

1. Papers in Refereed Journals

1. “Excited state intramolecular proton transfer in hydroxy oxime-based chemical sensors”, I.S.K. Kerkines, I.D. Petsalakis, G. Theodorakopoulos, and J. Rebek, Jr., *J. Phys. Chem. A*, **115**, 834 (2011).
[DOI.org/10.1021/jp1088433](https://doi.org/10.1021/jp1088433)
2. “Theoretical investigation of the complexation of crown ethers and crown ethers of fulleropyrrolidine with $(\text{CH}_3)_x \text{NH}^{4-x}$, $x = 0 - 4$ ”, D. Tzeli, I.D. Petsalakis, and G. Theodorakopoulos, *Phys. Chem. Chem. Phys.*, **13**, 954 (2011).
[DOI: 10.1039/c0cp00180e](https://doi.org/10.1039/c0cp00180e)
3. “Theoretical study on the electronic structure and the absorption spectra of complexes of C_{60} and C_{59}N with π -extended derivatives of tetrathiafulvalene”, I.D. Petsalakis, D. Tzeli, I.S.K. Kerkines, and G. Theodorakopoulos, *Comp. and Theor. Chem.*, **965**, 168 (2011).
[DOI:10.1016/j.comptc.2011.01.041](https://doi.org/10.1016/j.comptc.2011.01.041)
4. “Photoinduced charge transfer in heterofullerene-donor hybrids: A theoretical study”, I. Thanopoulos, I.D. Petsalakis, and G. Theodorakopoulos, *Chem. Phys. Lett.*, **506**, 248 (2011).
[DOI:10.1016/j.cplett.2011.03.028](https://doi.org/10.1016/j.cplett.2011.03.028)
5. “Theoretical calculations on the potential energy curves of electronic states of CF. Rydberg states of CF above the lowest ionization limit”, I.D. Petsalakis and G. Theodorakopoulos, *Chem. Phys. Lett.*, **508**, 17 (2011).
[DOI:10.1016/j.cplett.2011.04.014](https://doi.org/10.1016/j.cplett.2011.04.014)
6. “Electronic structure and absorption spectra of supramolecular complexes of a fullerene crown ether with a π -extended TTF derivative”, D. Tzeli, I.D. Petsalakis, and G. Theodorakopoulos, *Phys. Chem. Chem. Phys.*, **13**, 11965 (2011).
[DOI: 10.1039/c0cp02665d](https://doi.org/10.1039/c0cp02665d)
7. “Experimental and theoretical anion binding studies on coumarin linked thiourea and urea molecules”, K. Ghosh, S. Adhikari, R. Fröhlich, I.D. Petsalakis, and G. Theodorakopoulos, *J. Mol. Structure*, **1004**, 193 (2011).

[DOI:10.1016/j.molstruc.2011.08.004](https://doi.org/10.1016/j.molstruc.2011.08.004)

8. “Fluorescence properties of organic dyes: Quantum chemical studies on the green/blue neutral and protonated DMA-DPH emitters in polymer matrices”,
I.S.K. Kerkines, I.D. Petsalakis, G. Theodorakopoulos, and P. Argitis,
Phys. Chem. Chem. Phys. **13**, 21273 (2011).

[DOI: 10.1039/c1cp22499a](https://doi.org/10.1039/c1cp22499a)

9. “Computational insight into the electronic structure and absorption spectra of lithium complexes of N-confused porphyrin”,
D. Tzeli, I.D. Petsalakis, and G. Theodorakopoulos,
J. Phys. Chem. A **115**, 11749 (2011).

[DOI:10.1021/jp204298q](https://doi.org/10.1021/jp204298q)

10. “Theoretical study of hydrogen bonding in homodimers and heterodimers of amide, boronic acid and carboxylic acid, free and in encapsulation complexes”,
D.Tzeli, G. Theodorakopoulos, I.D. Petsalakis, D. Ajami, and J. Rebek, Jr.,
J. Amer. Chem. Soc., **133**, 16977 (2011).

[DOI:10.1021/ja206555d](https://doi.org/10.1021/ja206555d)

11. “Li atoms attached to helium nanodroplets”,
A. Hernando, R. Mayol, M. Pi, M. Barranco, I.S.K. Kerkines, and A. Mavridis,
Int. J. Quantum Chem., **111**, 400 (2011).

[DOI:10.1002/qua.22636](https://doi.org/10.1002/qua.22636)

12. “Enhancement of ultraviolet photo-induced energy transfer near plasmonic nanostructures”,
I. Thanopoulos, E. Paspalakis, and V. Yannopoulos,
J. Phys. Chem. C **115**, 4370 (2011).

[DOI: 10.1021/jp106564c](https://doi.org/10.1021/jp106564c)

13. “Outer-valence Green’s function method using natural orbitals for ultrafast electron dynamics”,
I. Thanopoulos,

Comp. Theor. Chem. **970**, 42 (2011)

[DOI: 10.1016/j.comptc.2011.05.0241](https://doi.org/10.1016/j.comptc.2011.05.0241)

14. “Fractional spin in reduced density-matrix functional theory”,
N. Helbig, G. Theodorakopoulos, and N.N. Lathiotakis,
J. Chem. Phys. **135**, 054109 (2011).

[DOI: 10.1063/1.3615955](https://doi.org/10.1063/1.3615955)

15. “Nonperturbative computation of the time-resolved formation of the profile of autoionizing states as a function of the intensity and duration of ultrashort pulses”,
Th. Mercouris, Y. Komninos, and C.A. Nicolaides,
Phys. Rev. A 83, 015403 (2011).
[DOI:10.1103/PhysRevA.83.015403](https://doi.org/10.1103/PhysRevA.83.015403)
16. “Regular series of doubly excited states inside two-electron continua: Application to $2s^2$ -hole states in neon above the $Ne^{2+} 1s^2 2s^2 2p^4$ and $1s^2 2s 2p^5$ thresholds”,
Y. Komninos, Th. Mercouris, and C.A. Nicolaides,
Phys. Rev. A 83, 022501 (2011).
[DOI: 10.1103/PhysRevA.83.022501](https://doi.org/10.1103/PhysRevA.83.022501)
17. “Classical dynamics of escape in a periodically driven unbound Hamiltonian system”,
L.P. Konstantinidis, V. Constantoudis and C.A. Nicolaides,
Int. J. Bifurcation and Chaos, 21, 2587 (2011).
[DOI: 10.1142/S0218127411029951](https://doi.org/10.1142/S0218127411029951)
18. “State- and property-specific quantum chemistry: basic characteristics and sample applications to atomic, molecular and metallic ground and excited states of beryllium”,
C.A. Nicolaides,
Int. J. Quantum Chem. 111, 3347 (2011).
[DOI: 10.1002/qua.23106](https://doi.org/10.1002/qua.23106)
19. “State- and property-specific quantum chemistry”,
C.A. Nicolaides,
Adv. Quantum Chem. 62, 35 (2011).
[DOI:10.1016/B978-0-12-386477-2.00008-5](https://doi.org/10.1016/B978-0-12-386477-2.00008-5)
20. “Structural correlations and melting of B-DNA fibers”,
A. Wildes, N. Theodorakopoulos, J. Valle-Orero, S. Cuesta-López, J-L Garden, and M. Peyrard,
Phys. Rev. E 83, 061923 (2011); [arXiv:1106.2632](https://arxiv.org/abs/1106.2632)
[DOI:10.1103/PhysRevE.83.061923](https://doi.org/10.1103/PhysRevE.83.061923)
21. “Bubbles, clusters and denaturation in genomic DNA: modeling, parametrization and efficient computation”,
N. Theodorakopoulos,
J. Nonlinear Math. Physics 18, Suppl. 2, 429 (2011); [arXiv:1102.0259](https://arxiv.org/abs/1102.0259)
[DOI:10.1142/S1402925111001611](https://doi.org/10.1142/S1402925111001611)
22. “The thermal denaturation of DNA studied with neutron scattering”,
A. Wildes, N. Theodorakopoulos, J. Valle-Orero, S. Cuesta-López, J-L Garden, and M. Peyrard,
Phys. Rev. Lett. 106, 048101 (2011); [arXiv:1101.1797](https://arxiv.org/abs/1101.1797)
[DOI:10.1103/PhysRevLett.106.048101](https://doi.org/10.1103/PhysRevLett.106.048101)

23. “Structural characterization of As-Se-Te glasses”,
G. Delaizir, M. Dussauze, V. Nazabal, P. Lecante, M. Dolle, P. Rozier, E.I. Kamitsos, and B. Bureau,
J. Alloy. Compd. 509, 831 (2011).
[DOI: 10.1016/j.jallcom.2010.09.104](https://doi.org/10.1016/j.jallcom.2010.09.104)
24. “Orientation phenomena in chromophore DR1-containing polymer films and their non-linear optical response”,
D. Möncke, G. Mountrichas, S. Pispas, and E.I. Kamitsos,
Mater. Sci. Eng. B 176, 515 (2011).
[DOI: 10.1016/j.mseb.2011.01.002](https://doi.org/10.1016/j.mseb.2011.01.002)
25. “SHG and orientation phenomena in chromophore DR1 containing polymer films”,
D. Möncke, G. Mountrichas, S. Pispas, E.I. Kamitsos, and V. Rodriguez,
Photonics Nanostuct. 9, 119 (2011).
[DOI: 10.1016/j.photonics.2010.11.004](https://doi.org/10.1016/j.photonics.2010.11.004)
26. “Bonding and ion-ion interactions of Mn²⁺ ions in fluoride-phosphate and boro-silicate glasses probed by EPR and fluorescence spectroscopy”,
D. Möncke, E.I. Kamitsos, A. Herrmann, D. Ehrt, and M. Friedrich,
J. Non-Cryst. Solids 357, 2542 (2011).
[DOI: 10.1016/j.jnoncrysol.2011.02.017](https://doi.org/10.1016/j.jnoncrysol.2011.02.017)
27. “Aging process of photosensitive chalcogenide films deposited by electron beam deposition”,
F. Charpentier, M. Dussauze, M. Cathelinaud, G. Delaizir, E.I. Kamitsos, J.-L. Adam, B. Bureau, and V. Nazabal,
J. Alloy. Compd. 509, 7330 (2011).
[DOI: 10.1016/j.jallcom.2011.04.054](https://doi.org/10.1016/j.jallcom.2011.04.054)
28. “Effect of synthesis method on the structure and properties of AgPO₃-based glasses”,
I. Konidakis, C.P.E. Varsamis, and E.I. Kamitsos,
J. Non-Cryst. Solids 357, 2684 (2011).
[DOI: 10.1016/j.jnoncrysol.2011.03.013](https://doi.org/10.1016/j.jnoncrysol.2011.03.013)
29. “Crystallization and second harmonic generation of lithium niobium silicate glass ceramics”,
H. Vigouroux, E. Fargin, A. Fargues, B. Le Carrec, M. Dussauze, V. Rodriguez, F. Adamietz, G. Mountrichas, E.I. Kamitsos, S. Lotarev, and V. Sigaev,
J. Am. Ceram. Soc. 94, 2080 (2011).
[DOI: 10.1111/j.1551-2916.2011.04416.x](https://doi.org/10.1111/j.1551-2916.2011.04416.x)

30. “Nonlinear optical response of a symmetrical Au dithiolene complex under ps and ns laser excitation in the infrared and in the visible”,
G. Chatzikyriakos, I. Papagiannouli, S. Couris, G.C. Anyfantis, and G.C. Papavassiliou,
Chem. Phys. Lett. **513**, 229 (2011).
[DOI: 10.1016/J.CPLETT.2011.07.091](https://doi.org/10.1016/J.CPLETT.2011.07.091)
31. “Some unconventional organic-inorganic hybrid low-dimensional semiconductors and related light-emitting devices”,
I. Koutselas, P. Bampoulis, E. Maratou, T. Evagelinou, G. Pagona, and G.C. Papavassiliou,
J. Phys. Chem. C **115**, 8475 (2011).
[DOI: 10.1021/jp111881b](https://doi.org/10.1021/jp111881b)
32. “Self-assembled nanostructures in mixed anionic-neutral double hydrophilic block copolymer/cationic vesicle-forming surfactant solutions”,
S. Pispas,
Soft Matter **7**, 474 (2011).
[DOI: 10.1039/c0sm00499e](https://doi.org/10.1039/c0sm00499e)
33. “Dynamics of amphiphilic diblock copolymers at the air-water interface”,
A. Stocco, K. Tauer, S. Pispas, and R. Sigel,
J. Colloid Interface Sci. **355**, 172 (2011).
[DOI: 10.1016/j.jcis.2010.11.049](https://doi.org/10.1016/j.jcis.2010.11.049)
34. “Influence of nanoreactor environment and substrate location on the activity of horseradish peroxidase in olive oil based water-in-oil microemulsions”,
E.D. Tzika, M. Christoforou, S. Pispas, M. Zervou, V. Papadimitriou, T.G. Sotiroudis, E. Leontidis, and A. Xenakis,
Langmuir **27**, 2692 (2011).
[DOI: 10.1021/la104848t](https://doi.org/10.1021/la104848t)
35. “How does a star chain (nanooctopus) crawl through a nanopore?”,
H. Ge, S. Pispas, and C. Wu,
Polym. Chem. **2**, 1071 (2011).
[DOI: 10.1039/c0py00361a](https://doi.org/10.1039/c0py00361a)
36. “Polyelectrolyte-surfactant complexes formed by poly-[3,5-bis(trimethylammonium methyl)-4-hydroxystyrene iodide]-block-poly(ethylene oxide) and sodium dodecyl sulfate in aqueous solutions”,
M. Stepanek, P. Matejicek, K. Prochazka, S.K. Filippov, B. Angelov, M. Slouf, G. Mountrichas, and S. Pispas,
Langmuir **27**, 5275 (2011).
[DOI: 10.1021/la200442s](https://doi.org/10.1021/la200442s)

37. “Microemulsions based on virgin olive oil: A model biomimetic system for studying native oxidative enzymatic activities”,
V. Papadimitriou, E.D. Tzika, S. Pispas, T.G. Sotiroudis, and A. Xenakis,
Colloids & Surfaces A: Physicochem. Eng. Aspects **382**, 232 (2011).
[DOI: 10.1016/j.colsurfa.2010.10.042](https://doi.org/10.1016/j.colsurfa.2010.10.042)
38. “Complexation of lysozyme with poly(sodium (sulfamate-carboxylate)isoprene)”,
M. Karayianni, S. Pispas, G.D. Chryssikos, V. Gionis, S. Giatrellis, and G. Nounesis,
Biomacromolecules **12**, 1697 (2011).
[DOI: 10.1021/bm200066t](https://doi.org/10.1021/bm200066t)
39. “Poly[(sodium sulfamate/carboxylate)isoprene-b-2-vinyl pyridine] block polyampholytes: Synthesis and self-assembly in aqueous media”,
C. Mantzaridis and S. Pispas,
J. Polym. Sci. Part A: Polym. Chem. **49**, 3090 (2011).
[DOI: 10.1002/pola.24746](https://doi.org/10.1002/pola.24746)
40. “CdS-containing nano-assemblies of double hydrophilic block copolymers in water”,
M. Uchman, K. Prochazka, K. Gatsouli, S. Pispas, and M. Spirkova,
Colloid Polym. Sci. **289**, 1045 (2011).
[DOI: 10.1007/s00396-011-2433-9](https://doi.org/10.1007/s00396-011-2433-9)
41. “Nylon 3 synthesized by ring opening polymerization with metal-free catalyst”,
H. Yang, J. Zhao, M. Yan, S. Pispas, and G. Zhang,
Polym. Chem. **2**, 2888 (2011).
[DOI: 10.1039/c1py00334h](https://doi.org/10.1039/c1py00334h)
42. “Synthesis of poly[(ethylene carbonate)-co-(ethylene oxide)] copolymer by phosphazene-catalyzed ROP”,
H. Yang, M. Yan, S. Pispas, and G. Zhang,
Macromol. Chem. Phys. **212**, 2589 (2011).
[DOI: 10.1002/macp.201100391](https://doi.org/10.1002/macp.201100391)
43. “Amphiphilic block copolymers by a combination of anionic polymerization and selective post-polymerization functionalization”,
E. Kaditi, G. Mountrichas, and S. Pispas,
Eur. Polym. J. **47**, 415 (2011) (invited review article).
[DOI: 10.1016/j.eurpolymj.2010.09.012](https://doi.org/10.1016/j.eurpolymj.2010.09.012)
44. “Vesicular structures in mixed block copolymer/surfactant solutions”,
S. Pispas,
Soft Matter **7**, 8697 (2011) (invited highlight article).
[DOI: 10.1039/c1sm05584d](https://doi.org/10.1039/c1sm05584d)

45. “Laser energy density, structure & properties of pulsed-laser deposited zinc oxide films”, M.G. Tsoutsouva, C.N. Panagopoulos, and M. Kompitsas, *Appl. Surf. Sci.* **257**, 6314 (2011).
[DOI: 10.1016/j.apsusc.2011.02.073](https://doi.org/10.1016/j.apsusc.2011.02.073)
46. “ZnO thin films prepared by pulsed laser deposition”, M.G. Tsoutsouva, C.N. Panagopoulos, D. Papadimitriou, I. Fasaki, and M. Kompitsas, *Mater. Sci. Eng. B* **176**, 480 (2011).
[DOI: 10.1016/j.mseb.2010.03.059](https://doi.org/10.1016/j.mseb.2010.03.059)
47. “Updating a synchronous fluorescence spectroscopic virgin olive oil adulteration calibration to a new geographical region”, M.R. Kunz, J. Ottaway, J.H. Kalivas, C.A. Georgiou, and G.A. Mousdis, *J. Agric. Food Chem.* **59**, 1051 (2011).
[DOI: 10.1021/jf1038053](https://doi.org/10.1021/jf1038053)
48. “Graphene with covalently linked porphyrin antennae: Synthesis, characterization, and photophysical properties”, N. Karousis, A.S.D. Sandanayaka, T. Hasobe, S.P. Economopoulos, E. Sarantopoulou, and N. Tagmatarchis, *J. Mater. Chem.* **21**, 109 (2011).
[DOI: 10.1039/c0jm00991a](https://doi.org/10.1039/c0jm00991a)
49. “Microwave-assisted functionalization of carbon nanohorns via [2+1] nitrenes cycloaddition”, N. Karousis, T. Ichihashi, M. Yudasaka, S. Iijima, and N. Tagmatarchis, *Chem. Commun.* **47**, 1604 (2011).
[DOI: 10.1039/c0cc03101a](https://doi.org/10.1039/c0cc03101a)
50. “Microwave-assisted functionalization of carbon nanostructured materials”, S.P. Economopoulos, N. Karousis, G. Rotas, G. Pagona, and N. Tagmatarchis, *Curr. Org. Chem.* **15**, 1121 (2011).
51. “Origin of the n-type transport behaviour of azafullerenes encapsulated single-walled carbon nanotubes”, N.T. Cuong, M. Otani, Y. Iizumi, T. Okazaki, G. Rotas, N. Tagmatarchis, Y. Li, T. Kaneko, R. Hatakeyama, and S. Okada, *Appl. Phys. Lett.* **99**, 053105 (2011).
[DOI: 10.1063/1.3619828](https://doi.org/10.1063/1.3619828)
52. “Synthesis, characterization and photophysical properties of a carbon nanohorn-coumarin hybrid material”, G. Pagona, H.E. Katerinopoulos, and N. Tagmatarchis, *Chem. Phys. Lett.* **516**, 76 (2011).

[DOI: 10.1016/j.cplett.2011.09.055](https://doi.org/10.1016/j.cplett.2011.09.055)

53. “Trioctahedral entities in palygorskite: Near-infrared evidence for sepiolite-palygorskite polysomatism”,
E.T. Stathopoulou, M. Suarez, E. Garcia-Romero, M. Sanchez del Rio, G.H. Kacandes, V. Gionis, and G.D. Chryssikos,
Eur. J. Mineral. **23**, 567 (2011).

[DOI: 10.1127/0935-1221/2011/0023-2112](https://doi.org/10.1127/0935-1221/2011/0023-2112)

54. “Secondary structure of chorion proteins of Lepidoptera *Pericallia ricini* and *Ariadne merione* by ATR FT-IR and micro-Raman spectroscopy”,
K. Srivastava, V.A. Iconomidou, G.D. Chryssikos, V. Gionis, K. Kumar, and S.J. Hamodrakas,
Int. J. Biol. Macromol. **49**, 317 (2011).

[DOI: 10.1016/j.ijbiomac.2011.05.006](https://doi.org/10.1016/j.ijbiomac.2011.05.006)

55. “Schottky and charge memory effects in InN nanodomains”,
N. Spyropoulos-Antonakakis, E. Sarantopoulou, Z. Kollia, G. Drazic and S. Kobe,
Appl. Phys. Lett. **99**, 153110 (2011).

[DOI:10.1063/1.3651327](https://doi.org/10.1063/1.3651327)

56. “Long term oxidization and phase transition of InN nanotextures”,
E. Sarantopoulou, Z. Kollia, G. Drazic, S. Kobe and N. Spyropoulos-Antonakakis,
Nanoscale Res. Lett. **6**, 387 (2011).

[DOI: 10.1186/1556-276X-6-387](https://doi.org/10.1186/1556-276X-6-387)

57. “Protein immobilization and detection on laser processed polystyrene surfaces”,
E. Sarantopoulou, P.S. Petrou, Z. Kollia, D. Palles, N. Spyropoulos-Antonakakis, S. Kakabakos
and A.C. Cefalas,
J. Appl. Phys. **110**, 064309 (2011).

[DOI:10.1063/1.3627160](https://doi.org/10.1063/1.3627160)

58. “Interplanetary survival probability of *Aspergillus terreus* spores under simulated solar vacuum ultraviolet irradiation”,
E. Sarantopoulou, I. Gomoiu, Z. Kollia, and A.C. Cefalas,
Planet. Space Sci. **59**, 63 (2011).

[DOI: 10.1016/j.pss.2010.11.002](https://doi.org/10.1016/j.pss.2010.11.002)

59. “MOCVD cobalt oxide deposition from inclusion complexes: Decomposition mechanism, structure, and properties”,
N.D Papadopoulos, H.S. Karayianni, P. E. Tsakiridis, M. Perraki, E. Sarantopoulou, and E. Hristoforou,

J. Electrochem. Soc. **158**, 5 (2011).

[DOI:10.1149/1.3509698](https://doi.org/10.1149/1.3509698)

60. “Effects of MOCVD thin cobalt films’ structure and surface characteristics on their magnetic behavior”,
N. Papadopoulos, C.S. Karayianni, P. Tsakiridis, E. Sarantopoulou, and E. Hristoforou,
Chem. Vapor Depos. 17, 211 (2011).
[DOI:10.1002/cvde.201106907](https://doi.org/10.1002/cvde.201106907)

2. Papers in Proceedings of International and National Conferences

1. “A theoretical study of complexes of crown ethers with substituted ammonium cations”,
D. Tzeli, I.D. Petsalakis, and G. Theodorakopoulos,
Advances in the Theory of Quantum Systems in Chemistry and Physics, - Progr. Theor. Chem.
Phys. 22 599 (2011), Book of proceedings of the QSCP XV (Eds. P.E. Hoggan et al.).
[DOI: 10.1007/978-94-007-2076-3_31](https://doi.org/10.1007/978-94-007-2076-3_31)

2. “Electrochemical sensors for the detection of hydrogen prepared by PLD and sol-gel chemistry”,
G.A. Mousdis, M. Kompitsas, and I. Fasaki,
NATO Advanced Study Institute Conference on Nanotechnological Basis for Advanced Sensors,
May 30-Jun 11, 2010, Sozopol, Bulgaria,
NATO Science for Peace and Security Series B: Physics and Biophysics, Edited by Reithmaier,
J.P.; Paunovic, P.; Kulisch, W.; Popov, C.; Petkov, P, Springer, pp. 401-407, 2011.
ISBN: 978-94-007-0902-7
[DOI: 10.1007/978-94-007-0903-4_41](https://doi.org/10.1007/978-94-007-0903-4_41)

3. “AFM of complex nanospheres formed by pulsed-laser deposition from an Al target in a nitrogen atmosphere”,
S. Šturm, K. Žužek-Rožman, B. Markoli, E. Sarantopoulou, Z. Kollia, A.C. Cefalas, S. Kobe,
Proceedings of the 10th Multinational Congress on Microscopy - MCM 2011, Urbino, Italy 4-9
September, 2011, Società Italiana Scienze Micriscopiche, pp. 519-520 (2011).

4. “Thermo-optic effect of an index guiding photonic crystal fiber with elastomer inclusions”,
C. Markos, K. Vlachos, and G. Kakarantzas,
Proc. SPIE 7753, 775340 (2011).
[DOI: 10.1117/12.886004](https://doi.org/10.1117/12.886004)

5. “Guiding and birefringent properties of a hybrid PDMS/silica photonic crystal fiber”,
C. Markos, K. Vlachos and G. Kakarantzas,
Proc. SPIE 7914, 791427 (2011).
[DOI: 10.1117/12.874158](https://doi.org/10.1117/12.874158)

6. “Direct Bragg grating writing in a hybrid PDMS/silica photonic crystal fiber”,

G. Kakarantzas, A. Diez, J.L. Cruz, C. Markos, M.V. Andres, and K. Vlachos, Conference on Lasers and Electro-Optics Europe and 12th European Quantum Electronics Conference, CLEO EUROPE/EQEC, 22- 26 May 2011, Munich, Germany, 5942824, (2011).
[DOI: 10.1109/CLEOE.2011.5942824](https://doi.org/10.1109/CLEOE.2011.5942824)

7. “Partial power recovery of bend-induced loss using a hybrid index-guiding photonic crystal fiber”,
C. Markos, K. Vlachos, and G. Kakarantzas, Conference on Lasers and Electro-Optics Europe and 12th European Quantum Electronics Conference, CLEO EUROPE/EQEC, 22- 26 May 2011, Munich, Germany, 5942860, (2011).
[DOI: 10.1109/CLEOE.2011.5942860](https://doi.org/10.1109/CLEOE.2011.5942860)

8. “Laser microstructured polymer optical fibres for optimised sensing devices”,
C. Riziotis, L. Athanasekos, M. Vasileiadis, D. Dimas, S. Pispas, and N. Vainos, Proc. of the 20th Int’l Conf. on Plastic Optical Fibers, 14-16 Sept. 2011, Bilbao, Spain, pp. 393-397 (2011).

9. “Laser microstructuring of polymer optical fibres for enhanced and autonomous sensor architectures”,
L. Athanasekos, D. Dimas, S. Katsikas, S. Pispas, N. Vainos, A.C. Boucouvalas, and C. Riziotis, Proceedings of the Eurosensors Conference XXV, 4-7 September 2011, Athens, Greece, in Procedia Engineering Elsevier, Vol. 25, pp.1593-1596 (2011).
[DOI:10.1016/j.proeng.2011.12.394](https://doi.org/10.1016/j.proeng.2011.12.394)

10. “Low cost, autonomous and wireless enabled liquid level sensor based on a multi-segmented polymer optical fiber”,
D. Dimas, S. Katsikas, A.C. Boucouvalas, and C. Riziotis, Proceedings of the SENSOR+TEST Conferences 2011, OPTO 2011, 7-9 June 2011, Nurnberg Exhibition Centre, Germany, ISBN 978-3-9810993-9-3, pp. 145-150 (2011).

11. “Wireless-enabled photonic sensor for liquid level and distributed flood monitoring”,
D. Dimas, S. Katsikas, A.C. Boucouvalas, and C. Riziotis, Proceedings of the 24th Int’l Congress on Condition Monitoring and Diagnostic Engineering Management, May 5-June 1, 2011, Stavanger, Norway, ISBN 0954130723, pp. 434-444 (2011).

3. Patents

1. “Solubilizing carbon nanohorns comprises reducing pristine carbon nanohorns by alkali metal to give carbon nanohorn alkali salt, and exposing carbon nanohorn alkali salt to polar aprotic solvent to give solution of reduced carbon nanohorns”,
D. Voiry, G. Pagona, N. Tagmatarchis, A. Penicaud, International Patent, WO 2011/154894 A1, December 15, 2011.

4. Dissertations

a. MSc theses

1. “Study of Maya Blue pigments by vibrational spectroscopic techniques”,
C. Tsiantos,
Supervisors Dr. G.D. Chryssikos and Prof. K. Raptis, National Technical University of Athens,
School of Chemical Engineering (2011).

b. Honors theses

1. “Growth and properties of NiO thin films. Optimization as hydrogen sensors by partial surface coverage with Au nanoparticles”,
P. Perdika,
Supervisors Dr. M. Kompitsas and Prof. D. Manolakos, National Technical University of Athens, School of Mechanical Engineering (2011).

5. Publications in Technical Journals / Miscellaneous Publications

1. “Η συνεισφορά των γυναικών στη Χημεία”,
Δ. Τζέλη,
Χημικά Χρονικά 73 (5), 22 (2011). [[Ιστοσελίδα περιοδικού](#)]

6. Conference Presentations

1. “Introduction to the reduced density matrix functional theory”,
N.N. Lathiotakis,
CECAM-Workshop, Electronic Structure with the ELK code, Lausanne, Switzerland, 18-23 July, 2011 (invited talk).
2. “Optimized local potential in reduced density matrix functional theory”,
N.N. Lathiotakis, N. Helbig, A. Rubio, and N. I. Gidopoulos,
DFT-2011, 14th International Density Functional Theory Conference, Application in Physics, Chemistry, Biology, Pharmacy, Athens, Greece, 29 August- 2 September 2011 (invited talk).
3. “Photoinduced electron and proton transfer in chemical sensors”,
I.D. Petsalakis, I.S. Kerkines, and G. Theodorakopoulos,
DFT-2011, 14th International Density Functional Theory Conference, Application in Physics, Chemistry, Biology, Pharmacy, Athens, Greece, 29 August- 2 September 2011 (invited talk).

4. “Encapsulation complexes of amide, boronic acid and carboxylic acid dimers: Theoretical study of hydrogen bonding”,
D. Tzeli, I.D. Petsalakis, G. Theodorakopoulos, and J. Rebek, Jr.,
DFT-2011, 14th International Density Functional Theory Conference, Application in Physics, Chemistry, Biology, Pharmacy, Athens, Greece, 29 August- 2 September 2011 (poster).
5. “Coherent control of intramolecular energy transfer: internal conversion in 24-mode pyrazine”,
I. Thanopoulos, X. Li, P. Brumer, and M. Shapiro,
Gordon Research Conference: Quantum Control of Light & Matter, Mount Holyoke College, July, 31- Aug, 5, 2011, South Hadley (MA) USA (poster).
6. “Coherent control of intramolecular energy transfer in 24-mode pyrazine”,
I. Thanopoulos, X. Li, P. Brumer, and M. Shapiro,
Conference on Quantum Information and Quantum Control, Fields Institute, Aug. 8-12, 2011, Toronto, Canada (oral).
7. “Plasmon-induced enhancement of optoelectronic processes in organic materials”,
I. Thanopoulos, E. Paspalakis, and V. Yannopapas,
Electronic Properties of pi-conjugated Materials II, University of Wuerzburg, Sep., 27-30, 2011, Wuerzburg, Germany (poster).
8. “Low energy peak features in atomic ionization by mid-infrared laser pulses”,
K.I. Dimitriou, Ch. Lemell, St. Gräfe, St. Nagele, and J. Burgdörfer,
ICPEAC 2011, 27 July-2 August 2011, Belfast, Ireland (poster).
9. “Thermally poled oxide glasses: correlation between polarization mechanisms and non linear optical properties”,
M. Dussauze*, V. Rodriguez, E. Fargin, T. Cardinal, G. Guimbretière, and E.I. Kamitsos,
Advances in Optical Materials (AIOM); Istanbul, Turkey, February 16-18, 2011 (oral).
10. “Infrared spectroscopy of borate glasses in bulk and thin film forms”,
E.I. Kamitsos,
Expert Meeting on Structure and Vibrations in Oxide Glasses; Montpellier, France, March 24-25, 2011 (invited talk).
11. “Thermally poled glasses with non-linear optical properties”,
E.I. Kamitsos,
7th International Conference on Borate Glasses, Crystals, and Melts; Halifax, Nova Scotia, Canada, August 21-25, 2011 (invited talk).
12. “Spectroscopic study of phase separated manganese-containing borate and borosilicate glasses”,
D. Möncke*, D. Ehrt, and E.I. Kamitsos,

7th International Conference on Borate Glasses, Crystals, and Melts; Halifax, Nova Scotia, Canada, August 21-25, 2011 (oral).

13. “Formation of an outer borosilicate glass layer on blue Late-Bronze-Age Mycenaean vitreous relief fragments”,

D. Möncke*, D. Palles, N. Zacharias, M. Kaparou, E.I. Kamitsos, and L. Wondraczek,

(a) 7th International Conference on Borate Glasses, Crystals, and Melts; Halifax, Nova Scotia, Canada, August 21-25, 2011 (poster).

(b) International Conference on the Chemistry of Glasses and Glass-Forming Melts; University of Oxford, UK, September 4-8, 2011 (invited poster).

14. “Glass structure of historic Greek samples from the Mycenaean to Roman period probed by infrared and Raman spectroscopy”,

D. Möncke*, D. Palles, E.I. Kamitsos, L. Wondraczek, N. Zacharias, M. Papageorgiou, M. Kaparou, and A. Oikonomou,

5th Balkan Conference on Glass Science and Technology; Nessebar, Bulgaria, September 25-29, 2011 (oral).

15. “Einbau und bindingsverhältnisse des indikatorions Mn^{2+} in verschiedensten gläsern – korrelation von EPR und fluoreszenz-spektroskopie”,

D. Möncke*, A. Herrmann, D. Ehrt, M. Friedrich, N. Da, L. Wondraczek, I. Konidakis, and E.I. Kamitsos,

Fachausschuss I - Physik und Chemie des Glases, Deutschen Glastechnischen Gesellschaft; Erlangen, Germany, Oktober 6, 2011 (oral).

(*Technical Session 1- Physics and Chemistry of Glasses, German Glass-Technical Society, online access: <http://www.hvg-dgg.de/download/gremien/fa-i.html>*)

16. “Chemical and spectroscopic investigation of a Greek glass archaeological collection spanning from the Mycenaean to Roman period as probed by SEM/EDS, IR and Raman techniques”,

D. Möncke*, D. Palles, N. Zacharias, M. Kaparou, M. Papageorgiou, A. Oikonomou, E.I. Kamitsos, and L. Wondraczek,

International Symposium on History, Technology and Conservation of Ancient Metals, Glasses and Enamels; Athens, Greece, November 16-19, 2011 (oral).

17. “DNA encapsulation via nanotemplates from cationic block copolymer micelles”,

E. Haladjova*, S. Rangelov, Ch.B. Tsvetanov, and S. Pispas,

IUPAC 9th International Conference on Advanced Polymers via Macromolecular Engineering (APME 2011); Cappadokia, Turkey, September 5-8, 2011 (poster).

18. “Laser microstructuring of polymer optical fibers for enhanced and autonomous sensor architectures”,

L. Athanasekos*, D. Dimas, S. Katsikas, S. Pispas, N. Vainos, A.C. Boukouvalas, and C. Riziotis,

Eurosensors XXV; Athens, Greece, September 4-7, 2011 (oral).

19. “Nanostructured ZnO based field effect transistors for enhanced gas sensing applications”,

N. Kelaidis, M. Widmann, E. Makarona, M.G. Kompitsas, T. Speliotis, F.V. Farmakis, P.T. Jedrasik, and C. Tsamis*,
SPIE Microtechnologies, Conference 8066: Smart Sensors, Actuators and MEMS; Prague, Czech Republic, April 18-20, 2011 (oral).

20. “Sensing properties of Cu_xO thin films grown by reactive PLD”,

M. Stamataki, D. Tsamakos*, M. Kompitsas, and K. Giannakopoulos,
E-MRS ICAM IUMRS 2011 Spring Meeting; Nice, France, May 11-13, 2011 (poster).

21. “Design aspects and characterization tests of a multi-wavelength beam HSRL for atmospheric monitoring in ultra high energy observatories”,

N. Maragos, S. Maltezos, E. Fokitis*, P. Fetfatzis, V. Gika, Y. Manthos, D. Kastana, and M. Kompitsas,
32nd ICRC; Beijing, China, August 11-18, 2011 (poster).

22. “Optical properties of $\text{CuIn}_{0.7}\text{Ca}_{0.3}\text{Se}_{2-y}\text{Te}_y$ deposited with e-beam evaporation at different annealing temperatures”,

F. Fiat*, P. Koralli, I. Polat, E. Bacaksiz, D. Manolakos, G. Cankaya, and M. Kompitsas,
28th Int’l Physics Congress, Turkish Physical Society; Bodrum, Turkey, Sept. 6-9, 2011 (poster).

23. “New materials and techniques for low cost and high efficiency photovoltaic cells”,

P. Koralli*, S. Fiat, M. Kompitsas, I. Polat, E. Bacaksiz, and D. Manolakos,
16th National Energy Conference “Energy and Development 2011”, Institute for Energy for South East Europe (IENE); Athens, Greece, November 22-23, 2011 (oral).

<http://www.iene.gr/energy-development2011/page02.asp#6>

24. “Stability and high sensitivity of a compound NiO:Au thin film hydrogen sensor grown by a two-laser, two-target PLD technique”,

M. Kandyla*, P. Perdika, I. Fasaki, and M. Kompitsas,
Eurosensors XXV; Athens, Greece, September 4-7, 2011 (oral).

25. “NiO:Au thin-film hydrogen sensors grown by a two-laser, two-target PLD technique”,

M. Kandyla*, I. Fasaki, and M. Kompitsas,
Int’l Conf. on Laser Ablation; Playa del Carmen, Mexico, November 13-19, 2011 (poster).

26. “Chemical and optical properties of chromophoric dissolved organic matter (CDOM) in the Aegean and Ionian seas”,

D. Tsoliakos*, C. Zeri, M. Tzortziou, G. Mousdis, and M. Scoullou,
SESAME Final Scientific Conference; Athens, Greece, April 4-8, 2011 (poster).

27. “Covalent functionalization of peapods”,
N. Tagmatarchis*, N. Karousis, S.P. Economopoulos, Y. Iizumi, T. Okazaki, Z. Liu, and K. Suenaga,
25th International Winterschool on Electronic Properties of Novel Materials (IWEPNM 2011);
Kirchberg, Austria, February 26-March 5, 2011 (poster).
28. “Functionalized peapods”,
N. Tagmatarchis,
219th Electrochemical Society (ECS) Meeting; Montreal, Canada, May 1-6, 2011 (invited talk).
29. “Applications of carbon nanotubes in medicine”,
N. Tagmatarchis,
15th Panhellenic Pharmaceutical Congress; Athens, Greece, May 13-15, 2011 (invited talk).
30. “Carbon nanotubes as novel platforms for drug delivery”,
N. Tagmatarchis,
Biomaterials and Nanotechnology Workshop; Athens, Greece, May 28, 2011 (invited talk).
31. “Revealing the inner walls by selective removal of the outer shells of functionalized double-walled carbon nanotubes”,
D. Chronopoulos*, N. Karousis, and N. Tagmatarchis,
8th International Conference on Nanoscience & Nanotechnologies; Thessaloniki, Greece, July 12-15, 2011 (poster).
32. “Aryne [2+2] cycloaddition onto carbon nanohorns and gold nanoparticles immobilization”,
D. Chronopoulos* and N. Tagmatarchis,
8th International Conference on Nanoscience & Nanotechnologies; Thessaloniki, Greece, July 12-15, 2011 (poster).
33. “Efficient functionalization of carbon nanostructures using microwave irradiation”,
S.P. Economopoulos*, S. Choulis, and N. Tagmatarchis,
Organic Electronics and Applications; Chania, Greece, July 4-15, 2011 (oral).
34. “Dendritic-type structures with high amino-loading decorating carbon nanotubes”,
D. Chronopoulos* and N. Tagmatarchis,
Carbon Nanoscience and Nanotechnology (NanoteC’11); Nantes, France, August 31–September 3, 2011 (poster).
35. “Visualization of conformational adaptations of C₆₀-fullerene moieties covalently attached onto aryl functionalized carbon nanohorns”,
N. Karousis*, Y. Sato, K. Suenaga, and N. Tagmatarchis,
Carbon Nanoscience and Nanotechnology (NanoteC’11); Nantes, France, August 31–September 3, 2011 (oral).

36. “Soluble functionalized graphene oxide sheets with porphyrin. Synthesis, characterization and photophysical studies”,
N. Karousis*, T. Hasobe, and N. Tagmatarchis,
Bioinspired Materials for Energy Utilization (BIOSOL-2011); Crete, Greece, September 12-17, 2011 (poster).
37. “Exfoliation and functionalization of graphene: Donor-acceptor hybrids managing charge-transfer processes”,
D. Chronopoulos*, S.P. Economopoulos, and N. Tagmatarchis,
Bioinspired Materials for Energy Utilization (BIOSOL-2011); Crete, Greece, September 12-17, 2011 (poster).
38. “Azafullerene-extended tetrathiafulvalene dyad: Synthesis and investigation of intramolecular electronic communication”,
G. Rotas*, A. Gouloumis, A. Kahnt, N. Martin, D.M. Guldi, and N. Tagmatarchis,
Bioinspired Materials for Energy Utilization (BIOSOL-2011); Crete, Greece, September 12-17, 2011 (poster).
39. “Azafullerene C₅₉N – phthalocyanine dyad: Synthesis, characterization and photoinduced electron transfer”,
G. Rotas*, M. Niemi, J. Ranta, A. Efimov, H. Lemmetyinen, N. Tkachenko, and N. Tagmatarchis,
Bioinspired Materials for Energy Utilization (BIOSOL-2011); Crete, Greece, September 12-17, 2011 (poster).
40. “Carbon nanohorns and dimer porphyrin conjugates in a photoelectrochemical cell construct. Preparation, characterization and photophysical properties evaluation”,
G. Pagona*, G. Zervaki, A.S.D. Sandanayaka, T. Hasobe, A.G. Coutsolelos, and N. Tagmatarchis,
Bioinspired Materials for Energy Utilization (BIOSOL-2011); Crete, Greece, September 12-17, 2011 (poster).
41. “Azafullerene-based donor-acceptor dyads for managing charge-transfer processes”,
N. Tagmatarchis,
Designing novel materials for nanodevices: From theory to practice (NanoTP); Trieste, Italy, November 9-11, 2011 (invited talk).
42. “The role of quantum coherence in nanocrystallization and its industrial applications”,
A.C. Cefalas,
7th Nanoscience and Nanotechnology Conference - NanoTR VII, Istanbul, Turkey, 27 June-1 July, 2011 (Invited talk).

43. “Transmission electron microscopy of studies metal and alloy-based hollow nanospheres prepared by pulsed laser deposition”,
S. Šturm*, K. Žužek -Rožman, B. Markoli, E. Sarantopoulou, Z. Kollia, A.C. Cefalas, S. Kobe,
20th National Electron Microscopy Congress-EMC 2011, Kemer, Turkey, 25-28 October, 2011
(Invited talk).
44. “Advanced TEM characterization methods of complex nanostructures”,
S. Šturm*, K. Žužek -Rožman, S. Markoli, A.C. Cefalas, E. Sarantopoulou, and S. Kobe,
International Scientific Conference on “Contemporary Materials 2011”, Banja Luka, Bosnia and
Herzegovina, 1-2 July, 2011 (Invited talk).
45. “Tunable devices in PDMS/silica hybrid photonic crystal fibers”,
G. Kakarantzas,
4th Mediterranean Conference on Nano-photonics MediNano-4, Rome, Italy, 24-25 Oct., 2011
(Invited talk).
46. “Charge memory effects and confinement in AuN_x nanodomains”,
N. Spyropoulos-Antonakakis*, E. Sarantopoulou, and Z. Kollia,
International Conference on the Formation of Semiconductor Interfaces - ICFSI 13, Prague,
Czech Republic, 3-8 July, 2011 (poster).
47. “Direct Bragg grating writing in a hybrid PDMS/silica photonic crystal fiber”,
G. Kakarantzas*, A. Diez, J.L. Cruz, C. Markos, M.V. Andres, and K. Vlachos,
Conference on Lasers and Electro-Optics Europe and 12th European Quantum Electronics
Conference, CLEO EUROPE/EQEC, 22- 26 May 2011, Munich, Germany, 2011 (oral).
48. “Guiding and birefringent properties of a hybrid PDMS/silica photonic crystal fiber”,
C. Markos*, K. Vlachos, and G. Kakarantzas,
SPIE, Photonics, West San Francisco, USA, 22-27 January, 2011 (poster).
49. “Thermo-optic effect of an index guiding photonic crystal fiber with elastomer
inclusions”,
C. Markos*, K. Vlachos, and G. Kakarantzas,
21st Int’l Conf. on Optical Fiber Sensors – OFS 21, Ottawa, Canada, 15-19 May, 2011 (poster).
50. “Partial power recovery of bend-induced loss using a hybrid index-guiding photonic
crystal fiber”,
C. Markos*, K. Vlachos, and G. Kakarantzas,
Conference on Lasers and Electro-Optics Europe, and 12th European Quantum Electronics
Conference, CLEO EUROPE/EQEC, 22- 26 May, 2011, Munich, Germany (poster).
51. “Laser microstructured polymer optical fibres for optimised sensing devices”,
C. Riziotis*, L. Athanasekos, M. Vasileiadis, D. Dimas, S. Pispas, and N. Vainos,
20th International Conference on Plastic Optical Fibers, Bilbao, Spain, 14-16 Sept. 2011 (oral).

52. “Laser microstructuring of polymer optical fibres for enhanced and autonomous sensor architectures”,
L. Athanasekos^{*}, D. Dimas, S. Katsikas, S. Pispas, N. Vainos, A.C. Boucouvalas and C. Riziotis,
Eurosensors Conference XXV, Athens, Greece, 4-7 September, 2011 (oral).
53. “Low cost, autonomous and wireless enabled liquid level sensor based on a multi-segmented polymer optical fiber”,
D. Dimas^{*}, S. Katsikas, A.C. Boucouvalas, and C. Riziotis,
SENSOR+TEST Conferences 2011, OPTO 2011, Nurnberg, Germany, 7-9 June, 2011 (poster).
54. “Wireless-enabled photonic sensor for liquid level and distributed flood monitoring”,
D. Dimas, S. Katsikas, A.C. Boucouvalas, and C. Riziotis^{*},
24th International Congress on Condition Monitoring and Diagnostic Engineering Management,
Clarion Hotel Stavanger, Stavanger, Norway, 30th May-1st June, 2011 (oral).
55. “Microsolid formation by laser radiation forces”,
N.A. Vainos^{*}, L. Athanasekos, M. Vasileiadis, Ch. Mantzaridis, V.C. Karoutsos, I. Koutselas,
and S. Pispas,
8th International Conference on Nanosciences & Nanotechnologies – NN11, Thessaloniki,
Greece, 12-15 July 2011 (oral).
56. “UV Laser microetching and soft lithography for diffractive optic sensors”,
M. Vasileiadis, N. Aspiotis, L. Athanasekos, D. Alexandropoulos, A. Meristoudi, V. Karoutsos,
M. Sigalas, and N.A. Vainos^{*},
8th International Conference on Nanosciences & Nanotechnologies – NN11, Thessaloniki,
Greece, 12-15 July 2011 (poster).
57. “3D-detection of nanosecond laser generated high frequency micro-elastic waves in metal films”,
Y. Orphanos^{*}, S. Brezas, M. Bakarezos, M. Vasiliadis, D. Aleksandropoulos, L. Athanasekos, M.
Tatarakis, N. Vainos, and N.A. Papadogiannis,
8th International Conference on Nanosciences & Nanotechnologies - NN11, Thessaloniki,
Greece, 12-15 July 2011 (poster).
58. “Dye deposition lithography - a versatile method for fabrication of optical fan-out devices”,
G. Clarke, K. Pavani, L. Athanasekos, S. Martin, N.A. Vainos, V. Toal and I. Naydenova^{*},
International Commission of Optics conference, Puebla, Mexico, 15-19 August 2011 (oral).