18	Controlled clustering of iron oxide nanocubes for magnetic fluid hyperthermia treatment. S. K. Avugadda[*1,2], D. Niculaes[1,2], A. Lak[1] and T. Pellegrino[1**]. [1] Istituto Italiano di Tecnologia, Via Morego 30, 16163 Genova, Italy. [2] Dipartimento di Chimica e Chimica Industriale, Università di Genova, Via Dodecaneso 31, 16146 Genova, Italy.
P3-19	The effect of Bone Morphogenetic Protein -2 (BMP-2) on the expression of tumor marker ZNF217 in human mesenchymal stem cells A. Mantsou, P. Lamprou, S. Z. Karoulias, M. Pitou, Theodora Choli-Papadopoulou Laboratory of Biochemistry, Department of Chemistry, Aristotle University of Thessaloniki, University Campus, 54124, Thessaloniki, Greece
P3-20	Study of the antimicrobial activity and biocompatibility of graphene/CuNPs against E.coli, S.aureus and L929 cell line and biofunctionalization of these nanostructures with proteins V. Vasilopoulos[1], M. Pitou[1], I. Fekas[2], R. Papi[1], E. Pavlidou[2], P. Patsalas[2], T. Choli-Papadopoulou[1] [1]Department of Chemistry, Aristotle University of Thessaloniki, GR-54124 Thessaloniki, Greece [2]Department of Physics, Aristotle University of Thessaloniki, GR-54124 Thessaloniki, Greece
P3-21	Label free detection of protein using SPR signal **(YRA CANDIDATE)** Constantin E.*, Popescu M., Simion M. National Institute for Research and Development in Microtechnologies -IMT Bucharest, 126A, Bucharest, ROMANIA
P3-22	PLGA nanoparticles in intranasal delivery of Galantamine adsorbed in novel Hierarchical Porous Carbon for Alzheimer's disease therapy S.G. Nanaki[1], K. Spyrou[2], C. Bekiari[3], P.Veneti[1], N.Karouta[2], I. Grivas[3], D. Gournis[2], D. Bikiaris[1] [1]Department of Chemistry, Aristotle University of Thessaloniki, Thessaloniki 54124, Greece [2]Department of Materials Science and Engineering,University of Ioannina, Ioannina 45110, Greece [3]Department of Anatomy,Histology&Embryology,Faculty of Health Sciences, AUTH, Greece

P3-23	Is it safe to use graphene on neural cells? Ş. Taşdemir[1], Z. Morçimen[1], A. Şendemir[1,2] [1]Bioengineering Department, Ege University, Izmir, Turkey [2] Department of Biomedical Technologies, Ege University, Izmir, Turkey
P3-24	Preparation and Characterization of a novel anti-inflammatory/antioxidant cream with polymer nanoparticles loaded with Cannabidiol C. Panagiotou[1], V.Karagiozaki[2], Z. Chakim[1], E. Papadopoulou[1], S. Dermenoudis[1], S. Logothetidis[1] [1]Nanotechnology Lab LTFN, Aristotle University of Thessaloniki, Thessaloniki, Greece [2]BL Nanobiomed P.C. Thessaloniki, Greece
P3-25	Tailor-Made "Smart" Capsules: Toward a New Generation of Antibacterials F. Le Floch,[1] N. Bousserrhine,[2] V. Alphonse, [2] ,Y. Charif Mechiche, [1] I. Menidjel, [1] B. Carbonnier, [1] S. Belbekhouche, [1] [1]- East Paris Institute of Chemistry and Materials Science/ University of Paris, France, ICMPE (UMR7182), CNRS, UPEC, F-94320 Thiais, France [2]- Laboratoire Eau Environnement et Systèmes Urbains (LEESU), Université-Paris-Est Créteil, Créteil cedex, 94010, France
P3-26	Basal cell carcinoma-targeted therapy using aptamer functionalized liposomes Anca Niculina Cadinoiu[1,*], Delia Mihaela Raţă[1], Leonard Ionuţ Atanase[1], Oana Maria Darabă[1], Gabriela Vochita[2], Marcel Popa[1, 3] [1]"Apollonia" University, Faculty of Medical Dentistry, Pacurari Street, No. 11, Iasi, Romania [2] Department of Experimental and Applied Biology, Institute of Biological Research Iasi, Lascar Catargi 47, Iasi, Romania [3]Academy of Romanian Scientists, Plaiul Independentei Street, No 54, Bucharest, Romania
P3-27	Aptamer-Functionalized Polymeric Nanocapsules — a promising alternative for the Basal Cell Carcinoma treatment Rata Delia Mihaela[1,*], Anca Cadinoiu[1], Leonard Ionut Atanase[1], Luiza Madalina Gradinaru[2], Mihai Cosmin-Teodor [3,4], Marcel Popa[1] [1] "Apollonia" University of Iasi, Faculty of Medical Dentistry, Muzicii Street, No. 2, Iasi, Romania [2] "Petru Poni" Institute of Macromolecular Chemistry, Gr. Ghica Voda Alley 41A, Iasi, Romania [3] Institute of Biological Research Iasi, branch of NIRDBS, 47 Lascar Catargi Str., Iasi, Romania [4] CEMEX, Grigore T. Popa University of Medicine and Pharmacy Iasi, 9-13Mihail Kogalniceanu Str., 700259, Iasi, Romania

WS4 POSTER SESSION **Tuesday 2 July (15:00-18:00), Thursday 4 July (17:30-20:00): Poster Display & Presentations** **Wednesday 3 July, Friday 5 July: Poster Display**	
P4-1	On-chip Modulation of Microtubules by Nanosecond Pulsed Electric Field Integrated on Super-Resolution Microscope D. Havelka[1], D. E. Chafai[1], A. Klebanovych[2], P. Dráber[2], F. Vostárek[3], L. Kubínová[3], M. Cifra[1] [1]Institute of Photonics and Electronics of the Czech Academy of Sciences, Chaberská 57, 182 51 Prague, Czechia [2]Institute of Molecular Genetics of the Czech Academy of Sciences, Vídeňská 1083, 142 20 Prague, Czechia [3]Institute of Physiology of the Czech Academy of Sciences, Vídeňská 1083, 142 20 Prague, Czechia
P4-2	Development of a novel and rapid aptameric- based nano-diagnostic assay for MERS- CoV Khalid M. Abu-Salah[1], Atheer Al Otaiby[1] Raja Chinnapan[2], Mohammed Zourob[2] [1]: Department ofnanomedicine, King Abdulla International Medical Resaerch Center/King Saud Bin Abdulaziz University for health Sciences, national Guard Health Affairs, Riyadh 11481, Saudi Arabia [2]: Department of Chemistry, Alraisal University, Al Zahrawi Street, Al Maather, Al takhassusi Road, Riyadh 11533, Saudi Arabia
P4-3	The Influence of the Thickness on the Electrical Properties of Electrolyte Gated Organic Field Effect Transistors S. Drakopoulou[1], S. Benaglia[4], M.D. Lauro[2], M. Murgia[3], C. A. Bortolotti[1], R. Garcia[4], F. Biscarini[1,2] [1]Dipartement of Life Sciences, University of Modena and Reggio Emilia, Modena, Italy [2]Center for Translational Neurophysiology of Speech and Communication (CTNSC), Instituto Italiano di Tecnologia, Ferrara, Italy [3]CNR-ISMN, Istituto per lo Studio dei Materiali Nanostrutturati, Bologna, Italy [4]Materials Science Factory, Instituto de Ciencia de Materiales de Madrid (ICMM), CSIC, Madrid, Spain
P4-4	PVD-derived silver nanopillars for plasmonic sensors M. Suster, P. Wróbel Faculty of Physics, University of Warsaw, Pasteura 5 Street 02-093 Warsaw, Poland
P4-5	Development of an inkjetable redox-active antibody methylene blue graphene oxide composite for label-free biosensing C. Steininger AIT Austrian Institute of Technology GmbH, Austria

WS5 POSTER SESSION **Tuesday 2 July (15:00-18:00), Thursday 4 July (17:30-20:00): Poster Display & Presentations** **Wednesday 3 July, Friday 5 July: Poster Display**	
P5-1	Piezoresistive sensors based on 3D percolative networks of graphene nanoplatelets V. Tsouti, V. Kekou, G. Papadimitropoulos, M. Sanopoulou, S. Chatzandroulis Institute of Nanoscience and Nanotechnology, National Center for Scientific Research "Demokritos" Patriarchou Gregoriou E' & 27 Neapoleos Str. 153 41 Ag. Paraskevi, Athens, Greece
P5-2	Quasienergy spectrum of graphene subjected to a bicircular laser field J. Derlikiewicz, M. Suster, K. Kotur, F. C. Velez, K. Krajewska, J. Z. Kamiński Faculty of Physics, University of Warsaw, Pasteura 5 Street 02-093 Warsaw, Poland
P5-3	Investigation of structures created by plasma processing and atomic layer deposition of TiO2 on carbon nanotubes P. Kaushik[1,2], M. Eliáš[3], J. Michalička[3], D. Hegemann[4], D. Nečas[1], L. Zajíčková[1,2] [1]RG Plasma Technologies, Central European Institute of Technology, Masaryk University, Brno 625 00, Czech Republic [2]Department of Physical Electronics, Faculty of Science, Masaryk University, Brno 611 37, Czech Republic [3]Central European Institute of Technology, Brno University of Technology, Brno 61200, Czech Republic [4]Empa, Swiss Federal Laboratories for Materials Science and Technology, St. Gallen 9014, Switzerland

P5-4	Raman study of laser-induced structural stabilization and charge transfer in reduced CeO2-x/graphene nanocomposite A. Nikolenko[1], V. Strelchuk[1], O.F. Kolomys[1], O. Gnatyuk[2], P. Kraszkiewicz[3], E. Kovalska[4], W. Mista[3], R. Klimkiewicz[3], G. Dovbeshko[2] [1]Institute of Semiconductor Physics of NAS of Ukraine, 41 Nauky pr., 03028 Kyiv, Ukraine. [2]Institute of Physics of NAS of Ukraine, 46 Nauky pr., 03028 Kyiv, Ukraine. [3]Institute of Low Temperature and Structure Research, PAS, Wroclaw, Poland. [4]College of Engineering, Mathematics and Physical Sciences, University of Exeter, Exeter EX4 4QF, United Kingdom.
P5-5	Silver and Gold Nanoparticles Deposited on Graphene Layers: Study of Sensing Properties M. Kostejn[1], R. Fajgar[1], J. Kupcik[1], J. Blazevska-Gilev[2] [1] Institute of Chemical Process Fundamentals of the CAS, v.v.i., Department of Laser Chemistry, Rozvojova 2/135, Prague, Czech Republic [2] Ss. Cyril and Methodius University, Faculty of Technology and Metallurgy, Ruger Boskovic 16, Skopje, North Macedonia
P5-6	Mechanical Behaviours of Graphene Nanoflake Inserted between Cross-Junctional Graphene Nanoribbons: Molecular Dynamics Simulations Jeong-Won Kang Department of Transportation System Engineering, Korea National University of Transportation, South Korea
P5-7	A novel graphene base heterojunction transistor C. Strobel[1], A. Chavarin[2], M. Albert[1], Ch. Wenger[2,3], J.W. Bartha[1] [1] Technische Universität Dresden, IHM, Nöthnitzer Straße 64, 01187 Dresden, Germany [2] IHP, Im Technologiepark 25, 15236 Frankfurt (Oder), Germany [3] Brandenburg Medical School Theodor Fontane, 16816 Neuruppin, Germany

I3D POSTER SESSION **Tuesday 2 July (15:00-18:00), Thursday 4 July (17:30-20:00): Poster Display & Presentations** **Wednesday 3 July, Friday 5 July: Poster Display**	
I3D-1	Cell viability and morphology in 3D bioprinted cell-laden gelatin/alginate hydrogel based constructs Z. Chakim[1,2] , S.Dermenoudis[1], V.Karagiozaki[2], S. Logothetidis[1] [1]Nanotechnology Lab LTFN, Aristotle University of Thessaloniki, Thessaloniki, Greece [2]BL Nanobiomed P.C. Thessaloniki, Greece
I3D-2	Melting of Hydroxyapatite by Selective Laser Sintering for fabrication of Bioceramic Scaffolds N.V. Bulina[1], A.I. Titkov[1], S.G. Baev[2], S.V. Makarova[1], V.P. Bessmeltsev[2], N.Z. Lyakhov[1] [1]Institute of Solid State Chemistry and Mechanochemistry SB RAS, Kutateladze St. 18, Novosibirsk, 630128, Russia [2]Institute of Automation and Electrometry SB RAS, Academician Koptyug Av. 1, Novosibirsk, 630090, Russia
I3D-3	Adaptation of a 3D printed hand prosthesis Arthur M. Martins[1], Fernanda S. Andrade[1], Gabriel S. Nascimento[1], Gustavo B. Coutinho[1], Moises F. Queiroz[1], Ricardo A. Valentim[2], Danilo P. Nagem[2] [1]Universidade Federal do Rio Grande do Norte (UFRN) – Natal, RN – Brazil [2]Universidade Federal do Rio Grande do Norte (UFRN) – Natal, RN – Brazil
I3D-4	3D Orthosis Printing for amyotrophic lateral sclerosis Danilo Alves Pinto Nagem1, Fernanda de Sena Andrade1, Gustavo Kleber Bezerra Coutinho[1], Moisés Freitas de Queiroz[1], Gabriel Ian Silva do Nascimento[1], Arthur Balboa de Medeiros Martins[1], Emília Márcia Gomes de Souza e Silva[2], Ana Raquel Rodrigues Lindquist[2], Ricardo Alexsandro de Medeiros Valentim[2]. Department of biomedical engineering, Federal University of Rio Grande do Norte. University Campus Lagoa Nova, Brazil.
I3D-5	Real-time bioimpedance monitoring of 3D cell-laden hydrogels Y. Jwmah[1], E. Bayir[2], B.O. Gürses[3], A. Şendemir[1], (1) Department of Bioengineering, Ege University, 35100 Bornova/Izmir, Turkey (2) Central Research Test and Analysis Laboratory Application and Research Center, Ege University, 35100 Bornova/Izmir, Turkey (3) Department of Mechanical Engineering, Ege University, 35100 Bornova/Izmir, Turkey
I3D-6	3D bio-printed artery wall model development for in vitro Atherosclerosis Research A. Orfanos[1], Z.Chakim[1,2] , S.Dermenoudis[1], V.Karagiozaki[2], S. Logothetidis[1] [1]Nanotechnology Lab LTFN Aristotle University of Thessaloniki,Thessaloniki, Greece [2]BL Nanobiomed P.C. Thessaloniki, Greece
I3D-7	Inkjet Printed In-Plane Flexible Micro-Supercapacitors Based on Carbon Nanotubes and Two Dimensional Materials Processed by Liquid Phase Exfoliation João Coelho, Lorcan McKeon and Valeria Nicolosi CRANN&Amber, School of Chemistry, Trinity College Dublin, Ireland
I3D-8	Diffusion in Extracellular Matrix Collagen Gels: Application in maturation of 3D-printed skin tissue Dimitrios Bratsios[1], Stergios Dermenoudis[2], Varvara Karagkiozaki[2], Stergios Logothetidis[2] [1] Department of Chemical Engineering, Aristotle University of Thessaloniki [2] Nanotechnology Lab LTFN Aristotle University of Thessaloniki,Thessaloniki, Greece