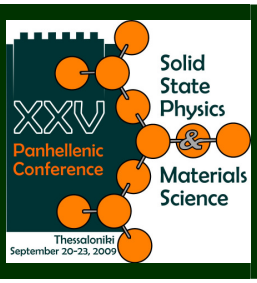


Program also available on the web

http://xxv.physics.auth.gr

xxv@physics.auth.gr
Tel. & Fax: +302310-998036

Program

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

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 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. Failure to follow this requirement will mean that the poster will NOT FIT on the allotted board.
- The dimensions of the posters should be 100 cm x 100 cm.
- 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

17^{00} - 18^{30}	**Registration**	
18^{30} - 19^{00}	**Opening Ceremony** *(Chair: E. Paloura)*	
19^{00} - 20^{00}	**Ple1**	**E. Dooryhee - CNRS, Grenoble, France** ***Looking into art and cultural heritage with synchrotron X - rays***
20^{00}	**Welcome Reception**	

Monday, Sept .21

09^{00} - 11^{00}		**Session MO1: Structural, Mechanical & Optical Properties of Condensed Matter - 1** *In memory of G. Kanellis (Chair: S. Ves & C. Raptis)*
09^{00} - 10^{00}	**Ple2**	**K. Syassen (Max Plank Institut für Festkörperforschung, Stuttgart) - *High - pressure studies of transition metal compounds located near the insulator - metal borderline***
10^{00} - 10^{15}	O1	**A. Antonakos** (NTUA, Dept. of Physics) - *Controlling phase separation in manganite thin films*
10^{15} - 10^{30}	O2	**D. Kastanis** (FORTH/ICE-HT, Patras) - *Plasma oxidation of multi - walled carbon nanotube sheets*
10^{30} - 10^{45}	O3	**Ch. Lekka** (Univ. of Ioannina, Dept. of Mat. Sci. & Eng.) - *Ultra fine structure of the short range order of the $Cu_{65}Zr_{35}$ and $Cu_{35}Zr_{65}$ metallic glasses*
10^{45} - 11^{00}	O4	**P. Kavouras** (TEI Thessaloniki, Dept. of Applied Sciences) - *The effect of In implantation on the structural and nano - mechanical properties of GaN*
11^{00} - 11^{30}		**Coffee break**
11^{30} - 13^{00}		**Session MO2: Poster Session: Structural, Mechanical & Optical Properties - 1 / Electronic Transport, Semiconductors & Devices / Photonics & Optoelectronics** *(Chair: G. Kourouklis, K.Syassen, E. Dooryhee)*
13^{00} - 14^{00}		**Lunch break**
14^{00} - 16^{30}		**Session MO3: Electronic Transport, Semiconductors & Devices, Photonics & Optoelectronics - 1** *(Chair: G. Papavassiliou & C. Dimitriadis)*
14^{00} - 14^{30}	**I1**	**E. Iliopoulos (Univ. of Crete, Dept. of Physics & FORTH, IESL) - *Advancing III - nitrides epitaxy: from kinetics to new device applications***
14^{30} - 14^{45}	O5	**V. Constantoudis** (NCSR "Demokritos", IMEL) - *The role of gate width in transistor performance: Effects of gate sidewall roughness*
14^{45} - 15^{00}	O6	**A. Tsormpatzoglou** (AUTH, Dept. of Physics, & IMEP, MINATEC, Grenoble) - *Electrical characterization and design optimization of finfets with TiN/HfO_2 gate stack*
15^{00} - 15^{15}	O7	**N. Kelaidis** (NCSR "Demokritos", IMEL) - *Electrical and structural characteristics of strained - Si MOS structures as a function of strained - Si overlayer*
15^{15} - 15^{45}	**I2**	**E. Monroy (CEA -INAC/SP2M/PSC, Grenoble) - *Polar and semipolar GaN/AlN nanostructures for optoelectronic applications***
15^{45} - 16^{00}	O8	**S. F. Galata** (NCSR "Demokritos", IMS) - *Stabilization of a very high - k tetragonal phase in Ge - doped ZrO_2 films grown by direct doping with Germanium*
16^{00} - 16^{15}	O9	**G. Leftheriotis** (Univ. of Patras, Dept. of Physics) - *Electrochromic devices based on electrodeposited WO_3 films with modified surface morphology*
16^{15} - 16^{30}	O10	**G. Mitrikas** (NCSR "Demokritos", IMS) - *Ultrafast control of nuclear spins using only microwave pulses: towards switchable solid state gates for quantum information processing*
16^{30} - 17^{00}		**Coffee break**
17^{00} – 18^{45}		**Session MO4: Electronic Transport, Semiconductors & Devices, Photonics & Optoelectronics - 2** *(Chair: P. Keliris & S. Logothetidis)*
17^{00} - 17^{30}	**I3**	**M. Kafesaki (Univ. of Crete, Dept. of Mat. Sci. & Tech. & FORTH, IESL) - *Manipulating light with optical left - handed metamaterials***
17^{30} - 17^{45}	O11	**C. Tserkezis** (Univ. of Athens, Dept. of Physics) - *Coupled plasmons and resonant effective permeability of metal - dielectric - metal nanosandwich assemblies*
17^{45} - 18^{00}	O12	**L. Mouchliadis** (Cardiff Univ., School of Physics & Astronomy) - *Exciton polaritons in resonant Bragg gratings*
18^{00} - 18^{15}	O13	**Z. Viskadourakis** (Univ. of Cyprus, Dept. Mechanical and Manufacturing Eng. & Univ. of Crete, Dept. of Mat. Sci. & Tech.) - *Power factor enhancement in composite Ag - Bi - Ag planar thin film thermoelectric structures*
18^{15} - 18^{45}	**I4**	**L. Palilis (NCSR "Demokritos", IMEL) - *Molecular and polymeric organic semiconductors and their applications in plastic optoelectronic and photonic devices***
19^{00} - 21^{00}		**Round Table: Research Perspectives in Europe & Greece**

Tuesday, Sept. 22

09^{00} - 11^{00}		**Session TU1: Structural, Mechanical & Optical Properties of Condensed Matter - 2** *(Chair: S Kennou & A. Lappas)*
09^{00} - 10^{00}	**Ple3**	**F. Boscherini (Univ. of Bologna, Dept. of Physics) - *New opportunities to study defects in semiconductors by soft X - ray absorption spectroscopy***
10^{00} - 10^{15}	O14	**G. Apostolopoulos** (NCSR "Demokritos", INT-RP) - *Neutron Compton scattering from LiH and LiD*
10^{15} - 10^{30}	O15	**Ch. B. Lioutas** (AUTh, Dept. of Physics)- *Identification of new nano - scale phases in $AgPb_{18}SbSe_{20}$ crystals by electron crystallography methods*
10^{30} - 11^{00}	**I5**	**A. Erko (BESSY II, Helmholtz Zentrum Berlin für Materialien und Energie GmbH) - *Ultra - high time - resolved XAS***
11^{00} - 11^{30}		**Coffee break**
11^{30} - 13^{00}		**Session TU2: Poster Session: Structural, Mechanical & Optical Properties - 2 / Magnetism & Superconductivity / Cultural Heritage Materials & Interdisciplinary Physics** *(Chair: T. Bakas, F. Boscherini, M. Farle)*
13^{00} - 14^{00}		**Lunch break**
14^{00} - 16^{30}		**Session TU3: Magnetism & Superconductivity - 1** *In memory of A. Simopoulos & A. Kostikas (Chair: D. Niarchos & O. Kalogirou)*
14^{15} - 15^{15}	**Ple4**	**M. Farle (Univ. Duisburg – Essen, Dept. of Physics & Center for Nanointegration) - *Magnetism at the nanoscale***
15^{15} - 15^{30}	O16	**E. Hristoforou** (NTUA, School of Mining and Metallurgy Engineering) - New sensors based on the magnetostrictive delay line technique
15^{30} - 15^{45}	O17	**E. Th. Papaioannou** (Uppsala Univ., Dept. of Physics & Mat. Sci.) - *Magnetic and magneto – optical properties of transition metal films with sub - wavelength antidot arrays*
15^{45} - 16^{00}	O18	**O. Crisan** (National Inst. for Materials Physics, Bucharest) - *Exchange spring effects in FePt/Fe(Co)/^{57}Fe multilayers*
16^{00} - 16^{15}	O19	**V. Tsakaloudi** (CPERI, Lab. of Inorganic Materials) - *New magnetic ferrite materials for innovative RFID concepts*
16^{15} - 16^{30}	O20	**A. Andriotis** (FORTH, IESL) - *Defect - induced defect - mediated magnetism in diluted magnetic semiconductors*
16^{30} - 17^{00}		**Coffee break**
17^{00} - 18^{00}		**Session TU4: Magnetism & superconductivity - 2** *In memory of A. Simopoulos & A. Kostikas (Chair: E. Hristoforou & K. G. Efthymiadis)*
17^{00} - 17^{30}	**I6**	**P. Poulopoulos (Univ. of Patras, Dept. of Mat. Sci.) - *Magnetic force microscopy on thin films and nanostructures***
17^{30} - 17^{45}	O21	**A. Kaidatzis** (Université Paris Sud, CNRS, Lab. de Physique des Solides) - *Hot electron transport and high resolution magnetic imaging on Co/Cu/Co and Co/Cu/NiFe spin valves*
17^{45} - 18^{00}	O22	**K.N. Trohidou** (NCSR "Demokritos", Inst. of Mat. Sci.) - *Exchange bias effects in Co nanoparticles dispersed in a Mn matrix*
18^{00} - 19^{30}		**Session TU5: Cultural Heritage Materials & Interdisciplinary Physics** *(Chair: K.M. Paraskevopoulos & E.K. Polychroniadis)*
18^{00} - 18^{30}	**I7**	**Th. Samaras (AUTh, Dept. of Physics) - *The use of iron oxide nanoparticles in hyperthermia***
18^{30} - 18^{45}	O23	**P. Papanikolaou** (AUTh, Dept. of Chemistry) - *Study of the effect of a uniform electric field on the bond lengths and the electronic distribution of diatomic and polyatomic molecules*
18^{45} - 19^{00}	O24	**E. Pavlidou** (AUTh, Dept. of Physics) – *Wall painting materials and technique: the case of famous iconographer Onoufrios*
19^{00} - 19^{15}	O25	**M. Maragakis** (AUTh, Dept. of Physics) *Random walk in complex systems with the particle diffusion model*
19^{15} - 19^{30}	O26	**B. Subedi** - (AUTh, Dept. of Physics & CETI Archaeometry Lab.) - *Towards luminescence dating of turquoise gemstone using TL and OSL methods*
21^{00} - Conference Dinner		

Wednesday, Sept. 23

09^{00} - 11^{00}		**Session WE1: INHOMOGENEOUS & DISORDERED MATERIALS, POLYMERS & BIOMATERIALS** *(Chair: S. Messoloras & A. Andriotis)*
09^{00} - 09^{30}	**I8**	**I. Margiolaki (ESRF, Grenoble) - *Complementary methods for the study of biomaterials***
09^{30} - 09^{45}	O27	**G. Soras** (NHRF, Theoretical & Physical Chemistry Inst. & Univ. of Athens, Chemistry Dept) - *Synthesis of novel transition metal dithiolenes: Synthesis, experimental and theoretical investigation*
09^{45} - 10^{00}	O28	**E. Karakosta** (NCSR "Demokritos", IMS) - *In situ monitoring of cement gel growth dynamics. The use of a miniaturized permanent Halbach magnet for precise ^{1}H NMR studies*
10^{00} - 10^{30}	**I9**	**N. Papageorgiou (Univ. de la Méditerranée & Univ. de Provence, CNRS) - *Transmission electron microscopy of proteins and single particle 3D reconstruction***
10^{30} - 10^{45}	O29	**K. Chrissopoulou** (FORTH, IESL) - *Effect of inorganic additive on the chain crystallization in polymer / layered silicate nanohybrids*
10^{45} - 11^{00}	O30	**G. Kalosakas** (Univ. of Patras, Dept. of Mat. Sci.) - *Tight Binding Parameters for Charge Transport in DNA*
11^{00} - 11^{30}		**Coffee break**
11^{30} - 13^{00}		**Session WE2: POSTER SESSION: INHOMOGENEOUS & DISORDERED MATERIALS, POLYMERS & BIOMATERIALS/ NANOSCALE & SURFACE SCIENCE** *(Chair: M. Calamiotou, E. Liarokapis, C. Galiotis)*
13^{00} - 14^{00}		**Lunch break**
14^{00} - 15^{30}		**Session WE3: NANOSCALE & SURFACE SCIENCE - 1** *(Chair: A. Vomvas & Th. Karakostas)*
14^{00} - 14^{30}	**I10**	**D. Christofilos (AUTH, School of Technology) - *Optical spectroscopy of nanoobjects: carbon nanotubes and metallic nanoparticles***
14^{30} - 14^{45}	O31	**T. Leontiou** (Cyprus Univ. of Technology, Dept. of Mech. & Mat. Sci. Eng.) - *Thermodynamics and kinetics of dislocated Ge/Si and InAs/GaAs thin layers*
14^{45} - 15^{00}	O32	**A. P. Douvalis** (Univ. of Ioannina, Dept. of Physics) - *Synthesis and characterization of novel carbon nanotubes - iron oxide nanoparticles hybrids*
15^{00} - 15^{15}	O33	**J. Kioseoglou** (AUTh, Dept. of Physics) - *The nonpolar - semipolar boundaries in III - nitrides: Atomic structure and influence on defect introduction*
15^{15} - 15^{30}	O34	**A. Skarmoutsou** (NTUA, School of Chem.Eng.) - *Nanomechanical properties of hydroxyapatite (HA) with DAB dendrimers (poly propylene imine) coatings onto Ti surfaces*
15^{30} - 16^{00}		**Coffee break**
16^{00} - 17^{30}		**Session WE4: NANOSCALE & SURFACE SCIENCE - 2** *(Chair: Ph. Komninou & M. Kamaratos)*
16^{00} - 16^{30}	**I11**	**P. Patsalas (Univ. of Ioannina, Dept. of Mat. Sci. & Eng.) - *Complex conducting nitrides: Synthesis, structure, properties and applications***
16^{30} - 16^{45}	O35	**E. Symianakis** (Univ. of Patras, Dept. of Chem. Eng. & ICE/HT-FORTH) - *On the substrate - driven oxidation of Ni/NiO(001) by X - ray photoelectron spectroscopy and molecular dynamics simulations*
16^{45} - 17^{00}	O36	**A. Kostopoulou** (FORTH, IESL & Un. Of Crete, Dept. of Chemistry) - *Magneto - optical properties of iron oxide nanoclusters*
17^{00} - 17^{15}	O37	**N. Galanis** (Univ. of Crete, Dept. of Mat. Sci. & Tech.) - *Mechanical properties of nanocrystalline Copper*
17^{15} - 17^{30}	O38	**D. Vlachos** (Univ. of Ioannina, Dept. of Physics)- *Indium adsorption on the reconstructed Si(111)√3×√3 and 4×1 - In surfaces at room and low temperature*
17^{30} - 18^{30}		**Session WE5: SPECIAL SESSION ON RENEWABLE ENERGY RESOURCES – HYDROGEN (UNDER THE AUSPICES OF HELLENIC SOCIETY FOR SCIENCE AND TECHNOLOGY OF CONDENSED MATTER (H.S.S.T.C.M)** *(Chair: H. Gamari-Seale)*
17^{30} - 18^{00}	**I12**	**A. G. Konstandopoulos (CPERI/CERTH, & AUTh, Dept. of Chem. Eng.) - *Solar thermochemical water-splitting for Hydrogen production: The Hydrosol Process***
18^{00} - 18^{30}	**I13**	**E. Varkaraki (CRES-Center for renewable energy sources & hydrogen technologies-Pikermi) - *Perspectives and challenges of hydrogen storage in metal hydrides. The case of the CRES wind-hydrogen plant***
18^{30} - 19^{00}		**Awards - Closing Ceremony**
19^{00} - 19^{30}		**Annual Meeting of the Hellenic Society for Science and Technology of Condensed Matter**

Monday, Sept. 21	
11^{30} - 13^{00} : Session MO2: Poster Session **STRUCTURAL, MECHANICAL & OPTICAL PROPERTIES - 1 / ELECTRONIC TRANSPORT, SEMICONDUCTORS & DEVICES / PHOTONICS & OPTOELECTRONICS**	
MO2-P1	**J. Parthenios** (FORTH, ICE- HT, Patras) - T*he effect of temperature on aramid fibre phonons*
MO2-P2	**A. E. Lagogianni** (Univ. of Ioannina, Dept. of Physics) - *Microstructure evolution in Cu_xZr_{100-x} metallic glasses under tensile deformation*
MO2-P3	**Ch. Argirusis** (NTUA, School of Chemical Engineering & Technische Universität Clausthal, Inst. für Metallurgie) - *Water and carbon dioxide as sources for oxygen incorporation into acceptor Doped $SrTiO_3$ single crystals*
MO2-P4	**K. Vartzelis – Nikakis** (NTUA, Dept. of Physics) - *Molecular dynamics in intercalated poly (propylene oxide) amines/layered silicate nanocomposites*
MO2-P5	**E. Almpanis** (NCSR "Demokritos", IMEL) - *Optical response of plasmonic nanoantenna arrays*
MO2-P6	**K. Pomoni** (Univ. of Patras, Dept. of Physics) - *Structure and photoconductivity of modified TiO_2 sol-gel coatings*
MO2-P7	**E. Kalesaki** (AUTh, Dept. of Physics) - *Structural and electronic properties of InN a-edge threading dislocations*
MO2-P8	**H. Zoubos** (Univ. of Ioannina, Dept. of Materials Science and Engineering)- *Optical properties of AlN-based nanocomposite films*
MO2-P9	**I. Efthimiopoulos** (Max Plank Inst. für Festkörperforschung, Stuttgart) - *High pressure studies of the perovskite isotopes $Re^{16}O_3$ and $Re^{18}O_3$*
MO2-P10	**I. Efthimiopoulos** (Max Plank Inst. für Festkörperforschung, Stuttgart) - Structural and spectroscopic studies of the multiferroic spinel $CdCr_2S_4$ under pressure
MO2-P11	**I. Efthimiopoulos** (Max Plank Inst. für Festkörperforschung, Stuttgart) - High pressure structural investigations of Fe-based superconductors
MO2-P12	**S. M. Souliou** (AUTh, Dept. of Physics & School of Technology) - *Probing the pressure-induced structural deformation of carbon nanotubes through carotene encapsulation in their interior*
MO2-P13	**C. A. Londos** (Univ. of Athens, Dept. of Physics) - *The effect of germanium doping on the annealing characteristics of the VO and VO_2 defects in silicon.*
MO2-P14	**V. Likodimos** (NCSR "Demokritos", IPC) - *Micro-Raman investigation on the long term stability of dye-sensitized solar cells under light and thermal stress*
MO2-P15	**V. Likodimos** (NCSR "Demokritos", IPC) - Micro-Raman spectroscopy on self-assembled anodized TiO_2 nanotube arrays
MO2-P16	**M. Dimitrijevic** (Univ. of Belgrade, Faculty of Technology and Metallurgy) - *Use of image analysis for characterisation of thermal shock behaviour of improved ceramic matrix composites*
MO2-P17	**M. Posarac** (Inst. of Nuclear Sciences "Vinca", Belgrade) - *Influence of microstructure on mechanical properties of porous SiC/cordierite composite materials*
MO2-P18	**Th. A. Goutziotis** (Univ. of Ioannina, Dept. of Materials Science and Engineering) - *Structural and electronic properties of metal nitrides*

Monday, Sept. 21	
11^{30} - 13^{00} : Session MO2: Poster Session **STRUCTURAL, MECHANICAL & OPTICAL PROPERTIES - 1 / ELECTRONIC TRANSPORT, SEMICONDUCTORS & DEVICES / PHOTONICS & OPTOELECTRONICS**	
MO2-P19	**Ch. Motsanos** (Univ. of Crete, Dept. of Materials Science and Technology) - *A maximum in the strength of superhard Rhenium borides*
MO2-P20	**Th. Ch. Hasapis** (AUTh, Dept. of Physics) - *Far infrared spectra and structure of $(K_2S)_x(Sb_2S_3)_{100-x}$ glasses*
MO2-P21	**E. Ramou** (Univ. of Patras, Dept. of Physics) - *On the measurement of the instability thresholds of nematic liquid crystal*
MO2-P22	**E. M. Pechlivani** (AUTh, Dept. of Physics) - *Interaction between hetrostructural interfaces and structural faults in GaN / $Al_xGa_{1-x}N$ on Al_2O_3 thin films*
MO2-P23	**Th. Kehagias** (AUTh, Dept. of Physics) - Mechanisms of indium segregation in MOVPE and MBE grown InAlN epilayers
MO2-P24	**M. Gioti** (AUTh, Dept. of Physics) - Evaluation of the optical properties, stoichiometry and composition of SiO_x films on PET by ellipsometry
MO2-P25	**D. Georgiou** (AUTh, Dept. of Physics) - *Effect of thickness on the optical properties of CuPc and C60 thin films for organic photovoltaic applications*
MO2-P26	**A. Laskarakis** (AUTh, Dept. of Physics) - *Effect of thickness in the optical properties of organic thin films deposited via organic vapor phase deposition*
MO2-P27	**E. D. Vanidhis** (AUTh, Dept. of Physics) - *Theoretical calculations to determine the electro-gyration coefficients in point group of $CaCO_3$*
MO2-P28	**E. Kalesaki** (AUTh, Dept. of Physics) - *Morphological and structural characterization of polar and semipolar GaN quantum dots in AlN*
MO2-P29	**M. Marinova** (AUTh, Dept. of Physics) - *Typical structural defects in 3C-SiC layers grown by various methods on different substrates*
MO2-P30	**A. Lotsari** (AUTh, Dept. of Physics) - *Structural and mechanical properties of AlN:Ag nanocomposite coatings grown by pulsed laser deposition*
MO2-P31	**C. Aris Chatzidimitriou-Dreismann** (Technical Univ. of Berlin, Inst. of Chemistry) - *Scattering of fast neutrons from protons in solids ($NbH_{0.80}$ and LiH): New quantum effects in the attosecond timescale*
MO2-P32	**D. Berdekas** (Direction of High Schools Education of Larissa) - *The influence of the disorder in the Raman spectra of GaSb/AlSb (001) superalattices*
MO2-P33	**G. Mitrikas** (NCSR "Demokritos", IMS) - *Probing the electronic structure of molecular magnets by pulse EPR methods*
MO2-P34	*Withdrawn*
MO2-P35	**A. Vomvas** (Univ. of Patras, Dept. of Physics) - *Dark conductivity and photoconductivity behavior of sol-gel S-doped TiO_2, thermally treated at different temperatures*

Monday, Sept. 21

11^{30} - 13^{00} : Session MO2: Poster Session

STRUCTURAL, MECHANICAL & OPTICAL PROPERTIES - 1 / ELECTRONIC TRANSPORT, SEMICONDUCTORS & DEVICES / PHOTONICS & OPTOELECTRONICS

MO2-P36	**M. Dimakogianni** (Univ. of Athens, Dept. of Physics) - *Field and temperature dependence of the small polaron hopping electrical conductivity in 1D disordered systems*
MO2-P37	**C. Paraskeva** (AUTh, Dept. of Physics) - *Study of $LiMgVO_4$ ionic conductivity mechanisms*
MO2-P38	**S. D. Pappas** (Univ. of Patras, School of Engineering) - *Photoluminescence from SiO_2 thin films produced by Reactive Radio Frequency Magnetron Sputtering*
MO2-P39	**K. T. Zorbas** (AUTh, Dept. of Physics & Univ. of Cyprus, Dept. of Mechanical and Manufacturing Engineering) - *Study of an in-car refrigerator using commercial Bi_2Te_3 thermoelectric modules*
MO2-P40	**V. Vargiamidis** (AUTh, Dept. of Physics) - *Fano resonances in electronic transport through quantum wires*
MO2-P41	**V. N. Petoussis** (Univ. of Thessaly. Dept of Electrical & Computer Engineering) - *A novel Hall effect sensor using elaborate offset cancellation method*
MO2-P42	**V. N. Petoussis** (TEI of Lamia, Dept. of Electronics) - *Semiconductor spintronics*
MO2-P43	**G. Kitis** (AUTh, Dept. of Physics) - *Correlation between TL And OSL signals in $KMgF_3:Ce^{3+}$; Bleaching study of individual glow peaks*
MO2-P44	**G. S. Polymeris** (C.E.T.I., R.C "ATHENA", Archaeometry Lab., Xanthi) - *Thermally assisted photo transfer OSL from deep traps in $Al_2O_3:C$*

Tuesday, Sept. 22	
11^{30} - 13^{00} : Session TU2: Poster Session **STRUCTURAL, MECHANICAL & OPTICAL PROPERTIES - 2 / MAGNETISM & SUPERCONDUCTIVITY / CULTURAL HERITAGE MATERIALS & INTERDISCIPLINARY PHYSICS**	
TU2-P1	**D. Tsitrouli** (NCSR "Demokritos", IMS) - *In vitro and in vivo efficient magnetic heating with polymer-dressed Fe_2O_3 nanoparticles*
TU2-P2	**P. Pandis** (NTUA, School of Chemical Engineering) - *Oxygen permeation study through dense ceramic membranes with perovskite structure ($Ba_{0.8}Sr_{0.2}M_xB_{1-X}O_{3\pm\delta}$, M=Co, Al, B=Mn, Fe, Ni)*
TU2-P3	**F. Noli** (AUTh, Dept. of Chemistry) - *Surface characterisation of nitrogen-implanted steel and corrosion behaviour in aggressive environment*
TU2-P4	**K. Kosmas** (NTUA, Lab. of Physical Metallurgy) - *On the magnetic properties of plastically deformed Armco steel*
TU2-P5	**P. Apostolopoulos** (AUTh, Dept. of Physics) - *Designing composite panels for minimum cost and weight*
TU2-P6	**F. Pinakidou** (AUTh, Dept. of Physics) - *Nanostructural characterization of TiN-Cu films using EXAFS spectroscopy*
TU2-P7	**F. Pinakidou** (AUTh, Dept. of Physics) - *Micro-XRF and micro-EXAFS studies of an Al matrix Fe-Ni composite*
TU2-P8	**D. Moussadakos** (Univ. of Athens, Dept. of Physics) - *Magnetic properties of Nd-Fe-B/3:29 and $Sm(CoFeCuZr)_{7.5}$ /3:29 nanocomposite permanent magnets*
TU2-P9	**N Pistofidis** (AUTh, Dept. of Physics) - *Effect of the steel composition on the morphology of zinc hot-dip galvanized coatings*
TU2-P10	**N. Pistofidis** (AUTh, Dept. of Physics) - *Effect of the cooling time on the morphology of zinc hot-dip galvanized coatings*
TU2-P11	**N. Pistofidis** (AUTh, Dept. of Physics) - *Thermodynamic evaluation of zinc hot-dip galvanizing*
TU2-P12	**N. Pistofidis** (AUTh, Dept. of Physics) - *Evaluation of Fe-Zn diffusion coefficient during hot-dip galvanizing*
TU2-P13	**M. Papazoglou** (AUTh, Dept. of Physics) - *Comparative examination on structure and oxidation behavior of pack cementation zinc coated and not coated copper alloys substrates*
TU2-P14	**M. Papazoglou** (AUTh, Dept. of Physics) - *Influence of Al and Cr alloying elements on the structure and corrosion resistance of zinc coatings formed by pack cementation process*
TU2-P15	**D. Hadjiapostolidou** (Imperial College London, Dept. of Materials) - *Coarsening in René 80 Ni-based superalloy*
TU2-P16	**K. Mergia** (NCSR "Demokritos", INT-RP) - *Residual stress measurements on CuCrZr/W brazed alloy using neutron diffraction*
TU2-P17	**N. Moutis** (NCSR "Demokritos", INT-RP) - *Brazing of Nimonic superalloy to carbon-based ceramic composites*
TU2-P18	**Y. Keremi** (AUTh, Dept. of Physics) - *Effect of indium implantation on the bonding environment of GaN*
TU2-P19	**E. Siranidi** (NTUA, Dept. of Physics) - *Pressure-induced phase separation in the Y123 superconductor*

Tuesday, Sept. 22	
11^{30} - 13^{00} : Session TU2: Poster Session **STRUCTURAL, MECHANICAL & OPTICAL PROPERTIES - 2 / MAGNETISM & SUPERCONDUCTIVITY / CULTURAL HERITAGE MATERIALS & INTERDISCIPLINARY PHYSICS**	
TU2-P20	**C. Simserides** (NCSR "Demokritos", IMS) - *Influence of antiferromagnetic interactions and of alloy disorder on the ferromagnetic properties of p-type (Cd,Mn)Te quantum wells*
TU2-P21	**M. Vasilakaki** (NCSR "Demokritos", IMS) - *Numerical study of the exchange bias effect in nanoparticles with ferromagnetic core / ferrimagnetic shell morphology*
TU2-P22	**N. Panopoulos** (NCSR "Demokritos", IMS) - *Structural investigation of optimal doped manganites at high temperature NMR*
TU2-P23	**D. Koumoulis** (NCSR "Demokritos", IMS) - *^{139}La NMR study reveals peculiar spin ordering and antiferromagnetism in the overdoped region of $La_{1-x}Ca_xMnO_3$ phase diagram*
TU2-P24	**V. Likodimos** (Univ. of Athens, Dept. Of Physics) - *Matrix effects in carbon nanotube polymer composites*
TU2-P25	**V. Likodimos** (Univ. of Athens, Dept. Of Physics) - *Magnetic properties of single-wall carbon nanotubes*
TU2-P26	**N. Ntallis** (AUTh, Dept. of Physics) - *Study of a magnetic NDT method with finite elements analysis*
TU2-P27	**P. Arampatzis-Ziamos** (AUTh, Dept. of Physics) - *Optimization of time response in electromechanical systems with iron core*
TU2-P28	**C. Serletis** (AUTh, Dept. of Physics) - *Experimental errors in magnetic viscosity measurements and activation volume calculations*
TU2-P29	**G. Litsardakis** (AUTh, Dept. of Electrical and Computer Engineering) - *Electromagnetic properties and absorption of new La substituted Sr W-type hexaferrite in the 2-18 GHz frequency range*
TU2-P30	**D. Sakellari** (AUTh, Dept. of Physics) - *Study of the mechanism through which microstructural characteristics affect the impedance of NiCuZn ferrites*
TU2-P31	**A. Markou** (Univ. of Ioannina, Dept. of Materials Science and Engineering) - *Magnetic thin films deposited on PDMS nanotemplates*
TU2-P32	**A. Kotoulas** (AUTh, Dept. of Physics) - *Controllable synthesis and characterization of hcp and fcc nickel nanoparticles*
TU2-P33	**I. Giannarakis** (AUTh, Dept. of Physics) - *The beneficiary role of intentional alloying in noble metal-Cobalt multilayered systems*
TU2-P34	**Th. Gkinis** (AUTh, Dept. of Physics) - *Evaluation of iron oxide nanoparticles prepared by high-energy ball milling in drinking water treatment*
TU2-P35	**A. Gaki** (NTUA, School of Chemical Engineering) - *Synthesis and magnetic properties of $LaCO_{3-\delta}$ and $La_{0.8}Sr_{0.2}CoO_{3-\delta}$*
TU2-P36	**N. Sheloudko** ("St. Kl. Ohridski" Univ. of Sofia, Faculty of Physics) - Magnetic anisotropy of Ho-Fe-Co-Cr intermetallic compounds

Tuesday, Sept. 22	
11^{30} - 13^{00} : Session TU2: Poster Session **STRUCTURAL, MECHANICAL & OPTICAL PROPERTIES - 2 / MAGNETISM & SUPERCONDUCTIVITY / CULTURAL HERITAGE MATERIALS & INTERDISCIPLINARY PHYSICS**	
TU2-P37	**K. Simeonidis** (AUTh, Dept. of Physics)- *Structural, morphological and magnetic features in exchange-biased Co nanoparticles*
TU2-P38	**P. Vlachos** (Democritus Univ. of Thrace, Dept. of Electrical and Computer Engineering) - *A quantum circuit for quantum key expansion from 6 to 24 Qubits*
TU2-P39	**K. Chrissafis** (AUTh, Dept. of Physics) - *Thermal degradation kinetics of in-situ prepared PET nanocomposites containing fumed silica nanoparticles (SiO_2)*
TU2-P40	**K. Chrissafis** (AUTh, Dept. of Physics) - *Thermal degradation kinetics of in-situ prepared PET nanocomposites containing organically modified montmorillonite (MMT) nanoparticles*
TU2-P41	**P. Argyrakis** (AUTh, Dept. of Physics) - *Scientific collaboration in Europe, and the Overlapping Tree Network*
TU2-P42	**A. Kittas** (AUTh, Dept. of Physics) - *Trapping in complex networks*
TU2-P43	**E. Filippaki** (NCSR "Demokritos", IMS) - *Optical emission spectroscopy in a glow discharge plasma during the restoration of iron corroded objects*
TU2-P44	**E. Filippaki** (NCSR "Demokritos", IMS) - *Effect of the Hydrogen-reductive plasma on underwater oxidized objects. Chaotic plasma configuration*
TU2-P45	**S. K. Papadopoulou** (AUTh, Dept. of Physics) - *Efficacy of hydrophobic polymeric coatings and syperhydrophobic nanoparticle based composite films for the protection of stone*
TU2-P46	**E. Anagnostopoulou** (AUTh, Dept. of Physics) - *Magnetically induced hyperthermia: Size, phase and concentration-dependent heating power of magnetic nanoparticles*
TU2-P47	**E. Pavlidou** (AUTh, Dept. of Physics) - *Technique and painting materials characterization of St. Athanasius Church in Moschopolis, Albania (18th Century)*
TU2-P48	**E. Pavlidou** (AUTh, Dept. of Physics) - *Study of the painting materials from 4^{th} century B.C. Vergina Tomb*
TU2-P49	**A. Chalkidou** (AUTh, Dept. of Physics & Theagenio Cancer Hospital, Molecular Oncology Lab.) - *Preparation, characterization and in-vitro toxicity test of nanoparticle-based system for magnetic hyperthermia of cancer tissues*
TU2-P50	**E. Sakellariou** (AUTh, Dept. of Physics) - *Studying technique and pigments of wall paintings in the Byzantine Church of "40 Holy Martyrs" in Veliko- Turnovo in Bulgaria*
TU2-P51	**A. Lappas** (FORTH, IESL) - Order Against Frustration in a Spin-2 Triangular Lattice System α-$NaMnO_2$

Wednesday, Sept. 23

11^{30} - 13^{00} : Session WE2: Poster Session

INHOMOGENEOUS & DISORDERED MATERIALS, POLYMERS & BIOMATERIALS / NANOSCALE & SURFACE SCIENCE

WE2-P1	**D. Chasoglou** (Chalmers Univ. of Technology, Gothenburg) - *Evaluation of surface characteristics of prealloyed Cr-Mo-steel powder*
WE2-P2	**Z. Sompolos** (Univ. of Patras, Dept. of Physics) - *Study of thin YSZ coatings deposited by e-beam evaporation*
WE2-P3	**G. E. Vantarakis** (Univ. of Crete, Dept. of Materials Science and Technology & Cyprus Univ. of Technology, Dept. of Mechanical and Materials Science Engineering) - *Atomistic simulations of carbon nanofoams*
WE2-P4	**G. C. Hadjisavvas** (Cyprus Univ. of Technology, Dept. of Mechanical and Materials Science Engineering) - *Theory of defects in Si nanocrystals embedded in a-SiO_2*
WE2-P5	**G. Syrrokostas** (Univ. of Patras, Dept. of Physics) - *Nanostructured thin films for dye sensitized solar cells*
WE2-P6	**I. Spanos** (Univ. of Patras, Dept. of Physics) - *Electrolytic Hydrogen production using ternary and quaternary Nickel based coatings*
WE2-P7	**K. T. Kleovoulou** (Univ. of Crete, Dept. of Physics) - *Interacting Si nanocrystals in a-SiO_2: a Monte Carlo study*
WE2-P8	**D. Georgakaki** (AUTh, Dept. of Physics) - *Application of time-series analysis methods for the study of nonlinear dynamical phenomena during nanosurface characterization in AFM metrology*
WE2-P9	**Ch. B. Lioutas** (AUTh, Dept. of Physics) - *Structural characterization of Ti / TiB_2 multi-nano-layer films by means of electron microscopy techniques*
WE2-P10	**D. Lafatzis** (NCSR "Demokritos", INT-RP) - *Oxidization behaviour of amorphous SiC coatings*
WE2-P11	**G. Bokas** (Univ. of Ioannina, Dept. of Physics) - *CuZr nanoclusters by ab-initio calculations*
WE2-P12	**M. Gialampouki** (Univ. of Ioannina, Dept. of Materials Science and Engineering) - *Structural and electronic properties of octahedral Titanium Oxide on Graphene by ab-initio calculations*
WE2-P13	**O. Crisan** (National Inst. for Materials Physics, Bucharest) - *Magnetic nanoclusters synthesized by a new gas-stabilised aggregation technique*
WE2-P14	**E. P. Koumoulos** (NTUA, School of Chemical Engineering)- *Effect of the adhesive forces and time-dependent response of polydimethylsiloxane elastomer on the nanomechanical properties determination by nanoindentation*
WE2-P15	**A. Skarmoutsou** (NTUA, School of Chemical Engineering) - *Nanoindentation studies and high stress sensitivity of fatigue life of rolled AZ31 Magnesium alloy*
WE2-P16	**J. N. Remediakis** (Univ. of Crete, Dept. of Materials Science and Technology) - *Shape and properties of gold nanoparticles*
WE2-P17	**A. Delimitis** (CERTH, CPERI, Thessaloniki) - *Electron microscopy studies of the structural transformation of $VOHPO_4.1/2H_2O$ precursors to $(VO)_2P_2O_7$ catalysts*

Wednesday, Sept. 23

11^{30} - 13^{00} : Session WE2: Poster Session

INHOMOGENEOUS & DISORDERED MATERIALS, POLYMERS & BIOMATERIALS / NANOSCALE & SURFACE SCIENCE

WE2-P18	**A. Zora** (Univ. of Athens, Dept. of Physics) - *Temperature dependence of photoluminescence in individual self-assembled quantum dots*
WE2-P19	**M. Filippousi** (AUTh, Dept. of Physics) - *Preparation and characterization of palladium supported on zeolites*
WE2-P20	**A. Skarmoutsou** (NTUA, School of Chemical Engineering) - *Nanomechanical and structural properties of deposited binary nitrides thin films grown by Pulsed Laser Deposition*
WE2-P21	**C. Georgiou** (NTUA, School of Chemical Engineering) - *Mechanical and electrical properties of epoxy resin filled with multi walled Carbon nanotubes*
WE2-P22	**G. A. Tritsaris** (Technical Univ. of Denmark, Dept. of Physics) - *Theoretical investigation of model non-Platinum cathode catalysts for low temperature fuel cells*
WE2-P23	**N. Tsakiris** (AUTh, Dept. of Physics) - *Crystal growth model with stress development and relaxation*
WE2-P24	**C. Batistakis** (AUTh, Dept. of Physics) - *Percolation theory and phase transitions in granular ferromagnets*
WE2-P25	**L. Skarpalezos** (AUTh, Dept. of Physics) - *Simulation of non classical coarsening mechanism in Pb/Si*
WE2-P26	**K. Brintakis** (FORTH, IESL & AUTh, Dept. of Physics) - *Fe_3O_4@Au core-shell nanocrystals: magnetic and optical properties*
WE2-P27	**A. P. Douvalis** (Univ. of Ioannina, Dept. of Physics) - *Structural and magnetic properties of colloidal Iron oxide magnetic nanoclusters*
WE2-P28	**A. Tsimpliaraki** (AUTh, Dept. of Chemical Engineering) - *Organomodification of nanoclays and its role on the porous structure of polymer nanocomposites produced by supercritical CO_2*
WE2-P29	**J. Kioseoglou** (AUTh, Dept. of Physics) - *Atomic scale modelling by the use of a III-species environment approach: Implementation on threading dislocations and (Al,In)N/GaN interfaces*
WE2-P30	**D. Tsikritzis** (Univ. of Patras, Dept. of Chemical Engineering - FORTH/ICE-HT) - *The electronic structure of Ni-phthalocyanine on ITO/flexible interface studied by photoelectron spectroscopies*
WE2-P31	**I. Tsiaoussis** (AUTh, Dept. of Physics) - *Structural characterization of ZnO/$Mg_xZn_{1-x}O$ and ZnO/MgO thin films grown on sapphire by using HRTEM*
WE2-P32	**V. Koultoukis** (Univ. of Western Macedonia) - *Hydrogen storage in the pseudobinary system of $TiMn_{0.4}Fe_{0.2}V_{0.4}$, $TiMn_{0.1}Fe_{0.2}V_{0.7}$ and $Ti_{0.4}Zr_{0.6}Mn_{0.4}Fe_{0.2}V_{0.4}$*
WE2-P33	**A. Ioannidou** (Univ. of Western Macedonia, Dept. of Mechanical Engineering) - *Structural properties of the effect of V substitution on the composite Zr-Ti-Cr-V-Ni intermetallic hydrides*
WE2-P34	**T. E. Karakasidis** (Univ. of Thessaly, School of Engineering) - *Transport properties of flows at the nanoscale*
WE2-P35	**T. E. Karakasidis** (Univ. of Thessaly, School of Engineering) - *Flow in periodically grooved nanochannels studied by computer simulation*

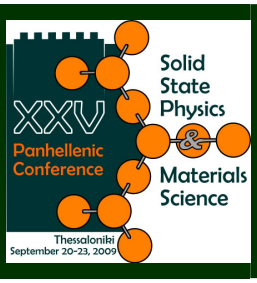
Wednesday, Sept. 23

11^{30} - 13^{00} : Session WE2: Poster Session

INHOMOGENEOUS & DISORDERED MATERIALS, POLYMERS & BIOMATERIALS / NANOSCALE & SURFACE SCIENCE

WE2-P36	**E. Pavlopoulou** (FORTH, IESL & Univ. of Crete, Dept. of Materials Science and Technology) - *Following the synthesis of metal nanoparticles within pH-responsive micelles and microgels by SAXS*
WE2-P37	**C. Grigoriadis** (Univ. of Ioannina, Dept. of Physics) - *Self-assembly and molecular dynamics of nanographenes*
WE2-P38	**A. Z. Stimoniaris** (Univ. of Ioannina, Dept. of Chemistry & TEI of Western Macedonia, Lab. of Physics and Materials Technology) - *Absorption and diffusion of commercially available cleaning liquids in epoxy resin nanocomposites*
WE2-P39	**A. Z. Stimoniaris** (Univ. of Ioannina, Dept. of Chemistry & TEI of Western Macedonia, Lab. of Physics and Materials Technology) - *Fluid absorption effects on the dynamics of epoxy resin nanocomposites*
WE2-P40	**C. G. Delides** (TEI of Western Macedonia, Lab. of Physics and Materials Technology) - *Epoxy composites filled with amine modified carbon nanotubes: High voltage corona discharge studies*
WE2-P41	**H. Zois** (TEI of Lamia) - *Thermogravimetric properties of epoxy resin/carbon nanotubes nanocomposites*
WE2-P42	**G. Ioannou** (Univ. of Patras, Dept. of Materials Science) - *Dielectric and functional properties of polymer matrix/ZnO/$BaTiO_3$ hybrid composites*
WE2-P43	**A. Patsidis** (Univ. of Patras, Dept. of Materials Science) - *Dielectric response and functionality of polymer matrix $BaTiO_3$ nanocomposites*
WE2-P44	**A. Delimitis** (CERTH, CPERI, Thessaloniki) - *Development of metallic Ag nanowires and nanoparticles on mesoporous silicas: Effect of pore structure and size of the silica support*
WE2-P45	**G. Kalosakas** (Univ. of Patras, Dept. of Materials Science) - *Statistical distributions of bubble lengths in DNA*
WE2-P46	**K. S. Andrikopoulos** (TEI of Thessaloniki, Dept. of Applied Science) - *Nanoindentation studies of phase separated glasses: The ternary Ag-As-S system*
WE2-P47	**A. Angelopoulou** (NCSR "Demokritos", IMS & Univ. of Patras, Dept. of Materials Science) - *About the mixed alkali effect*
WE2-P48	**V. Gountsidou** (AUTh, Dept. of Physics) - *Modelling Indentation of porous and inhomogenous materials*
WE2-P49	**T. P. Biros** (AUTh, Polytechnic School) - *Mechanical properties of collagen fibrils*
WE2-P50	**E. Vitoratos** (Univ. of Patras, Dept. of Physics) - *The influence of thermal treatment and ambient atmosphere on the electrical conductivity of polypyrrole and polypyrrole/5%w/w TiO_2 nanocomposite*
WE2-P51	**P. Gamaletsos** (Univ. of Athens, Faculty of Geology and Geoenvironment) - *Spectroscopic (Mössbauer, XANES and FTIR) and thermal investigation of Greek bauxites from the Parnassos- Ghiona active mining area*
WE2-P52	**E. Mavromati** (AUTh, Dept. of Physics) - *Fe distribution and speciation in human nails*
WE2-P53	**A. K. Nikolaidis** (AUTh, Dept. of Chemistry) - *Mechanical properties of PMMA/organomodified montmorillonite nanocomposites prepared by in situ bulk polymerization*

Wednesday, Sept. 23	
11^{30} - 13^{00}	**: Session WE2: Poster Session** **INHOMOGENEOUS & DISORDERED MATERIALS, POLYMERS & BIOMATERIALS / NANOSCALE & SURFACE SCIENCE**
WE2-P54	**O. M. Goudouri** (AUTh, Dept. of Physics) - *Bioactivity atudies of hydroxyapatite based glass-ceramics synthesized by Transferred Arc Plasma (TAP)*
WE2-P55	**D. Bikiaris** (AUTh, Dept. of Chemistry) - *Comparative study of the effect of different nanoparticles on the UV stability of HDPE*
WE2-P56	**G. Theodorou** (AUTh, Dept. of Physics) - *Bioactivity studies of bioactive glasses in different environments: the case of the 45S5 bioglass*
WE2-P57	**D. Afouxenidis** (C.E.T.I., R.C "ATHENA", Archaeometry Lab., Xanthi & AUTh, Dept. of Physics) - *Preliminary TL/OSL characterization on synthetic bioactive materials*
WE2-P58	**A. M. Pashou** (AUTh, Dept. of Physics) - Raman characterization of psoriatic and healthy nails



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Looking forward to seeing you all in Thessaloniki