

1. Papers in Refereed Journals

1. "Theoretical study of benzene, toluene and dibromobenzene at a Si(111) 7X7 surface",
I.D. Petsalakis, J.C. Polanyi and G. Theodorakopoulos,
Israel J. Chemistry 45, 111 (2005).
2. "Theoretical study of halogen-substituted benzene on a Si(111) 7X7 surface",
I.D. Petsalakis and G. Theodorakopoulos,
Israel J. Chemistry 45, 127 (2005).
3. "Generation of the $C_2H_3O^+$ ion in reactions of O (P_{33}) with 2-butyne",
A. Metropoulos,
Int. J. Quantum Chem. 104, 482 (2005).
4. "Controllable surfaces of path interference in the multiphoton ionization of atoms by a weak trichromatic field",
T. Mercouris and C.A. Nicolaides,
J. Opt B-Quantum SO7 (10), S403 (2005).
5. "Effect of the Rydberg states on the time evolution of nonstationary states below or just above the ionization threshold",
Y. Komninos and C.A. Nicolaides,
Phys. Rev. A 72, 032716 (2005).
6. "On calculations of correlated wave functions with heavy configurational mixing",
C.A. Nicolaides,
Int. J. Quantum Chem. 102, 250 (2005).
7. "Shape resonances as poles of the semiclassical Green's function obtained from path-integral theory: Application to the autodissociation of the $He_2^{++} \ ^1\Sigma_g$ state",
C.A. Nicolaides and T.G. Douvropoulos,
J. Chem. Phys. 123, 024309 (2005).
8. "Interference generalized cross-section for the multiphoton detachment of H in dichromatic fields",
T. Mercouris, C. Haritos and C.A. Nicolaides,
J. Phys. B 38, 399 (2005).
9. "Long-wavelength approximation in on- and off-resonance transitions",
Y. Komninos, T. Mercouris and C.A. Nicolaides,
Phys. Rev. A 71, 023410 (2005).
10. "Stabilization and relative phase effects in a dichromatically driven diatomic Morse molecule: Interpretation based on nonlinear classical dynamics",
V. Constantoudis and C.A. Nicolaides,
J. Chem. Phys. 122, 084118 (2005).

11. “Description of the lowest-energy surfaces of the CH+O system: Interpolation of ab initio configuration-interaction total energies by a tight-binding Hamiltonian”,
N.C. Bacalis, A. Metropoulos and D.A. Papaconstantopoulos,
Phys. Rev. A 71, 022707 (2005).
12. “Generalization of Laguerre orbitals toward an accurate, concise and practical analytic atomic wave function”,
Z. Xiong and N.C. Bacalis,
Commun. Mathem. Computer Chem. 53, 283 (2005).
13. “Analytic atomic wave functions of NMCSCF quality – and applications”,
Z. Xiong, M. Velgakis and N.C. Bacalis,
Int. J. Quantum Chem. 104, 418 (2005).
14. “Composition- and temperature-dependence of cesium-borate glasses by molecular dynamics”,
A. Vegiri, C.P.E. Varsamis and E.I. Kamitsos,
J. Chem. Phys. 123, 014508 (2005).
15. “Is the resistance upturn around 50K related to the Fermi surface area in τ -(EDO-*S,S*-DMEDT-TTF)₂(AuBr₂)_{1+y}”,
T. Nakanishi, L. Li, H. Yoshino, S. Yasuzuka, K. Murata, D. Graf, E.S. Choi, J.S. Brooks and G.C. Papavassiliou,
Synth. Met. 152, 425 (2005).
16. “Magnetic, thermoelectric, and pressure studies of the magnetic field-induced metal to insulator transition in tau-phase organic conductors”,
J.S. Brooks, D. Graf, Y. Oshima, E.S. Choi, K. Murata, T. Konoike and G.C. Papavassiliou,
Synth. Met. 152, 441 (2005).
17. “Pressure-induced low resistive and insulating phases in τ -(EDO-*R,R*-DMEDT-TTF)₂(AuI₂)_{1+y}”,
L. Li, H. Yoshino, T. Nakanishi, G.C. Papavassiliou, G.A. Mousdis, T. Sasaki and K. Murata,
Synth. Met. 152, 445 (2005).
18. “Evidence of band-filling control of τ -type organic conductors by thermal treatment”,
H. Yoshino, T. Nakanishi, L. Li, K. Murata, D. Graf, E.S. Choi, J.S. Brooks, Y. Nogami, and G.C. Papavassiliou,
Synth. Met. 153, 453 (2005).
19. “Determination of band-filling change in the two-dimensional organic conductor τ -(EDO-*S,S*-DMEDT-TTF)₂(AuBr₂)_{1+y} by the quantum oscillation and magnetoresistance”,
H. Yoshino, K. Murata, T. Nakanishi, L.Li, E.S. Choi, D. Graf, J.S. Brooks, Y. Nogami and G.C. Papavassiliou,
J. Phys. Soc. Jpn. 74, 417 (2005).
20. “Magnetic, thermoelectric and pressure studies of magnetic field-induced metal to insulator transition in τ -phase organic conductors”,
D. Graf, E. Choi, J. Brooks, N. Harrison, K. Murata, T. Konoike, G.A. Mousdis and G.C. Papavassiliou,

Phys. Rev. B 71, 045117 (2005).

21. “Induced absorption and spontaneous emission due to biexciton in two-dimensional semiconductor $(\text{CH}_3\text{C}_6\text{H}_4\text{CH}_2\text{NH}_3)_2\text{PbBr}_4$ single crystal”,
H. Makino, T. Goto, T. Yao, G. A. Mousdis, and G.C. Papavassiliou,
J. Luminesc. 112, 54 (2005).

22. “Structure and conductivity of unsymmetrical π -donor ethylenedithiadiselenafulvalene iodomercurate, $(\text{EDT-DTDSF})_4\text{H}_3\text{I}_8$ ”,
E.I. Zhilyaeva, A.Yu. Kovalvski, S.A. Torunova, G.A. Mousdis, R.B. Lyuborskii, G.C. Papavaassiliou, P. Coppens, and R.N. Lyuborskaya,
Synth. Met. 150, 245 (2005).

23. “Alternative method for the preparation of Ni(dddt) (edt) (dddt=5,6-Dihydro-1,4-dithin-2,3-dithiolate, edt=cis-1,2-Ethylenedithiolate) and similar complexes”,
G.C. Papavassiliou and G.S. Anyfantis,
Z. Naturforsch. B 60, 811 (2005).

24. “Classification of edible and lampante virgin olive oils based on synchronous scan fluorescence and total luminescence spectroscopy”,
K.I. Poulli, G.A. Mousdis, C.A. Georgiou,
Anal. Chim.Acta B 542, 151 (2005).

25. “Micelles of star block $(\text{PSPI})_8$ and PSPI diblock copolymers (PS=Polystyrene, PI=Polyisoprene): Structure and kinetics of micellization”,
G. Mountrichas, M. Mpiri, S. Pispas,
Macromolecules 38, 940 (2005).

26. “Magnetic field induced orientation in diblock copolymers with one crystallizable block”,
T. Grigorova, S. Pispas, N. Hadjichristidis, T. Thurn-Albrecht,
Macromolecules 38, 7430 (2005).

27. “Linear and non-linear triblock terpolymers: Synthesis, self-assembly in selective solvents and in bulk”,
N. Hadjichristidis, H. Iatrou, M. Pitsikalis, S. Pispas, A. Avgeropoulos,
Prog. Polym. Sci. 30, 725 (2005).

28. “Hybrid materials based on CdS and CdSe nanoparticles in glassy block copolymers”,
K.D. Gatsouli, S. Pispas, G. Mousdis, G.C. Papavassiliou, and E.I. Kamitsos,
Phys. Chem. Glasses 46, 197 (2005).

29. “Nonlinear optical properties of fullerene-organic glassy polymer composites”,
K.D. Gatsouli, S. Pispas, G. Mousdis, N. Vainos, P. Alukos, E. Xerogiannopoulou and S. Couris,
Glass Technology 46, 62 (2005).

30. “Raman spectra of $\text{As}_x\text{Se}_{100-x}$ glasses doped with metals”,
M.S. Iovu, E.I. Kamitsos, C.P.E. Varsamis, P. Boolchand and M. Popescu,
J. Optoelectron. Adv. Mat. 7, 1217 (2005).

31. “The peculiar role of non-bridging oxygen atoms in ionic borate glasses”
C.P.E. Varsamis, A. Vegiri and E.I. Kamitsos
Phys. Chem. Glasses 46, 72 (2005).
32. “Structure and properties of mixed phosphate and fluoride glasses”,
D. Moncke, D. Ehrt, L.L. Velli, C.P.E. Varsamis and E.I. Kamitsos,
Phys. Chem. Glasses 46, 67 (2005).
33. “Evidence from infrared spectroscopy of structural relaxation during field assisted and chemically driven ion-exchange in soda-lime-silica glasses”,
M.D. Ingram, M.H. Wu, A. Coats, C.P.E. Varsamis, E.I. Kamitsos, N.J. Garcia and M. Sola,
Phys. Chem. Glasses 46, 84 (2005).
34. “Structural investigation of metaphosphate glasses”,
L.L. Velli, C.P.E. Varsamis, E.I. Kamitsos, D. Moncke and D. Ehrt,
Phys. Chem. Glasses 46, 178 (2005).
35. “Raman spectra of As_xSe_{100-x} and $As_{40}Se_{60}$ glasses doped with metals”,
M.S. Iovu, E.I. Kamitsos, C.P.E. Varsamis, P. Boolchand and M. Popescu,
Chalcogenide Lett. 2, 21 (2005).
36. “Glassy drugs: A Raman investigation of binary dihydropyridine systems”,
D. Vassou, V. Gionis and G. D. Chryssikos,
Phys. Chem. Glasses 46, 144 (2005)
37. “Soluble carbon nanotubes ensembles for light-induced electron transfer interactions”,
N. Tagmatarchis, M. Prato, D.M. Guldi,
Physica E 29, 546 (2005).
38. “Single-walled carbon nanotube-based hybrid materials for managing charge transfer processes”,
Th. A. Felekis, N. Tagmatarchis,
Rev. Adv. Mater. Sci. 10, 272 (2005).
39. “Carbon nanotubes and applications”,
Th. A. Felekis and N. Tagmatarchis,
Chimica Chronica – Greek Edition 67, 33 (2005).
40. “Enhanced UV emissions in active nitrogen and oxygen”,
E. Kamaratos,
Chem. Phys. Lett. 415, 51 (2005).
41. “Cobalt chloride based nanocomposite humidity sensors”,
G. Manasis, A. Tsigara, A. Giannoudakos, G. Anyfantis, K. Gatsouli, G. Mousdis, S. Pispas,
N. Madamopoulos and N. Vainos,
Glass Technology 46, 171 (2005).
42. “Direct measurement of the dispersion of the electrogyration coefficient of photorefractive $Bi_{12}GeO_{20}$ crystals”,

N.C. Deliolanis, I.M. Kourmoulis, G. Asimellis, A.G. Apostolidis, A.D. Vanidhis, N. Vainos, J. Appl. Phys. 97, 023531 (2005).

43. “Reversible holographic grating formation in polymer solutions”,
B. Loppinet, E. Somma, N. Vainos and G. Fytas,
J. Am. Chem. Soc. 127, 9678 (2005).

44. “Nanostructured ZnO coatings grown by pulsed laser deposition for optical gas sensing of butane”
T. Mazingue, L. Escoubas, L. Spalluto, F. Flory, G. Socol, C. Ristoscu, E. Axente, S. Grigorescu, I.I. Mihailescu and N.A. Vainos,
J. Appl. Phys. 98, 074312 (2005).

45. “Compact switched-retroreflection-based 2x2 optical switching fabric for WDM applications”,
N.A. Riza and N. Madamopoulos,
J. Lightwave Technol. 23, 247 (2005).

46. “157 nm laser ablation of polymeric layers for fabrication of biomolecule micro arrays”
A.M. Douvas, P.S. Petrou, S.E. Kakabakos, K. Misiakos, P. Argitis, E. Sarantopoulou, Z. Kollia and A.C. Cefalas,
Anal. Bioanal. Chem. 381, 1027 (2005).

47. “Current trends in 157 nm dry lithography”,
A.C. Cefalas,
Appl. Surf. Science 247, 577 (2005).

48. “Self assembled structures on fluoro-polymers induced with laser light at 157 nm”,
Z. Kollia, E. Sarantopoulou, A.C. Cefalas, S. Kobe, P. Argitis and K. Missiakos,
Appl. Surf. Science 248, 248 (2005).

49. “Nanocrystalline Sm-Fe composites fabricated by pulse laser deposition at 157 nm”,
S. Kobe, K. Zuzek, E. Sarantopoulou, Z. Samardzija, Z. Kollia and A.C. Cefalas,
Appl. Surf. Science 248, 349 (2005).

50. “Growth of Al doped ZnO films by a synchronized two laser system”,
E. Gyorgy, J. Santiso, A. Giannoudakos, M. Kompitsas, I.N. Mihailescu and D. Pantelica,
Appl. Surf. Science 248, 147 (2005).

51. “Controlled inert gas environment for enhanced chlorine and fluorine detection in the visible and near-infrared by laser induced breakdown spectroscopy”,
G. Asimellis, S. Hamilton, A. Giannoudakos and M. Kompitsas,
Spectr. Acta B 60, 1132 (2005).

52. “Morphology evolution and local electric properties of Au nanoparticles on ZnO thin films”,
E. Gyorgy, J. Santiso, A. Fugueras, A. Giannoudakos, M. Kompitsas and I.N. Mihailescu,
J. Appl. Phys. 98, 84302 (2005).

53. “Influence of pulsed laser deposition (PLD) parameters on the H₂ sensing properties of zinc oxide thin films”,
N. Brilis, P. Romesis, D. Tsamakias and M. Kompitsas,
Superlattice Microstructures 38, 283 (2005).
54. “Kontrollierte dotierung von Al:ZnO schichten durch PLD mit zwei lasern und zwei targets”,
M. Kompitsas, A. Giannoudakos, E. Gyorgy, I.N. Mihailescu, J. Santiso and D. Pantelica,
Photonik 2, 58 (2005).
55. “Absorption spectrum in a three-level atom with injected squeezed vacuum: ladder case”,
S.A. Hadjiagapiou and S.M. Spyrou,
J. Mod. Optics 52, 1207 (2005).

2. Papers in Proceedings of International and National Conferences

1. “Properties of silicon nanocrystals via a transferable tight-binding Hamiltonian, based on ab-initio results”,
A.D. Zdetsis and N.C. Bacalis,
Lecture Series on Computer and Computational Science, Brill Academic Publishers, T. Simos and G. Maroulis (Eds.), vol. 4, pp. 1477-1479 (2005).
2. “Minimal modeling of DNA thermal and mechanical instabilities”,
N. Theodorakopoulos,
Proceedings of “Mathematical Methods and Models of Continuum Biomechanics”,
Oberwolfach Reports (European Mathematical Society), vol. 2, pp. 523-526 (2005).
3. “Stable aqueous dispersions of C₆₀ fullerene by the use of a block copolymer”,
G. Mountrichas, S. Pispas, E.I. Kamitsos, E. Xenogiannopoulou, V. Dracopoulos and S. Couris,
2nd Conf. on Microelectronics, Microsystems and Nanotechnology, Athens, Greece (2004). J. Phys. Conf. Ser. 10, 163-166 (2005).
4. “Time-resolved spectroscopy of oligothiophenes using the femtosecond fluorescence upconversion technique”,
D. Anastopoulos, M. Fakis, I. Polyzos, G. Tsigaridas, G. Mousdis, P. Persephonis and V. Giannetas,
2nd Conf. on Microelectronics, Microsystems and Nanotechnology, Athens, Greece (2004). J. Phys. Conf. Ser. 10, 230 (2005).
5. “Eu³⁺/block copolymer nanostructured hybrid materials”,
K.D. Gatsouli, S. Pispas and E.I. Kamitsos,
2nd Conf. on Microelectronics, Microsystems and Nanotechnology, Athens, Greece (2004). J. Phys. Conf. Ser. 10, 255 (2005).
6. “Nanostructured hybrid solid electrolytes based on block copolymers”,
K. Gatsouli, S. Pispas, C.P.E. Varsamis and E.I. Kamitsos,
Proc. of 5th Greek Sci. Conf. on Chemical Engineering, pp. 509-512 (2005) (in Greek).

7. “Flow field-flow fractionation for length separation and purification of water-soluble functionalized MWNTs”,
Th. Felekis, N. Tagmatarchis, A. Zattoni, P. Reschiglian and M. Prato,
19th International Winter School on Electronic Properties of Novel Materials,
Euroconference, Kirchberg, Austria, (2005), AIP Conf. Proc., vol. 786, 252-256 (2005).
8. “Laser ablative processing: A route to innovative photonics”,
N.A. Vainos,
in Pulsed Laser Deposition of Optoelectronic Films, Optoelectronic Materials and Devices
Series vol. 2, pp. 1-40, INOE Publishers, 2005.
9. “Semiconductor optical amplifier-based switched photonic delay lines for microwave photonic applications,”
N. Madamopoulos,
In Optical Transmission Systems and Equipment for WDM Networking IV, K-I. Sato, W. Weiershausen, A.K. Dutta and B.B. Dingel (Eds.), Proc. SPIE vol. 6012, 60120S (2005).
10. “Polymer based photonic sensors for physicochemical monitoring”,
N. Madamopoulos, S. Pispas, L. Athanasekos, A. Tsigara, G. Mountrihis, K. Gatsouli, N. A. Vainos and K. Kibasi,
In Advanced Environmental, Chemical, and Biological Sensing Technologies III, T. Vo-Dinh, R.A. Lieberman, and G. Gauglitz (Eds.), Proc. SPIE vol. 5993, 599308 (2005).
11. “Diffractive optical elements for photonic gas sensors”,
N. Madamopoulos, G. Siganakis, A. Tsigara, L. Athanasekos, S. Pispas, N.A. Vainos, E. Kaminska, A.B. Piotrowska, A. Perrone and K. Kibasi,
In Nanosensing: Materials and Devices II, M.S. Islam and A.K. Dutta (Eds.), Proc. of SPIE vol. 6008, 60081C (2005).
12. “Optical fibre long-period grating humidity sensor utilizing PEO/CoCl₂ outcladding overlayers”,
M. Konstantaki, G. Papaioannou, S. Pissadakis, S. Pispas, N. Madamopoulos and N. Vainos,
In Optical Fibers: Applications, L.R. Jaroszewicz, B. Culshaw and A. Grazia Mignani (Eds.), Proc. of SPIE vol. 5952, 59520H (2005).
13. “Oxidation of hydrogenated crystalline silicon as an alternative approach for ultrathin SiO₂ growth”,
A. Szekeres, S. Alexandrova, P. Lytvyn and M. Kompitsas,
2nd Conf. on Microelectronics, Microsystems and Nanotechnology, Athens, Greece (2004).
J. Phys. Conf. Ser. 10, 246-250 (2005).
14. “Properties of ZnO thin films developed by Pulsed Laser Deposition (PLD)”,
A. Giannoudakos, E. Tylipaki, M. Kompitsas and F. Roubani-Kalanzopoulou,
Proc. 5th Greek Sci. Conf. on Chemical Engineering, pp. 901-904 (2005) (in Greek).
15. “Halogen detection in solid matrices by Laser Induced Plasma Spectroscopy”,
A. Giannoudakos, G. Assimellis, S. Hamilton and M. Kompitsas,
Proc. 5th Greek Sci. Conf. on Chemical Engineering, pp. 965-968 (2005) (in Greek).

16. “Effect of the deposition parameters of ZnO thin films grown by PLD as hydrogen sensors”,
N. Brilis, D. Tsamakias, M. Kompitsas and E. Velamondes,
Proc. 5th Greek Sci. Conf. on Chemical Engineering, pp. 1081-1084 (2005) (in Greek).
17. “Development of a multi-layered Ta/TaO_x/Ta structure by pulsed laser deposition”,
N. Vakakis, I. Bassiotis, M. Kompitsas and F. Roubani-Kalontzopoulou,
Proc. 5th Greek Sci. Conf. on Chemical Engineering, pp. 1133-1136 (2005) (in Greek).

3. Dissertations

a. PhD theses

1. “Dynamics of quantum systems and resonance states”,
Th. Douvropoulos, supervisors C.A. Nicolaides and Th. Mercouris, National Technical University of Athens, (2005).

b. MSc theses

1. “Vibrational study of glazes and ceramic materials for the reproduction of ceramic artefacts of archaeological value”,
E. Ioannou, supervisors E.I. Kamitsos and N. Hadjichristidis, University of Athens, Chemistry Department (2005).

c. Honors theses

1. “Growth of NiO and ZnO thin films by Pulsed Laser Deposition (PLD) and their optical and structural characterization”,
I. Fasaki, supervisors M. Kompitsas and F. Roubani-Kalantzopoulou, National Technical University of Athens, Chem. Eng. Dept. (2005).

4. Publications in Technical Journals

1. “Analysis and documentation of the baptism of Christ by Domenicos Theotokopoulos using non-destructive physicochemical techniques” (in Greek),
E. Aloupi, V. Paschalis, S. Stassinopoulos, V. Tornari, D. Anglos, V. Gionis and G.D. Chryssikos,
The Annual Journal of the Benaki Museum 5, 87-114 (2005).

5. Conference Presentations

1. “Properties of silicon nanocrystals via a transferable tight-binding Hamiltonian, based on ab-initio results”,
A.D. Zdetsis, N.C. Bacalis*,
International Conference of Computational Methods in Sciences and Engineering, Loutraki, Greece, 21-26 October, 2005 (oral).

2. “Minimal modeling of DNA thermal and mechanical instabilities”,
N. Theodorakopoulos,
Miniworkshop on Mathematical Methods and Models of Continuum Biomechanics,
Mathematisches Forschungsinstitut Oberwolfach, 20-26 February 2005 (invited).
3. “Phase transitions in one dimension: are they *all* driven by domain walls?”,
N. Theodorakopoulos,
Nonlinear Physics: Condensed Matter, Dynamical Systems and Biophysics, Institut Henri
Poincare, Paris, 30-31 May 2005 (invited).
4. “Relative phase and stabilization effects in dichromatically driven morse oscillator”,
V. Constandoudis*, C.A. Nicolaidis, E. Meletidou, S. Ichtiaroglou,
XXV Dynamics Days Conference Europe 2005, Berlin, Germany, July 25-28, 2005 (poster).
5. “Theories and models of doubly excited states”,
C.A. Nicolaidis,
Symmetry and Spectroscopy, Torun, Poland, June 11- 15, 2005 (invited).
6. “Phase space control of molecular photodissociation processes”,
V. Constandoudis*, C.A. Nicolaidis, E. Meletidou, S. Ichtiaroglou,
18th Panhellenic Conference “Nonlinear Science and Complexity” 2005, Volos, July 18-30,
2005 (invited).
7. “Structure and dynamics of ion-exchanged glasses”,
E.I. Kamitsos,
17th University Conference of Glass Science and 1st International Materials Workshop on
New Functionality of Glasses, State College, Pennsylvania, USA, June 26-30, 2005 (invited).
8. “Spectroscopic study of the leaching behaviour of lead glazes”,
E. Ioannou, E.I. Kamitsos*, C.P. Varsamis, F. Okyar, B. Kavakli and H.G. Zeybekoglu,
4th International Conference on Science & Technology in Archaeology and Conservation,
Amman, Jordan, December 7-11, 2005 (oral).
9. “Spectroscopic evaluation of shreds of ancient Nabataean pottery ware and of raw
clay materials suitable for ceramic reproductions”,
E. Ioannou*, E.I. Kamitsos, G.D. Chryssikos, V. Gionis, M.N. Naes and T. Akasheh,
4th International Conference on Science & Technology in Archaeology and Conservation,
Amman, Jordan, December 7-11, 2005 (oral).
10. “Structure and dynamics of ionic borate glasses”,
C.P.E. Varsamis*, A. Vegiri and E.I. Kamitsos,
5th International Conference on Borate Glasses, Crystals and Melts, Trento, Italy, 11-15 July
2005 (invited).
11. “Soluble functionalized carbon nanotubes”,
N. Tagmatarchis,
International Symposium on Nanometer-scale Quantum Physics, Tokyo, Japan, 2005
(poster).

12. “Flow field-flow fractionation for length separation and purification of water-soluble functionalized MWNTs”,
Th. Felekis*, N. Tagmatarchis, A. Zattoni, P. Reschiglian and M. Prato,
19th International Winterschool on Electronic Properties of Novel Materials, Euroconference, Kirchberg, Austria, 2005 (poster).
13. “Soluble functionalized carbon nanotubes”,
N. Tagmatarchis,
2nd International Conference on Nanomaterials and Nanotechnologies (NN2005), Crete, Greece, 2005 (oral).
14. “Carbon nanotube nanoensembles for electron transfer processes”,
N. Tagmatarchis,
NanoteC’05-Nanotechnology in Carbon & Related Materials, Brighton, UK, 2005 (oral).
15. “1,3-Dipolar cycloaddition of azomethine ylides to carbon Nanotubes”,
N. Tagmatarchis,
20th Panhellenic Chemistry Conference, Ioannina, Greece, 2005 (oral).
16. “Carbon nanotube-based nanohybrids for light-induced electron transfer interactions”,
N. Tagmatarchis,
Pacifichem2005, Hawaii, USA, 2005 (oral).
17. “Water-soluble multi-walled carbon nanotubes: synthesis, purification and length separation by flow field-flow fractionation”,
N. Tagmatarchis,
Pacifichem2005, Hawaii, USA, 2005 (oral).
18. “Synthesis of new metal dithiolenes complexes precursors of organic conducting materials”,
G.A. Soras, N. Psaroudakis and G.A. Mousdis*,
Figipas, Athens, Greece, 6-9 July 2005 (poster).
19. “2nd derivative NIR spectroscopic investigation of hormites”,
V. Gionis, G. Kacandes, I. Kastritis and G.D. Chryssikos*,
42nd Annual Meeting of the Clay Minerals Society, Burlington, VT USA, June 2005 (oral).
20. “The genesis and geochemistry of palygorskite clays from western Macedonia, Greece”,
I. Kastritis, G.D. Chryssikos, E. Mposkos, V. Gionis and G. Kacandes*,
42nd Annual Meeting of the Clay Minerals Society, Burlington, VT USA, June 2005 (oral).
21. “Bone diagenesis: New data from infrared spectroscopy and X-ray diffraction”,
E. Stathopoulou*, V. Psycharis, G.D. Chryssikos and V. Gionis
5th International Bone Diagenesis Meeting, Cape Town, RSA, August 2005 (oral).
22. “NIR control of aminoplastic resin production processes”,
E. Minopoulou*, G. Prinos, E. Dessipri, G. D. Chryssikos and V. Gionis,
Int’l Conference on Wood Adhesives 2005, San Diego, CA, USA, Nov. 2005 (oral).

23. “Nanostructured hybrid solid electrolytes based on block copolymers”,
K.D. Gatsouli*, S. Pispas, C.P. Varsamis and E.I. Kamitsos,
5th Greek Scientific Conference on Chemical Engineering, Thessaloniki, Greece; May 26-28,
2005 (oral).
24. “Nanoscale pH responsive block copolymer micelles with potential use in water
purification methodologies”,
G. Mountrichas, S. Pispas* and E.I. Kamitsos,
2nd International Conference on Nanomaterials and Nanotechnologies, Crete, Greece; June
14-18, 2005 (poster).
25. “Optical fiber long-period grating humidity sensor utilizing PEO/CoCl₂ outcladding
overlayers”,
M. Konstantaki*, G. Papaioannou, S. Pissadakis, S. Pispas, N. Madamopoulos, N. Vainos,
SPIE International Congress on Optics and Optoelectronics, Warsaw Univ. of Technology,
Warsaw, Poland; August 28-September 2, 2005 (oral).
26. “Photonic humidity integrated sensor based on hybrid polymer/cobalt chloride
systems”,
A. Tsigara*, G. Mountrichas, G. Mousdis, S. Pispas, N. Madamopoulos and N. Vainos,
Conf. on Lasers and Electro-optics, CLEO/Europe, Munich, Germany; June 2005 (poster).
27. “Polymer based photonic sensors for physicochemical monitoring”,
N. Madamopoulos*, S. Pispas, L. Athanasekos, A. Tsigara, G. Mountrichas, K. Gatsouli, N.
Vainos and K. Kibasi,
SPIE Optics East, Boston, Massachusetts, USA; October 23-26, 2005 (oral).
28. “Diffractive optical elements for photonic gas sensors”,
N. Madamopoulos*, G. Siganakis, A. Tsigara, L. Athanasekos, S. Pispas, N. Vainos, E.
Kaminska, A. Piotrowska, A. Perrone, C. Pristoscu and K. Kibasi,
SPIE Optics East, Boston, Massachusetts, USA; October 23-26, 2005 (oral).
29. “Multilayered thin film structures as photonic temperature sensors”,
N. Madamopoulos, A. Tsigara, N. Vainos*, E. Kaminska, A. Piotrowska and K. Kibasi,
CLEO/Europe, Munich, Germany, CH2-5-THU, 12-16 June 2005 (oral).
30. “Gas sensors based on transmission surface plasmon resonance spectroscopy”,
T. Karakouz*, A. Vaskevich, I. Rubinstein, S. Pispas, G. Mousdis and N. Vainos,
Annual Meeting of Israel Chemical Society, Tel-Aviv, Israel; February 15-16, 2005 (oral)
31. “Magnetic properties and structures of Sm-Fe films processed by pulse laser
deposition”,
E. Sarantopoulou, S. Kobe, K. Žužek, Z. Kollia and A.C. Cefalas*,
26th International Conference MIPRO. Conference on Microelectronics, Electronics, and
Electronic Technologies. Opatija, Croatia, 30 May-3 June 2005 (oral).
32. “The fabrication of single magnetic nano-dots by pulsed laser deposition”,
E. Sarantopoulou*, G. Drazic, S. Kobe, Z. Kollia and A.C. Cefalas,
13th International Conference of Materials and Technology, Porto-Ross, Slovenia, 10-12 Oct.
2005 (oral).

33. “The quantum theory of nano-crystalization in the presence of magnetic fields”,
A.C. Cefalas*, S. Kobe, E. Sarantopoulou and Z. Kollia,
13th International Conference of Materials and Technology, Porto-Ross, Slovenia, 10-12 Oct.
2005 (oral).
34. “Subtle thermal effects of interaction of non-ionized radiation with DNA crystals: A
quantum mechanical approach”,
A.C. Cefalas*, E. Sarantopoulou and Z. Kollia,
FGF-Workshop on “Subtle Thermal Effects of RF-fields in Vitro and in Vivo”, Stuttgart,
Germany, 21-23 Nov. 2005 (oral).
35. “Magnetic properties and structure of Sm-Fe-X films processed by pulsed laser
deposition”,
S. Kobe, G. Drazic, E. Sarantopoulou*, Z. Kollia and A.C. Cefalas,
EMRS 2005, Strasbourg, France, 31st May-3rd June 2005 (poster).
36. “Properties of ZnO thin films developed by pulsed laser deposition (PLD)”,
A. Giannoudakos*, E. Tylipaki, M. Kompitsas and F. Roubani-Kalantzopoulou,
5th National Conf. on Chem. Engineering, Thessaloniki, Greece, May 26-29, 2005 (oral).
37. “Halogen detection in solid matrices by laser induced plasma spectroscopy”,
A. Giannoudakos, G. Assimellis*, S. Hamilton and M. Kompitsas,
5th National Conf. on Chem. Engineering, Thessaloniki, Greece, May 26-29, 2005 (oral).
38. “Effect of the deposition parameters of ZnO thin films grown by PLD as hydrogen
sensors”,
N. Brilis*, D. Tsamakis, M. Kompitsas and E. Velamondes,
5th National Conf. on Chem. Engineering, Thessaloniki, Greece, May 26-29, 2005 (oral).
39. “Development of a multi-layered Ta/TaOx/Ta structure by pulsed laser deposition”,
N. Vakakis, I. Bassiotis*, M. Kompitsas and F. Roubani-Kalantzopoulou,
5th National Conf. on Chem. Engineering, Thessaloniki, Greece, May 26-29, 2005 (oral).
40. “Parameter optimization for efficient Bromine and Sulfur detection in the near-
infrared spectral range”,
G. Asimellis*, A. Giannoudakos and M. Kompitsas,
E-MRS LIPS 2005, Aachen, Germany, 6-8 Sept. 2005 (oral).