

**1. Papers in Refereed Journals**

1. “Spectrum for nonmagnetic Mott insulators from power functional within reduced density matrix functional theory”,  
Y. Shinohara, S. Sharma, S. Shallcross, N.N. Lathiotakis, and E.K.U. Gross,  
J. Chem. Theory Comput. 11, 4895 (2015).  
[DOI: 10.1021/acs.jctc.5b00661](https://doi.org/10.1021/acs.jctc.5b00661)
2. “Doping induced metal-insulator phase transition in NiO-a reduced density matrix functional theory perspective”,  
Y. Shinohara, S. Sharma, J.K. Dewhurst, S. Shallcross, N.N. Lathiotakis, and E.K.U. Gross,  
New J. Phys. 17, 093038 (2015).  
[DOI:10.1088/1367-2630/17/9/093038](https://doi.org/10.1088/1367-2630/17/9/093038)
3. “Orbitals from local RDMFT: Are they Kohn-Sham or natural orbitals?”,  
I. Theophilou, N.N. Lathiotakis, N.I. Gidopoulos, A. Rubio, and N. Helbig,  
J. Chem. Phys. 143, 054106 (2015).  
[DOI:10.1063/1.4927784](https://doi.org/10.1063/1.4927784)
4. “Graphene allotropes under extreme uniaxial strain: An ab-initio theoretical study”,  
Z.G. Fthenakis, N.N. Lathiotakis,  
Phys. Chem. Chem. Phys. 17, 16418 (2015).  
[DOI:10.1039/C5CP02412A](https://doi.org/10.1039/C5CP02412A)
5. “Generalized Pauli constraints in reduced density matrix functional theory”,  
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J. Chem. Phys. 142, 154108 (2015).  
[DOI: 10.1063/1.4918346](https://doi.org/10.1063/1.4918346)
6. “Constraining the optimal local potential to heal self-interactions”,  
N.I. Gidopoulos, N.N. Lathiotakis,  
Adv. Atom. Mol. Opt. Phys. 64, 129 (2015).  
[DOI:10.1016/bs.aamop.2015.06.003](https://doi.org/10.1016/bs.aamop.2015.06.003)
7. “Applicability of Mulliken’s formula for photoinduced and intramolecular charge-transfer energies”,  
I.D. Petsalakis, G. Theodorakopoulos, O. Buchman, and R. Baer,  
Chem. Phys. Lett. 625, 98 (2015).  
[DOI: 10.1016/j.cplett.2015.02.040](https://doi.org/10.1016/j.cplett.2015.02.040)
8. “Electronic structure and spectra of  $(\text{Cu}_2\text{O})_n\text{-H}_2\text{O}$  complexes”,  
I.D. Petsalakis, G. Theodorakopoulos, and J. Whitten,  
Phys. Chem. Chem. Phys. 17, 428 (2015).

[DOI: 10.1039/c4cp04303k](https://doi.org/10.1039/c4cp04303k)

9. “The effects of hexafluoroisopropanol on guest encapsulation by water-soluble capsules and cavitands”,

J. Gavette, I.D. Petsalakis, G. Theodorakopoulos, K-D. Zhang, and J. Rebek, Jr.,  
Chem. Commun. 51, 17604, (2015).

[DOI: 10.1039/c5cc06405h](https://doi.org/10.1039/c5cc06405h)

10. “Intramolecular cyclization of  $\beta$ -nitroso-*o*-quinone methides. A theoretical endoscopy of a potentially useful innate “reclusive” reaction”,

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11. “Reversible encapsulation in a covalent capsule”,

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[DOI: 10.1016/j.cplett.2015.05.018](https://doi.org/10.1016/j.cplett.2015.05.018)

12. “Encapsulation of monomers, homodimers and heterodimers of amides and carboxylic acids in three non-covalent assemblies”,

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[DOI: 10.1007/s11224-015-0682-9](https://doi.org/10.1007/s11224-015-0682-9)

13. “Interference effects on quantum light group velocity in cavity induced transparency”,  
A. Eilam, I. Thanopoulos,

J. Phys. B: At. Mol. Opt. Phys. 48, 194002 (2015).

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14. “Structure and properties of alkali and silver sulfophosphate glasses”,

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15. “Structure and properties of orthoborate glasses in the  $\text{Eu}_2\text{O}_3$ -(Sr,Eu)O- $\text{B}_2\text{O}_3$  quaternary”,

A. Winterstein-Beckmann, D. Möncke, D. Palles, E.I. Kamitsos, and L. Wondraczek,  
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16. “Ionic conductivity and self-assembly in poly(isoprene-*b*-ethylene oxide) electrolytes doped with LiTf and EMITf”,

G. Zardalidis, E.F. Ioannou, K.D. Gatsouli, S. Pispas, E.I. Kamitsos, and G. Floudas,  
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17. “Ultrashort pulse induced modifications in ULE - from nanograting formation to laser darkening”,  
S. Richter, D. Möncke, F. Zimmermann, E.I. Kamitsos, L. Wondraczek, A. Tünnermann, and S. Nolte,  
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18. “On the connectivity of borate tetrahedra in borate and borosilicate glasses”,  
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19. “Synthesis of a palladium complex with a  $\beta$ -d-glucopyranosyl-thiosemicarbazone and its application in the Suzuki–Miyaura coupling of aryl bromides with phenylboronic acid”,  
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21. “Revisiting the infrared spectrum of the water-smectite interface”,  
A. Kuligiewicz, A. Derkowski, M. Szczerba, V. Gionis, and G.D. Chryssikos,  
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22. “Measuring the layer charge of dioctahedral smectite by O-D vibrational spectroscopy”,  
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23. “Hydrogen sensing by sol-gel grown NiO and NiO:Li thin films”,  
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24. “Carrier confinement and bond softening in photoexcited bismuth films”,  
T. Shin, J.W. Wolfson, S.W. Teitelbaum, M. Kandyla, and K.A. Nelson,  
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25. “A novel nano-structured  $\text{CuIn}_{0.7}\text{Ga}_{0.3}(\text{Se}_{0.4}\text{Te}_{0.6})/\text{SLG}$  multinary compounds thin films for photovoltaic applications”,  
S. Fiat-Varol, E. Bacaksiz, P. Koralli, M. Kompitsas, and G. Cankaya,  
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26. “Color-saturated ZnO deep-ultraviolet light emitters with AlN server layer”,  
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27. “Effects of organic moieties on the photoluminescence spectra of perovskite-type tin bromide based compounds”,  
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28. “Tuning the reorganization energy of electron transfer in supramolecular ensembles – metalloporphyrin, oligophenylenevinyls, and fullerene – and the impact on electron transfer kinetics”,  
C. Stangel, C. Schubert, S. Kuhri, G. Rotas, J.T. Margraf, E. Regulska, T. Clark, T. Torres, N. Tagmatarchis, D.M. Guldi, and A.G. Coutsolelos,  
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32. “Does a nitrogen matter? Synthesis and photoinduced electron transfer of perylene diimide covalently donors covalently linked to  $\text{C}_{59}\text{N}$  and  $\text{C}_{60}$  acceptors”,  
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R. Singh, G. Pagona, V.G. Gregoriou, N. Tagmatarchis, D. Toliopoulos, Y. Han, Z. Fei, A. Katsouras, A. Avgeropoulos, T.D. Anthopoulos, M. Heeney, P.E. Keivanidis, and C.L. Chochos,  
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34. “Multichromophores onto graphene: Supramolecular non-covalent approaches for efficient light harvesting”,  
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G. Pagona, C. Bittencourt, R. Arenal, and N. Tagmatarchis,  
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38. “Oligothiophene/graphene supramolecular ensembles managing light induced processes: Preparation, characterization, electrochemical and femtosecond transient absorption studies leading to charge-separation”,  
A. Stergiou, H.B. Gobeze, I.D. Petsalakis, S. Zhao, H. Shinohara, F. D’Souza, and N. Tagmatarchis,  
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42. “Imidazolium quaternized polymers based on poly(chloromethyl styrene) and their complexes with FBS proteins and DNA”,  
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44. “Tuning the instrument resolution using chopper and time of flight at the small-angle neutron scattering diffractometer KWS-2”,  
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## **2. Papers in Proceedings of International and National Conferences**

1. “The need, benefits, and demonstration of a minimization principle for excited states”,  
N.C. Bacalis,  
International Conference of Computation Methods in Sciences and Engineering 2015 (ICCMSE 2015), AIP Conf. Proc. 1702, 090008/1-4 (2015).  
[DOI:10.1063/1.4938816](https://doi.org/10.1063/1.4938816).
2. “A story of Quantum Chemistry: From research on energy transfer mechanism in collisions of the  $H_2 \ ^1\Sigma_u^+$  excited state, to the identification and calculation of novel light molecules that hold Hydrogen in molecular form”,  
C.A. Nicolaides,  
AIP Conference Proc. 1702, 090004/1-4 (2015).  
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3. “Connectivity of borate and silicate groups in a low-alkali borosilicate glass by vibrational and 2D-NMR spectroscopy”,

D. Möncke, G. Tricot, D. Ehrt, and E.I. Kamitsos,  
Proc. Sixth Balkan Conference on Glass Science and Technology and 18<sup>th</sup> Conference on Glass  
and Ceramics, Nessebar, Bulgaria; October 1-4, 2014.

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4. “Spectroscopic study of a historical glass collection from Thebes, Greece, by Raman and IR”, E. Palamara, N. Zacharias, E.I. Kamitsos, A. Oikonomou, D. Palles, and D. Möncke,  
Proceedings of the 6<sup>th</sup> Symposium of the Hellenic Society for Archaeometry, Athens, Greece;  
May 16-18, 2013. E. Photos-Jones (Ed.), British Archaeological Reports, Oxford, U.K., BAR  
International Series XXXX, Chapter 8, pp. 59-64 (2015).

5. “Bio-inspired chimeric drug delivery nano systems (chi-aDDnSs): Their fractal hologram  
and regulatory aspects”,

N. Pippa, S. Pispas, and C. Demetzos,  
Adv. Exp. Med. Biol. 822, 199-200 (2015).

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6. “Assessment of fiber optic sensors for ageing monitoring of industrial liquid coolants”,  
C. Riziotis, A. El Sachat, C. Markos, A. Meristoudi, and A. Papadopoulos,  
Proceedings of SPIE Photonics West Conference, SPIE OPTO, Optical Components and  
Materials XII Conference, San Francisco, California, USA; February 7-12, 2015. Proc. SPIE  
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7. “Laser based microstructuring of polymer optical fibers for sensors optimization”,  
L. Athanasekos, M. Vasileiadis, A. El Sachat, N.A. Vainos, and C. Riziotis,  
Proceedings of SPIE Photonics West Conference, SPIE LASE, Laser-based Micro- and  
Nanoprocessing IX Conference, San Francisco, California, USA; February 7-12, 2015. Proc.  
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8. “Multianalytes gas sensors by soft lithography induced gratings with sol-gel and  
copolymers nanocomposites”,

A.N. Aspiotis, M. Vasileiadis, G. Mousdis, S. Pispas, N. Vainos, and C. Riziotis,  
NATO Advanced Research Workshop on Nanotechnology in the Security Systems, Yalta,  
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Security Series C-Environmental Security, pp. 181-192 (2015).

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9. “Flat mid-infrared supercontinuum generation in tapered fiber with thin coating of highly  
nonlinear glass”,

P. Velanas, G. Kakarantzas, and C. Riziotis,  
Proceedings of SPIE Photonics West Conference, SPIE LASE, Proc. SPIE 9347, Nonlinear  
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10. “Hybrid silica nanowires with a highly nonlinear glass thin coating”,  
G. Antonopoulos, P. Velanas, A. Psomaki-Karra, C. Riziotis, and G. Kakarantzas,  
IEEE Proceedings of Spatiotemporal Complexity in Nonlinear Optics (SCNO), 2015, Lake  
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### **3. Book Chapters**

1. “Infrared spectroscopy of glasses”,

E.I. Kamitsos,

[Modern Glass Characterization](#), M. Affatigato (Ed.), John Wiley & Sons, Inc., Hoboken, New  
Jersey, USA; 2015, Chapter 2, pp. 32-73.

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2. “Mixed biocompatible block copolymer/lipid nanostructures as drug nanocarriers:  
advantages and pharmaceutical perspectives”,

N. Pippa, S. Pispas, and C. Demetzos,

Handbook of Polymers for Pharmaceutical Technologies, V.K. Thakur and M.K. Thakur (Eds.),  
Scrivener Publishing LLC, Wiley, USA; 2015, Volume 4, pp. 257–284.

ISBN-13: 978-1119041467

3. “Multianalytes gas sensors by soft lithography induced gratings with sol-gel and  
copolymers nanocomposites”,

A. El Sachat, N. Aspiotis, M. Vasileiadis, G. Mousdis, S. Pispas, N. Vainos, and C. Riziotis,  
‘Nanotechnology in the Security Systems’, J. Bonca and S. Kruchinin (Eds.), NATO Science for  
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4. “Wireless condition monitoring integrating smart computing and optical sensor  
technologies”,

C. Emmanouilidis and C. Riziotis,

Engineering Asset Management - Systems, Professional Practices and Certification, P.W. Tse, J.  
Mathew, K. Wong, R. Lam, and C.N. Ko (Eds.), Lecture Notes in Mechanical Engineering;  
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5. “Nanothermodynamics mediates drug delivery”,

A.L. Stefi, E. Sarantopoulou, Z. Kollia, N. Spyropoulos-Antonakakis, A. Bourkoula, P.S.  
Petrou, S. Kakabakos, G. Soras, P.N. Trohopoulos, A.S. Nizamutdinov, V.V. Semashko, and  
A.C. Cefalas,

Genedis 2014; Neurodegeneration, Book Series: Advances in Experimental Medicine and Biology, P. Vlamos and A. Alexiou (Eds.), 822, pp. 213-220 (2015).

[DOI: 10.1007/978-3-319-08927-0\\_28](https://doi.org/10.1007/978-3-319-08927-0_28)

#### **4. Books Editing**

1. “Endohedral metallofullerenes – Fullerenes with metal inside”,  
H. Shinohara and N. Tagmatarchis (Eds.),  
John Wiley & Sons Ltd, West Sussex, PO19 8SQ, United Kingdom, 2015.  
ISBN: 9781119942726

#### **5. Patents**

1. “Reference and calibration grid for improved real time detection of biological entities in microscopy diagnostic techniques”,  
C. Riziotis and E. Tsiambas,  
Hellenic Industrial Property Organization (OBI), Patent Pending No#:20150100315 (16/7/2015).

#### **6. Dissertations**

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

1. “Structure-property correlations and connectivity in borate and boro-silicate glasses”,  
A. Winterstein-Beckmann,  
Supervisors Prof. L. Wondraczek (Otto-Schott-Institut for Materials Research, Friedrich-Schiller-Universität, Jena, Germany) and Dr. E.I. Kamitsos (TPCI/NHRF, Greece); Otto-Schott-Institut for Materials Research, Friedrich-Schiller-Universität, Jena, Germany (2015).

2. “Pharmaceutical nanotechnology: Study on the morphology of chimeric advanced drug delivery nanosystems”,  
N. Pippa,  
Supervisors Prof. C. Demetzos and Dr. S. Pispas, National and Kapodistrian University of Athens, Faculty of Pharmacy (2015).

3. “Hybrid self-assembled nanosystems from block copolymers”  
E. Vlassi,  
Supervisor Dr. S. Pispas, National and Kapodistrian University of Athens, Department of Chemistry (2015).

4. “Design, synthesis and study of novel phosphate borate glasses and glass-ceramics with high chemical stability”,  
M. Anastassopoulou,

Supervisors: M.A. Karakassides, Th. Bakas and G.D. Chryssikos, University of Ioannina, Dept. of Materials Science and Engineering (2015).

5. “Chemical sensors for rapid detection of toxic substances”,  
G. Nikoleli,  
Supervisor: G. A. Mousdis, National Technical University of Athens (2015).

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

1. “Optical point spread function of a lithographic system”,  
V. E. Gavriil,  
Supervisors Dr. A.C. Cefalas and Prof. D. Tsoukalas, National Technical University of Athens, Interdepartmental Program of Postgraduate Studies in Microsystems and Nanodevices (2015).

2. “Development of photonic sensors and devices using nanocomposites optical materials”,  
A. El Sachat,  
Supervisors Dr. Ch. Riziotis, Prof. I. Zergioti, and Prof. I. Raptis, National Technical University of Athens (2015).

3. “Synthesis and study of organic-inorganic hybrid semiconductors”,  
M.-S. Vidali,  
Supervisor Dr. G.A. Mousdis, University of Ioannina, Department of Materials Science and Engineering (2015).

4. “Encapsulation of functionalized carbon nanotubes in liposomes and evaluation of their thermotropic behavior”,  
E. Mitoudi-Vagourdi,  
Supervisor: N. Tagmatarchis, Department of Applied Mathematics and Natural Sciences, National Technical University of Athens (2015).

#### **c. Honors theses / Internships**

1. “Vibrational spectroscopy in materials characterization”,  
A. Nikolaidi,  
Supervisor Dr. G.D. Chryssikos, Université Paris-Diderot, Department of Physics (2015).

2. “Structure of oxide glasses by Raman and infrared spectroscopy”,  
A. Banis,  
Supervisors E.I. Kamitsos and A. Tsetsekou, National Technical University of Athens, School of Mining and Metallurgical Engineering (2015).

3. A. Psomaki-Karra, Department of Electronic Engineering, TEI of Athens, Supervisor: G. Kakarantzas (2015).

## 7. Conference Presentations

1. “Local reduced density matrix functional theory”,  
N.N. Lathiotakis, N. Helbig, A. Rubio, and N.I. Gidopoulos\*,  
International Workshop on Computational Physics and Materials Science: Total Energy and Force Methods, 15-17/1/2015, Trieste, Italy (poster).
2. “The effect of periodically arranged Stone-Walles defects in graphene on its mechanical properties: an ab-initio study”,  
Z. G. Fthenakis\* and N. N. Lathiotakis,  
XXXI Panhellenic Conference on Solid State Physics & Materials Science, 20-23/9/2015, Thessaloniki (oral).
3. “Local potentials in the reduced density matrix functional theory: Hybrid DFT-RDMFT approaches”,  
N.N. Lathiotakis,  
PSI-K 2015 Conference, 6-10/9/2015, San Sebastian, Spain (oral).
4. “STIRAP and coherent control: From optical control of chirality to light-driven molecular switches”,  
I. Thanopoulos,  
International Symposium: Stimulated Raman Adiabatic Passage, Chemistry, and Technology, Current status and future directions 25 years after the introduction of STIRAP, 22-25/9/2015, Technische Universitaet Kaiserslautern, Kaiserslautern, Germany (invited talk).
5. “Quantum chemistry on the time axis: electron correlations and rearrangements on femtosecond and attosecond scales”,  
C.A. Nicolaidis,  
55<sup>th</sup> Sanibel Symposium, February 2015, St. Simon Island, USA (plenary lecture).
6. “The many-electron problem on the time axis”,  
C.A. Nicolaidis,  
Johns Hopkins University, USA, February 2015 (invited colloquium).
7. “A story of Quantum Chemistry: From research on energy transfer mechanism in collisions of the  $H_2^1\Sigma_u^+$  excited state, to the identification and calculation of novel light molecules that hold hydrogen in molecular form”,  
C.A. Nicolaidis,  
International Conference on Computational Chemistry, March 2015, Athens (honorary lecture).
8. “The need, benefits, and demonstration principle for excited states”,  
N.C. Bacalis,  
International Conference of Computational Methods in Sciences and Engineering 2015 (ICCMSE 2015), Athens, Greece; March 20-23, 2015 (invited talk).

9. “Transition and post-transition metal borate glasses: Structure-property correlation, cluster formation and borate ligand speciation”,  
D. Möncke\*, D. Palles, E.I. Kamitsos, and L. Wondraczek,  
American Ceramic Society / Glass & Optical Materials Division - German Society of Glass Technology Joint Annual Meeting (ACerS GOMD – DGG), Miami, Florida, USA; May 17-21, 2015 (oral).
10. “Structure-property relations in ionic sulfophosphate glasses”,  
D. Möncke, L. Wondraczek\*, and E.I. Kamitsos,  
American Ceramic Society / Glass & Optical Materials Division - German Society of Glass Technology Joint Annual Meeting (ACerS GOMD – DGG), Miami, Florida, USA; May 17-21, 2015 (invited talk).
11. “Provenance and technology issues of Byzantine glazed pottery from Corinth, Greece”,  
E. Palamara\*, N. Zacharias, M. Xanthopoulou, B.Z. Kasztovszky, I. Kovács, D. Palles, and E.I. Kamitsos,  
TECNART- Non-destructive and Microanalytical Techniques in Art and Cultural Heritage, Catania, Italy; April 27-30, 2015 (oral).
12. “Electro-thermal poling and second harmonic generation in oxide glasses”,  
E.I. Kamitsos,  
3rd Hellenic Forum for Science, Technology & Innovation, NCSR ‘Demokritos’, Athens, Greece; June 29 - July 03, 2015 (invited talk).
13. “IR, Raman and NMR spectroscopic study on the connectivity of borate and silicate groups in sodium-borosilicate glasses”,  
D. Möncke\*, G. Tricot, and E.I. Kamitsos,  
Glass Reflections, SGT Annual Meeting, Cambridge, UK; September 7-9, 2015 (oral).
14. “Systematics of Li<sup>+</sup> fixation in reduced-charge montmorillonite”,  
G.D. Chryssikos\*, V. Gionis, and G.E. Christidis,  
Euroclay 2015, Edinburgh, UK; July 5-10, 2015 (oral).
15. “Sol-gel grown compound ZnO thin films for photovoltaic applications”,  
P. Koralli, M. Kandyla, G.A. Mousdis\*, M. Sideris, M. Kompitsas, M. Girtan, and D.E. Manolakos,  
TO-BE Spring Meeting, Aveiro, Portugal; March 30 – April 2, 2015 (poster).
16. “Resistivity sensors of metal oxides with metal nanoparticles as catalysts”,  
G.A. Mousdis\*, M. Kompitsas, D. Tsamakis, M. Stamataki, G. Petropoulou, and N. Korrali,  
Nanomaterials for security, NATO Advanced Research Workshop, Odessa, Ukraine; August 31 – September 3, 2015 (oral).
17. “Synchronous fluorescence spectroscopy for the determination of argan oil adulteration with corn oil”,  
G.A. Mousdis\*, F. Mellou, J. Kalivas, A. Amine, and C. Georgiou,

Recent trends in lipid science, Athens, Greece; June 11-12, 2015 (poster).

18. “Calculating core level binding energies for graphene and azafullerenes”,  
T. Suzi\*, D. Mowbray, M.P. Ljungberg, D. Erbahar, X. Rocquefelte, C. Bittencourt, M. Scardamaglia, P. Guttman, G. Rotas, N. Tagmatarchis, X. Zhu, A. Hitchcock, C.P. Ewels, and P. Ayala,

International Winterschool on Electronic Properties of Novel Materials, Kirchberg, Austria;  
March 7-14, 2015 (poster).

19. “Functionalized exfoliated graphene with oligothiophenes”,  
N. Tagmatarchis,  
227<sup>th</sup> ECS Meeting, Chicago, USA; May 24-28, 2015 (invited talk).

20. “Carbon nanostructures and perylenediimides”,  
A. Sastre-Santos\*, L. Martin-Gomis, G. Rotas, N. Karousis, I.D. Petsalakis, S. Pia, F. Fernandez-Lazaro, K. Ohkubo, N. Tagmatarchis, and S. Fukuzumi,  
227<sup>th</sup> ECS Meeting, Chicago, USA; May 24-28, 2015 (oral).

21. “Non-covalent oligothiophene-graphene hybrid materials”,  
D.D. Chronopoulos\*, A. Stergiou, and N. Tagmatarchis,  
The Sixteenth International Conference on the Science and Application of Nanotubes – NT15,  
Nagoya, Japan; June 29 – July 3, 2015 (poster).

22. “Synthesis, characterization and photophysics of graphene donor-acceptor nanoensembles”,  
S. Economopoulos\*, N. Karousis, L. Martin-Gomis, K. Ohkubo, T. Hasobe, A. Sastre-Santos, S. Fukuzumi, and N. Tagmatarchis,  
The Sixteenth International Conference on the Science and Application of Nanotubes – NT15,  
Nagoya, Japan; June 29 – July 3, 2015 (poster).

23. “Oligothiophene/graphene ensembles managing photoinduced charge-transfer processes: Preparation, characterization, photophysical and redox properties”,  
A. Stergiou\* and N. Tagmatarchis,  
The Sixteenth International Conference on the Science and Application of Nanotubes – NT15,  
Nagoya, Japan; June 29 – July 3, 2015 (poster).

24. “Fullerenes in space: Fullerene-water interaction and the origins of life”,  
D. Erbahar, T. Susi, X. Rocquefelte, C. Bittencourt, M. Scardamaglia, P. Guttman, G. Rotas, N. Tagmatarchis, X. Zhu, A. P. Hitchcock, and C.P. Ewels\*,  
Fullerenes – Past, Present and Future, London, United Kingdom; July 15-16, 2015 (poster).

25. “Azafullerene-based hybrids for managing charge-transfer processes”,  
N. Tagmatarchis,  
Workshop on Organic Photovoltaics, Patra, Greece; September 18, 2015 (invited talk).

26. “Azafullerene-based hybrids for managing charge-transfer processes”,



- N. Tagmatarchis,  
HeteroNanoCarb2015, Benasque (Aragon), Spain; December 7-11, 2015 (invited talk).
27. “Multifunctional carbon nanostructures”,  
N. Tagmatarchis,  
3<sup>rd</sup> Hellenic Forum for Science, Technology and Innovation; Athens, Greece, June 29 – July 3,  
2015 (invited talk)
28. “Functionalization of exfoliated graphene with electron donors”,  
N. Tagmatarchis,  
Pacifichem, Honolulu, USA, December 15-20, 2015 (invited talk).
29. “Controlled release from advanced Drug Delivery nanoSystems: the physicochemical, morphological and thermodynamic characteristics of the vesicle”,  
N. Pippa\*, S. Pispas, and C. Demetzos,  
International Liposome Society 2015 Meeting. Liposome Advances: Progress in Drug and Vaccine Delivery, London, UK; December 19-22, 2015 (oral).
30. “Chimeric biocompatible block copolymer/lipid nanostructures: innovative therapeutic devices for controlled release”,  
N. Pippa\*, S. Pispas, and C. Demetzos,  
6<sup>th</sup> BBBB Conference on Pharmaceutical Sciences to improve the quality and performance of modern drug delivery systems, Helsinki, Finland; September 10-12, 2015 (oral).
31. “Functional macromolecular nanostructures based on cationic amphiphilic block polyelectrolyte aggregates with insulin”,  
N. Pippa\*, M. Karayianni, S. Pispas, and C. Demetzos,  
Proteins in the World of Synthetic Polymers Workshop, Athens, Greece; March 19-20, 2015 (oral).
32. “The effect of grafted thermosensitive polymers on the physicochemical characteristics of chimeric liposomal platforms”,  
A. Kyrili, M. Chountoulesi, N. Pippa\*, A. Meristoudi, S. Pispas, and C. Demetzos,  
International Liposome Society 2015 Meeting. Liposome Advances: Progress in Drug and Vaccine Delivery, London, UK; December 19-22, 2015 (poster).
33. “Calorimetric results of pH-responsive grafted lipid bilayers may contribute to rational design and investigation of pH-sensitive liposomes”,  
M. Chountoulesi, A. Kyrili, N. Pippa\*, A. Meristoudi, S. Pispas, and C. Demetzos,  
International Liposome Society 2015 Meeting. Liposome Advances: Progress in Drug and Vaccine Delivery, London, UK; December 19-22, 2015 (poster).
34. “Temperature-responsive block polyelectrolyte/lysozyme nanocomplexes. Design and development of potential nutraceuticals”,  
N. Pippa\*, A. Meristoudi, S. Pispas, and C. Demetzos,

6<sup>th</sup> BBBB Conference on Pharmaceutical Sciences to improve the quality and performance of modern drug delivery systems, Helsinki, Finland; September 10-12, 2015 (poster).

35. “Thermo-responsive innovative polymer grafted liposomes”,

N. Pippa\*, A. Meristoudi, S. Pispas, and C. Demetzos,

EUFEPS Annual Meeting, Geneva, Switzerland; June 15-17, 2015 (poster).

36. “The modulation of physicochemical characterization of chimeric liposomes: the role of the thermoresponsive grafted polymers”,

A. Kyrili, M. Chountoulesi, N. Pippa\*, A. Meristoudi, S. Pispas, and C. Demetzos,

IX<sup>th</sup> Joint Meeting in Medicinal Chemistry, Athens, Greece; June 7-10, 2015 (poster).

37. “Preparation and physicochemical characterization of novel block polyelectrolyte aggregates with antitumor peptide”,

G. Mountrichas, N. Pippa\*, S. Pispas, and C. Demetzos,

IX<sup>th</sup> Joint Meeting in Medicinal Chemistry, Athens, Greece; June 7-10, 2015 (poster).

38. “Temperature-dependent drug release from innovative polymer grafted liposomes”,

N. Pippa\*, A. Meristoudi, S. Pispas, and C. Demetzos,

1<sup>st</sup> International Congress of Controlled Release Society-Greek Local Chapter, Athens, Greece; May 27-28, 2015 (poster).

39. “Advanced drug delivery nanosystems: A thermotropic study on a dual stimuli-responsive copolymer into phospholipid membranes”,

I. Kolman, N. Pippa\*, A. Meristoudi, S. Pispas, and C. Demetzos,

Challenges in Science and Technology of Polymer Materials, Bansko, Bulgaria; May 19-23, 2015 (poster).

40. “Insulin/PEG-b-PLys hybrid nanostructures: Physicochemical properties and protein encapsulation”,

N. Pippa\*, R. Kalinova, I. Dimitrov, S. Pispas, and C. Demetzos,

Challenges in Science and Technology of Polymer Materials, Bansko, Bulgaria; May 19-23, 2015 (poster).

41. “Block copolymers as membrane protein mimetics: A dual stimuli-responsive copolymer into phospholipid membranes”,

I. Kolman\*, N. Pippa, A. Meristoudi, S. Pispas, and C. Demetzos,

Proteins in the World of Synthetic Polymers Workshop, Athens, Greece; March 19-20, 2015 (poster).

42. “Stealth polypeptide micelles for insulin encapsulation”,

N. Pippa\*, M. Karayianni, S. Pispas, C. Demetzos, and I. Dimitrov,

Proteins in the World of Synthetic Polymers Workshop, Athens, Greece; March 19-20, 2015 (poster).

43. “Design and development of temperature-responsive block polyelectrolyte/lysozyme complexes as potential nutraceuticals”,  
N. Pippa\*, A. Meristoudi, S. Pispas, and C. Demetzos,  
Proteins in the World of Synthetic Polymers Workshop, Athens, Greece; March 19-20, 2015 (poster).
44. “Synthesis and solution properties of poly(oligoethylene glycol methacrylate-b-vinyl benzyl trimethylammonium chloride)”,  
G. Mountrichas\*, N. Pippa, and S. Pispas,  
Proteins in the World of Synthetic Polymers Workshop, Athens, Greece; March 19-20, 2015 (poster).
45. “Block copolymer/bio(macro)molecules hybrid self-assembled nanostructures of biomedical interest”,  
S. Pispas,  
Challenges in Science and Technology of Polymer Materials, Bansko, Bulgaria; May 19-23, 2015 (invited talk).
46. “Virus-like nanoparticle formation by interaction of peripherally functionalized block copolymer micelles and proteins”,  
A. Meristoudi\* and S. Pispas,  
Challenges in Science and Technology of Polymer Materials, Bansko, Bulgaria; May 19-23, 2015 (oral).
47. “A combined light scattering and analytical ultracentrifugation study of the electrostatic complexation between bovine serum albumin and a block polyelectrolyte”,  
M. Karayianni\*, R. Radeva, N. Koseva, and S. Pispas,  
Challenges in Science and Technology of Polymer Materials, Bansko, Bulgaria; May 19-23, 2015 (oral).
48. “Small angle neutron scattering investigation of lysozyme loading on core-shell PnBA-b-PAA micelles”,  
A. Papagiannopoulos\*, A. Meristoudi, S. Pispas, and A. Radulescu,  
Challenges in Science and Technology of Polymer Materials, Bansko, Bulgaria; May 19-23, 2015 (oral).
49. “Complexation of lysozyme with block polyelectrolyte micelles adsorbed on solid surfaces”,  
S. Pispas,  
79<sup>th</sup> Prague Meeting on Macromolecules: Functional Polymers at Bio-Material Interfaces, Prague, Czech Republic; June 28 - July 2, 2015 (oral).
50. “Complexation of lysozyme onto the corona of PnBA-b-PAA amphiphilic block copolymer micelles”,  
A. Papagiannopoulos, A. Meristoudi, S. Pispas\*, and A. Radulescu,

International Symposium on Amphiphilic Polymers, Networks, Gels and Membranes-APNGM15, Budapest, Hungary; August 30 - September 2, 2015 (oral).

51. “New polymers and polymeric nanostructures for the delivery of pharmaceuticals”,  
S. Pispas,  
Novel Materials for Biomedical Applications, Athens, Greece; April 6, 2015 (invited talk).
52. “Block copolymers nanocarriers for pharmaceutical compounds”,  
S. Pispas,  
Novel Systems for the Delivery of Drugs in Nanomedicine, Athens, Greece; July 13, 2015  
(invited talk).
53. “Towards an ideal polymer thermal neutron scintillator”,  
I. Sen<sup>\*</sup>, N.N. Lathiotakis, S. Pispas, and P. Petrov,  
Challenges in Science and Technology of Polymer Materials, Bansko, Bulgaria; May 19-23,  
2015 (oral).
54. “Magnetopolyplexes-hybrid vector nanosystems for enhanced gene delivery”,  
E. Haladjova<sup>\*</sup>, S. Rangelov, C.B. Tsvetanov, V. Posheva, D. Momekova, G. Mountrichas, S.  
Pispas, and A. Ledeler,  
Challenges in Science and Technology of Polymer Materials, Bansko, Bulgaria; May 19-23,  
2015 (oral).
55. “Nanotechnology devices with reticulated water and aromatic surfactants”,  
I. Sen<sup>\*</sup>, N.N. Lathiotakis, S. Pispas, B. Vratzov, and P. Petrov,  
Challenges in Science and Technology of Polymer Materials, Bansko, Bulgaria; May 19-23,  
2015 (poster).
56. “Physicochemical characterization of novel gene delivery vector systems based on  
poly(vinyl benzyl trimethylammonium chloride) homo- and block copolymers”,  
E. Haladjova<sup>\*</sup>, G. Mountrichas, S. Pispas, and S. Rangelov,  
Challenges in Science and Technology of Polymer Materials, Bansko, Bulgaria; May 19-23,  
2015 (poster).
57. “Study on the electrostatic complexes formed between bovine fibrinogen and a block  
polyelectrolyte”,  
M. Karayianni<sup>\*</sup>, R. Radeva, N. Koseva, and S. Pispas,  
Challenges in Science and Technology of Polymer Materials, Bansko, Bulgaria; May 19-23,  
2015 (poster).
58. “Block copolymer nanostructures for the encapsulation and delivery of hydrophobic  
drugs, proteins and nucleic acids”,  
S. Pispas,  
Greek-German Workshop 2015, Athens, Greece; September 28 - October 1, 2015 (invited talk).
59. “Polymeric nanostructures for the immobilization of enzymes”,

- S. Pispas<sup>\*</sup>, A. Papagiannopoulos, M. Karayianni, and A. Meristoudi,  
10<sup>th</sup> Anniversary Conference of the Hellenic Society for Biomaterials, Athens, Greece;  
November 26-28, 2015 (oral).
60. “Temperature-dependent drug release from chimeric DPPC:C12H25-PNIPAM-COOH liposomes”,  
N. Pippa<sup>\*</sup>, A. Meristoudi, S. Pispas, and C. Demetzos,  
10<sup>th</sup> Anniversary Conference of the Hellenic Society for Biomaterials, Athens, Greece;  
November 26-28, 2015 (oral).
61. “DSC studies of a pH-responsive block copolymer incorporated in lipidic bilayers: Rational design and development of pH-responsive liposomes”,  
M. Choudoulesi, A. Kyrili, N. Pippa<sup>\*</sup>, A. Meristoudi, S. Pispas, and C. Demetzos,  
10<sup>th</sup> Anniversary Conference of the Hellenic Society for Biomaterials, Athens, Greece;  
November 26-28, 2015 (poster).
62. “Micelles from amphiphilic PLMA-b-POEGMA block copolymers and their use as nanocarriers for indomethacin”,  
A. Skandalis<sup>\*</sup> and S. Pispas,  
10<sup>th</sup> Anniversary Conference of the Hellenic Society for Biomaterials, Athens, Greece;  
November 26-28, 2015 (poster).
63. “Virus-like nanoparticle formation by interaction of peripherally functionalized block copolymer micelles with proteins”,  
A. Meristoudi<sup>\*</sup> and S. Pispas,  
Proteins in the World of Synthetic Polymers Workshop, Athens, Greece; March 19-20, 2015 (oral).
64. “Thermoresponsive protein nanocarriers using novel linear tri-block terpolymer nanoassemblies”,  
A. Meristoudi<sup>\*</sup> and S. Pispas,  
Proteins in the World of Synthetic Polymers Workshop, Athens, Greece; March 19-20, 2015 (poster).
65. “Complexation of lysozyme with adsorbed PtBS-b-SCPI block polyelectrolyte micelles on a solid/liquid interface”,  
A. Papagiannopoulos<sup>\*</sup>, S. Pispas, C. Toprakcioglu, N. Spiliopoulos, D. Anastassopoulos, and A. Vradis,  
Proteins in the World of Synthetic Polymers Workshop, Athens, Greece; March 19-20, 2015 (oral).
66. “Temperature response kinetics of PEO-b-PNIPAM-b-PAA triblock terpolymer aggregates and PEO-b-PNIPAM-b-PAA / Lysozyme complexes”,  
A. Papagiannopoulos<sup>\*</sup>, A. Meristoudi, K. Hong, and S. Pispas,  
Proteins in the World of Synthetic Polymers Workshop, Athens, Greece; March 19-20, 2015 (poster).

67. “New polymeric nanostructures for the delivery of drugs and genes”,  
S. Pispas,  
Thalis TEI Thessalias Workshop, Athens, Greece; June 19, 2015 (invited talk).
68. “Enhanced gene expression promoted by hybrid magnetic/cationic block copolymer micelles”,  
E. Haladjova\*, S. Rangelov, V. Posheva, G. Mountrichas, and S. Pispas,  
4<sup>th</sup> International Conference on Multifunctional, Hybrid and Nanomaterials (Hybrid Materials 2015), Sitges Spain; March 9-13, 2015 (poster).
69. “Co-assembly behavior of double hydrophilic block polyelectrolyte with oppositely charged fluorosurfactant”,  
M. Stepanek\*, M. Uchman, S. Pispas, and L. Kovacik,  
Polyelectrolytes in Chemistry, Biology and Technology, Nanyang, Singapore; January 26-28, 2015 (oral).
70. “Femtosecond-laser nanostructured silicon substrates for UV photodiodes based on p-Si/n-ZnO heterojunctions”,  
N. Latsis\*, M. Ulmeanu, D. Palles, and M. Kandyla,  
6<sup>th</sup> International Conference on Micro-Nanoelectronics, Nanotechnologies and MEMS, Athens, Greece; October 4-7, 2015 (poster).
71. “Silicon nanostructures for photonic and optoelectronic applications”,  
D.G. Kotsifaki, D. Georgiadou, M. Ulmeanu, P.G. Lagoudakis, and M. Kandyla\*,  
European Materials Research Society (E-MRS) 2015 Spring Meeting, Lille, France; May 11-15, 2015 (oral).
72. “Tunable femtosecond-pulsed plasmonic nanotweezers based on laser-fabricated substrates”,  
D.G. Kotsifaki, M. Kandyla\*, and P.G. Lagoudakis,  
11<sup>th</sup> International Conference of Computational Methods in Sciences and Engineering (ICCMSE), Athens, Greece; March 20-23, 2015 (invited talk).
73. “The role of annealing temperature on CuInSe<sub>2</sub> thin films as solar cell material”,  
S.F. Varol\*, K. Uzun, G. Cankaya, P. Koralli, and M. Kompitsas,  
Int. Semiconductor Science Technology Conference (IS STC 2015), Ismir, Turkey; 11-13 May, 2015 (poster).
74. “Enhancement with high oxygen pressure of ZnO deep-UV light emitters with AlN server layer”,  
S.F. Varol\*, Z. Merdan, P. Koralli, and M. Kompitsas,  
Int. Semiconductor Science Technology Conference (IS STC 2015), Ismir, Turkey; 11-13 May, 2015 (poster).

75. “Elemental analysis of chalcopyrite thin film absorbers and monolithic integration for 2nd generation photovoltaic cells”,  
P. Koralli\*, S.F. Varol, M. Kompitsas, D.E. Manolakos, and G. Kankaya,  
Int. Semiconductor Science Technology Conference (IS STC 2015), Ismir, Turkey; 11-13 May 2015 (poster).
76. “High brightness (HB) blue/near ZnO/Si heterojunction light emitting diode with different dopants”,  
S. F. Varol\*, P. Koralli, M. Kompitsas, and D.E. Manolakos,  
Int. Semiconductor Science Technology Conference (IS STC 2015), Ismir, Turkey; 11-13 May 2015 (poster).
77. “Surface functionalization of sol-gel grown NiO thin films by Palladium nanoparticles for Hydrogen gas sensing”,  
I. Sta, M. Jlassi, M. Kandyla, M. Hajji, P. Koralli, M. Kompitsas\*, and H.Ezzaouia,  
9th Int. Conference on Instruments for Analysis (IMA-2015), Kalamata, Greece; 20-24-September 2015 (oral).
78. “Photonic probing of entropic potentials”,  
A.C. Cefalas\*, N. Spyropoulos-Antonakakis, Z. Kollia, M. Chatzichristidi, and E. Sarantopoulou,  
OASIS 5 Conference, Tel Aviv, Israel; March 3–4, 2015 (oral).
79. “Size dependent semiconducting behavior in metal nitride nanodomains”,  
A.C. Cefalas\*, V.V. Pavlov, Z. Kollia, V.V. Semashko, and E. Sarantopoulou,  
14<sup>th</sup> International Scientific Conference-School “Materials of nano-, micro-, opto-electronics and fiber optics: physical properties and application”,  
Saransk, Russia; Sep.29-Oct.4, 2016 (invited talk).
80. “Light pressure effects in physics of solid state lasers”,  
V.V. Semashko\*, O.R. Akhtyamov, A.S. Nizamutdinov, E. Sarantopoulou, and A.C. Cefalas,  
14<sup>th</sup> International Scientific Conference-School “Materials of nano-, micro-, opto-electronics and fiber optics: physical properties and application”,  
Saransk, Russia; Sep.29-Oct.4, 2016 (invited talk).
81. “Optical point spread function as a method for testing dynamic operation of image sensor”,  
V.E. Gavriil\*, E. Sarantopoulou, Z. Kollia, and A.C. Cefalas,  
XXXI Panhellenic Conference on Solid State Physics and Material Science, Thessaloniki, Greece; September 20-23, 2015 (poster).
82. “Atomic Force Microscopy. The locomotive of nanoscience”,  
E. Sarantopoulou,  
1<sup>st</sup> Conference on Research and Discoveries,  
Athens, Greece; October 9-10, 2016 (oral).

83. “Physical principles of nanotechnology”,  
A. C. Cefalas,  
1<sup>st</sup> Conference on Research and Discoveries,  
Athens, Greece; October 9-10, 2016 (oral).
84. “Assessment of fiber optic sensors for ageing monitoring of industrial liquid coolants”,  
C. Riziotis\*, A. El Sachat, C. Markos, A. Meristoudi, and A. Papadopoulos,  
SPIE Photonics West 2015 Conference, SPIE OPTO, Optical Components and Materials XII  
Conference, San Francisco, California, USA; February 7-12, 2015 (poster).
85. “Laser based microstructuring of polymer optical fibers for sensors optimization”,  
L. Athanasekos, M. Vasileiadis, A. El Sachat, N.A. Vainos, and C. Riziotis\*,  
SPIE Photonics West 2015 Conference, SPIE LASE, Laser-based Micro- and Nanoprocessing IX  
Conference, San Francisco, California, USA; February 7-12, 2015 (poster).
86. “Flat mid-infrared supercontinuum generation in tapered fiber with thin coating of highly  
nonlinear glass”,  
P. Velanas, G. Kakarantzas, and C. Riziotis\*,  
SPIE Photonics West 2015 Conference, SPIE LASE, Nonlinear Frequency Generation and  
Conversion: Materials, Devices, and Applications XIV Conference, San Francisco, California  
USA; February 7-12, 2015 (poster).
87. “Hybrid photonic crystal fibres and functionalized micro-nano-fibres for nonlinear optics:  
The role of new materials”,  
G. Kakarantzas,  
11th ICCMSE 2015 International Conference of Computational Methods in Sciences and  
Engineering, “Nonlinear Optics and Lasing in Complex Media”, Metropolitan Hotel, Athens,  
Greece; March 20-23, 2015 (invited talk).
88. “Study and optimization of tapered plasmonic waveguides for light nanofocusing”,  
A. Petropoulou, M.N. Zervas, and C. Riziotis\*,  
11th ICCMSE 2015 International Conference of Computational Methods in Sciences and  
Engineering, “Nonlinear Optics and Lasing in Complex Media”, Metropolitan Hotel, Athens,  
Greece; March 20-23, 2015 (invited talk).
89. “Engineering and assessment of diblock copolymers for the development of fiber optic  
sensors for proteins fast detection”,  
C. Riziotis,  
Proteins in the World of Synthetic Polymers Workshop, Athens, Greece; March 19-20, 2015  
(oral).
90. “Novel integrated photonic platforms towards lab-on-chip based point of care  
diagnostics”,  
C. Riziotis,



4th International Congress on Biophotonics (ICOB 2015), and COST Action BM1401 “European Network on Raman-based applications for clinical diagnostics (Raman4clinics)” joint meeting, Florence, Italy; May 18-20, 2015 (invited talk).

91. “Research for BSI in Europe”, Panel Discussion,  
C. Riziotis,

6th European Conference on Bloodstream Infections, Mare Nostrum Hotel, Vravrona, Athens, Greece; June 6-7, 2015 (invited panel discussant).

92. “Hybrid silica nanowires with a highly nonlinear glass thin coating”,

G. Antonopoulos\*, P. Velanas, C. Riziotis, and G. Kakarantzas,

Spatiotemporal Complexity in Nonlinear Optics, Lake Como School of Advanced Studies, Lake Como, Italy; 31 August – 4 September, 2015 (poster).

93. “Evaluation of fluorescent nanocomposite grids and membranes based on polymeric electrospun nanofibres towards ammonia sensing”,

A. Petropoulou\*, K. Christodoulou, T. Krasia-Christoforou, and C. Riziotis,

5th International Conference on Materials and Applications for Sensors and Transducers, IC-MAST, Mykonos, Greece; 27-30 September, 2015 (poster).

94. “Engineering of composite metallic microfibers towards development of plasmonic devices for sensing applications”,

A. Petropoulou\*, G. Antonopoulos, G. Kakarantzas., D.W. Hewak, M.N. Zervas, and C. Riziotis,

5th International Conference on Materials and Applications for Sensors and Transducers, IC-MAST, Mykonos, Greece; 27-30 September, 2015 (poster).

## **8. Popular Conference Presentations**

1. “Πως μπορούμε να σχεδιάσουμε ένα βιώσιμο μέλλον ελέγχοντας το παρόν”,

Ι.Δ. Πετσαλάκης,

2nd Athens Science Festival, Τεχνόπολη Δήμου Αθηναίων, 17-22 Μαρτίου 2015 (ομιλία).

2. “Όταν η κοινή λογική δεν αρκεί”,

Ι.Δ. Πετσαλάκης,

Researchers Night, September 25 (2015).

Κέντρο Πολιτισμού ΕΛΛΗΝΙΚΟΣ ΚΟΣΜΟΣ, Ταύρος, Αθήνα (ομιλία).

3. “Organic electronics”,

G.A. Mousdis,

Science in Society: The contribution of materials in the development of human civilization, Athens, NHRF; March 3, 2015 (invited talk).

4. “Organic electronics: building the future”,

G.A. Mousdis,

Summer School, Science Union of Greek Physicists, Eretria; June 26-July 1, 2015 (invited talk).

5. “Organic LEDs (OLED): The future in lighting and displays”,  
G.A. Mousdis,  
Two days full of light, Eugenides Foundation for the Year of Light, Athens; October 10, 2015  
(invited talk).

6. “Graphene – Miraculous material of a new generation”,  
N. Karousis\* and N. Tagmatarchis,  
Science in Society: The contribution of materials in the development of human civilization”,  
Athens, NHRF; February 10, 2015 (invited talk).