5th International Conference – NN08 & 2nd International Summer School – SS-NN08 on Nanosciences & Nanotechnologies

"…where Sciences meet together…"

Aristotle University of Thessaloniki, 14-16 July 2008
Physics Department

Preliminary Program

Monday 14 July		
School of Sciences, AUTh (First Floor Room A31)		
	08:00 – 09:00	Registration
	09:00 – 09:30	Welcome
PT1	***09:30 – 10:10 Plenary Talk***	**Pantelides S.T.,** Dept of Physics, Vanderbilt University, Nashville, Tennessee, USA, QUANTUM TRANSPORT IN MOLECULES AND NANOSTRUCTURES
	10:10– 10:20	***Short Coffee Break***
		Session 1: ***Organic Electronics & Photonics and Nanoelectronics I*** ***Chair:*** *Hadziioannou G., Dimitriadis Ch.*
I1-1	10:20 – 10:50 Invited	**Mark Boukerche,** European Commission EUROPEAN SUPPORTED ACTIVITIES IN MICRO- & NANOSYSTEMS R&D. STATUS & OUTLOOK
I1-2	10:50 – 11:20 Invited	**Hadziioannou G.,** Laboratoire d' Ingénierie de Polymères pour les Hautes Technologies, (LIPHT), Inst. d' Electronique des Solides et des Systèmes, InESS, CNRS, France SEMICONDUCTING BLOCK COPOLYMERS: OPTIMIZED SYNTHESIS AND PROCESSING FOR EFFICIENT PHOTOVOLTAIC DEVICES
O1-3	11:20 – 11:35	**N. G. Semaltianos [1],** S. Logothetidis [2], W. Perrie[1], S. Romani[1], R. J. Potter[1], P. French[1], M. Sharp[1], G. Dearden[1], K. G. Watkins[1] [1]University of Liverpool, Department of Engineering, Liverpool, U.K. [2]Aristotle University of Thessaloniki, Department of Physics, Thessaloniki, , Greece II-VI SEMICONDUCTOR NANOPARTICLES PRODUCED BY LASER ABLATION
O1-4	11:35 – 11:50	**E. Suljovrujic** Institute of Nuclear Sciences "Vinca", Belgrade, Serbia AGGREGATION MECHANISM OF THIN ORGANIC FILMS
I1-5	11:50 – 12:20 Invited	**Malliaras G.** , Dept. of Materials Science and Engineering, Cornell University, USA PHOTOLITHOGRAPHIC PATTERNING OF ORGANIC SEMICONDUCTORS
O1-6	12:20 – 12:35	**N. Kehagias[1],** V. Reboud[1], M. Zelsmann[2], M. Striccoli[3],, M. L. Curri[3], F. Reuther[4], G. Gruetzner[4], J. A. Alduncin[5], D. Mecerreyes[5] and C. M. Sotomayor Torres[1,6] [1] Tyndall National Institute, University College Cork, Cork, Ireland [2] LTM-CNRS, c/o CEA-LETI,France [3] CNR IPCF Division of Bari c/o Dept. of Chemistry, University of Bari, Italy [4] Micro Resist technology GmbH, Berlin, Germany [5] New Materials Department, CIDETEC-Centre for Electrochemical Technologies, Parque Tecnológico de San Sebastián, Spain [6] Catalan Institute of Nanotechnology, Spain and Catalan Institute for Research and Advanced Studies ICREA, Spain 2D AND 3D POLYMER PHOTONIC DEVICES FABRICATED BY NANOIMPRINT LITHOGRAPHY
	12:35 – 14:00	***Lunch Break***
	14:00– 15:00	***Poster Session I (Sessions 1,2,3) – Exhibition – Coffee – Networking*** ***Chair:*** *Anastasiadis S., Frangis N.*
		Session 2: ***Nanotechnology in Energy and Environment***

		Chair*: *Cefalas A. C., Konstandopoulos A.
I2-1	15:00 – 15:30 Invited	**Giannoules P.**, INTECS, Germany CONVERTING PHOTONS INTO SOLAR POWER BUSINESS
O2-2	15:30 – 15:45	**AC Varonides,** RA Spalletta, G Keiser, P Chiappini Physics & EE Dept, University of Scranton, A Jesuit University, Scranton PA, USA FINE-TUNING NEAR 1eV FOR FULL-SPECTRUM HIGH EFFICIENCY (>30%) NANO-SOLAR CELLS VIA GaAs/Ge SUPERLATTICES
O2-3	15:45 – 16:00	**A. C. Cefalas[1],** E. Sarantopoulou[1], Z. Kollia[1], S. Kobe[2], G. Dražic[2] [1]National Hellenic Research Foundation, TPCI, Athens, Greece [2]Department of Nanostructured Materials, Jozef Stefan Institute, Ljubljana, Slovenia NANOCRYSTALLIZATION UNDER ELECTROMAGNETIC FIELDS: A QUANTUM MECHANICAL APPROACH
I2-4	16:00 – 16:30 Invited	**Konstandopoulos A.**, CERTH, Greece NANOPARTICLE TECHNOLOGIES FOR EMISSION CONTROL AND CLEAN ENERGY
O2-5	16:30 – 16:45	**K.S. Roelofs,** T. Schiestel Fraunhofer Institute for Interfacial Engineering and Biotechnology, Stuttgart, Germany SPEEK BASED NANOCOMPOSITES FOR DIRECT ETHANOL FUEL CELL APPLICATIONS
O2-6	16:45 – 17:00	**I.N. Savina[1],** A. Cundy[2], R. Whitby[2], S. Mikhalovsky[2] [1]School of Pharmacy and Biomolecular Sciences, Brighton University, Brighton, UK [2]School of Environment and Technology, Brighton University, Brighton, UK NANOPARTICLE / MACROPOROUS POLYMER COMPOSITE FOR ENVIRONMENTAL APPLICATION
	17:00 – 17:30	***Coffee Break – Exhibition – Poster Vision – Networking***
		Session 3: ***Theoretical and Computational Modelling at the Nanoscale*** ***Chair:** Damnjanovic M., Vassilopoulos P.*
I3-1	17:30 – 18:00 Invited	**Damnjanovic M.,** Univ. of Belgrade, Dept of Physics, Serbia SYMMETRY PREDICTION OF ELECTRON-PHONON INTERACTION ANOMALY IN GRAPHENE
I3-2	18:00 – 18:30 Invited	**Vassilopoulos P.,** Department of Physics , Concordia University DIRECTION-DEPENDENT TUNNELING THROUGH GRAPHENE NANOSTRUCTURES
O3-3	18:30 – 18:45	**L. Tsetseris[1,2],** S. T. Pantelides[2] [1]Department of Physics, Aristotle University of Thessaloniki, Thessaloniki, Greece [2]Department of Physics and Astronomy, Vanderbilt University, Nashville, USA SELF-HEALING OF DEFECTIVE GRAPHENE AND CARBON NANOTUBES
O3-4	18:45 – 19:00	**A. Chroneos[1],** H. Bracht[1], R. W. Grimes[2] [1]Institut für Materialphysik, Westfälische Wilhelms-Universität Münster,Germany [2]Department of Materials, Imperial College London,United Kingdom ATOMISTIC STUDIES OF SELF DIFFUSION IN GALLIUM ANTIMONIDE
O3-5	19:00 – 19:15	**T. Leontiou,[1]** P. C. Kelires,[1,2] and J. Tersoff[3] [1]Department of Mechanical and Materials Science Engineering, Cyprus University of Technology, Limassol, Cyprus [2]Department of Physics, University of Crete, Heraclion, Crete, Greece [3]IBM Research Division, T. J. Watson Research Center, Yorktown Heights, USA DISLOCATION-INDUCED SUPPRESSION OF INTERMIXING IN Ge/Si QUANTUM WELLS & NANOISLANDS
O3-6	19:15 – 19:30	**H.M.C. Barbosa**, M.M.D. Ramos Department of Physics, University of Minho, Campus de Gualtar, Portugal THE EFFECT OF THE INTRAMOLECULAR PROPERTIES IN POLYMER DIODES
O3-7	19:30 – 19:45	**G.K. Dalakoglou[1]**, K. Karatasos[1], S.V. Lyulin[2], A.V. Lyulin[3] [1]Physical Chemistry Laboratory, Chemical Engineering Department, Aristotle University of Thessaloniki, Thessaloniki, Greece [2]Institute of Macromolecular Compounds, Russian Academy of Sciences, St. Petersburg, Russia [3]Group Polymer Physics, Eindhoven Polymer Laboratories, Technische Universitei Eindhoven, 5600 MB & Dutch Polymer Institute MODELLING OF COMPLEXES OF HYPERBRANCHED POLYMERS WITH LINEAR POLYELECTROLYTES IN SHEAR FLOWS
O3-8	19:45 – 20:00	**J. Kioseoglou,** E. Kalessaki, G. P. Dimitrakopulos, Ph. Komninou, Th. Karakostas Department of Physics, Aristotle University of Thessaloniki, Thessaloniki, Greece ATOMIC SCALE MODELLING AND HRTEM INVESTIGATION OF (Al,In)N/GaN INTERFACES

		End of first day
Tuesday 15 July		
		Session 4: **Nanobiotechnology and Nanomedicine I** ***Chair:*** *Kyriakidis D., Rustichelli F.*
I4-1	08:30 – 09:00 Invited	**Kousoulas G.,** Division of Biotechnology & Molecular Medicine, Louisiana State University, USA ENGINEERING VIRUSES AS NANOMACHINES FOR CANCER TREATMENT
I4-2	09:00 – 09:30 Invited	**Missirlis Y.,** Dept. of Mechanical & Aeronautics Engineering, Univ. of Patras, Greece MECHANISMS OF BACTERIA ATTACHMENT TO POLYMERIC SURFACES: INFLUENCE OF SURFACE MODIFICATIONS, FLOW RATES. EXPRESSION OF SPECIFIC GENES
O4-3	09:30 – 09:45	**I.S. Chronakis,** Swerea IVF, Swedish Institute for Industrial Research and Development, Mölndal, Sweden ELECTROSPUN FUNCTIONAL NANOFIBERS FOR BIOMEDICAL APPICATIONS
O4-4	09:45 – 10:00	**M. Hulander**[1], J. Hong[2], M. Andersson[1], M. Ohrlander[3], H. Elwing[1] [1]Dept of Cell & Mol. Biology/Interface Biophysics, Göteborg Univ., Sweden [2]Department of Clinical Immunology, Uppsala University, Uppsala, Sweden [3]Bactiguard AB, Stockholm, Sweden BLOOD INTERACTIONS WITH A NANOSTRUCTURED NOBLE METAL BIOMATERIAL COATING
O4-5	10:00 – 10:15	**S. Lousinian,** N. Kalfagiannis, S. Logothetidis, Laboratory for Thin Films - Nanosystems and Nanometrology, Aristotle University of Thessaloniki, Department of Physics, Greece OPTICAL AND SURFACE CHARACTERISTISATION OF AMORPHOUS BORON NITRIDE THIN FILMS FOR BIOMEDICAL COATINGS
	10:15 – 10:30	***Coffee Break – Exhibition – Poster Vision – Networking***
		Session 4: **Nanobiotechnology and Nanomedicine II** ***Chair:*** *Kousoulas G., Arsenakis M.*
I4-6	10:30 – 11:00 Invited	**Rustichelli F.,** Univ. Politecnica delle Marche, Istituto di Scienze Fisiche, SOME APPLICATIONS OF NANOTECHNOLOGIES IN STEM CELL RESEARCH
O4-7	11:00 – 11:15	**V. Koutsos**[1], E. Glynos[1], S. D. Pye[2], C.M. Moran[2], M. Butler[2], J.A. Ross[2], W.N. McDicken[2], V. Sboros[2] [1]Institute for Materials and Processes, School of Engineering and Electronics & Centre for Materials Science and Engineering, University of Edinburgh, United Kingdom [2]Medical School, Royal Infirmary of Edinburgh, University of Edinburgh, Edinburgh, United Kingdom NANOMECHANICS OF BIOCOMPATIBLE HOLLOW MICROSPHERES
O4-8	11:15 – 11:30	**D. Stamopoulos,** V. Gogola, E. Manios, M. Pissas , D. Niarchos Institute of Materials Science, NCSR "Demokritos", Athens, Greece BIOCOMPATIBILITY OF FERROMAGNETIC NANOPARTICLES WITH HUMAN BLOOD CONSTITUENTS AT ROOM TEMPERATURE, T=20^{O}C AND HUMAN BODY TEMPERATURE, T=37^{O}C CONDITIONS
O4-9	11:30 – 11:45	**A. Katranidis**[1], J. Fitter[3], R. Schlesinger[3], W. Grange[4], M. Hegner[4], T. Choli-Papadopoulou[1], G. Papadopoulos[2], G. Büldt[3] [1]Lab of Biochemistry, Dept. of Chemistry, Aristotle University of Thessaloniki, Greece [2]Department of Biochemistry and Biotechnology, University of Thessaly, Larissa, Greece [3]Research Centre Juelich, INB-2 Structural Biology, Juelich, Germany [4]CRANN, The Naughton Institute, School of Physics, Trinity College Dublin, Ireland EXPERIMENTS WITH OPTICAL TWEEZERS ON RIBOSOMES
O4-10	11:45 – 12:00	**A. Katsikari,** C. Kiparissides, M. Arsenakis Lab of General Microbiology, Department of Biology, Aristotle University of Thessaloniki, Greece UPTAKE AND CYTOTOXICITY OF PLGA NANOPARTICLES IN HUMAN COLON ADENOCARCINOMA CELLS
	12:00– 12:15	***Short Break***
		Session 4: **Nanobiotechnology and Nanomedicine III** ***Chair:*** *Missirlis Y., Wei C.*
I4-12	12:15 – 12:45	**Baumgaertner A.,** Forschungszentrum Julich, Germany

	Invited	CONCEPTS IN BIONANOMACHINES
O4-13	12:45 – 13:00	**R. Bakalova[1],** Z. Zhelev[1], I.Aoki[1], K. Matsumoto[2], V. Gadjeva[3], I. Kanno[1] [1]Molecular Imaging Center, National Institute of Radiological Sciences, NIRS, Chiba, Japan [2]Research Center for Charged Particle Therapy, National Institute of Radiological Sciences, Chiba, Japan [3]Department of Chemistry and Biochemistry, Thracian University, Stara Zagora, Bulgaria NANOBIOPROBES FOR MULTIMODAL MOLECULAR IMAGING: CHEMICAL DESIGN, SPECTRAL CHARACTERISTICS AND BIOMEDICAL APPLICATIONS
O4-14	13:00 – 13:15	**J.V. Soulis[1],** G.D .Giannoglou[2], M.Demetrakopoulou[3], V.C. Papaioannou[3], S. Logothetidis[3] [1]Fluid Mechanics, Demokrition University of Thrace, Xanthi, Greece [2] AHEPA General Hospital, Cardiology Department, Aristotle University of Thessaloniki, Thessaloniki, Greece [3] Physics Department, Aristotle University of Thessaloniki, Thessaloniki, Greece ARTERIAL LDL TRANSPORT IN THE NORMAL AORTIC ARCH
I4-15	13:15 – 13:45 Invited	**Ch. Wei,** Johns Hopkins University School of Medicine CLINICAL NANOMEDICINE – THE PERSPECTIVE FROM THE AMERICAN ACADEMY OF NANOMEDICINE
I4-16	13:45 – 14:15 Invited	**Constantinou A.G.,** HELP-FORWARD, Foundation of Research and Technology Hellas (FORTH), Greece NANOSCIENCE AND NANOTECHNOLOGY IN EUROPE: EU STRATEGY, ACTION PLAN AND IMPLEMENTATION ACTIVITIES
	14:15 – 15:30	***Lunch Break***
		Session 5: ***Thin Films, Meta-materials and Spintronics*** ***Chair:*** *Kaxiras E., Polatoglou H.*
I5-1	15:30 – 16:00 Invited	**Kaxiras E.,** Dept of Physics & Division of Engineering & Applied Sciences, Harvard Univ, Cambridge, USA GRAPHENE NANO-FLAKES WITH LARGE SPIN AND THEIR ROLE IN SPINTRONIC NANO-CIRCUITS
O5-2	16:00 – 16:15	**D. Stamopoulos,** E. Manios, M. Pissas , D. Niarchos Institute of Materials Science, NCSR “Demokritos”, Athens, Greece SUPERCONDUCTIVITY VERSUS EXCHANGE BIAS: ARE THESE TWO FUNDAMENTAL MECHANISMS REALLY ANTAGONISTIC?
O5-3	16:15 – 16:30	**G. Boutaud,** W.M. Cranton, D.C. Koutsogeorgis, R.M. Ranson Imaging & Displays Research Facility, School of Science and Technology, Nottingham Trent University, Clifton Lane, Nottingham, UK GROWTH OPTIMISATION OF ZnS:Mn THIN FILM PHOSPHORS FOR HIGH INTENSITY MINIATURE ELECTROLUMINESCENT DISPLAYS
O5-4	16:30 – 16:45	**J.Smalc-Koziorowska[1,3],** G. Dimitrakopulos[1], Ph. Komninou[1], S.-L. Sahonta[1], G. Tsiakatouras[2], A.Georgakilas[2] [1] Department of Physics, Aristotle University of Thessaloniki, Greece [2] Microelectronics Research Group, Department of Physics, University of Crete, Heraklion, Greece, and IESL, FORTH, Heraklion, Greece [3] Department of Materials Science, Warsaw University of Technology, Poland EPITAXIAL ORIENTATIONS OF GALLIUM NITRIDE GROWN ON NITRIDED R-PLANE SAPPHIRE BY MOLECULAR BEAM EPITAXY
O5-5	16:45 – 17:00	**N. Kalfagiannis,** S. Logothetidis Department of Physics, Aristotle University of Thessaloniki, Greece THE EFFECT OF SUBSTRATE VOLTAGE AND ROTATION ON THE CRYSTAL STRUCTURE, MORPHOLOGY AND MECHANICAL PROPERTIES OF TiB_2 FILMS
O5-6	17:00 – 17:15	**A. E. Radziszewska** Faculty of Metals Engineering and Industrial Computer Science, AGH University of Science and Technology, Krakow, Poland STRUCTURE AND PROPERTIES OF β-Al-Mg THIN FILMS PREPARED BY PULSED LASER DEPOSITION
O5-7	17:15 – 17:30	**P.F. Gomes[1],** F Iikawa[1], F. Cerdeira[1], M. Larsson[2], A. Elfving[2], G. V. Hansson[2], W.-X. Ni[2], P.-O. Holtz[2], J. R. Madureira[3], A. García-Cristóbal[4] 1Institution of Physics "Gleb Wataghin", University Estadual de Campinas, Brazil LARGE OPTICAL EMISSION BLUE SHIFT IN GE/SI QUANTUM DOTS UNDER EXTERNAL BIAXIAL STRAIN
O5-8	17:30 – 17:45	**L. Athanasekos[1,2],** M. Vasileiadis[1,2], A. Meristoudia[2], S. Pispas[2], G. Mousdis[2], A. Tsigara[2,3], V. Karoutsos[2], N. A. Vainos[1,2]

		1 National Hellenic Research Foundation-NHRF, Theoretical and Physical Chemistry Institute-TPCI, Photonics Media Lab, Athens, Greece 2 Department of Materials Science, University of Patras, Greece 3 Raycap Corporation, Athens, Greece DIFFRACTIVE OPTIC NANOCOMPOSITE SENSORS
	17:45 – 19:00	***Poster Session II (Sessions4,5) - Exhibition – Coffee – Networking*** ***Chair:*** *Choli – Papadopoulou T., Frangis N.*
	21:30	***Conference Dinner***
Wednesday 16 July		
		Session 6: ***Commercialization of Nanotechnology*** ***Chair:*** *Constantinou A.*
O6-1	09:00 – 09:20	**K. Tzitzinou** HELP-FORWARD, Foundation of Research and Technology Hellas (FORTH), Greece THE ROLE OF TECHNOLOGY TRANSFER IN A KNOWLEDGE-BASED ECONOMY
O6-2	09:20 – 09:35	**M. Chachamidou,** S. Logothetidis Physics Department, Aristotle University of Thessaloniki, Greece CASE STUDIES OF ACADEMIC SPIN-OFFS CREATION IN GREECE
		Session 7: ***Nanometrology, Instrumentation and Tools*** ***Chair:*** *Frangis N.*
I7-1	09:35 – 10:05 Invited	**Van Tendeloo G.,** EMAT, University of Antwerp, Belgium ELECTRON MICROSCOPY AND NANOSCIENCE: HOW LONG CAN WE GO?
O7-2	10:05 – 10:20	**P. E. Hansen,** K. Dirscherl, J. Garnaes Danish Fundamental Metrology, Denmark SPM AND SCATTEROMETRIC NANOMETROLOGY AT DANISH FUNDAMENTAL METROLOGY
O7-3	10:20 – 10:35	**I. Zyganitidis,** N. Kalfagiannis, S. Logothetidis Laboratory for Thin Films-Nanosystems & Nanometrology (LTFN), Physics Department, Aristotle University of Thessaloniki, Greece ULTRA SHARP BERKOVICH INDENTER USED FOR NANOINDENTATION STUDIES OF TiB_2 THIN FILMS
O7-4	10:35 – 10:50	**A. Farrokh Payam**, M. Fathipour, M.J. Yazdanpanah Department of Electrical & Computer Engineering, College of Engineering, University of Tehran, Iran DESIGN A BACKSTEPPING CONTROLLER FOR ATOMIC FORCE MICROSCOPE
	10:50 – 11:10	***Coffee Break – Exhibition – Networking***
O7-5	11:10 – 11:25	**T. Kingshott** Veeco Instruments Ltd, Cambridge, United Kingdom THE NEXT GENERATION Of AFM TECHNOLOGY - HARMONIX MATERIAL PROPERTY MAPPING
O7-6	11:25 – 11:40	**NT-MDT**
O7-7	11:40 – 11:55	**Horiba Jobin Yvon**
		Session 8: ***Nanomaterials, Nanoengineering and Nanomechanics I*** ***Chair:*** *Patsalas P.*
I8-1	11:55 – 12:25 Invited	**Komvopoulos K.**, Dept. of Mech. Engineering, Univ. of California at Berkeley, USA SURFACE CHEMICAL MODIFICATION EFFECTS ON ADHESION AND MECHANICAL RESPONSE OF ENDOTHELIAL CELLS
O8-2	12:25 – 12:40	D. Lazar, S. Simon, K. Magyari, **V. Simon** Babes-Bolyai University, Faculty of Physics & Institute for Interdisciplinary Experimental Research, Cluj-Napoca, Romania EFFECTS OF SYNTHESIS CONDITIONS ON BIOACTIVITY OF IMPLANT NANOSTRUCTERED MATERIALS
O8-3	12:40 – 12:55	H. El Hamzaoui, B. Capoen, L. Hay, D. Jegouso, **M. Bouazaoui** Laboratoire de Physique des Lasers, Atomes et Molécules (CNRS, UMR 8523), Université des Sciences et Technologies de Lille, France EFFECTS OF LASER IRRADIATION ON THE GROWTH OF GOLD NANOPARTICLES INSIDE GLASSES
O8-4	12:55 – 13:10	**P. N. Manoudis[1],** I. Karapanagiotis[2], A. Tsakalof[3], I. Zuburtikudis[4], C. Panayiotou[1] [1]Aristotle University of Thessaloniki, Department of Chemical Engineering,

		Thessaloniki, Greece [2]Ormylia Art Diagnosis Centre, Ormylia, Chalkidiki, Greece [3]University of Thessaly, Medical Department, Larissa, Greece [4]TEI of Western Macedonia, Department of Industrial Design Engineering, Kozani, Greece SUPERHYDROPHOBIC COMPOSITE POLYMER/PARTICLE FILMS
O8-5	13:10 – 13:25	**C. Mathioudakis**[1], G. Kopidakis [1],P. C. Kelires[2,3] [1]Department of Materials Science and Technology, University of Crete, Heraclion, Greece [2]Department of Mechanical and Materials Science Engineering, Cyprus University of Technology, Limassol, Cyprus [3]Department of Physics, University of Crete, Heraclion, Greece OPTOELECTRONIC PROPERTIES OF DIAMOND CARBON NANOCOMPOSITES
	13:25 – 15:00	***Lunch Break***
	15:00 – 16:00	***Poster Session III (Sessions 6,7,8) - Exhibition – Coffee – Networking*** ***Chair:*** *Anastasiadis S., Frangis N.*
		Session 8: ***Nanomaterials, Nanoengineering and Nanomechanics II*** ***Chair:*** *Komvopoulos K.*
I8-7	16:00 – 16:30 Invited	**Tringides M.**, Ames Lab-USDOE, Dept of Physics & Astronomy, USA NEW CRYSTALLOGRAPHIC PHASES, QUANTUM SIZE EFFECTS IN LOW TEMPERATURE GROWTH OF METALS ON Si(111)
O8-8	16:30 – 16:45	**R.A. Andrievskiy,** Institute of Problems of Chemical Physics, Russian Academy of Sciences, Chernogolovka, Moscow Region, Russia SIZE-DEPENDENT EFFECTS IN PROPERTIES OF NANOSTRUCTURED MATERIALS
O8-9	16:45 – 17:00	**P. Parisse**[1], A. D'Angelo[2], F. Bussolotti[2,4], M. Rinaldi[2], D. Luciani[2], S. Santucci[2], P. Zuppella[3], P. Tucceri[3], A. Reale[3], L. Ottaviano[2] [1]CASTI CNR-INFM Regional Lab and Physics Department University of L'Aquila, Italy [2]Physics Department of University of L'Aquila, [3]Physics Department of University of L'Aquila, gc-LNGS INFN, L'Aquila, Italy [4]Japan Advanced Institute of Science and Technology (JAIST), School of Materials Science and Research Center for Integrated Science 1-1, Ishikawa, Japan PATTERNING AT THE NANOSCALE: ATOMIC FORCE MICROSCOPY AND X-RAY INTERFERENCE LITHOGRAPHY
O8-10	17:00 – 17:15	**K. Simeonidis**[1], S. Mourdikoudis [1], C. Dendrinou-Samara[2], M. Angelakeris [1], O. Kalogirou[1] [1] Physics Department, Aristotle University, Thessaloniki, Greece [2] Department of Chemistry, Aristotle University, Thessaloniki, Greece SURFACE MAGNETISM AND INTERFACE EFFECTS ON COBALT NANOPARTICLES
O8-11	17:15 – 17:30	V. Musat[1], R Prabakaran[2], E. Fortunato[2], **C. Iticescu**[3], M. Mazilu[1] [1]Faculty of Metallurgy and Materials Science, "Dunarea de Jos" University of Galati, Galati, Romania. [2]Department of Materials Science, CENIMAT, Faculty of Sciences and Technology, New University of Lisbon, Campus da Caparica, Caparica, Portugal. [3]Faculty of Sciences, "Dunarea de Jos" University of Galati, Galati, Romania. EFFECT OF POROSITY ON THE OPTICAL AND ELECTRICAL PROPERTIES OF ZnO:SiO_2 THIN FILMS OBTAINED BY SOL-GEL METHOD USING NANO-SIZED ZnO DISPERSION
	17:30– 17:45	***Short Break***
		Session 8: ***Nanomaterials, Nanoengineering and Nanomechanics III*** ***Chair:*** *Tringides M., Komninou F.*
I8-12	17:45 – 18:15 Invited	**Patsalas P.,** Dept. of Materials Science & Engineering, University of Ioannina, Greece PULSED LASER DEPOSITION OF COMPLEX FILMS: NANOCOMPOSITES VS. TERNARY STRUCTURES
O8-13	18:15 – 18:30	**M. Kildemo**[1], I. S. Nerbø[1], S. Leroy[2], S. Hagen[1], E. Søndergård[2], I. Simonsen[1], M. Stchakovsky[3] [1]Applied Optics Group, Department of Physics, Norwegian University of Science and Technology (NTNU), Trondheim, Norway [2]UMR 125 Unité mixte CNRS/Saint-Gobain, Laboratoire Surface du Verre et Interfaces, Aubervilliers Cedex, France [3]Horiba Jobin Yvon, Lonjgumeau Cedex, France OPTICAL PROPERTIES OF NANOSTRUCTURED GaSb

O8-14	18:30 – 18:45	**C. Gravalidis,** S. Kassavetis, S. Logothetidis Laboratory for Thin Films - Nanosystems and Nanometrology, Aristotle University of Thessaloniki, Department of Physics, Greece NON-DESTRUCTIVE CHARACTERIZATION ON ION BEAM TREATED POLYMER SURFACES
O8-15	18:45 – 19:00	**G. Wicht**[1]**,** R. Ferrini[1], M. Pauchard[2], L. Zuppiroli[1] [1]Laboratoire d'Optoelectronique des Materiaux Moleculaires, Ecole Polytechnique Fédérale de Lausanne (EPFL), Lausanne, Switzerland [2]Functional Layers Section, ILFORD Imaging Switzerland GmbH, Switzerland OPTICAL PROPERTIES OF NANOPOROUS HYBRID POLYMER FILMS
O8-16	19:00 – 19:15	**P.I. Stavroulakis,** N. Christou, D. Bagnall NanoGroup, Department of Electronics and Computer Science, University of Southampton, United Kingdom ROBUST SELF-ASSEMBLY NANOSPHERE DEPOSITION METHOD COMPATIBLE WITH LARGE SCALE ASSEMBLY OF MOTH-EYE ANTI-REFLECTION SURFACES
	19:15 – 19:45	**Closing Remarks (Komvopoulos K., Choli – Papadopoulou T.) – Discussion – Awards Ceremony**
End of Conference		

Poster Program

Monday 14 July	
	Poster Session I
	Session 1: ***Organic Electronics & Photonics and Nanoelectronics***
P1-1	**Structure Property Relationship of Thin Films of Diketopyrrolopyrrole Derivatives** M. Weiter, J. Navrátil, M.Vala, O.Salyk, P. Bednár, O. Zmeškal, J. Vynuchal
P1-2	**Photoluminescence of Fluorene Chromophores Embedded into Porous Silicon** M. Fakis, P. Persephonis, V. Giannetas , F. Zacharatos, V. Gianneta and A. G. Nassiopoulou
P1-3	**Development of 3D Structures using the Two-photon Polymerization Technique** I. Fitilis, M. Fakis, I. Polyzos, V. Giannetas, P. Persephonis
P1-4	**Novel Polymerizable Fullerene Derivative for Organic Solar Cells and Photodetectors** V. A. Kostyanovskiy, P. A. Troshin, A. S. Peregudov, N. S. Sariciftci, R. N. Lyubovskaya
P1-5	**Novel perylene and naphthalene bisimides for small molecular organic photovoltaic devices** D. K. Susarova, P. A. Troshin, R. Koeppe, R. N. Lyubovskaya, V. F. Razumov, N. S. Sariciftci
P1-6	**Novel Fullerene-Based Electron Acceptor Materials for Use in Organic Solar Cells** P. A. Troshin, J. Renz, H. Hoppe, M. Egginger, A. E. Goryachev, A. S. Peregudov, R. N. Lyubovskaya, G. Gobsch, N. S. Sariciftci, V. F. Razumov
P1-7	**Simultaneous Measurement of Nonlinear Refraction and Absorption through a Novel Z-scan Technique** G. Tsigaridas , P. Persephonis, V. Giannetas
P1-8	**Photoluminescence of self-assembled individual quantum dots in the high temperature regime** A. Zora, C. Simserides, G. P. Triberis
P1-9	**The influence of silicon oxide nanoparticles on the optical and surface properties of hybrid (inorganic-organic) barrier materials** A. Laskarakis, D. Georgiou, S. Logothetidis, S. Amberg-Schwab and U. Weber
	Session 2: *Nanotechnology in Energy and Environment*
P2-1	**Structure and Photocatalytic Performance of Magnetically Separable Titania Photocatalysts for the Degradation of Propachlor** V. Belessi, D. Lambropoulou, I. Konstantinou, R. Zboril, J. Tucek, D. Jancik, T. Albanis, D. Petridis
P2-2	**Ionic Diffusion in Lithium Aluminosilicate** A. Chroneos , H. Bracht, A. Schirmeisen, B. Roling, R. W. Grimes
P2-3	**New Nanoparticle MnO_2-silica composite catalysts for removal of endocrine-disrupting chemicals like phenol pollutants** R. Jothiramalingam and M.K.Wang
P2-4	**Changes in Hydrogen Storage Properties of Nanostructurated Magnesium Hydride Induced by Ion Irradiation** Lj. Matovic, N. Novakovic, S. Milovanovic, N.Ivanovic, M.Siljegovic, Z. Kacarevic Popovic, J.Grbovic Novakovic
P2-5	**Nanostructured Ag/TiO_2 Photocatalysts for Azo-Dye Degradation** V. Belessi, G. Romanos, N. Boukos, A. Bourlinos, C. Trapalis
P2-6	**Porous Composites based on TiO_2 and Noble Metal Nanoparticles for Water Quality Improvement** L. Baia, A. Peter, M. Baia,V. Cosoveanu, L. Barbu-Tudoran, F. Toderas, F. Vasiliu, L. Diamandescu, V. Danciu
P2-7	**Anodic Oxidation of Mono – Crystalline Silicon For Solar Cell Application** E. Manea, C. Podaru, A. Popescu, E. Budianu, M.Purica, C. Parvulescu
P2-8	**Metal Doped Carbon Aerogels Based Catalysts** M. Baia, L.C. Cotet, I. Stamatin, L. Baia, V. Danciu
P2-9	**Optical and electrical properties of nanocrystal Zinc Oxide Films Prepared by dc Magnetron Sputtering at Different Sputtering Pressures** A. Tanusevski and V. Georgieva
P2-10	**Correlations between Surface Porosity and Dyes Photodegradation** L. Andronic, C. Vladuta, A. Enesca, A. Duta
P2-11	**Modification of the Solar Absorbers Performance in Environments with Different pH and Salinity**

	M. Voinea, E. Ienei, C. Bogatu, A. Duta
P2-12	**The influence of the annealing treatment on the solar selective coatings performance** E. Ienei, M. Voinea, L.Isac, A.Duta
P2-13	**Identification of the presence of crystalline phase in lithiated boron oxide ionic glass conductors** E. E. Horopanitis, G. Perentzis, A. Beck, L. Guczi, G. Peto, L. Papadimitriou
	Session 3: *Theoretical and Computational Modelling at the Nanoscale*
P3-1	**Resonance line shapes in a conducting channel: Elastic scattering by impurities** V. Vargiamidis and H. M. Polatoglou
P3-2	**Theoretical Study of Intramolecular Charge Carrier Mobility Dependence on the Termination of Conjugated Polymer Strands** M.M D. Ramos and H.M.C. Correia
P3-3	**Gold glyconanoparticles: QM/MM study** L.Sihelnikova and I. Tvaroska
P3-4	**Dipolar Interaction Effects in Maghemite Nanoparticle Assemblies** K. N. Trohidou, M. Vasilakaki, E. Devlin and G. C. Papaefthymiou
P3-5	**The Edge Wiener Polynomial of Nanotubes** A. R. Ashrafi, H. Yousefi-Azari, M. H. Khalifeh
P3-6	**Computing the Cluj index of the first and the second type dendrimer nanostars** A. Iranmanesh and N. Dorosti
P3-7	**Electronic parameters for charge transfer along DNA** L. Hawke, G. Kalosakas, C. Simserides
P3-8	**Szeged Index of VAC_5C_7 [r,p] Nanotubes** A. Iranmanesh and O. Khormali
P3-9	**PI Index of $HC_5C_7[k, p]$ Nanotubes** A. Iranmanesh and Y. Pakravesh
P3-10	**The Wiener Index of One-Pentagonal Carbon Nanocones** M. H. Khalife, H. Yousefi-Azari, A. R. Ashrafi
P3-11	**Modeling the properties of diluted semiconductors starting from the properties of their components** M. Negoita, E. A. Patroi, R. Erdei
P3-12	**Magnesium adsorption and incorporation at InN (0001) and $(000\bar{1})$ surfaces: A first-principles study** A. Belabbes, J. Kioseoglou, G. P. Dimitrakopulos, Ph. Komninou, and Th. Karakostas
P3-13	**Ab initio Study of MgH_2 Formation** N.Novakovic, Lj.Matovic, J. Grbovic Novakovic, N. Ivanovic
P3-14	**First Principles Study of Point Defects in Titanium Oxycarbides** L. Marques, H. M. Pinto, F.Vaz
P3-15	**A Method for Atomistic/Continuum Analysis of Large HRTEM Images** A. Belkadi, G. P. Dimitrakopulos, J. Kioseoglou, G.Jurczak, T. D. Young, P. Dluzewski, Ph. Komninou
P3-16	**Pulsed four-wave mixing in intersubband semiconductor quantum well transitions** S. Evangelou and E. Paspalakis
P3-17	**A two-waveguide directional coupler based in quantum well systems with tunnelling induced coherence** A. Fountoulakis, A.F. Terzis, E. Paspalakis
P3-18	**Edge-Wiener index of Armchair Polyhex** A. Iranmanesh and A. Soltani
P3-19	**The Vertex PI Polynomial of Fullerenes** H. Yousefi-Azari, M. H. Khalifeh, A. R. Ashrafi
Tuesday 15 July	
	Poster Session II
	Session 4: *Nanobiotechnology and Nanomedicine*
P4-1	**The DC-potential and protein binding on Au-nanoparticles in suspension** Jieh-Hen Tsung and Tsing-Tshih Tsung

P4-2	**Complex nanostructured thin films based on hydroxyapatite and functionalized polyurethanes** R. M. Piticescu, T. Buruiana, E. Vasile, C. Moldovan, L. M. Popescu, C. Rusti
P4-3	**Developing Fe_2O_3 quantum dots with Ferritin monolayers on Si** K. Anetakis, G. Papadopoulos, S. Logothetidis
P4-4	**Solvent Effects on the Fraction 1-57 from HPNAP: Molecular Dynamics Simulations.** S. Pentas, G. Papadopoulos, F. Kottakis, S. Logothetidis, T.Choli-Papadopoulou
P4-5	**Diamond photoluminescent nanoparticles as innovative markers for intracellular biomolecule tracking** O. Faklaris, D. Garrot, V. Joshi, F. Druon, J.P. Boudou, T. Sauvage, P. Georges, P. Curmi, F. Treussart
P4-6	**Solvothermal Synthesis of Nanostructured Ag-Doped ZnO and Ag-Doped TiO_2 Powders** R. R. Piticescu, R. M. Piticescu, A. M. Motoc, M. Parvulescu, I. Grozescu
P4-7	**Study of Detonation Nano Diamonds/Hydroxyapatite Composite Layers** T. Hikov, D. Fingarova, I.Dineva, E.Pecheva, L. Pramatarova
P4-8	**Biocompatible Magnetic Nanoparticles for Treatment of Brain Cancer** B. Mucha, A. Schuster, L. Vekas, D. Bica, M. Avdeev, K. Lamszus, R. Willumeit
P4-9	**Pd-loaded magnetite nano-particles for medical applications** D. Zamboulis, M. Filippousi, P. Misaelides
P4-10	**Benzocaine loaded biodegradable poly-(d,l-lactide-co-glycolide) nanocapsules** C.M. Moraes, A.M. Prado, A.H. Rosa, E. de Paula, L.F. Fraceto
P4-11	**Haemocompatibility and nanomechanical properties of carbon based thin films as stent-coatings** V.Karagkiozaki, S.Logothetidis, S.Kassavetis, S.Lousinian, A.Laskarakis, G.Giannoglou
P4-12	**Nanodispersed titanium and tungsten oxides as electrodes for electrochemical oxygen sensor** G.Ya. Kolbasov, V.S.Vorobets, A.M. Korduban, I.G. Kolbasova, O.V. Linyucheva
P4-13	**Peptide Imprinted Polymers by Suspension Polymerization** O. Kotrotsiou, S. Chaitidou and C. Kiparissides
P4-14	**Expansion effect on the coated coronary stent surface** S. Kassavetis, S. Logothetidis, G. Kazinakis, S. Fachouri, E. Pavlidou
P4-15	**Electronic and Magnetic Characterization of Iron Oxoanion Nanophases Grown within the Apoferritin Cavity** G. C. Papaefthymiou, E. Devlin, A. J. Viescas, N. Wallace, N. R. Dollahon, R. Hilton, R. K. Watt
P4-16	**Physical Properties of a Hybrid and a Nanohybrid Dental Light-cured Resin Composite** I. Sideridou, M. Karabela, Ch. Micheliou, P. Karagiannidis, S. Logothetidis
P4-17	**Biocatalytic Preparation of Biologically Active Derivatives from Mastic Oil Using Immobilized Lipases in Nanoclays** A. A. Tzialla, A. A. Taha, I. V. Pavlidis, E. Kalogeris, D. Gournis, H. Stamatis
P4-18	**Development of calcium hydroxide/nano-hydroxyapatite composites for hard tissue treatment** A.Zamanian and S. Hesaraki
P4-19	**Production of bioactive nano-powders of TCP and hydroxyapatite from cuttlefish bone by hot-plate method** U.Tuyel, E.Toksoy Oner, S.Agathopoulos, O. Gunduz, F.N.Oktar
P4-20	**Atomic environment in sol-gel derived nanocrystalline biomaterials** V. Simon, D. Lazar, H. Mocuta, K. Magyari, M. Prinz, M. Neumann, S. Simon
P4-21	**Sensitization of cancer cells to radiation using hybrid nanoparticles: Activation of apoptotic factors** Z. Zhelev, R. Bakalova, I. Aoki, M. Mileva, V. Gadjeva, I. Kanno
P4-22	**Multimodal Quantum Dots: Direct intracellular delivery, Photosensitization and Cytotoxic effects** Z. Zhelev, I. Aoki, R. Bakalova, V. Gadjeva, I. Kanno
	Session 5: *Thin Films, Meta-materials and Spintronics*
P5-1	**Microstructured Lithium Niobate Thin Films** A. R. Poghosyan, A.M.Arzumanyan, I.A.Ghambaryan, S.G.Grigoryan, A.G.Hayrapetyan, A.L.Manukyan
P5-2	**High ozone sensitive sol-gel $ZnO:SiO_2$ nanocomposite thin films** V. Musat, R. Prabakaran, R.M.S. Martins, E. Fortunato

P5-3	**A Novel Plasma Polymerization Technique for Synthesizing Polymer Nanoparticles and Thin Films** H. Goktas, F. G. Ince, A. Iscan, I. Yildiz, M. Kurt
P5-4	**Oxidization behaviour of amorphous SiC coatings** D. Lafatzis, Th. Speliotis, N. Moutis, F. Cousin, K. Mergia
P5-5	**Duplex treatment based on the combination of ion nitriding and CrAlN coating by PVD process: Application in peeling MDF and Aleppo Pine** H.Aknouche, C.Nouveau, Y.Benlatreche, K. Ram Mohan Rao
P5-6	**An Optical Study of the Stain Effects on $Pr_{0.6}Ca_{0.4}MnO_3$ Thin Films** A. Antonakos , E. Liarokapis, M. Filippi, W. Prellier
P5-7	**Surface and Interface-related Phonon Modes in InN/AlN Nanolayer Structures** E. Valcheva , M. Baleva, G. Zlateva, N. Todorov
P5-8	**Sol – Gel ZrO_2 and ZrO_2-Al_2O_3 Nanocrystalline Thin Films on Si as high –k Dielectrics** P. Vitanov, A. Harizanova, T. Ivanova, Ch. Trapalis, N. Todorova
P5-9	**Electrochromic TiO_2, ZrO_2 and TiO_2-ZrO_2 Thin Films By Dip – Coating Method** T. Ivanova and A. Harizanova
P5-10	**Band gab engineering in amorphous Be_xZn_yO Thin Films** J. M. Khoshman, D. Ingram, M. E. Kordesch
P5-11	**Microstructure and Spectroscopic Investigations in Mn_2O_3-CeO_2/Si Thin Films** A. Kopia, and K. Kowalski
P5-12	**On the implementation of nano-structured materials in plasmonics instrumentation** A.G. Koutsioubas , N. Spiliopoulos, D. Anastassopoulos, A.A. Vradis, G.D. Priftis
P5-13	**Electron Microscopy of CrN-TiN Multialyer Thin Films** N. Frangis, K. Breza, I. Tsiaoussis, N. Kalfagiannis, S. Logothetidis
P5-14	**Effects of nitrogen flow ratio on the structure and properties of reactively sputtered (AlMoNbSiTaTiVZr)N_x coatings** Ming-Hung Tsai, Jien-Wei Yeh, Jon-Yiew Gan
P5-15	**Surface Photovoltage and Photoluminescence Spectroscopy of Multi-layer InP/GaAs Quantum Dots** Ts. Ivanov,V. Donchev, F. Iikawa, M. J. S. P. Brasil, M. A. Cotta, K. Germanova
P5-16	**Development and Characterization of Metallic Hall Sensors** M. Gioti, D. Giannakis, E. Hatzikraniotis
P5-17	**The Cr alloying influence in magnetic features in CoCr/Pt multilayers** M. Kopsidis, E. Th. Papaioannou, P. Poulopoulos, M. Angelakeris, F. Wilhelm, A. Rogalev, O. Kalogirou, N.K. Flevaris
P5-18	**Structural Characterisation of PAMBE-Grown InAlN Films on Sapphire (0001) By Transmission Electron Microscopy** S.-L. Sahonta, A. Adikimenakis, Ph. Komninou, G. P. Dimitrakopulos, E. Iliopoulos, A. Georgakilas,Th. Karakostas
P5-19	**Pt/X/Pt (X=SmCo, FeCo) magnetic trilayers with adjustable structural and magnetic features** I. Siskos , I. Tsiaoussis, K. Simeonidis, M. Angelakeris and O. Kalogirou
P5-20	**ZnO nanostructured films grown by chemical deposition and rapid photothermal processing** S. Shishiyanu, O. Lupan, L. Chow, T. Shishiyanu, S. Railean, A. Rusu
P5-21	**Looking for ferromagnetism in II-VI dilute-magnetic-semiconductor quantum wells via Monte Carlo – total energy calculations** C. Simserides , A. Lipinska, T. Dietl, K. Trohidou
P5-22	**Magnetic properties of Co films and Co/Pt multilayers deposited on PDMS nanostructures** A. Markou, K.G. Beltsios, I. Panagiotopoulos, M.-E. Vlachopoulou, A. Tserepi, T. Bakas, T. Dimopoulos
Wednesday 16 July	
	Poster Session III
	Session 6: *Commercialization of Nanotechnology*
P6-1	**Two-Photon Photopolymerization Enables Commercialization of 3D Nanostructuring in Various Materials** M. Malinauskas, A. Gaidukeviciute, V. Purlys, R. Gadonas, C. Reinhardt

	Session 7: *Nanometrology, Instrumentation and Tools*
P7-1	**Nanomanufacturing using a drop on a hot plate** M. Elbahri, K. Hirmas, D. Paretkar, R. Adelung, F. Faupel
P7-2	**Review on analytical methods for nanomaterials characterization** A. C. Ion and I. Ion
P7-3	**Nanomeasuring and nanotechnologycal systems for nanoeducation** P.N. Luskinovich, V.A. Zhabotinsky, A.V. Dikov, A.E.Zhavykin
	Session 8: *Nanomaterials, Nanoengineering and Nanomechanics*
P8-1	**Spectroscopic properties and Judd-Ofelt analysis of (Er^{3+}- Yb^{3+})-codoped sol-gel SnO_2** C. Bouzidi, A. Moadhen, H. Elhouichet, M. Oueslati
P8-2	**Green and red up-conversion emissions of Er^{3+}-doped sol-gel SnO_2** A. Moadhen* ,C. Bouzidi, H. Elhouichet and M. Oueslati
P8-3	**Energy transfer in Rh B-Rh 6G /Porous silicon system evidenced with photoluminescence and polarization memory measurements** A.Chouket, H. Elhouichet, H. Koyama, B.Gelloz, M. Oueslati
P8-4	**Porous silicon/PH indicators composites for gas sensing** M. Hiraoui, A. Chouket, H. Elhouichet, M. Oueslati
P8-5	**Microdomain Engineering in Lithium Niobate Crystals** A. R. Poghosyan, I.A. Ghambaryan, E.S. Vardanyan, G.O.Shirinyan
P8-6	**Structural and Magnetic Properties of Nanosized Barium Hexaferrite Powders Obtained by Microemulsion Techniques** S. Kolev, T. Koutzarova, I. Nedkov, K. Grigorov, Ch. Ghelev, R. Cloots, M. Ausloos, A. Zaleski, D. Gajda
P8-7	**Influence of Preparation Methods on the Structure and Magnetic Properties of Nanosized Al-substituted Barium Hexaferrite Powders** S. Kolev, T. Koutzarova, I. Nedkov, K. Grigorov, Ch. Ghelev, C. Henrist, R. Cloots, M. Ausloos, A. Zaleski
P8-8	**Synthesis and luminescent properties of ZnO/MgO nanocomposites** Olesya O. Kapitanova, Andrey N. Baranov, Genady N. Panin
P8-9	**Co-precipitated ferrite nanoparticles** V. Musat, O. Potecasu, R. Belea, P. Alexandru
P8-10	**Nanomaterials for restauration and conservation of romanian gospel** R.M. Ion, Irina Dumitriu, R.C. Fierascu, Mihaela-Lucia Ion, V.I.R.Niculescu
P8-11	**New drug nanocarriers consisting of Chitosan, PVA and Cyclodextrin derivatives** R.M. Ion, I. Dumitriu, R.C. Fierascu, S.Dreve
P8-12	**Characterization of Functionally Graded Materials based on Ni3Al - alumina nanostructured core-shell powders obtained by an innovative sol-gel colloidal process** R. M. Piticescu, R. Orban, M. Lucaci, S. Tanasescu, R.R. Piticescu, D.Taloi
P8-13	**Surface Modification of Titanium by Laser-Liquid-Solid-Interaction Process of Nanodiamond-Reinforced Hydroxyapatite Composite Coating** D. Fingarova, T. Hikov, I. Dineva, E. Pecheva, L. Pramatarova
P8-14	**Colloidal Co magnetic nanoparticles: synthesis and morphology characterization** A. Vilalta-Clemente, S. Soumelidis, S. Mourdikoudis, I. Tsiaoussis, K. Simeonidis, V. Karoutsos, P. Poulopoulos, C. Dendrinou-Samara, M. Angelakeris, O. Kalogirou
P8-15	**Surface and interface plasmon-phonons modes in Mg_2Si nanolayers** M. I. Baleva, G. A. Zlateva
P8-16	**Synthesis of $CoFe_2O_4$ Ferrite Nanopowder by Low-Temperature Method** R.M. Ion, D.V. Brezoi, E. Chirtop
P8-17	**Nanocomposites polimer-nanocarbon and polimer-nanoclays as Advanced Materials for structural application** I. Dinca, Z. Vuluga, I. Voicu, A. Stefan, A. Stan, L. Gavrila-Florescu, D. Donescu, L. Dumitrache, G. Prodan
P8-18	**Structural and Magnetic Properties of ?-Fe_2O_3 Nanoparticles Dispersed on Clays** A. P. Douvalis, E. Diamadi, A. Enotiadis, A. Tomou, D. Gournis, T. Bakas
P8-19	**Structural and magnetic studies of chemically synthesized CoPt-nanostructures** K. Gloystein, K. Simeonidis, I. Tsiaoussis, S. Mourdikoudis, C. Dendrinou-Samara, M. Angelakeris, O. Kalogirou
P8-20	**Synthesis and Study of Applications of Metal coated Carbon Nanotubes**

	R., Shivaraman, B.N. Tiwari Sushil, S. Kumar, C.Gopalakrishnan
P8-21	**Morphology and Thermomechanical Behavior of Poly(e-caprolactone) Clay Nanocomposites: The Role of Filler Modification Level** S. I. Marras, I. Zuburtikudis, K. Tornikidou, A. Tsimpliaraki, E. Panayotidou, G. Christofidou
P8-22	**Thermal Behavior of Biodegradable Poly(3-hydroxybutyrate)/Layered Silicate Nanocomposites** S. I. Marras, I. Zuburtikudis, K. Tornikidou, A. Tsimpliaraki, E. Panayotidou, G. Christofidou
P8-23	**Metallic Nanoparticles Embedded in Porous Silicon Matrix for Specific Applications** M.Miu, F. Craciunoiu, I. Kleps, T. Ignat, M. Simion, A. Bragaru
P8-24	**Towards the study of Mn-Pt nanoparticles prepared by various chemical routes** S. Mourdikoudis, A. Shavel, K. Simeonidis, C. Dendrinou-Samara, M. Angelakeris, O. Kalogirou, L. Liz-Marzan
P8-25	**The Precipitation of Nanocrystalline Structure in the Joule Heated $Fe_{72}Al_5Ga_2P_{11}C_6B_4$ Metallic Glasses** N. Mitrovic, S. Kane, S. Roth, A. Maricic, C. Mickel, J. Eckert
P8-26	**Optical, structural, and magnetic properties of InMnP fabricated using Mn^+ implantation** Yoon Shon, Sejoon Lee, T. W. Kang, Eun Kyu Kim, Chong S. Yoon
P8-27	**Selective Deposition of Copper on TiN Substrates versus electron beam patterned PMMA** G. Papadimitropoulos, S. Cibella, Th. Speliotis, R. Leoni, M. Vassilopoulou, D. Davazoglou
P8-28	**Polymer Nanocomposites Based on Carbon Nanotube Films** Z. Spitalsky, C. Aggelopoulos, C. Tsakiroglou, J. Parthenios, C. Krontiras, D. Tasis, K. Papagelis, C. Galiotis
P8-29	**Evaluation of Antioxidant Activities of Organic Compounds using Chemiluminescence Catalyzed by Ferric Oxide Nanoparticles** D. Dimotikali, K. Papadopoulos, E. Yannakopoulou, T. Triantis, D. Christodouleas, J. Hrbác, R. Zboril
P8-30	**Novel Room Temperature Synthesis of Tin Nanoparticles** C.-L. Cheng, Y.-C. Chuang, Z.-R. Huang, J.-Y. Lai
P8-31	**Thermal barrier coatings behavior at high temperature** V. Manoliu, S. Gaman, A. Stefan, Gh. Ionescu, C. Serghie
P8-32	**Temporal Patterning of the Anodization Kinetics of Iron and Nanostructure of the Passive Oxide Film** M. Pagitsas, M. Pavlidou, E. Stefanidou, D. Sazou
P8-33	**Nanostructures of ZnO Prepared with a Solid-Vapor Process** M. Podlogar, A. Recnik, M. Mazaj, S. Bernik
P8-34	**Effect of the Concentration of Silane-coupling Agent on Dynamic Mechanical Properties of Dental Resin-Nanocomposites** I.D. Sideridou and M.M. Karabela
P8-35	**Electronic Structure of self-assembled Mg_2Si Quantum dots in Si matrix** N. D. Todorov, M. I. Baleva, E. P. Valcheva
P8-36	**Preparation and characterization of biodegradable polymer nanocomposites and their nanofibrous nonwoven mats** A. Tsimpliaraki, S. Svinterikos, S.I. Marras, I. Zuburtikudis, L. Papadopoulou, C. Panayiotou
P8-37	**Surface and interface polaritons of the optical phonons in Mg_2Si nano-layers with rough surfaces** G. A. Zlateva, M. I. Baleva, G. N. Nikolov
P8-38	**Nanoparticles Formulation for Oral Delivery of Insulin** N. Reix, C. Vodouhé, N. Ebel, E. Seyfritz, A. Callet, V. Epure, Y. Frère*, L. Danicher*, M. Pinget, A. Belcourt, S. Sigrist
P8-39	**Piezoelectric hybrid nanocomposites based on lithium niobate (LN) nanoparticles** V. Monnier, J. Eschbach, M. Thomassey, D. Rouxel, Y. Fort
P8-40	**Growth of ferromagnetic core-shell Fe-Sm-Ta-N nanospheroids** E.Sarantopoulou, Z. Kollia, A. C. Cefalas, S. Kobe, G. Dražic
P8-41	**Ceramic Nanostructured Layers Electrochemically Grown On Titanium** M.-L. Soare, I. Roman, C. Fratila, E. Vasile
P8-42	**Laser synthesis of bioactive nanostructured ceramic glass** M.Taca, L. Boroica, E. Vasile, M. Udrea
P8-43	**A systematic study of the electron mobility in V-shaped quantum wires at low temperatures** M. Tsetseri, G. P. Triberis, M. Tsaousidou
P8-44	**The Potential of Quantum Dots in High- Q Resonator Structures for Practical Applications** M. Vasileiadis, D. Alexandropoulos, M. J. Adams, N. A. Vainos

P8-45	**Correlations between the structure and the morphology of PET-rubber composites with different additives** C. Vladuta, M. Voinea, E. Purghel, A. Duta
P8-46	**Nanostructured Pt-Rh alloy produced by hydrostatic extrusion** H.Garbacz, J.Mizera, Z.Laskowski, M.Gierej, W.Pachla, K.J.Kurzydlowski