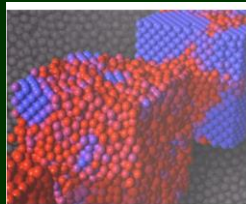


XXXI Panhellenic Conference on Solid State Physics and Materials Science

Scientific Program



XXXI Panhellenic Conference on **SOLID STATE PHYSICS & MATERIALS SCIENCE** Thessaloniki, 20-23 September 2015

Program also available on the web

<http://xxxi.physics.auth.gr>

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Program

The Conference program includes plenary, keynote, invited and contributed talks as well as poster presentations. A video projector & a laptop (PowerPoint ready) will be available in the Conference Room.

Talk Guidelines

- Presentations should be in Microsoft PowerPoint format (.ppt file) or Adobe Acrobat Reader format (.pdf file).
- The file should be electronically handed by the speaker to the Registration Desk at least one session before his/her presentation.
- Projector and PC devices will be available in the Conference Room.
- The plenary and the keynote talks will be 60 min long (45 min for the talk and 15 min for questions)
- The invited talks will be 30 min long (25 min for the talk and 5 min for questions)
- The contributed talks will be 15 min long (12 min for the talk and 3 min for questions)

Poster Guidelines

- The best poster presentation in each poster session will be awarded a prize.
- The presenting authors should hang their posters in the morning, before 9 am, and remove them in the evening of the corresponding day.
- All posters are required to conform to PORTRAIT ORIENTATION (**A0 size: 84.1 cm x118.9 cm**). Failure to follow this requirement will mean that the poster will NOT FIT on the allotted board.
- Posters should be clear and easy to read. Type size should be sufficiently large to allow people to read from 2-3 meters. (Minimum of 1 cm high for text and 2.5 cm high for titles).
- Design the poster to convey a CLEAR MESSAGE. If this is not obvious to the reader after reading the introduction, the message is NOT CLEAR and the reader will move on to an alternative poster, which provides the correct impact

Young Scientists Awards

4 prizes will be awarded to the best papers presented by young scientists (1 for oral and 3 for poster presentations)

Sunday, Sept. 20

16⁰⁰ - 19⁰⁰ Registration

Opening Ceremony - *Transferred to Monday 21/09 morning 08³⁰*

Plenary talk by **T. Moustakas** (Boston University, USA) - *Transferred to Tuesday 22/09 evening 20⁰⁰*

Welcome Reception- *Transferred to Monday 21/09 evening 20³⁰*

Registration Desk will be re-open Monday 21/09 on 08:00

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Monday, Sept. 21

08³⁰ - 09⁰⁰ Opening Ceremony (Chair: T. Kehagias)

09⁰⁰ - 11⁰⁰ Session MO1: NANOSCALE, SURFACE & INTERFACE SCIENCE-1

(Chair: T. Karakostas & I. Zouboulis)

- 09⁰⁰ - 9³⁰ [Inv1](#) **V. Pontikis** (CEA, France) - *Phase-Field Modeling of irradiation induced microstructures*
- 09³⁰ - 9⁴⁵ [O01](#) **E. Xenogiannopoulou** (NCSR-Demokritos) - *Evidence for Germanene formation on epitaxial hexagonal (h)-AlN(0001)/Ag(111)*
- 09⁴⁵ - 10⁰⁰ [O02](#) **D. Tsoutsou** (NCSR-Demokritos) - *Molecular Beam Epitaxy of atomically thin 2D metal dichalcogenide Van der Waals semiconductor heterostructures*
- 10⁰⁰ - 10¹⁵ [O03](#) **S. Kassavetis** (AUTH) - *Superhard Protective Coatings Developed by Closed Field Unbalanced and Highly Ionized Magnetron Sputtering*
- 10¹⁵ - 10³⁰ [O04](#) **A. Delimitis** (CPERI-CERTH-Thessaloniki) - *Alumina Supported Iridium Catalysts for N₂O Abatement: Electron Microscopy Investigations of the Active Species*
- 10³⁰ - 10⁴⁵ [O05](#) **G Dimitrakopoulos** (AUTH) - *Microscopical characterization of 2D-film selenide heterostructures grown on polar wurtzite AlN by molecular beam epitaxy*
- 10⁴⁵ - 11⁰⁰ [O06](#) **T. Vasileiadis** (Fritz Haber Institute-Germany) - *The effect of spatial confinement in the electron-phonon coupling constant studied with ultrafast electron diffraction*

11⁰⁰ - 11³⁰ Coffee break

11³⁰ - 13³⁰ Session MO2: Photonics & Optoelectronics-1

(Chair: J. Arvanitidis & M. Sigalas)

- 11³⁰ - 12⁰⁰ [Inv2](#) **N. Pelekanos** (UCrete) - *Ultra-low threshold GaN polariton lasing at room temperature*
- 12⁰⁰ - 12¹⁵ [O07](#) **P. Varytis** (UAthens) - *Engineering Giant Circular Dichroism in Silver-Coated Magnetodielectric Nanoparticles*
- 12¹⁵ - 12³⁰ [O08](#) **C. Tserkezis** (CSIC-UPV/EHU, Spain) - *Antenna-cavity mode hybridization in plasmonic nanocavities*
- 12³⁰ - 12⁴⁵ [O09](#) **C. Baziotti** (AUTH) - *Microstructural evolution in high alloy content InGaN films grown by molecular beam epitaxy*
- 12⁴⁵ - 13⁰⁰ [O10](#) **M. Gioti** (AUTH) - *Development and characterization of organic light emitting diodes on rigid and flexible substrates*
- 13⁰⁰ - 13¹⁵ [O11](#) **E. Lidorikis** (Uloannina) - *Modelling and design of graphene-based applications in sensing and photodetection*
- 13¹⁵ - 13³⁰ [O12](#) **F. Zacharatos** (NTUA) - *Laser Direct Writing of large area electronics on flexible substrates*

13³⁰ - 14³⁰ Lunch break

14³⁰ - 16³⁰ Session MO3: (C. Dimitriadis & E. Hristoforu)

ELECTRONIC TRANSPORT, SEMICONDUCTORS & DEVICES-1, STRUCTURAL, MECHANICAL & OPTICAL PROPERTIES OF CONDENSED MATTER-1

- 14³⁰ - 15⁰⁰ [Inv3](#) **D. Niarchos** (NCSR-Demokritos) - *Manipulating heat: Improved thermoelectrics and thermal/electrical cloaking*
- 15⁰⁰ - 15¹⁵ [O13](#) **F. Pinakidou** (AUTH) - *Metal (Hydr)oxides for the removal of Cr(VI) from drinking water: a XAFS study*
- 15¹⁵ - 15³⁰ [O14](#) **Z. Viskadourakis** (Univ. Crete) - *Microstructure correlated thermoelectric properties of La_{1-x}Sr_xCoO₃ composites*
- 15³⁰ - 15⁴⁵ [O15](#) **E. Stefanaki** (AUTH) - *High efficiency thermoelectric materials: a holistic approach from macro to nano- scale*
- 15⁴⁵ - 16⁰⁰ [O16](#) **V. Gianneta** (NCSR-Demokritos) - *Efficient Si-based solar cell using aluminum induced crystallization and doping*
- 16⁰⁰ - 16¹⁵ [O17](#) **A. Adikimenakis** (IESL/Forth-Crete) - *InN bandgap determination in low electron concentration films*
- 16¹⁵ - 16³⁰ [O18](#) **K. Valalaki** (NCSR-Demokritos) - *Porous Si thermal conductivity in the temperature range 5-350K*

16³⁰ - 17⁰⁰ Coffee break

17⁰⁰ - 19⁰⁰ Session MO4: Magnetism and Superconductivity

(Chair: G. Litsardakis & D. Niarchos)

- 17⁰⁰ - 17³⁰ [Inv4](#) **U. Wiedwald** (UDE-Germany) - *Tuning Magnetism in Nanostructures by Interface Design*
- 17³⁰ - 17⁴⁵ [O19](#) **A. Makridis** (AUTH) - *Promising features of bimetallic magnetic nanoparticles allow tuning parameters in magnetic hyperthermia application*
- 17⁴⁵ - 18⁰⁰ [O20](#) **G. Tonozlis** (AUTH) - *Scaling laws analysis of magnetocaloric manganites*
- 18⁰⁰ - 18³⁰ [Inv5](#) **E. Hristoforu** (NTUA) - *Stress tensor distribution monitoring in steels using magnetic techniques*
- 18³⁰ - 18⁴⁵ [O21](#) **E. Gkogkosi** (NTUA) - *Effect of pressure on the properties of iron oxyphosphides: an ab initio study*
- 18⁴⁵ - 19⁰⁰ [O22](#) **K. Kanari** (AUTH) - *Processing of anisotropic MnBi nanoparticles by surfactant assisted ball milling*

19⁰⁰ - 20³⁰ Poster Session (Chairs: M. Gioti, P.-I. Gouma, G. Kalosakas, J. Kioseoglou)

20³⁰ Welcome Reception

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Tuesday, Sept. 22

09⁰⁰ - 11⁰⁰ Session TU1: STRUCTURAL, MECHANICAL & OPTICAL PROPERTIES OF CONDENSED MATTER-2

(Chair: N. Frangis & E. Lidorikis)

- 09⁰⁰ - 09³⁰ [Inv6](#) **C. Soukoulis** (University of Crete) - *Broadband Terahertz Generation from Metamaterials and Optical Metamaterials Resonances with High Quality Factor*
- 09³⁰ - 09⁴⁵ [O23](#) **I. Zoumpoulis** (NTUA-Athens) - *High-Pressure Phase Transition in Y₃Fe₅O₁₂*
- 09⁴⁵ - 10⁰⁰ [O24](#) **M. Constantinou** (Cyprus University of Technology) - *Amorphous Carbon Films For Protective and Solid Lubricant Applications*
- 10⁰⁰ - 10¹⁵ [O25](#) **J. Kioseoglou** (AUTH) - *Metal vacancies in strained AlN/GaN interfaces: a first principles investigation*
- 10¹⁵ - 10³⁰ [O26](#) **P. Pappas** (NTUA) - *Induced Raman scattering in multiferroic EuTiO₃*
- 10³⁰ - 10⁴⁵ [O27](#) **Z. G. Fthenakis** (IESL-FORTH-Crete) - *The effect of periodically arranged Stone - Walles defects in graphene on its mechanical properties: an ab-initio study*
- 10⁴⁵ - 11⁰⁰ [O28](#) **D. Photiou** (Cyprus University of Technology) - *Indentation Resistance Enhancement of Auxetic Materials: A Numerical Investigation*

11⁰⁰ - 11³⁰ Coffee break

11³⁰ - 13³⁰ Session TU2: POLYMERS, BIOMATERIALS-1

(Chair: E. Paloura & D. Vlachos)

- 11³⁰ - 12³⁰ [Key1](#) **P.-I. Gouma** (StonyBrook, USA) - *Polymorphic Metal-Oxide based Sensors for the Diagnostic Breathalyzer*
- 12³⁰ - 12⁴⁵ [O29](#) **J. Theodorakos** (NTUA) - *Magnetic manipulation in a microfluidic system of hybrid composites made of MWCNTs functionalized with Fe₃O₄ nanoparticles for drug delivery applications*
- 12⁴⁵ - 13⁰⁰ [O30](#) **G. Kalosakas** (UPatras) - *Numerical simulations of drug release profiles*
- 13⁰⁰ - 13¹⁵ [O31](#) **K. Lambropoulos** (UAthens) - *THz oscillations in small B-DNA segments*
- 13¹⁵ - 13³⁰ [O32](#) **E. Ramou** (UPatras) - *Phase formation and stability in binary mixtures of cyanobiphenyl dimers*

13³⁰ - 14³⁰ Lunch break

14³⁰ - 16³⁰ Session TU3: INHOMOGENEOUS MATERIALS, COMPOSITE MATERIALS-1

(Chair: Ph. Komninou & Ch. E. Lekka)

- 14³⁰ - 15⁰⁰ [Inv7](#) **C. Charitidis** (NTUA) - *Carbon based composite structures and advanced tools for mechanical behaviour assessment*
- 15⁰⁰ - 15¹⁵ [O33](#) **N. Vergadou** (NSCR-Demokritos) - *Molecular Simulation of Imidazolium-based Tricyanomethanide Ionic Liquids*
- 15¹⁵ - 15³⁰ [O34](#) **G. Kritikos** (NSCR-Demokritos) - *Molecular dynamics simulation of highly confined ionic liquids*
- 15³⁰ - 15⁴⁵ [O35](#) **M. Spasova** (University Duisburg-Essen) - *CoO octahedra with a Ferromagnetic Interface between two Antiferromagnets*
- 15⁴⁵ - 16⁰⁰ [O36](#) **E. C. Senis** (UPatras) - *The impact of grain size/interface at Boron Carbide/epoxy composites: dielectric properties and molecular dynamics*
- 16⁰⁰ - 16¹⁵ [O37](#) **S. Varitis** (AUTH) - *Structural properties of thermally treated chromium containing waste*
- 16¹⁵ - 16³⁰ [O38](#) **G. Megariotis** (NTUA) - *Mesosopic Simulations of the Viscoelastic Properties of Polymer Networks*

16³⁰ - 17⁰⁰ Coffee break

17⁰⁰ - 18³⁰ Session TU4: Photonics & Optoelectronics-2

(Chair: D. Christofilos & N. Pelekanos)

- 17⁰⁰ - 17³⁰ [Inv8](#) **M. Sigalas** (UPatras) - *Photonic materials and devices for sensors and solar cells*
- 17³⁰ - 17⁴⁵ [O39](#) **S. Gardelis** (NSCR-Demokritos) - *Enhancement of conversion efficiency of solar cells by down-conversion*
- 17⁴⁵ - 18⁰⁰ [O40](#) **C. P. Mavidis** (IESL-FORTH-Crete) - *Enhanced Light Emission in Extraordinary Optical Transmission Structures*
- 18⁰⁰ - 18¹⁵ [O41](#) **G. Skoulatakis** (UPatras) - *Energy level alignment of PCBM interfaces with low work function substrates*
- 18¹⁵ - 18³⁰ [O42](#) **A. C. Tasolamprou** (IESL-FORTH-Crete) - *Frequency splitter based on the manipulation of surface modes in dielectric photonic crystals structures*

18³⁰ - 20⁰⁰ Poster Session (Chairs: M. Gioti, P.-I. Gouma, G. Kalosakas, J. Kioseoglou)

- 20⁰⁰-21⁰⁰ [Ple1](#) **T. Moustakas** (Boston University, USA) - *Nitride Semiconductors: Physics and Applications*

21⁰⁰ - Conference Dinner

Wednesday, Sept. 23

09³⁰ - 11⁰⁰	Session WE1: NANOSCALE, SURFACE & INTERFACE SCIENCE-2 (Chair: M. Katsikini & S. Kennou)	
09 ³⁰ - 09 ⁴⁵	O43	E. Symianakis (Imperial College, UK) - <i>Electrochemical Characterization and Quantified Surface Termination Obtained by LEIS and XPS of Orthorhombic and Rhombohedral LaMnO₃ Powders</i>
09 ⁴⁵ - 10 ⁰⁰	O44	K. Filintoglou (AUTH) - <i>Raman study of graphene irradiated with 350 eV N⁺ ions</i>
10 ⁰⁰ - 10 ¹⁵	O45	D. Kehrakos (School of Ped. & Techn. Edu, Athens) - <i>Multiscale approach to field-dependent energy barrier calculation of exchange biased nanoparticles</i>
10 ¹⁵ - 10 ³⁰	O46	A. E. Maniadaki (University of Crete) - <i>Theoretical study on hydrogen evolution edge-site activity of MoS₂ and hybrid MoS₂/Graphene structures</i>
10 ³⁰ - 10 ⁴⁵	O47	D. Vlachos (Uloannina) - <i>Adsorption of water on a cesium covered SrTiO₃ (100) surface</i>
10 ⁴⁵ - 11 ⁰⁰	O48	K. Karatasos (AUTH) - <i>Effects of Macromolecular Architecture and Size on Polymer/Graphene Nanocomposites: Insight from Molecular Dynamics Simulations</i>
11⁰⁰ - 11³⁰	Coffee break	
11³⁰ - 13³⁰	Session WE2: ELECTRONIC TRANSPORT, SEMICONDUCTORS & DEVICES-2 (Chair: S. Gardelis & D. Tassis)	
11 ³⁰ - 12 ³⁰	Key2	T. D. Anthopoulos (Imperial, UK) - <i>Low-Dimensional Charge-Transport Phenomena in Solution-Processed Metal Oxide Materials and Devices</i>
12 ³⁰ - 12 ⁴⁵	O49	A. Kaidatzis (NCSR-Demokritos) - <i>Tungsten and tungsten-based alloy thin films as copper substitutes for microelectronics interconnects</i>
12 ⁴⁵ - 13 ⁰⁰	O50	D. Sygkridou (TEI of Western Greece) - <i>Nanocrystalline TiO₂ Films Synthesized through a Simple Procedure for Dye-sensitized Solar Cells' Photoanodes</i>
13 ⁰⁰ - 13 ¹⁵	O51	D. Karageorgopoulos (UPatras) - <i>TiO₂ transport layer made with Pluronic P123 as template for efficient perovskite solar cells</i>
13¹⁵ - 14⁰⁰	Best Poster Awards - Closing Ceremony (Chair: T. Kehagias)	

Poster Session Monday, Sept.21

Electronic transport, semiconductors & devices

<u>P001</u>	G. Leftheriotis	<i>Long-term stability and performance of photoelectrochromic devices for energy saving and power production</i>
<u>P002</u>	Y. Panayiotatos	<i>Dopant-defect interactions in Ge and GeO₂: density functional theory calculations</i>
<u>P003</u>	T. Georgakopoulos	<i>Electrical Conduction Mechanisms of ZnO sol-gel film</i>
<u>P004</u>	H. Sarafidis	<i>Synthesis, structural characterization and complex conductivity study of LiVO₃</i>
<u>P005</u>	P. Bousoulas	<i>Modelling the multilevel resistive switching behaviour of forming free TiO_{2-x} memory devices</i>
<u>P006</u>	I. Leontis	<i>High performance MIS capacitors using silicon nanowires by metal-assisted chemical etching</i>
<u>P007</u>	M. Mpotzakaki	<i>MOS pGe/GeO₂/HfO₂/Au structures: XPS and electrical analysis</i>
<u>P008</u>	I. Karagiannis	<i>EIS studies of unconventional topological pseudo-insulator phases in incandescent lamps' tungsten wires</i>
<u>P009</u>	A. Adikimenakis	<i>Effect of top barrier thickness on transistor performance in AlN/GaN/AlN HEMTs</i>
<u>P010</u>	K. Bidinakis	<i>Galvanomagnetic Phenomena in Bi₂Te₃ and Bi₂Se₃ Thin Films</i>
<u>P011</u>	D. Psiachou	<i>Non-Perturbative Approaches to Electron Transfer in Donor-Acceptor-Like Systems</i>
<u>P012</u>	G. Papadimitropoulos	<i>Gas sensing properties and electrical characterization of hot-wire porous metal oxides thin films</i>
<u>P122</u>	A. Tsiara	<i>Simulation of nanoscale triple gate FinFETs, with TCAD tools – A comparative study.</i>

Poster Session Monday, Sept .21

Structural, mechanical & optical properties of condensed matter

<u>P013</u>	G. Leftheriotis	<i>Effective medium modelling of the interfacial roughness in multilayer coatings</i>
<u>P014</u>	J. Arvanitidis	<i>Structural and Spectroscopic Study of Two Isomeric Nitrate Complexes of Pt(II). Experimental and Computational Approach</i>
<u>P015</u>	G. Megariotis	<i>Coarse-grained Computer Simulations of Hexa-peri-hexabenzocoronene (HBC) and Hexa-n-dodecyl-hexa-peri-hexabenzocoronene (HBC-C12)</i>
<u>P016</u>	A. Delimitis	<i>Tuning the Localised Surface Plasmon Resonances (LSPR) of Au/Gu Nanocrystalline Epilayers via their Microstructure</i>
<u>P017</u>	T. Angeletos	<i>A Spectroscopical Study of the $\text{SiO}_2(\text{Si})$ Absorption Bands Upon Isothermal Annealing in Irradiated Silicon at Liquid Helium Temperatures (L.H.T.)</i>
<u>P018</u>	C. Kyrou	<i>Polarized Raman scattering and birefringence studies of the orientational order in the nematic liquid crystal 4-n-pentyloxyphenyl 4-n-octyloxybenzoate and its nanocomposite with semiconducting CdSe-ZnS quantum dots</i>
<u>P019</u>	M. Katsikini	<i>Simulation of the EXAFS and Raman spectra of $\text{In}_x\text{Ga}_{1-x}\text{N}$ enabling the equation of motion routine of FEFF8</i>
<u>P020</u>	Ph. Komninou	<i>Structural and electronic properties of GaN/AlN and InN/GaN core /shell NWs</i>
<u>P021</u>	Y. Katsandredakis	<i>Small Angle Neutron Scattering investigation of thermal ageing effects in FeCr alloys</i>
<u>P022</u>	N. Bensaid	<i>Effect of welding process Parameters and filler metal types on microstructure and mechanical properties of dissimilar stainless steel welds</i>
<u>P023</u>	N. Bensaid	<i>Effect of heat input and grain refining elements on microstructure and mechanical properties of Ferritic Stainless Steel welds parameters of X70 welds</i>
<u>P024</u>	M. F. Benlamnouar	<i>NDT and Optimization of welding process</i>
<u>P025</u>	S. Magkos	<i>Characterization of TiO_2 nanoparticles by X-ray Absorption Fine Structure Spectroscopy</i>
<u>P026</u>	M. F. Benlamnouar	<i>Filler metal composition and mechanical behavior of TIG dissimilar joints</i>
<u>P027</u>	J. Karakostas	<i>Molecular dynamics investigation of GaN nanocluster formation in SiO_2</i>

Poster Session Monday, Sept.21

Magnetism, superconductivity & strongly correlated systems

P028	C. Serletis	<i>Soft magnetic multilayered thin films for HF applications</i>
P029	N. Ntallis	<i>Finite Element Micromagnetic Simulation of μMag standard problems</i>
P030	N. Ntallis	<i>Micromagnetic modelling of superparamagnetic particles</i>
P031	N. Ntallis	<i>An alternate treatment of surface effects in micromagnetism. Theory and computations</i>
P032	O. Patsia	<i>Optimization of magnetic hyperthermia via synthesis parameters of magnetic nanoparticles</i>
P033	E. Myrovali	<i>The influence of nanoparticle arrays on magnetic hyperthermia</i>
P034	S. Liébana	<i>Enhanced magnetic efficiency by nanoscale mixing and matching in ferrite-based nanoparticles</i>
P035	A. Terzopoulou	<i>Reliable measurements and error-free data handling of magnetic particle hyperthermia parameters</i>
P036	K. Georgalas	<i>Orbital and spin order transitions in $\text{LaMn}_{1-x}\text{Cr}_x\text{O}_{3+\delta}$ ($\delta \approx 0$) perovskite compounds.</i>
P037	M Gjoka	<i>Thermomagnetic analysis and magnetic properties of $\text{RFe}_{6-x}\text{Si}_x$ (R= Y, Sm, Gd, Dy, Ho, Lu) alloys</i>
P038	N. Maniotis	<i>Magnetic field modes for manipulation of magnetic nanoparticles</i>
P039	C. A. Stergiou	<i>Ferrite optimization for wireless powering</i>
P040	G. Giannopoulos	<i>High anisotropy induction into multilayer Fe-Co thin films, towards Rare Earth free permanent magnets applications</i>

Poster Session Monday, Sept. 21

Inhomogeneous materials, composite materials, polymers, biomaterials

<u>P041</u>	D. Photiou	<i>Nanomechanics of Magnetron Sputtered Ti-Nb Films</i>
<u>P042</u>	A. Pipertzis	<i>Influence of structure and dynamics on the ionic conductivity of new solid polymer electrolytes</i>
<u>P043</u>	V. Margaritis	<i>Designing Molecules for Organic Photovoltaics: The case of Hexasubstituted Benzenes carrying Ultrastrong Dipole Moments</i>
<u>P044</u>	G. Papamokos	<i>Polymethacrylates with Polyhedral Oligomeric Silsesquioxane Moieties (POSS): The Influence of Spacer Length on Packing, Thermodynamics and dynamics</i>
<u>P045</u>	S. Alexandris	<i>Capillary Rise in Cylindrical Nanoconfinement of cis-1,4 Polyisoprene and Poly(methyl phenyl siloxane)</i>
<u>P046</u>	I. Stavrakas	<i>Dc conductivity measurements on PVDF composite samples of low graphene content</i>
<u>P047</u>	A. Delimitis	<i>Transmission Electron Microscopy Studies of CoSi/Si₃N₄ Nanocomposite Materials</i>
<u>P048</u>	S. Floros	<i>Dielectric study of a lysozyme solution with molecular dynamics simulations: Non thermal effects of low alternating electric fields</i>
<u>P049</u>	C. A. Stergiou	<i>Microwave attenuation and dielectric properties of hybrid nanocomposites co-filled with organomodified graphene oxide</i>
<u>P050</u>	E. Rousalis	<i>Interactions of polyaspartic-b-poly(ethylene glycol) copolymer with magnetite nanoparticles</i>
<u>P051</u>	A. Kanapitsas	<i>Structure-properties relationship of Barium Ferrite/Barium Titanate/Epoxy Resin Hybrid Nanocomposites.</i>
<u>P052</u>	G. Tomara	<i>Conductivity analysis on epoxy resin/carbon nanotubes composites</i>
<u>P053</u>	G. Tomara	<i>Low content ZnO/epoxy resin and BaTiO₃/epoxy resin nanocomposites: Dielectric response</i>
<u>P054</u>	G. C. Psarras	<i>Dielectric Properties of Ceramic Particles/Epoxy Resin Nanodielectrics</i>
<u>P055</u>	G. C. Psarras	<i>Inorganic Filler-Polymer Matrix Nanocomposites as Bulk Energy Storing Devices</i>
<u>P056</u>	E. Tarani	<i>Effect of different graphene nanoparticles on the structural, thermal and mechanical properties of high density polyethylene</i>
<u>P057</u>	S. X. Drakopoulos	<i>Studying the Water Effect upon α-Relaxation in Thermoplastic Starch Biocomposites by means of Dielectric Spectroscopy</i>
<u>P058</u>	A. Sanida	<i>Dielectric Characterization of Epoxy Resin - Strontium Ferrite Nanocomposites</i>
<u>P059</u>	A. Stimoniaris	<i>Thermomechanical characterization of hybrid epoxy composites with Carbon-based nanofillers</i>
<u>P060</u>	G. Z. Kyzas	<i>Selective removal of silver ions from synthetic mining effluents using Molecularly Imprinted Polymers (MIPs)</i>

Poster Session Tuesday, Sept. 22

Inhomogeneous materials, composite materials, polymers, biomaterials

P061	S. Stavropoulos	<i>Development and Characterization of Epoxy Resin- Zinc Ferrite Nanocomposites</i>
P062	S. Stavropoulos	<i>Thermal and Dielectric Properties of Graphene/poly Cyclic Butylene Terephthalate (pCBT) Nanocomposites</i>
P063	A. Speliotis	<i>Dielectric and electrical properties of Fe₃O₄/CNT/PVDF Nanocomposites</i>
P064	Th. Karakostas	<i>Stabilization of Cr-rich tannery waste in fly-ash based cementitious materials</i>
P065	A. Zerfiridou	<i>High pressure Raman study of L-phenylalanine crystals</i>
P066	S. P. Petsi	<i>Composition and Characterization of Silicate Glasses Containing ZnO and CuO prepared through the Sol-Gel Process</i>
P067	K. Boutzi	<i>On the consolidation of Bi₂Te₃ pellets: Taguchi optimization analysis</i>
P068	D. Patsiaoura	<i>Comparative study of natural fibre reinforced composite materials</i>
P069	G. Theodorou	<i>Synthesis and Characterization of Silicate Glasses Containing SrO through the Sol-Gel Process</i>
P070	G. Theodorou	<i>Strontium doped Mg-based ceramic: Characterization and bioactivity evaluation</i>
P071	G. Theodorou	<i>Effect of synthesis through foam replica technique method on the porosity and mechanical strength of Cu containing scaffolds</i>
P072	S. Termine	<i>Development and Characterization of Epoxy Resin- Barium Tungstate Composites</i>
P073	C. Gkanatsiou	<i>Synthesis, characterization and applications of copper based nanoparticles</i>
P074	C. Charitidis	<i>Corrosion behaviour of dissimilar metal/metal joints including reinforcing additives</i>
P075	C. Kamaraki	<i>Study of keratin tissues by means of Small Angle X - Ray Scattering (SAXS)</i>

Poster Session Tuesday, Sept. 22

Photonics & Optoelectronics

<u>P076</u>	E. Paspalakis	<i>Linear and Nonlinear Optical Properties of CdTe/ZnO Core/Shell Quantum Dots</i>
<u>P077</u>	K. Vysokinos	<i>Optimization of out of plane optical coupling between optical/optoelectronic components and optical waveguides</i>
<u>P078</u>	M. Karampiri	<i>Natural Dose Evaluation using Thermoluminescence and component resolved Optically Stimulated Luminescence analysis.</i>
<u>P079</u>	A. Sotiropoulos	<i>Polystyrene on 101 nm Nitride on Si</i>
<u>P080</u>	C. Tserkezis	<i>Influence of nonlocality on fluorescence from a dipolar emitter coupled to a metallic nanoshell</i>
<u>P081</u>	K. Moratis	<i>Growth and optical characterization of GaAs-InGaAs core-shell piezoelectric nanowires on silicon substrates</i>
<u>P082</u>	S. Eftychis	<i>The Role of Intentional and Unintentional Nitridation of Si (111) in the Growth of GaN Nanowire by Plasma Assisted Molecular Beam Epitaxy</i>
<u>P083</u>	V.E. Gavril	<i>Optical Point spread function as a method for testing dynamic operation of CCDs</i>
<u>P084</u>	Ph. Komninou	<i>Catalyst-free growth of GaN NWs on Si (111) and r- plane sapphire</i>

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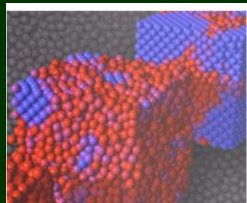
Nanoscale, surface & interface science

P085	V. Georgiadou	<i>Cobalt Ferrite Magnetic Nanoparticles as Anti-Inflammatory Drug Carriers</i>
P086	E. Symianakis	<i>Embedded Atom Method potentials for the simulation of Pt-Ni nanostructures fitted upon DFT calculations.</i>
P087	C. Ioannidou	<i>Phase investigation of PbTe +25%PbSnS₂ thermoelectric composite by electron crystallography</i>
P088	D. Kehrakos	<i>Monte Carlo study of the exchange bias effect in ferromagnetic/antiferromagnetic hybrid nanoparticles</i>
P089	I. Michelakaki	<i>DNA hybridization on ultrasmall gold nanoparticles</i>
P090	M. Dimitropoulos	<i>Fabrication and characterization of free-standing porous silicon and alumina membranes</i>
P091	N. Michalak	<i>Raman spectroscopy indications of the Verwey transition in epitaxial Fe₃O₄(111) films on Pt(111) and Ru(0001)</i>
P092	Z. Milosz	<i>Room temperature/ambient conditions study of the magnetic properties of few-nanometers-thick epitaxial Fe₃O₄(111) films on Pt(111) and Ru(0001)</i>
P093	P. Athanasiadis	<i>Plasmon sensors based on metallic bilayers</i>
P094	G. Constantinides	<i>Nanoparticle Production and Surface Micromachining Through Femtosecond Laser Ablation</i>
P095	A. Gkanatsiou	<i>Quantitative analysis of interfaces in multilayer structures grown on SiC</i>
P096	I. Katrantzis	<i>Structural models of defects in an Al-doped Si emitter of a p-n junction solar cell</i>
P097	V. Syropoulos	<i>Formation of Zn-Mg and Zn-Al alloyed coatings by hot dip galvanizing</i>
P098	M. Tassi	<i>Ab initio calculations of ionization and excitation energies of biologically important heterocyclic planar molecules</i>
P099	M. G. Bouri	<i>L-glutamine on Cu-Fe surfaces by Density Functional Theory Calculations</i>
P100	M. Zegkos	<i>Density Functional Theory Calculations of H₂O Adsorption on Cu(111)</i>
P101	N. Chourdakis	<i>Interaction of CVD graphene with femtosecond laser</i>
P102	T. Vasileiadis	<i>The effect of confinement and coupling with the substrate in the electron-phonon coupling constant of magic Gold nanoclusters studied with ultrafast electron diffraction</i>
P103	N. Florini	<i>Morphology, Structure, and Strain properties of Quantum Nanostructures</i>
P104	E. Polydorou	<i>Hydrogenated Zinc and Titanium Oxide Cathode Interfacial Layers For Efficient and Stable Inverted Organic Solar Cells</i>
P105	A. Soultati	<i>Tailoring Molybdenum Oxide Electronic Properties and Stoichiometry For Application as an Anode Interfacial Layer in Efficient and Stable Organic Solar Cells</i>
P106	T. Kehagias	<i>Stress-Strain Relation in (211)B-oriented InAs/GaAs Quantum Dot Superlattice</i>
P107	J. Kioseoglou	<i>Structural reconstructions, band gaps and bowing parameters of the ternary nitride alloys</i>
P108	Ph. Komninou	<i>Strain and elastic constants in GaN and InN: a first principles study</i>
P109	E. Kokkinos	<i>Improved Hg⁰ Removal from Flue Gases by Mn(IV) Feroxyhyte</i>

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Interdisciplinary Solid State Physics

<u>P110</u>	Th. Karakostas	<i>Vitrification as a tool for sustainable solid waste management</i>
<u>P111</u>	E. Lykartsis	<i>Color fastness of green pigments in egg tempera technique under accelerated aging and weathering tests</i>
<u>P112</u>	L. Malletzidou	<i>Saint Demetrios Monastery of Stomion: Comparative analysis of plasters via TG-DSC and FTIR</i>
<u>P113</u>	D. Papazoglou	<i>Comparative study of contemporary restoration mortars</i>
<u>P114</u>	K. Karatzia	<i>Authenticity study of two German expressionism paintings using spectroscopic techniques</i>
<u>P115</u>	S. Mitropoulos	<i>Investigation of stiffness in micromagnetic simulations of spin valve sensors with OOMMF</i>
<u>P116</u>	M. Niora	<i>Anomalous fading in Durango apatite: comparison between grain sizes in the micro and the nano scale</i>
<u>P117</u>	Z. Papari	<i>Research on anomalous fading of feldspars billion years old using thermoluminescence signal</i>
<u>P118</u>	M. Katsikini	<i>Characterization of fossil remains using XRF, XPS and XAFS spectroscopies</i>
<u>P119</u>	T. Kazakou	<i>Study of archaeological and contemporary ceramic artifacts with physical-chemical techniques</i>
<u>P120</u>	N. Kyriakou	<i>Study and characterization of an 18th century portable icon</i>
<u>P121</u>	F. Pinakidou	<i>Micro and conventional XAFS study of incinerated Cr-rich tannery wastes</i>



**XXXI Panhellenic Conference on
SOLID STATE PHYSICS &
MATERIALS SCIENCE**
Thessaloniki, 20-23 September 2015

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Looking forward to seeing you all in Thessaloniki