

**1. Papers in Refereed Journals**

1. "Multireference configuration interaction and quantum defect calculations on the Rydberg states of the BH molecule",  
I.D. Petsalakis and G. Theodorakopoulos,  
Mol. Phys. 104, 103 (2006).
2. "Quasi-molecular radiative transitions produced by thermal and low-temperature collisions: Ar(3p<sup>6</sup> <sup>1</sup>S<sub>0</sub> – 3p<sup>5</sup>4s <sup>3</sup>P<sub>2</sub>) – He",  
A. Devdariani, E. Chesnokov, A. Zagrebin, M.G. Lednev, I.D. Petsalakis, G. Theodorakopoulos, H.P. Liebermann and R.J. Buenker,  
Chem. Phys. 330, 101 (2006).
3. "Unbalanced strain-directed functionalization of carbon nanohorns: A theoretical investigation based on complementary methods",  
I.D. Petsalakis, G. Pagona, G. Theodorakopoulos, N. Tagmatarchis, M. Yudasaka, and S. Iijima,  
Chem. Phys. Lett. 429, 194 (2006).
4. "Theoretical study on the low-lying electronic states of InN",  
G. Theodorakopoulos and I. D. Petsalakis,  
Chem. Phys. Lett. 423, 445 (2006).
5. "Semiclassical path integral theory of a double-well potential in an electric field",  
T.G. Douvropoulos and C.A. Nicolaides,  
Int. J. Quantum Chem. 106, 1032 (2006).
6. "Analytic variationally optimized internally orthogonalized modified Laguerre-type orbitals in accurate atomic configuration interaction calculation",  
Z. Xiong and N.C. Bacalis,  
Chinese Phys. 15, 992 (2006).
7. "Phase transitions in one dimension: are they *all* driven by domain walls?",  
N. Theodorakopoulos,  
Physica D 216, 185 (2006).
8. "Structure and dynamics of ionic borate glasses",  
C.P.E. Varsamis, A. Vegiri, E.I. Kamitsos,  
Phys. Chem. Glasses: Eur. J. Glass Sci. Technol. B 47, 419 (2006).
9. "Thermal history of a low alkali borosilicate glass probed by infrared and Raman spectroscopy",  
D. Moncke, D. Ehrt, C.P.E. Varsamis, E.I. Kamitsos, A. Kalampounias,  
Glass Technol.: Eur. J. Glass Sci. Technol. A 47, 133 (2006).
10. "Influence of thermal treatment on the water release and the glassy structure of perlite",

- M. Roulia, K. Chassapis, J.A. Kapoutsis, E.I. Kamitsos, T. Savvidis, J. Mater. Sci. 41, 5870 (2006).
11. “MD study of sodium borate glasses containing Al<sub>2</sub>O<sub>3</sub>”, N. Ohtori, M. Togashi, K. Takase, K. Handa, J. Ide, E.I. Kamitsos, K. Itoh, T. Fukunaga, N. Umesaki, Phys. Chem. Glasses: Eur. J. Glass Sci. Technol. B, 47, 323 (2006).
12. “On the structure of palygorskite by mid- and near-infrared spectroscopy”, V. Gionis, G.H. Kacandes, I.D. Kastritis and G.D. Chryssikos, Am. Miner. 91, 1125 (2006).
13. “Amyloid fibril formation propensity is inherent into the hexapeptide tandemly repeating sequence of the central domain of silkworm chorion proteins of the A-family”, V.A. Iconomidou, G.D. Chryssikos, V. Gionis, A.S. Galanis, P. Cordopatis, A. Hoenger, S.T. Hamodrakas, J. Structural Biology, 156, 480 (2006).
14. “Double hydrophilic block copolymers of sodium(2-sulfamate-3-carboxylate) isoprene and ethylene oxide”, S. Pispas, J. Polym. Sci. Part A: Polym. Chem. 44, 606 (2006).
15. “Crystallization of block copolymers in restricted cylindrical geometries”, C. Vasilev, G. Reiter, S. Pispas and N. Hadjichristidis, Polymer 47, 330 (2006).
16. “Well-defined flexible polyelectrolytes with two cationic sites per monomeric unit”, G. Mountrichas, C. Mantzaridis and S. Pispas, Macromol. Rapid Comm. 27, 289 (2006).
17. “Soluble complexes of sodium poly(isoprene-b-methacrylate) micelles with cationic surfactants in aqueous media”, S. Pispas, J. Phys. Chem. B 110, 2649 (2006).
18. “Synthesis and pH responsive self-assembly of new double hydrophilic block copolymers”, G. Mountrichas and S. Pispas, Macromolecules 39, 4767 (2006).
19. “Optical fiber long-period grating humidity sensor with poly(ethylene oxide)/cobalt chloride coating”, M. Konstantaki, S. Pissadakis, S. Pispas, N. Madamopoulos and N.A. Vainos, Appl. Optics 45, 4567 (2006).
20. “Modifying the rheological behavior of associative triblock copolymer in aqueous media through surfactant additives”, S. Pispas, D. Vlassopoulos, G. Fytas, B. Loppinet and N. Hadjichristidis, Polymer 47, 7302 (2006).

21. “Designed block copolymers for ordered polymeric nanostructures”,  
N. Hadjichristidis and S. Pispas,  
*Adv. Polym. Sci.* 200, 37 (2006).
22. “Functionalization of carbon nanohorns with azomethine ylides: Towards solubility enhancement and charge transfer processes”,  
N. Tagmatarchis, A. Maigné, M. Yudasaka and S. Iijima,  
*Small* 2, 490 (2006).
23. “Chemistry of carbon nanotubes”,  
D. Tasis, N. Tagmatarchis, A. Bianco and M. Prato,  
*Chem. Rev.* 106, 1105 (2006).
24. “Element-specific probe of the magnetic and electronic properties of Dy incar—fullerenes”,  
F. Bondino, C. Cepek, N. Tagmatarchis, M. Prato, H. Shinohara and A. Goldoni,  
*J. Phys. Chem. B* 110, 7289 (2006).
25. “Infra-red and Raman spectroscopic study on the thermal stability and high temperature transformation of hydroazafullerene  $C_{59}HN$ ”,  
N. Tagmatarchis, T. Pichler, M. Krause, H. Kuzmany and H. Shinohara,  
*Carbon* 44, 1420 (2006).
26. “Carbon nanotubes: Materials for medicinal chemistry and biotechnological applications”,  
G. Pagona and N. Tagmatarchis,  
*Curr. Med. Chem.* 13, 1789 (2006).
27. “Ultrafast third-order nonlinear optical response of  $C_{84}$ ,  $C_{84}-D_2$ (IV) and  $C_{84}-D_{2d}$ (II)”,  
E. Xenogiannopoulou, E. Koudoumas, N. Tagmatarchis, H. Shinohara and S. Couris,  
*Chem. Phys. Lett.* 425, 110 (2006).
28. “Cone-end functionalization of carbon nanohorns”,  
G. Pagona, N. Tagmatarchis, J. Fan, M. Yudasaka and S. Iijima,  
*Chem. Mater.* 18, 3918 (2006).
29. “Electronic interplay in illuminated aqueous carbon nanohorn—porphyrin ensembles”,  
G. Pagona, A. S. D. Sandanayaka, Y. Araki, J. Fan, N. Tagmatarchis, M. Yudasaka, S. Iijima and O. Ito,  
*J. Phys. Chem. B* 110, 20729 (2006).
30. “Transient nonlinear optical response of novel neutral unsymmetrical nickel dithiolene complexes”,  
P. Aloukos, S. Couris, J.B. Koutselas, G.C. Anyfantis and G.C. Papavassiliou,  
*Chem. Phys. Lett.* 428, 109 (2006).
31. “Preparation and characterization of some nickel 1,2-dithiolene complexes as single-component semiconductors”,

G.C. Anyfantis, G.C. Papavassiliou, A. Terzis, C.P. Raptopoulou, Y.F. Weng, H. Yoshino and K. Murata,  
Z. Naturforsch. 61b, 1007 (2006).

32. “Localization of triplet excitons and biexcitons in the two-dimensional semiconductor  $(CH_3C_6H_4CH_2NH_3)_2PbBr_4$ ”,

T. Goto, H. Makino, T. Yao, C.H. Chia, T. Makino, Y. Segawa, G.A. Mousdis and G.C. Papavassiliou,  
Phys. Rev. B 73, 115206 (2006).

33. “Is the two-dimensional organic conductor  $\tau$ -(EDO-S,S-DMEDT-TTF)<sub>2</sub> ( $AuCl_2$ )<sub>ity</sub> clean or dirty?”,

T. Nakanishi, S. Yasuzuka, H. Yoshino, H. Fujiwara, T. Sugimoto, Y. Nishio, K. Kajita, G.A. Anyfantis, G.C. Papavassiliou and K. Murata,  
J. Low Temp. Phys. 142, 247 (2006).

34. “Synchronous fluorescence spectroscopy for quantitative determination of virgin olive oil adulteration with sunflower oil”,

K.I. Poulli, G.A. Mousdis, and C.A. Georgiou,  
Anal. Bioanal. Chem. 386, 1571 (2006).

35. “Preparation of ultra-thin films of DNA bases with laser light at 157 mm”,

E. Sarantopoulou, Z. Kollia, A.C. Cefalas, Z. Samardzija and S. Kobe,  
Thin Solid Films 495, 45 (2006).

36. “Preventing biological activity of *Ulocladium sp* spores in artifacts using 157-nm laser”,

E. Sarantopoulou, Z. Kollia and I. Gomoiu,  
Appl. Phys. A 83, 663 (2006).

37. “Dispersion of electrogyration in sillenite crystals”,

N.C. Deliolanis, E.D. Vanidis N.A. Vainos,  
Appl. Phys. B: Lasers and Optics 85, 591 (2006).

38. “Active nitrogen and oxygen: Enhanced emissions and chemical reactions”,

E. Kamaratos,  
Chem. Phys. 323, 271 (2006).

39. “Au cluster growth on ZnO thin films by pulsed laser deposition”,

E. György, J. Santiso, A. Figueras, A. Giannoudakos, M. Kompitsas, I.N. Mihailescu and C. Ducu,  
Appl. Surf. Sci. 252, 4429 (2006).

40. “Growth of Au–TiO<sub>2</sub> nanocomposite thin films by a dual-laser, dual-target system”,

E. György, G. Sauthier, A. Figueras, A. Giannoudakos, M. Kompitsas and I.N. Mihailescu,  
J. Appl. Phys. 100, 114302 (2006).

Article selected for “Virtual Nanoscale Science and Technology”, October 2006.

41. “New near-infrared LIBS detection technique for sulphur”,

G. Asimellis, A. Giannoudakos and M. Kompitsas,

Anal. Bioanal. Chem. 385, 333 (2006).

42. “Accurate wavelength calibration in the near-infrared for multielement analysis without the need for reference spectra”,

G. Asimellis, A. Giannoudakos and M. Kompitsas,  
Appl. Opt. 45, 8855 (2006).

43. “Phosphate ore beneficiation via determination of phosphorus-to-silica ratios by laser induced breakdown spectroscopy”,

G. Asimellis, A. Giannoudakos and M. Kompitsas,  
Spectrochim. Acta B 61, 1253 (2006).

44. “Near-IR bromine laser induced breakdown spectroscopy detection and ambient gas effects on emission line asymmetric Stark broadening and shift”,

G. Asimellis, A. Giannoudakos and M. Kompitsas,  
Spectrochim. Acta B 61, 1270 (2006).

## **2. Papers in Proceedings of International and National Conferences**

1. “Magnetic ground state of quasi-two-dimensional organic conductor,  $\tau$ -(EDO-S,S-DMEDT-TTF)<sub>2</sub> (AuCl<sub>2</sub>)<sub>1+y</sub>”,

T. Nakanishi, S. Yasuzuka, H. Yoshino, H. Fujiwava, T. Sugimoto, Y. Nishio, K. Kajita, G.C. Anyfantis, G.C. Papavassiliou and K. Murata,  
J. Phys.: Conf. Series 51, 343 (2006).

2. “Non-invasive detection of antibiotics in a model anterior chamber using Raman spectroscopy”,

Th. Sideroudi, A. Tyrovolas, N. Pharmakakis, G. Papatheodorou, G.D Chryssikos and G. Voyatzis,  
Proc. 5<sup>th</sup> European Symposium on BioMedical Engineering, Patras, Greece, June 2006, CD S3.07, pp. 1-4.

3. “Structure and dynamics of lithium neutralized ionic block copolymers”,

E. Ioannou, G. Mountrichas, S. Pispas, E.I. Kamitsos, P. Papadopoulos and G. Floudas,  
6<sup>th</sup> Hellenic Conference on Polymers, Patras, Greece, 3-5 November 2006, pp. 221-222.

4. “Dogfish egg case structural studies by ATR FT-IR and FT-Raman spectroscopy”,

V.A. Ikonomidou, M. Georgaka, G.D. Chryssikos, V. Gionis, P. Megalofonou, and S.J. Hamodrakas,  
Proc. 58<sup>th</sup> Intl. Conf. Hellenic Soc. Biochem. Molec. Biol., Patras, Greece, November 2006, CD, pp. 1-4.

5. “NiCl<sub>2</sub>/SiO<sub>2</sub> sol-material for ammonia sensing”,

A. Tsigara, N. Madamopoulos, M. Hands, L. Athanasekos, A. Meristoudi, G. Mousdis, G. Manasis, I. Koutselas and N. Vainos,  
Proc. SPIE 6377, 63770 B-1 (2006).

### **3. Book Chapters**

1. "Lasers and biodeterioration",  
I. Gomoiu, R. Radvan, E. Sarantopoulou and A.C. Cefalas,  
in *Handbook on the Use of Lasers in Conservation and Conservation Science*, M. Schreiner  
and M. Strlic (Eds.), COST G7 (2006).  
<http://alpha1.infim.ro/cost/pagini/handbook>
  
2. "Magnetic water treatment device. The influence of impurity elements and magnetic  
fields on the crystallization from calcium carbonate",  
S. Kobe, G. Dražić, J. Stražšar and A.C. Cefalas,  
in *Physikalische und Energetische Wasserbehandlungsverfahren fur Wärmeübertrager und  
Rohrleitungen*, D. Ende (Ed.), Publico Publications, Essen, Germany, pp 94-100 (2006).

### **4. Publications in Technical Journals**

1. "Controlled doping of Al:ZnO films by two-laser, two-target PLD",  
M. Kompitsas, A. Giannoudakos, E. Gyorgy, I. Mihailescu, J. Sasntiso and D. Pantelica,  
Photonik International, pp. 95-97 (2006).  
*Selected among the 30 best articles published in Photonik in year 2006.*

### **5. Dissertations**

#### **a. PhD theses**

1. "On the study of the internal micromorphology and fossilization of cenozoic vertebrates  
by radioanalytical techniques",  
E.T. Stathopoulou, supervisors G. Theodorou, V. Pscharis, V. Gionis and G.D. Chryssikos,  
University of Athens, Geology Department (2006).

#### **b. MSc theses**

1. "Study of adsorption of amphiphilic diblock copolymers by FT-ATR spectroscopy", M.  
Karayianni, supervisors V. Gionis, S. Pispas and G.D. Chryssikos, University of Athens,  
Chemistry Dept. (2006).
  
2. "Growth of NiO thin films by Pulsed Laser Deposition (PLD) and their  
characterization",  
M. Stamataki, supervisors M. Kompitsas and F. Roubani-Kalantzopoulou, National Technical  
University of Athens, Chem. Eng. Dept. (2006).

#### **c. Honors theses**

1. "Synthesis and study of dithiocarbamate metal complexes",  
A. Vogiatzi, supervisors G.A. Mousdis and N. Psaroudakis, University of Athens,  
Chemistry Department (2006).

2. "Theoretical and experimental determination of the thickness of NiO thin films grown by Pulsed Laser Deposition (PLD)",  
D. Kontis, supervisors M. Kompitsas and F. Roubani-Kalantzopoulou, National Technical University of Athens, Chem. Eng. Dept. (2006).

## 6. Conference Presentations

1. "An analytic model of the Bethe surface of condensed water for accurate inelastic scattering calculations",  
D. Emfietzoglou, H. Nikjoo, I.D. Petsalakis and A. Pathak,  
Int'l Conference on Atomic Collisions in Solids, Berlin, Germany, July 21-26, 2006.
2. "Attosecond time-resolved spectroscopy of electron correlation in excited states",  
Th. Mercouris\*, Y. Komninos and C.A. Nicolaides,  
XX Int'l Conference on Atomic Physics, Innsbruck, Austria, July 16- 21, 2006 (poster).
3. "Nonperturbative quantum and classical calculations of multiphoton vibrational excitation and dissociation of molecules",  
K. Dimitriou\*, Th. Mercouris, V. Constantoudis, Y. Komninos and C. A. Nicolaides,  
37<sup>th</sup> Meeting of the Division of Atomic, Molecular and Optical Physics, Knoxville, Tennessee, USA, May 16-20, 2006 (poster).
4. "Investigation of the reaction between aluminum cluster and methane",  
E. Alexandrou\*, I.D. Petsalakis, H.M. Polatoglou and N.C. Bacalis,  
CECAM Workshop on "Catalysis from First Principles", Lyon, France, September 11-14 2006 (poster).
5. "Structure and dynamics of ionic borate glasses",  
C.P.E. Varsamis, A. Vegiri\*, and E.I. Kamitsos,  
10<sup>th</sup> Int. Conf. on the Structure of Non-Crystalline Materials, Prague, Czech Republic, September 18-22, 2006 (poster).
6. "Dynamics and structure of amorphous materials using methods of molecular dynamics",  
C.P.E. Varsamis,  
19<sup>th</sup> Summer School in Non-linear Science and Complexity, Thessaloniki, Greece, July 10-22, 2006 (invited).
7. "Comparative spectroscopic investigation of fluoride-phosphate glasses",  
D. Möncke\*, D. Ehrt, L.L. Velli, C.P.E. Varsamis, E.I. Kamitsos, S. Elbers, C.C. de Araujo and H. Eckert,  
8<sup>th</sup> Int. Otto Schott Colloquium, Jena, Germany, July 23-27, 2006 (poster).
8. "Optical basicity and refractivity in mixed oxyfluoride glasses",  
L.L. Velli\*, C.P.E. Varsamis, E.I. Kamitsos, D. Möncke and D. Ehrt,  
8<sup>th</sup> Int. Otto Schott Colloquium, Jena, Germany, July 23-27, 2006 (oral).
9. "Infrared spectroscopy of Li-diborate glassy thin films",  
E.I. Kamitsos\*, M. Dussauze, C.P. Varsamis P. Vinatier and Y. Hamon,

10th Int. Conf. on the Structure of Non-Crystalline Materials, Prague, Czech Republic, September 18-22, 2006 (oral).

10. "Structural investigation of bismuth borate glasses",  
C.P.E. Varsamis, N. Makris<sup>\*</sup> and E.I. Kamitsos,  
XXII Greek Conf. on Solid State Physics and Materials Science, Patras, Greece, September 24-27, 2006 (oral).
11. "Mixed alkali aspects in ion-exchange glasses",  
E.I. Kamitsos<sup>\*</sup>, R. Todorov and C.P.E. Varsamis,  
XI Int. Conf. on the Physics of Non-Crystalline Solids, Rhodes, Greece, Oct. 29–Nov. 2, 2006 (oral).
12. "Leaching studies of lead-containing glazes",  
E. Ioannou<sup>\*</sup>, E.I. Kamitsos, F. Okyar and H. G. Zeybekoglou,  
XI Int. Conf. on the Physics of Non-Crystalline Solids, Rhodes, Greece, Oct. 29–Nov. 2, 2006 (oral).
13. "Infrared investigation of bismuth borate glasses",  
C.P.E Varsamis, N. Makris<sup>\*</sup> and E.I. Kamitsos,  
XI Int. Conf. on the Physics of Non-Crystalline Solids, Rhodes, Greece, Oct. 29–Nov. 2, 2006 (oral).
14. "Combined XRD and near-infrared characterization of palygorskite-rich deposits from western Macedonia, Greece",  
V. Gionis, G. Kacandes, I.D. Kastritis and G.D. Chryssikos<sup>\*</sup>,  
Joint Meeting of The Clay Minerals Society and the French Clay Group, 43<sup>rd</sup> Annual Meeting of the Clay Minerals Society - 4<sup>eme</sup> Colloque du GFA, Ile d' Oleron, France, June 2006 (oral).
15. "Non-invasive detection of antibiotics in a model anterior chamber using Raman spectroscopy",  
Th. Sideroudi<sup>\*</sup>, A. Tyrovolas, N. Pharmakakis, G. Papatheodorou, G.D. Chryssikos and G. Voyatzis,  
Proc. 5<sup>th</sup> European Symposium on BioMedical Engineering, Patras, June 2006 (oral).
16. "PAMAM dendrimer as carrier for a bioactive curcumin derivative: Studies on the nature of the PAMAM-curcumin derivative complexation",  
E. Markatou, V. Gionis, G. D. Chryssikos, S. Hatziantoniou, A. Georgopoulos and C. Demetzos<sup>\*</sup>,  
33<sup>rd</sup> Annual Meeting of the Controlled Release Society, Vienna, Austria, July 2006 (oral).
17. "Diagenesis of skeletal material: New data from X-ray diffraction and Infrared Spectroscopy",  
E. T. Stathopoulou<sup>\*</sup>, V. Pscharis, V. Gionis, G. D. Chryssikos and G. Theodorou,  
3<sup>rd</sup> Conference of the Hellenic Crystallographic Association, Patras, September 2006 (oral).
18. "Structural studies of the dogfish *G. Melastomus* egg case by ATR FT-IR and FT-Raman spectroscopy",  
V.A. Iconomidou<sup>\*</sup>, M.E. Georgaka, G.D. Chryssikos, V. Gionis, P. Megalofonou and S.J. Hamodrakas,

58th Intl. Conf. Hellenic Soc. Biochem. Molec. Biol, Patras, November 2006 (oral).

19. "FTIR-ATR real-time monitoring of the adsorption of PS-b-PEO copolymers on Ge, from micellar solutions",  
M. Karayianni\*, K. Gatsouli, G. D. Chryssikos, V. Gionis and S. Pispas,  
6<sup>th</sup> Annual Hellenic Conf Polymers, Patras, November 2006 (oral).
20. "Biomineralization studies onto carbon nanotube thin films",  
D. Tasis\*, D. Katsanis, C. Galiotis, N. Bouropoulos and S. Pispas,  
XXth International Winterschool on Electronic Properties of Novel Materials: Molecular Nanostructures (IWEPNM2006), Kirchberg, Austria; March 4-11, 2006 (poster).
21. "Design and development of sterically stabilized liposomes based on polymer interactions with DPPC membrane bilayers. A DSC study".  
C. Vasilaki\*, G. Mountrichas, C. Matsingou, S. Pispas and C. Demetzos,  
9<sup>th</sup> European Symposium on Thermal Analysis and Calorimetry, Poland; August 27-31, 2006 (poster).
22. "Novel double hydrophilic block copolymers via anionic polymerization: self-assembly and complexes with biomacromolecules",  
G. Mountrichas and S. Pispas\*,  
45<sup>th</sup> Microsymposium "Structure and Dynamics of Self-organized Macromolecular Systems", Prague, Czech Republic; July 9-13, 2006 (oral).
23. "Complexes of polyelectrolyte-neutral double hydrophilic block copolymers with surfactants, polyelectrolytes and proteins",  
S. Pispas,  
Polyelectrolytes 2006, Dresden, Germany; September 4-8, 2006 (oral).
24. "Solubilization of carbon nanotubes in water using amphiphilic block polyelectrolytes",  
G. Mountrichas\*, S. Pispas and N. Tagmatarchis,  
Polyelectrolytes 2006, Dresden, Germany; September 4-8, 2006 (poster).
25. "Novel double hydrophilic block copolymers as building blocks for aqueous functional nanostructures",  
S. Pispas,  
6<sup>th</sup> Hellenic Conference on Polymers, Patras, Greece; November 3-5, 2006 (oral).
26. "Forces between adsorbed polyelectrolyte layers. Dependence on pH and salt concentration",  
Y. Hiotelis\*, S. Pispas, C. Toprakcioglou and A. Vradis,  
6<sup>th</sup> Hellenic Conference on Polymers, Patras, Greece; November 3-5, 2006 (oral).
27. "Dynamics of block copolymers at the liquid-liquid interface investigated by evanescent light scattering and ellipsometry",  
A. Stocco\*, S. Pispas and R. Sigel,  
Julich Soft Matter Days 2006, Julich, Germany; November 14-17, 2006 (poster).

28. "Hierarchical self-assembled structures from block copolymer/metal nanoparticles hybrid materials induced by VUV light",  
 E. Sarantopoulou\*, K. Gatsouli, Z. Kollia and S. Pispas,  
 TNT2006 "Trends in Nanotechnology", Grenoble, France; September 4-8, 2006 (poster).
29. "Thin films of metal nanoparticles in polymeric, SiO<sub>2</sub> or TiO<sub>2</sub> matrices",  
 A. Meristoudi\*, G. Mousdis, A. Pispas, N. Vainos, K. Iliopoulos and S. Couris,  
 XXII Hellenic Conference on Solid State Physics and Materials Science, Patras, Greece;  
 September 24-27, 2006 (poster).
30. "Forces between adsorbed polyelectrolyte layers. Dependence on pH and salt concentration",  
 Y. Hiotelis\*, S. Pispas, C. Toprakcioglou and A. Vradis,  
 XXII Hellenic Conference on Solid State Physics and Materials Science, Patras, Greece;  
 September 24-27, 2006 (poster).
31. "Growth of CaCO<sub>3</sub> nanocrystals on carbon nanotubes",  
 D. Tasis\*, S. Pispas, C. Galiotis and N. Bouropoulos,  
 XXII Hellenic Conference on Solid State Physics and Materials Science, Patras, Greece;  
 September 24-27, 2006 (poster).
32. "Synthesis of pH responsive double hydrophilic block copolymer",  
 G. Mountrichas\* and S. Pispas,  
 6<sup>th</sup> Hellenic Conference on Polymers, Patras, Greece; November 3-5, 2006 (poster).
33. "Novel highly charged cationic polyelectrolytes and their complexes with oppositely charged surfactants",  
 C. Mantzaridis\*, G. Mountrichas and S. Pispas,  
 6<sup>th</sup> Hellenic Conference on Polymers, Patras, Greece; November 3-5, 2006 (poster).
34. "Hybrid materials for photonic applications",  
 A. Meristoudi\*, G. Mousdis, S. Pispas and N. Vainos,  
 6<sup>th</sup> Hellenic Conference on Polymers, Patras, Greece; November 3-5, 2006 (poster).
35. "Organic-inorganic hybrid materials: Semiconductor nanoparticles in amphiphilic block copolymers",  
 K.D. Gatsouli\*, S. Pispas and E.I. Kamitsos,  
 6<sup>th</sup> Hellenic Conference on Polymers, Patras, Greece; November 3-5, 2006 (poster).
36. "Structure and dynamics of lithium neutralized ionic block copolymers",  
 E. Ioannou\*, G. Mountrichas, S. Pispas, E.I. Kamitsos, P. Papadopoulos and G. Floudas,  
 6<sup>th</sup> Hellenic Conference on Polymers, Patras, Greece; November 3-5, 2006 (poster).
37. "Intramolecular electronic interactions on soluble carbon nanotubes/semiconductor nanoparticles ensembles"  
 G. Mountrichas\*, N. Tagmatarchis and S. Pispas,  
 International Conference on Synthetic Metals, Doublin, Ireland; July 2-7, 2006 (poster).
38. "Polymer decorated carbon nanotubes templating the growth of CdS nanoparticles: towards intramolecular charge transfer processes",

G. Mountrichas\*, N. Tagmatarchis and S. Pispas,  
3rd Workshop on Nanoscience and Nanotechnologies, Thessaloniki, Greece; July 10-12, 2006 (poster, award winner).

39. “Inorganic and hybrid polymer-inorganic nanostructured materials, for optical physicochemical sensing applications”,

A. Tsigara, L. Athanasekos, G. Manasis, G. Mousdis, S. Pispas and N.A. Vainos\*, Romopto 2006, Sibiu, Romania; August 28-31, 2006 (invited talk).

40. “Inorganic and hybrid nanostructured materials, for optical-photonic chemical sensing applications”,

G. Mousdis\*, A. Tsigara, A. Meristoudi, S. Pispas, M. Hands, N. Madamopoulos and N. Vainos,

NATO ASI on Optical Waveguide Sensing and Imaging, Gatineau, Québec, Canada; October 12-21, 2006 (poster).

41. “Functionalization of carbon nanohorns”,

G. Pagona\*, N. Tagmatarchis, M. Yudasaka and S. Iijima,  
ChemOnTubes, Arcachon, France, April 2-5, 2006 (poster).

42. “Carbon nanohorn-based donor-acceptor nanoensembles for managing charge-transfer interactions”,

G. Pagona\*, N. Tagmatarchis, M. Yudasaka and S. Iijima,  
ICSM-2006 (International Conference on Science and Technology of Synthetic Metals), Dublin, Ireland, July 2-7, 2006 (poster).

43. “Photo-induced electron-transfer reactions on water-soluble carbon nanohorn—pyrene—tetrathiafulvalene nanoensembles”,

G. Pagona\* and N. Tagmatarchis,  
3<sup>rd</sup> Workshop on Nanosciences and Nanotechnologies (NN06), Thessaloniki, Greece, July 10-12, 2006 (poster).

44. “Multifunctional carbon-based nanostructured materials”,

N. Tagmatarchis,  
3<sup>rd</sup> Workshop on Nanosciences and Nanotechnologies (NN06), Thessaloniki, Greece, July 10-12, 2006 (oral).

45. “Single-wall carbon nanohorns for various applications”,

M. Yudasaka\*, K. Ajima, T. Murakami, J. Miyawaki, K. Murata, N. Tagmatarchis, K. Shiba, Y. Kubo and S. Iijima,  
NT06: International Conference on the Science and Applications of Nanotubes, Nagano, Japan, June 18-23, 2006 (oral).

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G. Pagona\*, N. Tagmatarchis, M. Yudasaka and S. Iijima,  
17<sup>th</sup> European Conference on Diamond, Diamond-Like Materials, Carbon Nanotubes and Nitrides, Estoril, Portugal, September 3-8, 2006 (poster).

47. "Multifunctional carbon-based nanostructured materials: Azafullerenes, nanotubes and nanohorns",  
N. Tagmatarchis,  
SloNano06, Ljubljana, Slovenia, September 20-21, 2006 (invited oral).
48. "Multifunctional carbon-based nanostructured materials",  
N. Tagmatarchis,  
Complexity and Diversity in Matter, Molecules, Life and Society, Strasbourg, France, November 29 – December 2, 2006 (oral).
49. "Single-component metal-1,2-dithiolene complexes as candidate semiconductors for field-effect transistors",  
G.C. Papavassiliou\*, G.C. Anyfantis, B.R. Steele, A. Terzis, C.P. Raptopoulou, G. Tatakis, G. Chaidogianos, N. Glezos, Y. F. Wang, H. Yashino and K. Murata,  
ICSM-2006, International Conference on Science and Technology of Synthetic Metals, Dublin, Ireland, July 2-7, 2006 (poster).
50. "New donor molecules, precursors of conducting salts",  
G.A. Mousdis\* and G.C. Papavassiliou  
Cost D35 - "From Molecules to Molecular Devices", Kick off Meeting, Pragha, Czech Republic, 6-7 January 2006 (oral).
51. "Synthesis of some new electron  $\pi$ -donors containing a thioxy ring, precursors of organic metals",  
G. Soras, N. Psaroudakis, A.J. Tasiopoulos, A.D. Keramidas and G.A. Mousdis\*,  
XXII Hellenic Conf. on Solid State Physics and Materials Science, Patras, Greece, 24-27/9/2006, (poster).
52. "Spectroscopic study of a CHO substituted terthiophene",  
D. Anestopoulos, M. Fakis\*, G. Mousdis, V. Giannetas and P. Persephonis,  
XXII Hellenic Conf. on Solid State Physics and Materials Science, Patras, Greece, 24-27/9/2006 (poster).
53. Study of the inlaying of pyrene methylamine in layered materials",  
M. Enotiadis\*, U. Tsoufis, D. Gournis and G.A. Mousdis,  
XXII Hellenic Conf. on Solid State Physics and Materials Science, Patras, Greece, 24-27/9/2006 (poster).
54. "Magnetic properties and structure of Sm-Fe-N nano droplets",  
E. Sarantopoulou, Z. Kollia\*, A.C. Cefalas and S. Kobe,  
3<sup>rd</sup> Workshop on NanoSciences and NanoTechnologies, Thessaloniki, Greece, July 10-12, 2006 (poster).
55. "Atomic resolution etching of the external proteinaceous protective membrane of Ulocladium and Aspergillus 1-4 spores *in vivo*"  
E. Sarantopoulou and Z. Kollia\*,  
3<sup>rd</sup> Workshop on NanoSciences and NanoTechnologies, Thessaloniki, Greece, July 10-12, 2006 (poster).

56. "Hierarchical self assembled structures from block copolymer/metal nanoparticles hybrid materials induced by VUV",  
 Z. Kollia\*, K. Gatsouli, E. Sarantopoulou and S. Pispas,  
 3<sup>rd</sup> Workshop on NanoSciences and NanoTechnologies, Thessaloniki, Greece, July 10-12, 2006 (poster).
57. "Nanocrystallization of calcium carbonate in magnetic field",  
 A.C. Cefalas, S. Kobe, E. Sarantopoulou\*, Z. Kollia, J. Stražišar and A. Meden,  
 Trends in Nanotechnology 2006, Grenoble, France, 4-8 September 2006 (poster).
58. "Hierarchical self assembled structures from block copolymer/metal nanoparticles hybrid materials induced by VUV light",  
 E. Sarantopoulou\*, K. Gatsouli, Z. Kollia, S. Pispas and S. Kobe,  
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59. "CaF<sub>2</sub>:Tm<sup>3+</sup> nanocomposites fabricated by pulsed laser deposition at 157 nm",  
 E. Sarantopoulou, Z. Kollia, A.C. Cefalas\*, S. Kobe and J.T. van Elteren,  
 5<sup>th</sup> International Conference on Inorganic Materials, Ljubljana, Slovenia, 23-26 September 2006 (poster).
60. "Magnetism from intermetallic alloy droplets",  
 S. Kobe, E. Sarantopoulou, G. Drazic, Z. Kollia and A.C. Cefalas\*,  
 5<sup>th</sup> Symposium of Science and Technology of Nanomaterials - SLONANO, Ljubljana, Slovenia, 20-21 September 2006 (invited).
61. "Structural and optical properties of nano-composites of wide band gap dielectric crystals doped with trivalent rare earth ions fabricated by pulsed laser deposition at 157 nm",  
 E. Sarantopoulou, Z. Kollia, A.C. Cefalas\*, S. Kobe, and J. T van Elteren,  
 European Materials Research Society, Nice, France, May 29 - June 2, 2006 (poster).
62. "Polymer self-assembly with lasers at 157 nm",  
 E. Sarantopoulou, Z. Kollia, A. C. Cefalas\*, A.M. Douvas, M. Chatzichristidi, P. Argitis, and S. Kobe,  
 European Materials Research Society, Nice, France, May 29 - June 2, 2006 (poster).
63. "Magnetic properties and structure of Sm-Fe-N nano droplets",  
 E. Sarantopoulou, Z. Kollia, A.C. Cefalas\* and S. Kobe,  
 European Materials Research Society, Nice, France, May 29 - June 2, 2006 (poster).
64. "Structure and magnetic properties of Sm-Fe-(Ta)-N film processed by pulsed laser deposition at 157 nm",  
 E. Sarantopoulou, S. Kobe, G. Dražić\*, J. Kovač, Z. Kollia and A.C. Cefalas,  
 19<sup>th</sup> International Workshop on Rare Earth Magnets, Beijing, China, 29<sup>th</sup> Aug.-2<sup>nd</sup> Sept. 2006 (oral).
65. "Nano-functionalization and processing of engineering surfaces with vacuum ultraviolet light (110-180 nm). Bio-array fabrication",  
 E. Sarantopoulou, A.C. Cefalas\* and Z. Kollia,  
 50<sup>th</sup> IUVSTA Workshop: Towards Novel Nanostructure Based Devices, Dubrovnik, Croatia, 22-27 Oct. 2006 (oral).

66. "Reversible pattern formation and hologram recording in polymers and hybrid materials",  
 N.A. Vainos\*, A. Tsigara, S. Pispas, B. Loppinet and G. Fytas,  
 International Workshop on "Materials and Systems for Optical Data Storage and Processing"- COST P8 Action, Loutraki, Greece, May 26-27, 2006 (poster).
67. "Polymer/Ag, Au and sol-gel /Ag, Au, NiCl<sub>2</sub> derived thin film photonic structures for sensing applications",  
 A. Meristoudi\*, A. Tsigara, L. Athanasekos, M. Hands, S. Pispas, N. Vainos and H.L. Du,  
 8<sup>th</sup> ESG Conference on Glass Science and Technology, Sunderland, UK, September 10-14, 2006 (poster).
68. "NiCl<sub>2</sub>/SiO<sub>2</sub> sol-material for ammonia sensing",  
 A. Tsigara, N. Madamopoulos\*, M. Hands, L. Athanasekos, A. Meristoudi, G. Mousdis, G. Manasis, I. Koutselas and N. Vainos,  
 SPIE Optics East, Boston, USA, October 1-4, 2006 (oral).
69. "Multilayered metal/ metal-oxide structures for photonic applications",  
 A. Tsigara\*, M. Hands, N. Madamopoulos, N.A. Vainos, A. Perrone, C. Ristescu, A. Piotrowska, E. Kaminska and S. Duhalde,  
 1<sup>st</sup> International Symposium on Transparent Conducting Oxides TCO 2006, Crete, Greece, October 22-25, 2006 (oral).
70. "Inorganic and hybrid nanostructured materials for optical physicochemical sensing applications",  
 A. Tsigara\*, A. Meristoudi, S. Pispas, G. Mousdis, M. Hands, N. Madamopoulos, N.A. Vainos and F. Roubani-Kalantzopoulou,  
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71. "Nanocomposite inorganic and hybrid thin film structures containing Ag, Au and NiCl<sub>2</sub> nanoparticles for photonic applications",  
 A. Tsigara, G. Mousdis, S. Pispas\*, A. Meristoudi, M. Hands, I. Koutselas and N. Vainos,  
 XXII Greek Conf. on Solid State Physics and Materials Science, Patras, Greece, September 24-27, 2006 (poster).
72. "Growth and characterization of nickel oxide thin films by pulsed laser deposition",  
 E. György\*, A. Figueras, A. Giannoudakos, I. Fasaki, M. Kompitsas, I.N. Mihailescu, C. Ducu, and F. Roubani-Kalantzopoulou,  
 E-MRS IUMRS 2006, May 29 - June 2, 2006, Nice, France (poster).
73. "Pulsed laser deposited ZnO thin films with metal clusters on top and study of their surface catalytic behavior with reversed-flow gas chromatography",  
 A. Giannoudakos\*, F. Agelakopoulou, M. Kompitsas and F. Roubani-Kalantzopoulou,  
 E-MRS IUMRS 2006, May 29- June 2, 2006, Nice, France (poster).
74. "Wavelength calibration in the near-infrared for multielement analysis without the need for reference spectra",  
 G. Asimellis\*, A. Giannoudakos and M. Kompitsas,

22<sup>th</sup> National Conference for Solid State Physics and Materials Science, 24-27 Sept. 2006, Patras, Greece (poster).

75. "Sulfur and bromine detection in a laser-produced plasma spectroscopy", G. Asimellis\*, A. Giannoudakos and M. Kompitsas,

22<sup>th</sup> National Conference for Solid State Physics and Materials Science, 24-27 Sept. 2006, Patras, Greece (oral).

76. "Electrical and optical properties of NiO thin films grown by pulsed-laser deposition", I. Fasaki, M. Stamataki\*, A. Giannoudakos, N. Brilis, F. Roubani-Kalantzopoulou, D. Tsamakis and M. Kompitsas,

22<sup>th</sup> National Conference for Solid State Physics and Materials Science, 24-27 Sept. 2006, Patras, Greece (poster).

77. "Controlled doping of metal-oxide semiconductors by a dual-laser, dual target PLD arrangement",

M. Kompitsas\*, A. Giannoudakos, E. György, I. Mihailescu, J. Santiso and D. Pantelica, 1<sup>st</sup> Int'l Conference on Transparent Conductive Oxides (TCO2006), 24-27 October 2006, Chersonissos, Crete (oral).