

30th Panhellenic Conference
on
Solid-State Physics and Materials Science

September 21-24, 2014
Heraklion, Crete

Conference Program

30^ο Πανελλήνιο Συνέδριο
Φυσικής Στερεάς Κατάστασης και Επιστήμης Υλικών

30th Panhellenic Conference on
Solid State Physics and Materials Science

Program

Sunday, 21/09/2014

Session S.1: Opening Session

16:00 Registration

17:30 Welcome, S.H. Anastasiadis, Director

Institute of Electronic Structure and Laser, Foundation for Research and Technology - Hellas

17:35 Opening remarks, N.T. Pelekanos, Conference Chair

Department of Materials Science and Technology, University of Crete

17:40 L. Samuelson (Keynote)

Nanowires as a generic technology for basic science and future applications

18:20 L. Kronik (Keynote)

Fundamental and optical gaps from density functional theory

19:00

Welcome reception

Monday, 22/09/2014

08:30 Registration

Session M.1: Photonics and Plasmonics

09:00 F. J. García de Abajo (Keynote)
Extreme plasmonics in atomically thin materials

09:40 E. Almpanis, N. Papanikolaou, N. Stefanou
Light-sound interaction and spontaneous emission control in dual photonic-phononic microcavities

09:55 S. Droulias, C. Fietz, T. Koschny, C. Soukoulis
Band-edge operation of two-dimensional photonic crystals with gain

10:10 D.G. Kotsifaki, M. Kandyla, P.G. Lagoudakis
Plasmonic nanotweezers based on femtosecond-laser nanostructured substrates

10:25 C. Tserkezis, J. Aizpurua, J.S. Barnard, S. Kasera, O.A. Scherman, L.O. Herrmann, V.K. Valev, J.J. Baumberg
Capacitive and threaded chain plasmons in metallic nanoparticle strings

10:40 E. Kabouraki, I. Sakellari, D. Gray, M. Farsari, M. Vamvakaki
Quantum dot based 3D photonic devices

10:55 G. Kenanakis, N. Katsarakis, M. Kafesaki, C.M. Soukoulis, E.N. Economou
Optically controllable THz chiral metamaterials

11:10 Coffee break

Session M.2: Nanomaterials

11:40 S. Couris, N. Liaros, I. Papagiannouli, P. Aloukos
Nonlinear optics of carbon nanostructures: graphenes, nano-diamonds, carbon-dots and carbon-onions

11:55 G. Sivaraman, B. Adhikari, F.C. Maier, M. Fyta
Modified diamondoids for sensing applications

12:10 Z.G. Fthenakis, Z. Zhu, J. Guan, D. Tomanek
Understanding the conduction mechanism of carbon foam surfaces

12:25 I. Chatzakis, L. Luo, A. Patz, J. Wang
Ultrafast terahertz probes of interacting dark excitons in chirality-specific semiconducting single-wall carbon nanotubes

12:40 T. Leontiou, P.C. Kelires
Effects of curvature on the equilibrium properties of nanostructures

12:55 N. Florini, G.P. Dimitrakopoulos, J. Kioseoglou, Th. Kehagias, S. Germanis, Z. Hatzopoulos, N.T. Pelekanos
Lattice registration and allocation of strain in (211)B InAs/GaAs quantum dot superlattices

13:10 Lunch break

Monday, 22/09/2014

Session M.3: Strongly Correlated Systems I

- 14:30** P. Fischer (Keynote)
Magnetic soft X-ray spectromicroscopy: from nanoscale behavior to mesoscale phenomena
- 15:10** M. Angelakeris (Invited)
Nanoscale magnetism and its biomedical applicability
- 15:35** K. Brintakis, A. Kostopoulou, S. Psycharakis, A. Ranella, M. Vasilakaki, K.N. Trohidou, A.P. Douvalis, S.K.P. Velu, L. Bordonali, A. Lascialfari, D. Sakellari, K. Simeonidis, M. Angelakeris, I. Athanassakis, A. Lappas
Maghemite nanoclusters: a promising multifunctional material for biomedicine
- 15:50** M.Gjoka, C. Sarafidis, D. Niarchos
Prospect of MnBi permanent magnets for traction motors and generators
- 16:05** G. Tonozis, G. Litsardakis
Magnetocaloric materials for room temperature refrigeration: the case of rare earth doped La-Ba manganites
- 16:20** Coffee break

Session M.4: Strongly Correlated Systems II

- 16:40** A.J. Tasiopoulos, E.E. Moushi, M. Charalambous, C. Papatriantafyllopoulou, C. Lampropoulos, T.C. Stamatatos, G. Christou (Invited)
High nuclearity, high spin clusters and single molecule magnets from the use of diols in Mn chemistry
- 17:05** I. Galanakis (Invited)
Heusler compounds in spintronics: theory and perspectives
- 17:30** G.M. Kavoulakis
Rotational properties of trapped superfluid gases of atoms
- 17:45** D. Bessas, I. Kantor, D.G. Merkel, A. Chumakov, R. Ruffer, K. Glazyrin, I. Sergueev, R.P. Hermann
Pressure mediated structural transition in EuTiO₃
- 18:00** Th. Speliotis, A. Melitsiotis, D. Niarchos, P. Athanasopoulos, C. Christides
Structural and magnetotransport properties in granular Co(c=0.8)Bi(1-c) thin films

Session M.5: Poster session

- 18:15** Posters and discussion

Tuesday, 23/09/2014

Session T.1: Graphene and beyond

- 09:00** A. Dimoulas (Invited, co-sponsored by the “Hellenic Society for Science and Technology of Condensed Matter”)
Atomically thin 2D materials for nanoelectronics
- 09:25** K. Papagelis (Invited)
Single and few layer graphene flakes under uniaxial deformation
- 09:50** E. Lidorikis, A. Dagkli, N. Myoung, S. Evangelou, T.J. Echtermeyer, M. Wu, A. Lombardo, A. Colli, S. Milana, A.C. Ferrari
Modeling of plasmonic nanostructures for enhanced graphene-based photodetectors
- 10:05** S.P. Economopoulos, N. Tagmatarchis
Water-soluble graphene nanoensembles with dual porphyrin donor moieties
- 10:20** I. Paradisanos, E. Kymakis, C. Fotakis, G. Kioseoglou, E. Stratakis
Intense femtosecond photoexcitation of bulk and monolayer MoS₂
- 10:35** A.E. Maniadaki, D. Davelou, G.N. Kioseoglou, I.N. Remediakis, G. Kopidakis
Electronic-properties engineering of TMDs: strained monolayers and nanoribbons
- 10:50** A. Michail, K. Papagelis, C. Galiotis, J. Parthenios
Raman characterisation of layered MoS₂ produced by a non-catalytic CVD method
- 11:05** Coffee break

Session T.2: Optoelectronics

- 11:35** Th. Kehagias (Invited)
Nanostructures and interfaces in III-V compound semiconductors
- 12:00** G.K. Angeli, P. Falaras, P.N. Trikalitis
Advanced hybrid semiconductors for energy applications
- 12:15** V. Melissinaki, M. Farsari, S. Pissadakis
Fabry-Perot vapour microsensor onto fiber endface fabricated by multiphoton polymerization technique
- 12:30** S. Eftychis, J. Kruse, K. Tsagaraki, M. Androulidaki, A. Georgakilas, T. Koukoula, Th. Kehagias, Ph. Komninou
Nucleation and growth of GaN nanowires by plasma-assisted molecular beam epitaxy
- 12:45** E. Papadomanolaki, C. Bazioti, S. Kazazis, Th. Kehagias, A. Georgakilas, G.P. Dimitrakopoulos, E. Iliopoulos
High In-content InGa_N films grown by plasma-assisted molecular beam epitaxy for photovoltaic applications
- 13:00** K. Moratis, R. Jayaprakash, S. Germanis, K. Tsagaraki, Z. Hatzopoulos, N.T. Pelekanos
Enhanced absorption in GaAs nanowire arrays grown on silicon substrates
- 13:15** Lunch break

Tuesday, 23/09/2014

Session T.3: Composite Materials

- 14:35** Ch.E. Lekka (Invited)
Biocompatible titanium-based alloys for orthopaedics
- E. Tzianaki, Y. Orphanos, M. Bakarezos, G.D. Tsibidis, P.A. Loukakos, C. Kosmidis,
- 15:00** M. Tatarakis, N.A. Papadogiannis
Ultrafast laser-induced thermo-mechanical changes of Ti thin films on Si substrates
- 15:15** G. Vekinis, G. Xanthopoulou, A. Marinou
Novel ultra high temperature composites for extreme space applications
- 15:30** A. Balliou, N. Glezos, S. Kazim, J. Peger, J. Rakusan, S. Kennou, G. Skoulatakis
Hybrid networks based on the interplay of Au nano-particles and CuPcSu ligands-electronic transport in mesoscopic scale
- 15:45** G. Hadjisavvas, G. Tritsarlis, C. Mathioudakis, E. Kaxiras, P.C. Kelires
Optical absorption of carbon-metal nanocomposites
- 16:00** Coffee break

Session T.4: Surface Science

- 16:30** G.A. Tritsarlis, D. Vinichenko, G. Kolesov, E. Kaxiras
On the possibility of photocatalytic water splitting on rutile TiO₂(110): a theoretical study
- 16:45** E. Klontzas, T. Stergiannakos, G. E. Froudakis, E. Tylianakis
Effect of magnesium alkoxide group on the CO₂ adsorption in metal-organic frameworks
- 17:00** N.K. Kostoglou, C. Rebholz, V. Tzitzios, C. Tampaxis, T.A. Steriotis, K. Giannakopoulos,
G.C. Charalambopoulou, K. Polychronopoulou, Y. Li, K. Liao
Hydrogen storage capacity of different nanoporous carbon adsorbents
- 17:15** E. Magoulakis, A. Kostopoulou, G.N. Arvanitakis, A.G. Kanaras, A.N. Andriotis, A. Lappas,
P.A. Loukakos
Porosity-moderated ultrafast electron transport in Au nanowire networks
- 17:30** E. Hourdakis, A.G. Nassiopoulou
High performance MIM capacitors with nanomodulated electrode and dielectric surfaces
- 17:45** M. Panagopoulou, D. Tsoukalas, Y. Raptis, D. Louloudakis, D. Vernardou, E. Spanakis,
N. Katsarakis, E. Koudoumas, E. Gagaoudakis, G. Michail, V. Kampylafka, E. Aperathitis,
G. Kiriakidis, G. Iliadis
Study on the properties of VO₂ as thermochromic coating for smart windows
- 18:00** D. Karageorgopoulos, A. Apostolopoulou, E. Vitoratos, E. Stathatos
Sol-gel prepared ZnO nanostructured films for dye sensitized solar cells

Session T.5: Poster Session

- 18:15** Posters and discussion
- 21:00** Conference dinner

Wednesday, 24/09/2014

Session W.1: Biomaterials

- 09:00 S. Pispas (Invited)
Chimeric block copolymer/protein nanostructures via electrostatic self-assembly
- 09:25 T. Manouras, G. Pasparakis, P. Argitis, M. Vamvakaki
Photodegradable acetal block copolymer for drug delivery
- 09:40 E. Daskalaki, K. Velonia
Synthesis of giant amphiphiles by enzyme catalyzed ring opening polymerization
- 09:55 A. Kolokithas-Ntoukas, Y. Sarigiannis, A. Bakandritsos, R. Zboril, S. Pispas, G. Mountrichas, Zoppellaro, C. Diwoy
PEGylation of condensed colloidal magnetite nanocrystal clusters for imaging and drug delivery
- 10:10 P.Ch. Papaphilippou, I. Virydes, Th. Krasia-Christoforou
Electrospun, pH-responsive microfibrillar membranes as adsorbents for bacteria removal from contaminated aqueous solutions
- 10:25 P.I. Sifakaki, M. Mone, E. Pavlidou, D. Bikiaris
Effect of various parameters on morphological structure of PCL nanofibers
- 10:40 K. Lambropoulos, K. Kaklamanis, G. Georgiadis, C. Simserides
THz charge oscillations and charge transfer in DNA
- 10:55 Coffee break

Session W.2: Nanocomposites

- 11:25 K. Czaniková, I. Krupa, M. Omastová (Keynote)
Photo-mechanical actuation of elastomer/carbon nanotubes nanocomposites
- 12:05 F.D. Gegitsidis, N.D. Alexopoulos, E.P. Favvas, S.K. Kourkoulis
The effect of multi-wall carbon nanotubes addition on the performance of P84 co-polyimide hollow fiber membranes
- 12:20 K. Androulaki, K. Chrissopoulou, S.H. Anastasiadis, M. Labardi, D. Prevosto
Dynamics of hyperbranched polymers in the bulk and close to surfaces
- 12:35 A.N. Rissanou, V. Harmandaris
Study of polymer/graphene interfacial systems through molecular dynamics simulations
- 12:50 E. Kapetanakis, J. Kaliakatsos, C. Katsogridakis, A.M. Douvas, S. Koliopoulou, A. Speliotis, V. Psycharis, P. Argitis, P. Normand, V. Saltas, D. Dimotikali
Radiation sensors based on the generation of protons in polymeric gate dielectric
- 13:05 Lunch break

HSSTCM Workshop

- 14:30 G. Vekinis
Technological innovation and entrepreneurship

Posters

Topic 1: Photonics and optoelectronics

- 1 A. Fountoulakis, E. Paspalakis
Switching properties of a waveguide directional coupler based on quantum nanostructures with decay interference
- 2 T. Georgakopoulos, K. Pomoni, D. Karageorgopoulos, A. Apostolopoulou, E. Stathatos
The temperature dependence of the transient photoconductivity of ZnO films
- 3 S. Germanis, L. Monniello, R. Hostein, A. Stavriniadis, G. Konstantinidis, Z. Hatzopoulos, V. Voliotis, N.T. Pelekanos
Near room temperature emission from single (211)B InAs QD and clear antibunching behaviour up to 60K
- 4 S. Germanis, A. Stavriniadis, G. Konstantinidis, Z. Hatzopoulos, N.T. Pelekanos
Microcavity-enhanced emission from single (211)B InAs QDs for the generation of entangled photon pairs
- 5 R. Jayaprakash, F. Kalaitzakis, N.T. Pelekanos, J. Bleuse, B. Gayral, E. Monroy
Study of resonant energy transfer between GaN/AlGaIn quantum wells and polyfluorene
- 6 SA. Kazazis, E. Papadomanolaki, M. Androulidaki, K. Tsagaraki, A. Kostopoulos, E. Aperathitis, E. Iliopoulos
Effect of rapid thermal annealing on polycrystalline InGaIn deposited on fused silica substrates
- 7 M. Manousidaki, A. Aristov, M. Farsari, A. Kabashin
3D Photonic Crystal structures for Sensing Applications
- 8 Ch.P. Mavidis, M. Kafesaki, E.N. Economou, C.M. Soukoulis
Spontaneous emission modification in photonic structures
- 9 G. Michail, V. Kambylafka, E. Aperathitis, K. Tsagaraki, G. Kiriakidis, Gagaoudakis, N. Pelekanos
Study of sputtered NiO and NiAl₂O₄ spinel thin films deposited in oxygen deficient plasma
- 10 K. Moratis, K. Tsagaraki, Z. Hatzopoulos, J. Bleuse, F. Donatini, N.T. Pelekanos
Optical properties of core-shell GaAs-AlGaAs nanowires on silicon
- 11 I. Papagiannouli, P. Aloukos, S. Couris
Optical power limiting of laser radiations by carbon nanostructures
- 12 S. Papazoglou, Y.S. Raptis, I. Zergioti, V. Tsouti, S. Chatzandroulis
Laser printing and laser reduction of graphene oxide
- 13 A.C. Tasolamprou, M. Kafesaki, L. Zhang, T. Koschny, C.M. Soukoulis
Beam shaping and manipulation in photonic crystal structures
- 14 Aggelos Xomalis, G. Kenanakis, A. Selimis, M. Kafesaki, M. Farsari
Three-dimensional photonic crystals and metamaterials made by direct laser writing

Topic 2: Structural-dynamical and mechanical properties of condensed matter

- 15 M. Katsikini, F. Pinakidou, E. C. Paloura, J. Arvanitidis, S. Ves, A. Georgakilas
Application of the equation of motion method for the determination of the EXAFS Debye-Waller factors
- 16 P. Kavouras, G.P. Dimitrakopoulos, Th. Kehagias, Ph. Komninou, I. Ratschinski, H.S. Leipner, G. Leibiger, F. Habel
Study of plastic deformation and fracture of polar and nonpolar GaN single crystals: a multiscale approach
- 17 Th. Kehagias, C. Bazioti, G.P. Dimitrakopoulos, Th. Walther, E. Papadomanolaki, E. Iliopoulos
Strain accommodation in InGaN epilayers and interlayers with high alloy content towards efficient photovoltaics
- 18 Z. Kotsina, G. Apostolopoulos, K. Mergia, S. Messoloras, A. Lagoyannis, S. Harissopoulos
Reordering of Cr atoms during proton irradiation in a Fe-5 at.% Cr alloy
- 19 K.A. Skoufaris, G.P. Tsironis
Nonlinear dynamics in small world and scale free networks

Topic 3: Strongly correlated electronic systems, magnetism and superconductivity

- 20 E. Aza, I. Bakaimi, A.M. Abakumov, B. Klemke, K. Kiefer, A. Lappas
Magnetolectricity in two-dimensional manganites
- 21 N. Biniskos, M. Calamiotou, E. Syskakis
Structural, magnetic and electrical properties of $La_{1-x}Bi_xMnO_{3+\delta}$ ($\delta=0.09$) perovskite compounds
- 22 I. Galanakis
Magnetic order of transition-metal δ -doped cubic ZnO
- 23 K. Georgalas, E. Syskakis
Study of CMR effect and magnetic order in perovskite (La, Pr, Nd) $MnO_{3+\delta}$ ($\delta \approx 0.09, 0.12$) compounds
- 24 G. Giannopoulos, L. Reichel, A. Markou, S. Kauffmann-Weiss, I. Panagiotopoulos, A. Edström, W. Wallisch, J. Ruzs, S. Fähler, J. Fidler, D. Niarchos
Structural and magnetic properties of strongly carbon doped Fe-Co thin films
- 25 G. Giannopoulos, L. Reichel, A. Markou, M. Werwinski, A. Edström, J. Ruzs, I. Panagiotopoulos, S. Faehler, D. Niarchos
 Li_0 FePt/FeCo thin films towards rare earth free permanent magnets applications
- 26 A. Makridis, M. Tziomaki, E. Myrovali, D. Sakellari, K. Simeonidis, M. Angelakeris, K. Topouridou, M.P. Yavropoulou, J.G. Yovos
A multifunctional approach focused on hyperthermia response of commercial ferrofluids
- 27 E. Myrovali, V. Ntomprougidis, D. Sakellari, K. Simeonidis, M. Angelakeris
Magnetic nanoparticle arrays: effect on magnetic hyperthermia
- 28 A. Samartzis, E. Syskakis
Orbital and magnetic order in $LaMn_{1-x}Cr_xO_{3+\delta}$ ($x=0.0-0.25$) compounds

Topic 4: Surfaces, nanomaterials, and low-dimensional systems

- 29 K.Alexaki, C. Fotakis, E. Stratakis
Ultrashort pulse laser assisted generation of layered nanomaterials in liquid
- 30 S. Alexandri, G. Kalosakas, N.N. Lathiotakis, C. Galiotis, K. Papagelis
Mechanical properties of graphene and boron nitride sheets and ribbons
- 31 S. Andrikaki, K. Govatsi, K.S. Andrikopoulos, S.N. Yannopoulos, G.A. Voyatzis
The influence of Au film thickness and annealing conditions on SERS enhancement
- 32 G. Antonaropoulos, K. Brintakis, A. Kostopoulou, A. Lappas
Shaping core-shell iron oxides nanocrystals
- 33 V. Gkrana, K. Filintoglou, J. Arvanitidis, D. Christofilos, M. Katsikini, C. Bazioti, G.P. Dimitrakopoulos, S. Ves, G.A. Kourouklis, A. Georgakilas, E. Iliopoulos
High pressure Raman and PL study of $In_xGa_{1-x}N$
- 34 A. Bairamis, Ch. Zervos, A. Adikimenakis, A. Kostopoulos, M. Kayampaki, K. Tsagaraki, G. Konstantidis, A. Georgakilas
AlN/GaN HEMTs with thin GaN/AlN buffer layers on sapphire (0001) substrates
- 35 A. Balliou, G. Papadimitropoulos, N. Glezos, D. Davazoglou
Low temperature porous Ta_2O_5 films. Towards hybrid molecular/high-k oxides for non-volatile memory applications
- 36 M.A. Botzakaki, S.N. Georga, C.A. Krontiras, G. Skoulatakis, S. Kennou, S. Ladas, P. Svarnas, C. Tsamis, E. Makarona
ALD deposited thin HfO_2 films: electrical and structural characterization
- 37 D. Kokkinos, K. Filintoglou, D. Christofilos, J. Arvanitidis, S. Ves, G.A. Kourouklis, O. Frank, M. Kalbac
Raman study of $^{12}C/^{13}C$ double layer graphene
- 38 D. Davelou, G. Kopidakis, G. Kioseoglou, I.N. Remediakis
 MoS_2 nanostructures: semiconductors with metallic edges
- 39 Nikos Delikoukos, L. Sygellou, J. Parthenios, D. Tasis, C. Galiotis, K. Papagelis
Surface doping of exfoliated and CVD graphene on Si/SiO₂ substrate
- 40 M.G. Frysalis, E.M. Klontzas, G.E. Froudakis
Theoretical study of CO₂ adsorption in functionalized MOFs
- 41 C. Gkanatsiou, N. Vouroutzis, N. Frangis, V. Gianneta, A.G. Nassiopoulou
Structural characterization of Al-induced crystallized amorphous Si thin films for photovoltaic applications
- 42 A. Gkanatsiou, Ch.B. Lioutas, N. Frangis
Atomic models for interfaces in multilayer structures grown on SiC
- 43 Ch. Gryparis, I. Spanopoulos, P.N. Trikalitis
Gas sorption properties of a functionalized NbO-type metal organic frameworks
- 44 A. Kaidatzis, D. Niarchos, O. Boule, G. Gaudin, C.A. Avcı, K. Garello, P. Gambardella
Perpendicular magnetic anisotropy on W-based spin-orbit torque CoFeB | MgO MRAM stacks

- 45 P. Koralli, M. Kandyla, G. Mousdis, M. Kompitsas, M. Girtan
Sol-gel grown compound ZnO thin films for photovoltaic applications
- 46 I. Karagiannis, I. Samaras
Electrical percolation in incandescent lamps' tungsten wires
- 47 T. Pavloudis, J. Kioseoglou, Th. Kehagias, Ph. Komninou, Th. Karakostas, C. D. Latham, M. I. Heggie, P.R. Briddon, M.J. Rayson, M. Eickhoff
Energetics and electronic properties of GaN nanowires with embedded $In_xGa_{1-x}N$ nanodisks
- 48 V.A. Dimitriadis, D. Kechrakos, O. Chubykalo-Fesenko
Exchange-bias effect in core-shell nanoparticles with non-spherical shape and rough interfaces
- 49 P.A. Kolozoff, S. Katsiaounis, G. Avgouropoulos, E. Topoglidis
Adsorption and electrochemical behaviour of cyt-c on carbon nanotubes/TiO₂ nanocomposite films fabricated at various annealing temperatures
- 50 Th. Kehagias, N. Florini, G. P. Dimitrakopoulos, J. Kioseoglou, Ph. Komninou, K. Moratis, Z. Hatzopoulos, N.T. Pelekanos
GaAs/AlGaAs core-shell nanowires for energy applications: a structural study
- 51 M. Kotzabasaki, E. Klontzas, G.E. Froudakis
OH-IRMOF-16 as potential drug carrier for gemcitabine delivery. A DFT study.
- 52 T. Koukoula, Th. Kehagias, Th. Pavloudis, J. Kioseoglou, Ph. Komninou, S. Eftychis, J. Kruse, A. Georgakilas
Interfacial phenomena in GaN core-AlN/GaN shell nanowires
- 53 T. Koukoula, Th. Kehagias, J. Kioseoglou, Ph. Komninou, S. Eftychis, J. Kruse, A. Georgakilas
Nanoscale properties of GaN nanowires grown on Si substrates with an AlN interfacial layer
- 54 N. Liaros, S. Couris
Size dependence of ultrafast electron dynamics and nonlinear optical response of γ -Fe₂O₃ nanoparticles
- 55 A. Lotsari, G. P. Dimitrakopoulos, Th. Kehagias, Ph. Komninou, A. Adikimenakis, A. Georgakilas
Structural properties of inclined GaN nanowires
- 56 P.A. Loukakos, E. Stratakis, G. D. Tsibidis and C. Fotakis
Ultrafast laser-induced processes and processing on semiconductor surfaces at the micro/nano-scale by temporally shaped fs laser pulses
- 57 A. Marinou, G. Xanthopoulou, G. Vekinis, A. Lekatou
Aqueous corrosion of Ni-Al composite coatings by combustion-assisted flame spraying
- 58 G. Mathioudakis, A. Soto Beobide, G. A. Voyiatzis
Comparative SERS and UV-visible measurements for low concentration detection of biocidal groups
- 59 C. Mathioudakis, P.C. Kelires
Modelling of 3D nanographene
- 60 N. Michalak, Z. Miłosz, M. Lewandowski, R. Ranecki, S. Jurga, T. Luciński
The influence of epitaxial strain on the structure of iron oxide thin films on Pt(111) and Ru(0001)
- 61 I. Michelakaki, D. Tsoukalas
Oxidation study of hafnium nanoparticles through grazing incidence x-ray diffraction
- 62 G. Papadimitropoulos, I. Kostis, N. Stathopoulos, D. Davazoglou
Gas sensing properties and structural characterization of hot-wire porous metal oxides thin films

- 63 K. Papamichail, K. Mergia, Y. Serruys, Th. Speliotis, G. Apostolopoulos, F. Ott
Fe⁺ irradiation effects on iron films
- 64 H. Papananou, K. Chrissopoulou, S.H. Anastasiadis, K.S. Andrikopoulos, G.A. Voyiatzis, A. Avgeropoulos, M. Labardi, D. Prevosto
PEO crystallization and dynamics close to SiO₂ surfaces
- 65 S. Papazoglou, S. Samothrakitis, I. Theodorakos, I. Zergioti, A. Ntziouni, K. Kordatos, A. Klinakis
Chemical functionalization of carbon nanomaterials for magnetic drug delivery applications
- 66 V.S. Petrakis, A.N. Rissanou, V. Harmandaris, K. Chrisopoulou, S. Anastasiadis
Atomistic molecular dynamics simulation study of a hybrid poly (ethylene oxide) / silica nanoparticle system
- 67 G.S. Polymeris, E.C. Stefanaki, C.B. Lioutas, K. Mars, E. Godlewska, A. Burkov, M. Fedorov, E. Hatzikraniotis, K.M. Paraskevopoulos
Micro and nanostructure of Mg₂Si after ageing
- 68 G. Anagnostopoulos, C. Androulidakis, G. Tsoukleri, J. Parthenios, I. Polyzos, K. Papagelis, C. Galiotis
Raman spectroscopy probes stress transfer efficiency in monolayer graphene/polymer systems
- 69 I. Polyzos, J. Parthenios, K. Papagelis, M. Bianchi, R. Sordan, C. Galiotis
Wavelength dependence of suspended single layer graphene Raman spectra
- 70 A.J. Power, I. Remediakis, V. Harmandaris
Properties of hybrid polymer/gold nanocomposite materials through a classical molecular dynamics approach
- 71 K. Psifis, D. Louloudakis, G. Papadimitropoulos, D. Davazoglou, N. Katsarakis, C. Savvakis, E. Spanakis, D. Vernardou, E. Koudoumas
LPCVD electrochromic WO₃ layers on FTO glass substrates using different substrate temperatures
- 72 I. Rousalis, A. Bakandritsos, G. Moudrichas, S. Pispas
Interactions of polyaspartic-b-poly(ethylene glycol) copolymer with magnetite nanoparticles
- 73 L. Seremetis, J. Parthenios, C. Galiotis, K. Papagelis
Graphene deposited on the top of a highly corrugated polymer substrate
- 74 L. Sygellou, I. Polyzos, J. Parthenios, K. Papagelis, C. Galiotis
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- 75 I. Spanopoulos, P.N. Trikalitis
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- 77 I. Sta, M. Jlassi, M. Kandyla, M.Hajji, P. Koralli, M. Kompitsas, H. Ezzaouia
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- 78 T. Stergiannakos, E. Klontzas, G.E. Froudakis, E. Tylianakis, T. Vegge
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- 80 A.Z. Stimoniaris, C.G. Delides, A. Kanapitsas, H. Zois
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- 81 M. Sygletou, C. Petridis, E. Kymakis, C. Fotakis, E. Stratakis
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- 82 G. Tamiolakis, I. Skarmoutsos, G.E. Froudakis
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- 83 C Tiflidou, E. Topoglidis
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- 84 C. Tsangarakis, I. Spanopoulos, P.N. Trikalitis
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- 85 G.D. Tsibidis, P. A. Loukakos, E. Stratakis, C. Fotakis
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- 86 D. Gherca, D. Tsikritzis, S. Kennou, M. Vamvakaki
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- 87 E. Vasilaki, M. Kaliva, D. Vernardou, I. Georgaki, D. Konios, E. Kymakis, M. Vamvakaki, N. Katsarakis
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- 88 N. Vasilakis, K.C. Vasilopoulos, L. Syggelou, K. Chrissopoulou, S.H. Anastasiadis
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- 89 J. Marquez Velasco, S.A. Giamini, N. Kelaidis, G. Kordas, Y.S. Raptis, A. Dimoulas
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- 90 G. Xanthopoulou, G. Vekinis
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- 91 G. Xanthopoulou, K. Karanasios, G. Vekinis
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- 92 P. Xydias, I. Spanopoulos, P.N. Trikalitis
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- A. Katsouras, C.L. Chochos, A. Avgeropoulos
94 *High band gap indacenodithiophene and indacenodithienothiophene copolymers as electron donors in organic photovoltaics*
- P.G. Falireas, M. Vamvakaki
95 *Synthesis and characterization of pH-sensitive hybrid janus nanoparticles*
- C. Flouraki, M. Kaliva, G.S. Armatas, M. Vamvakaki
96 *Porous porphyrin-containing polymer nanoparticles for gas separation applications*
- M.A. Frysalis, C. Orfanou, M. Kaliva, L. Papoutsakis, M. Vamvakaki, S.H. Anastasiadis
97 *Immobilization of nanocatalysts-containing polymeric carriers onto solid surfaces*
- M.A. Frysalis, L. Papoutsakis, G. Kenanakis, E. Stratakis, S.H. Anastasiadis
98 *Polymeric surfaces with controlled wettability exhibiting unidirectional features*
- S.F. Galata, G.T. Malliaros, I. Stavrakas, K. Moutzouris, D. Triantis
99 *Electrical characterization on PVDF-graphene samples*
- I. Gavalas, A. Selimis, M. Farsari
100 *3D scaffold micro fabrication via multi photon polymerization of hybrid materials for neural cell cultivations*
- A. Georgopoulou, M. Kaliva, M. Vamvakaki, M. Chatzinikolaidou
101 *Enhanced in vitro biological response of a chitosan-graft-poly(ϵ -caprolactone) copolymer for bone repair*
- A. Skarmoutsou, D. Dragatogiannis, C.A. Charitidis, M. Kaliva, M. Vamvakaki,
M. Chatzinikolaidou, C. Pontikoglou
102 *Nanoindentation analysis and biological characteristics of chitosan-graft-poly(ϵ -caprolactone) copolymer scaffolds*
- E.I. Koufakis, Th. Manouras, M. Vamvakaki
103 *Novel polymer brushes for antifouling surfaces*
- F.K. Krasanakis, S.H. Anastasiadis, M. Vamvakaki
104 *pH-responsive hollow polymeric capsules*
- T. Manouras, E. Koufakis, S.H. Anastasiadis, M. Vamvakaki
105 *Synthesis and characterization of diblock copolymers containing antifouling and self-polishing groups*
- M. Mantela, C. Simserides
106 *Nucleic acid bases and analogues: electronic structure with LCAO*
- E. Mygdali, M. Kaliva, M. Vamvakaki, Ch. Pontikoglou, M. Chatzinikolaidou
107 *Pro-angiogenic features of Wharton's jelly-derived mesenchymal stromal cells enhance vascular formation on novel chitosan-graft-poly(ϵ -caprolactone) copolymer*
- A. Nika, Th. Manouras, M. Chatzichristidi, M. Vamvakaki, P. Argitis
108 *Synthesis of PDMAEMA-*b*-PTHPMA copolymers and investigation of their lithographic performance*
- M. Kaliva, C. Orfanou, S.H. Anastasiadis, M. Vamvakaki
109 *Controlled synthesis of active metal nanocatalysts within pH-responsive microgel particles*

- 110 A. Papadopoulos, M. Kaliva, G. Kaklamani, M. Vamvakaki
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- 111 P.Ch. Papaphilippou, I. Virydes, Th. Krasia-Christoforou
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- 112 Z. Paragkamian, N.D. Alexopoulos, P. Poulin
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- 116 V. Tsouti, S. Chatzandroulis
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- 119 S. Boutsoukou, N.D. Alexopoulos, F. Giannakopoulou, S.K. Kourkoulis
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- 120 N. Chousidis, E. Rakanta, G. Batis
Effect of iron slag as mineral admixture on durability of concrete
- 121 A.A. Ioannidou, M. Rull, M. Martin-Gonzalez, A. Moure, A. Jacquot, D. Niarchos
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- 122 I. Lazaridou, N.D. Alexopoulos, A. Vairis, M. Petoussis
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- 123 D. Louloudakis, D. Vernardou, E. Spanakis, N. Katsarakis, E. Koudoumas, G. Kiriakidis
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- 124 N. Mavrikakis, K. Siderakis, E. Koudoumas
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- 125 A.C. Patsidis, A. Kanapitsas, C. Tsonos, G.C. Psarras
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- 126 G.N. Tomara, C. Tsonos, A. Kanapitsas, G.C. Psarras
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- 127 V. Saltas, I. Fitis, F. Vallianatos, D. Pentari
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- 128 E.C.Senis, A.C.Patsidis, G.C.Psarras
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- 129 A. Talarou, N.D. Alexopoulos, E.P. Favvas
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- 130 G.N. Tomara, P. K. Karahaliou, S.N. Georga, C.A. Krontiras, G.C. Psarras, E. Siores
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- 131 K. Triantou, K. Mergia, A. Marinou, G. Vekinis, W. Fischer, G. Pinaud, J. Barcena
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- 132 S. Varitis, P. Kavouras, G. Kaimakamis, E. Pavlidou, G. Vourlias, K. Chrissafis, G.P. Dimitrakopoulos, Th. Karakostas, Ph. Komninou
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- 133 O.Vrionis, G.C.Psarras
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- 136 G. Avgouropoulos, J. Papavasiliou
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- 137 D. Bessas, D.G. Merkel, A. Chumakov, R. Rüffer
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- 140 A. Paxinou, J. Papavasiliou, G. Avgouropoulos
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- 141 V. Saltas, I. Fitis, F. Vallianatos
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- 142 A. Tsolakis, G. Litsardakis, L. Chaleva, A. Salifoglou, N. Vouroutzis
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- 143 G. Tzagkarakis, M. Sucheai, I.V. Tudose, G. Kenanakis, M. Katharakis, E. Drakakis, E. Koudoumas
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- 145 K. Androulaki, K. Chrissopoulou, S. H. Anastasiadis
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