

1. **Papers in Refereed Journals**

1. “Intramolecular single H-bonding vs bifurcation in tuning the conformation of 2,2’-dihydroxybenzo-phenone and its derivatives. A DFT insight”,  
D. Tzeli, I.D. Petsalakis, P.G. Tsoungas, and P. Kozielwicz,  
*Struct. Chem* 28, 925 (2017).  
[DOI:10.1007/s11224-016-0895-6](https://doi.org/10.1007/s11224-016-0895-6)
2. “Time-evolution study of photoinduced charge-transfer in tertiary amine-fluorophore systems”,  
D. Tzeli, Th. Mercouris, G. Theodorakopoulos, and I.D. Petsalakis,  
*Comput. Theoret. Chem.* 1115, 197 (2017).  
[DOI:10.1016/j.comptc.2017.06.019](https://doi.org/10.1016/j.comptc.2017.06.019)
3. “Pyridinium urea coupled polyether receptor for selective sensing of Lysine and cell imaging”,  
K. Ghosh, D. Tarafdar, I.D. Petsalakis, and G. Theodorakopoulos,  
*Eur. J. Org. Chem.* 2017, 355, (2017).  
[DOI: 10.1002/ejoc.201601203](https://doi.org/10.1002/ejoc.201601203)
4. “Electron transfer through organic molecular wires: A theoretical study”,  
N.N. Lathiotakis, G. Theodorakopoulos, and I.D. Petsalakis,  
*Chem. Phys. Lett.* 667, 45 (2017).  
[DOI: 10.1016/j.cplett.2016.11.044](https://doi.org/10.1016/j.cplett.2016.11.044)
5. “Structural deformations of two-dimensional planar structures under uniaxial strain: The case of graphene”,  
Z.G. Fthenakis and N.N. Lathiotakis,  
*J. Phys. Cond. Matt.* 29, 175401 (2017).  
[DOI: 10.1088/1361-648X/aa63d5](https://doi.org/10.1088/1361-648X/aa63d5)
6. “Relating correlation measures: The importance of the energy gap”,  
C.L. Benavides-Riveros, N.N. Lathiotakis, C. Schilling, and M.A.L. Marques,  
*Phys. Rev. A* 95, 032507 (2017).  
[DOI: 10.1103/PhysRevA.95.032507](https://doi.org/10.1103/PhysRevA.95.032507)
7. “Towards a formal definition of static and dynamic electronic correlations”,  
C.L. Benavides-Riveros, N.N. Lathiotakis, and M.A.L. Marques,  
*Phys. Chem. Chem. Phys.* 19, 12655 (2017).  
[DOI: 10.1039/C7CP01137G](https://doi.org/10.1039/C7CP01137G)
8. “Structural prediction of two-dimensional materials under strain”,  
P. Borlido, C. Steigemann, N.N. Lathiotakis, M.A.L. Marques, and S. Botti,

2D Materials **4**, 045009 (2017).

[DOI: 10.1088/2053-1583/aa85c6](https://doi.org/10.1088/2053-1583/aa85c6)

9. “Atomistic potential for graphene and other  $sp^2$  carbon systems”,  
Z.G. Fthenakis, G. Kalosakas, G.D. Chatzidakis, C. Galiotis, K. Papagelis, and N.N. Lathiotakis,  
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[DOI:10.1039/c7cp06362h](https://doi.org/10.1039/c7cp06362h)

10. “Theory and computation of electromagnetic transition matrix elements in the continuous spectrum of atoms”,

Y. Komninos, Th. Mercouris, and C.A. Nicolaides,

Eur. Phys. J. D **71**, 8 (2017).

[DOI:10.1140/epjd/e2016-60706-8](https://doi.org/10.1140/epjd/e2016-60706-8)

11. “Resonances in the continuum, field-induced nonstationary states, and the state- and property-specific treatment of the many-electron problem”,

C.A. Nicolaides,

Adv. Quantum Chem. **74**, 149 (2017).

[DOI: 10.1016/bs.aiq.2016.03.001](https://doi.org/10.1016/bs.aiq.2016.03.001)

12. “Correct small-truncated excited state wave functions obtained via minimization principle for excited states compared/opposed to Hylleraas-Undheim and McDonald higher 'roots’”,

Z. Xiong, J. Zang, H.J. Liu, D. Karaoulanis, Q. Zhou, and N.C. Bacalis,

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[DOI: 10.3233/JCM-170722](https://doi.org/10.3233/JCM-170722)

13. “Tetrathiomolybdate complexes of rhodium(I) with molybdenum–rhodium interactions”,

N. Xamonaki, A. Asimakopoulos, A. Balafas, M. Dasenaki, I. Choinopoulos, S. Coco, E. Simandiras, and S. Koinis,

Inorg. Chem. **55**, 4471 (2017).

[DOI: 10.1021/acs.inorgchem.6b00072](https://doi.org/10.1021/acs.inorgchem.6b00072)

14. “Molecular dynamics study of structural reorganization by electro-thermal poling in sodium diborate glass”,

A. Vegiri and E.I. Kamitsos,

J. Non-Cryst. Solids **472**, 14 (2017).

[DOI: 10.1016/j.jnoncrysol.2017.07.007](https://doi.org/10.1016/j.jnoncrysol.2017.07.007)

15. “Structural stability, vibrational properties and photoluminescence in  $CsSnI_3$  perovskite upon the addition of  $SnF_2$ ”,

A. Kontos, A. Kaltzoglou, E. Siranidi, D. Palles, G. Angeli, M. Afranis, V. Psycharis, Y.S. Raptis, E.I. Kamitsos, P. Trikalitis, C. Stoumpos, M. Kanatzidis, and P. Falaras,

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16. “Synthesis, thermal and structural properties of pure  $TeO_2$  glass and zinc-tellurite glasses”,

N.S. Tagiara, D. Palles, E.D. Simandiras, V. Psycharis, A. Kyritsis, and E.I. Kamitsos, *J. Non-Cryst. Solids* **457**, 116 (2017).

[DOI: 10.1016/j.jnoncrysol.2016.11.033](https://doi.org/10.1016/j.jnoncrysol.2016.11.033)

17. “Transition-metal incorporation and Co-Sr/Mn-Sr mixed-modifier effect in metaphosphate glasses”,

K. Griebenow, U. Hoppe, D. Möncke, E.I. Kamitsos, and L. Wondraczek,

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18. “Modifying the surface wetting behavior of soda lime silicate glass substrates through thermal poling”,

F. Lind, D. Palles, D. Möncke, E.I. Kamitsos, and L. Wondraczek,

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19. “Removal of phosphate from aqueous solutions by adsorption onto Ca(OH)<sub>2</sub> treated natural clinoptilolite”, D. Mitrogiannis, M. Psychoyou, I. Baziotis, V. Inglezakis, N. Koukouzas, N. Tsoukalas, D. Palles, E.I. Kamitsos, G. Oikonomou, and G. Markou, *Chem. Eng. J.* **320**, 510 (2017).

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20. “Mixed-modifier effect in (Ca,Mg) metaphosphate glasses”,

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21. “A multi technique study of a new lithium disilicate glass-ceramic spray-coated on ZrO<sub>2</sub> substrate for dental restoration”,

D. Möncke, R. Ehrt, D. Palles, I. Efthimiopoulos, E.I. Kamitsos, and M. Johannes,

*Biomed. Glasses* **3**, 41 (2017).

[DOI: 10.1515/bglass-2017-0004](https://doi.org/10.1515/bglass-2017-0004)

22. “Preferential bonding in low alkali borosilicate glasses”,

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23. “Influence of cooling rate on cracking and plastic deformation during impact and indentation of borosilicate glasses”,

C. Zehnder, S. Bruns, J.-N. Peltzer, K. Durst, S. Korte-Kerzel, and D. Möncke,

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24. “Non-Newtonian flow to the theoretical strength of glasses via impact nanoindentation at room temperature”,

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25. “Formation, structure and properties of fluoro-sulfo-phosphate multi-anion glasses”,  
H.Q. Le, T. Palenta, O. Benzine, K. Griebenow, R. Limbach, E.I. Kamitsos, and L. Wondraczek,  
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26. “PLMA-b-POEGMA amphiphilic block copolymers: Synthesis and self-assembly in aqueous media”,

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27. “Amphiphilic poly(2-oxazoline) copolymers as self-assembled carriers for drug delivery applications”,

E. Vlassi, A. Papagiannopoulos, and S. Pispas,

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[DOI: 10.1016/j.eurpolymj.2016.10.034](https://doi.org/10.1016/j.eurpolymj.2016.10.034)

28. “Small nanosized poly(vinyl benzyl trimethylammonium chloride) based polyplexes for siRNA delivery”,

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29. “Thermoresponsive behavior of poly(N-isopropylacrylamide)s with dodecyl and carboxyl terminal groups in aqueous solutions: pH-dependent cloud point temperature”,

J. Skvarla, R.K. Raya, M. Uchman, J. Zednik, K. Prochazka, V.M. Garamus, A. Meristoudi, S.

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30. “Tuning the solution organization of cationic polymers through interactions with bovine serum albumin”,

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32. “Au nanoparticle-corona loaded polystyrene-b-quaternized poly(2-vinylpyridine) micelles and their interaction with DNA”,  
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34. “Kinetics of light-induced concentration patterns in transparent polymer solutions”,  
M. Anyfantakis, A. Pamvouxoglou, C. Mantzaridis, S. Pispas, H-J. Butt, G. Fytas, and B. Loppinet,  
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35. “Innovative drug nanocarriers by incorporating thermoresponsive polymer in phospholipid bilayer”,  
A. Tzani, N. Naziris, N. Pippa, S. Pispas, and C. Demetzos,  
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36. “Advances and perspectives in cancer nanotherapy: The added value of nanocarriers.”  
C. Demetzos, N. Pippa, and S. Pispas,  
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37. “Lysozyme complexes with thermo- and pH-responsive PNIPAM-b-PAA block copolymers”,  
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38. “Preparation and physicochemical characterization of polyelectrolyte complexes incorporating antitumor peptide”,  
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41. “The modulation of physicochemical characterization of innovative liposomal platforms: the role of the grafted thermoresponsive polymers”,  
M. Chountoulesi, A. Kyrili, N. Pippa, A. Meristoudi, S. Pispas, and C. Demetzos,  
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42. “Mixed lipid/polymer nanostructures: from advanced materials to drug delivery systems”,  
N. Pippa, A. Skandalis, S. Pispas, C. Demetzos, M. Libera, A. Marcinkowski, and B. Trzebicka,  
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43. “Modification of xanthan solution properties by the cationic surfactant DTMAB”,  
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45. “Case study for artificial photosynthesis: Noncovalent interactions between C<sub>60</sub>-dipyridyl and Zinc porphyrin dimer”,  
C. Stangel, A. Charisiadis, G.E. Zervaki, V. Nikolaou, G. Charalambidis, A. Kahnt, G. Rotas, N. Tagmatarchis, and A.G. Coutsolelos,  
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D.K. Perivoliotis and N. Tagmatarchis,  
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47. “Exfoliation and supramolecular functionalization of graphene with an electron donor perylenediimide derivative”,  
L. Martin-Gomis, N. Karousis, F. Fernandez-Lazaro, I. D. Petsalakis, K. Ohkubo, S. Fukuzumi, N. Tagmatarchis, and A. Sastre-Santos,  
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48. “Functionalization of MoS<sub>2</sub> with 1,2-dithiolanes: Toward donor-acceptor nanohybrids for energy conversion”,  
R. Canton-Vitoria, Y. Sayed-Ahmad-Baraza, M. Pelaez-Fernandez, R. Arenal, C. Bittencourt, C. P. Ewels, and N. Tagmatarchis,  
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49. “Fabrication of a “green” and low-cost screen-printed graphene sensor and its application to the determination of caffeine by adsorptive stripping voltammetry”,  
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50. “Design and development of multi-walled carbon nanotube-liposome drug delivery platforms”,  
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53. “Axially assembled photosynthetic antenna-reaction center mimics composed of boron dipyrromethenes, aluminum porphyrin and fullerene derivatives”,  
A. Bagaki, H.B. Gobeze, G. Charalambidis, A. Charisiadis, C. Stangel, V. Nikolaou, A. Stergiou, N. Tagmatarchis, F. D’Souza, and A.G. Coutsolelos,  
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55. “Considerations for spectroscopy of liquid-exfoliated 2D materials: Emerging photoluminescence of *N*-methyl-2-pyrrolidone”,

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1. “Nonstationary states and the many-electron problem”,  
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## 3. Book Chapters

1. “Thermal analysis of liposomal formulation as element to evaluate their effectiveness as drug and vaccine delivery systems”,  
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2. “Investigations of complex polymer-based nanoassemblies with small angle neutron scattering”,  
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#### **4. Patents**

1. "Reference and calibration grid for improved real time detection of biological entities in microscopy diagnostic techniques",

C. Riziotis, E. Tsiambas

Hellenic Industrial Property Organization, Awarded Patent No#:1008931.

2. "Reference and calibration grid for medical diagnostic microscopy",

C. Riziotis, E. Tsiambas,

International PCT Patent Application, Patent Pending. PCT/GR2016/000032, WO2017/009673.

#### **5. Dissertations**

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

1. "Exfoliation of graphite and chemical functionalization of graphene and related carbon nanoforms, with substituted (ter)thiophene derivatives and other chromophores for energy conversion",

A. Stergiou,

Supervisor: Dr. N. Tagmatarchis; Department of Chemistry, University of Crete (2017).

2. "Mixed modifier effect in alkaline earth metaphosphate glasses",

K. Griebenow,

Supervisors: Prof. L. Wondraczek (Friedrich-Schiller-Universität, Jena, Germany) and Dr. E.I. Kamitsos (TPCI/NHRF); Otto-Schott-Institut for Materials Research, Friedrich-Schiller-Universität, Jena, Germany (11/2017).

3. “Properties and structure of archaeological glasses”,  
E. Palamara,  
Supervisors: Prof. N. Zacharias (University of Peloponnese) and Dr. E.I. Kamitsos (TPCI/NHRF);  
Department of History, Archaeology and Cultural Resources Management, University of  
Peloponnese (11/2017).

**b. MSc theses**

1. “Synthesis and study of hybrid perovskites”,  
N.M. Ganotopoulos,  
Supervisor: Dr. G.A. Mousdis; Department of Materials Science and Engineering, University of  
Ioannina (2017).

<b>6. Conference Presentations</b>
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1. “Nonstationary states and the many-electron problem”,  
C.A. Nicolaidis,  
13<sup>th</sup> Int’l Conference of Computational Methods in Sciences and Engineering (ICCMSE),  
Thessaloniki, Greece; April 21-25, 2017(Invited Honorary Lecture).

2. “Approximating the many-electron problem with functionals of the one-body reduced  
density matrix”,  
N.N. Lathiotakis,  
13<sup>th</sup> Int’l Conference of Computational Methods in Sciences and Engineering (ICCMSE),  
Thessaloniki, Greece; April 21-25, 2017 (invited talk).

3. “Effective Hamiltonians in RDMFT and single particle properties”,  
N.N. Lathiotakis,  
CECAM International Workshop: 'New challenges in Reduced Density Matrix Functional  
Theory: Symmetries, time-evolution and entanglement',  
Lausanne, Switzerland; September 26-29, 2017 (invited talk).

4. “Effective potentials to minimise the total energy functional in DFT and RDMFT”,  
N. Gidopoulos\*, N.N. Lathiotakis,  
CECAM International Workshop: 'New challenges in Reduced Density Matrix Functional  
Theory: Symmetries, time-evolution and entanglement',  
Lausanne, Switzerland; September 26-29, 2017 (invited talk).

5. “Extending graphene force fields for the accurate description of out-of-plane distortions”,  
Z.G. Fthenakis, G. Chatzidakis, G. Kalosakas\*, C. Galiotis, K. Papagelis, N. N. Lathiotakis,  
Graphene Week 2017, Athens, Greece; September 25-29, 2017 (poster).

6. “Predicting spectroscopic parameters in molecular logic gates”,  
D. Tzeli,

COST EUSPEC MP1306: Modern Tools for Spectroscopy on Advanced Materials, Athens, Greece; February 13-14, 2017 (invited talk).

7. “Low alkaline borosilicate glasses with different thermal history - a multi spectroscopic study of preferential bonding, phase-separation and dopant site”,  
D. Möncke\*, D. Palles, G. Tricot, D. Ehrt, and E. I. Kamitsos,  
Dynamics of glass-forming liquids: will theory and experiment ever meet? Carlsberg Academy, Copenhagen, Denmark; April 5-7, 2017 (poster).

8. “Modification of silicophosphate glass composition, structure and properties via melting conditions”,  
N. Sawangboon\*, A. Nizamutdinava, D. Möncke, C. Bocker, E. Meechoowas, K. Tapasa, L. Wondraczek, E.I. Kamitsos, L. van Wüllen, and D.S. Brauer,  
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9. “From preferential bonding to phase separation in low alkaline borosilicate glasses”,  
D. Möncke\*, G. Tricot, D. Ehrt, and E.I. Kamitsos,  
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10. “Properties and structure of boro-tellurite and alumino-tellurite glasses”,  
N.S. Tagiara\*, E. Moayedi, A. Kyritsis, L. Wondraczek, and E.I. Kamitsos,  
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11. “Thermal-electric-field poling in bioactive sodium-calcium phospho-silicate glass: Second harmonic generation and related near-surface structural rearrangements”,  
D. Palles\*, M. Dussauze, V. Rodriguez, C.R. Mariappan, B. Roling, and E.I. Kamitsos,  
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12. “Mixed glass former effect in ultra-fast-quenched lithium borophosphate glasses by infrared spectroscopy”,  
D. Palles\*, M.B. Ragueneau, G. Silly, M. Ribes, G. Tricot, A. Pradel, and E.I. Kamitsos,  
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13. “Spectroscopic study of the role of alkaline earth oxides in mixed borate glasses - site basicity, polarizability and glass structure”,  
H. Elkholy\*, H. Othman, D. Palles, D. de Ligny, E.I. Kamitsos, and D. Möncke,  
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15. “Fluorine evaporation and structural variations in fluoride-phosphate glasses”,  
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16. “Influence of aluminium content on structure and properties of silicophosphate glasses”,  
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17. “Properties and structure of tellurite glasses”,  
E.I. Kamitsos,  
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18. “Poly(vinyl benzyl trimethylammonium chloride) based polyplexes for siRNA delivery”,  
B. Lou, G. Mountrichas, W. E. Hennink, and S. Pispas\*,  
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19. “Chimeric lipid/block copolymer nanosystems as drug delivery platforms: Physicochemical and biocompatibility evaluation”,  
N. Pippa\*, D. Stellas, A. Skandalis, S. Pispas, and C. Demetzos,  
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20. “Self-Assembly of chimeric systems composed of HSPC and pH-sensitive PDMAEMA-b-PLMA copolymers”,  
N. Naziris\*, N. Pippa, V. Chrysostomou, S. Pispas, C. Demetzos, M. Libera, and B. Trzebicka,  
28th Annual Conference of the European Society for Biomaterials (ESB2017), Athens, Greece;  
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21. “QP(DMAEMA-b-PLMA-b-POEGMA) triblock terpolymers as gene delivery vectors”,  
A. Skandalis\* and S. Pispas,  
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September 4-8, 2017 (poster).
22. “Amphiphilic QP(DMAEMA-co-LMA)-b-POEGMA block copolymers as gene vectors”,

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September 4-8, 2017 (poster).

23. “Novel PNIPAM-b-POEGA amphiphilic block copolymers for drug delivery”,  
D. Giaouzi\* and S. Pispas,  
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24. “Ultrasound as potential ‘INSTRUCTOR’ of protein crystallisation”,  
A. Derpogolian, A. Papagiannopoulos, S. Pispas, P. Zoumpoulakis, G. Heropoulos, and E. D.  
Chrysina\*,  
Instruct Biennial Structural Biology Conference, Brno, Czech Republic; May 24-26, 2017 (poster).

25. “PDMAEMA-b-PLMA-b-POEGMA triblock terpolymers: Synthesis, quaternization and  
complexation with DNA”,  
A. Skandalis\* and S. Pispas,  
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Thessaloniki, Greece; September 17-22, 2017 (poster).

26. “Tunable wettability of thin polymer films on microstructured silicon surfaces”,  
M. Kanidi\*, A. Papagiannopoulos, A. Skandalis, S. Pispas, and M. Kandyla,  
European Congress and Exhibition on Advanced Materials and Processes (EUROMAT 2017),  
Thessaloniki, Greece; September 17-22, 2017 (poster).

27. “Design, preparation and evaluation of chimeric pH-sensitive liposomes incorporating  
dimethoxycurcumin”,  
M. Chountoulesi\*, N. Naziris, N. Pippa, A. Meristoudi, S. Pispas, and C. Demetzos,  
3<sup>rd</sup> International Congress of the Greek Local Chapter of the Controlled Release Society (CRS),  
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28. “Thermal analysis and evaluation of liposomal systems and classic solid-state  
pharmaceutical excipients with furosemide”,  
A. Kyrili\*, A. Siamidi, N. Pippa, S. Pispas, C. Demetzos, V. Karalis, and M. Vlachou,  
3<sup>rd</sup> International Congress of the Greek Local Chapter of the Controlled Release Society (CRS),  
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29. “The contribution of amphiphilic and pH-sensitive diblock copolymers in the development  
of functionalized drug delivery nanosystems”,  
N. Naziris\*, N. Pippa, V. Chrysostomou, S. Pispas, C. Demetzos, M. Libera, and B. Trzebicka,  
3<sup>rd</sup> International Congress of the Greek Local Chapter of the Controlled Release Society (CRS),  
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30. “Thermo-responsive chimeric liposomes as innovative drug nanocarriers”,  
A. Tzani\*, N. Naziris, N. Pippa, A. Meristoudi, S. Pispas, and C. Demetzos,

3<sup>rd</sup> International Congress of the Greek Local Chapter of the Controlled Release Society (CRS), Athens, Greece; June 19-20, 2017 (poster).

31. “Mixed lipid/block copolymer nanovesicles for loading and controlled release of ibuprofen”, N. Pippa\*, D. Stellas, A. Skandalis, S. Pispas, and C. Demetzos, 5<sup>th</sup> International Phytocosmetics and Phytotherapy Congress, Rio, Patras, Greece; May 14-17, 2017 (poster).

32. “Cryo-TEM studies on the scale-related morphology of block copolymer/lipid chimeric nano-assemblies for pharmaceutical applications”, N. Naziris, N. Pippa\*, V. Chrysostomou, S. Pispas, C. Demetzos, M. Libera, and B. Trzebicka, 6<sup>th</sup> Pharmaceutical Sciences World Congress, Stockholm, Sweden; May 21-24, 2017 (poster).

33. “Block copolymer based protein nanocarriers: Hierarchical self-assembly and responsiveness”, A. Papagiannopoulos\* and S. Pispas, International Conference on Bio-Medical Instrumentation and related Engineering and Physical Sciences (BIOME P 2017), Athens, Greece; October 12-13, 2017 (oral).

34. “Biocompatible polyoxazoline polymers as gene vectors”, E. Vlassi\*, A. Papagiannopoulos, and S. Pispas, International Conference on Bio-Medical Instrumentation and related Engineering and Physical Sciences (BIOME P 2017), Athens, Greece; October 12-13, 2017 (poster).

35. “QPDMAEMA-b-PLMA-b-POEGMA triblock terpolymers as gene delivery vectors”, A. Skandalis\*, and S. Pispas, International Conference on Bio-Medical Instrumentation and related Engineering and Physical Sciences (BIOME P 2017), Athens, Greece; October 12-13, 2017 (oral).

36. “Block copolymers with regulated amphiphilicity as nanocarriers for gene delivery”, M. Kafetzi\* and S. Pispas, International Conference on Bio-Medical Instrumentation and related Engineering and Physical Sciences (BIOME P 2017), Athens, Greece; October 12-13, 2017 (poster).

37. “Thermo-responsive drug nanocarriers based on novel PNIPAM-b-POEGA amphiphilic block copolymers”, D. Giaouzi\* and S. Pispas, International Conference on Bio-Medical Instrumentation and related Engineering and Physical Sciences (BIOME P 2017), Athens, Greece; October 12-13, 2017 (poster).

38. “Physicochemical characterization and basic research principles of mixed/chimeric delivery platforms”, N. Pippa\*, S. Pispas, and C. Demetzos, International Conference on Bio-Medical Instrumentation and related Engineering and Physical Sciences (BIOME P 2017), Athens, Greece; October 12-13, 2017 (oral).



39. “Fluorescent-labeled poly(methacrylic acid) and its interpolyelectrolyte complexes with poly-[3,5-bis(trimethylammoniummethyl)-4-hydroxystyrene iodide]-*block*-poly(ethylene oxide) in aqueous solution”,  
A. Murmiliuk\*, S. K. Filippov, M. Janata, S. Pispas, and M. Štěpánek,  
TUM Kolloid-Tagung and FCS Workshop, Munich, Germany; October 9-12, 2017 (poster).
40. “Poly(N-isopropylacrylamide)s with dodecyl and carboxyl terminal groups in aqueous solution: Influence of electrostatic interactions on thermoresponsive behavior”,  
M. Štěpánek\*, A. Fanova, J. Škvarla, M. Uchman, S. K. Filippov, and S. Pispas,  
31<sup>st</sup> Conference of European Colloid and Interface Society, Madrid, Spain; September 3-8, 2017 (oral).
41. “Chemical functionalization of graphene and layered transition metal dichalcogenides”,  
N. Tagmatarchis,  
XXXVI Biennial Meeting Spanish Royal Society of Chemistry, Barcelona, Spain; June 25-29, 2017 (invited oral).
42. “Functionalization of exfoliated graphene with electron donors”,  
N. Tagmatarchis,  
Towards Reality in Nanoscale Materials IX. Nanoscale Materials for Warfare Agent Detection: Nanoscience for Security, Levi, Finland; February 13-16, 2017 (oral).
43. “Preparation and characterization of poly(3-hexyl thiophene) nanoparticles and graphene oxide composites in water”,  
E. Istif\*, J. Hernandez-Ferrer, N. Tagmatarchis, A. M. Benito, and W. K. Maser,  
Graphene2017, Barcelona, Spain; March 28-31, 2017 (poster).
44. “Carbon meta-tubes through molecular self-assembly”,  
C. Ewels\*, J. Rio, P. Briddon, D. Jacquemin, N. Tagmatarchis, and H.A. Wegner,  
Carbon2017, Melbourne, Australia; July 23-28, 2017 (oral).
45. “Sulfur-doped graphene-supported Pd nanoparticles as novel electrocatalyst for oxygen reduction reaction”,  
D.K. Perivoliotis\* and N. Tagmatarchis,  
NanoteC17 – Carbon Nanoscience and Nanotechnology, Nantes, France; August 30-Sept. 2, 2017 (oral).
46. “Functionalization of graphene with cyanine dyes”,  
R. Canton-Vitoria\*, K. Prousis, T. Calogeropoulou, and N. Tagmatarchis,  
NanoteC17 – Carbon Nanoscience and Nanotechnology, Nantes, France; August 30-Sept.2, 2017 (oral).
47. “Nanoring/fullerene complexation: 1D and 2D networks using covalent and self-assembly process by DFT”,  
J. Rio\*, P. Briddon, N. Tagmatarchis, H. A. Wegner, and C. Ewels,  
NanoteC17 – Carbon Nanoscience and Nanotechnology, Nantes, France; August 30-Sept. 2, 2017 (oral).
48. “Tuning aggregation and charge transfer of poly(3-hexyl thiophene) nanoparticles by graphene oxide”,

- E. Istif\*, J. Hernandez-Ferrer, E. Urriolabeitia, A. Stergiou, N. Tagmatarchis, A. M. Benito, and W. K. Maser,  
NanoteC17 – Carbon Nanoscience and Nanotechnology, Nantes, France; August 30-Sept. 2, 2017 (oral).
49. “Ensembles of metal nanoclusters and graphene for photocatalysis”,  
M. Koklioti\*, T. Skaltsas, A. Stergiou, and N. Tagmatarchis,  
NanoteC17 – Carbon Nanoscience and Nanotechnology, Nantes, France; August 30-Sept. 2, 2017 (oral).
50. “S-doped graphene/MoS<sub>2</sub> hybrid”,  
A. Kagkoura\* and N. Tagmatarchis,  
NanoteC17– Carbon Nanoscience and Nanotechnology, Nantes, France; August 30-Sept. 2, 2017 (poster).
51. “Transitional metal dichalcogenides functionalized with porphyrins for energy conversion”,  
R. Canton-Vitoria\*, C. Stangel, and N. Tagmatarchis,  
HeteroNanoCarb2017, Benasque, Spain; December 11-15, 2017 (oral).
52. “S-doped graphene/MoS<sub>2</sub> hybrids for enhanced electrocatalytic activity”,  
A. Kagkoura\*, D. K. Perivoliotis, and N. Tagmatarchis,  
HeteroNanoCarb2017, Benasque, Spain; December 11-15, 2017 (oral).
53. “Tuning aggregation and charge transfer of P3HT nanoparticles by GO”,  
E. Istif\*, J. H. Fernandez, E. Urriolabeitia, A. Stergiou, N. Tagmatarchis, G. Fratta, M. J. Large, A. Dalton,  
A. M. Benito, and W. K. Maser,  
HeteroNanoCarb2017, Benasque, Spain; December 11-15, 2017 (oral).
54. “Experimental and DFT studies on the functionalization of 2D nanomaterials with pyrene derivatives”,  
Y. Sayed-Ahmad-Baraza, R. Canton-Vitoria, M. Pelaez-Fernandez, B. Anothumakkool, C. Bittencourt, J. Gaubicher, R. Arenal, B. Humbert, N. Tagmatarchis, and C. P. Ewels,  
HeteroNanoCarb2017, Benasque, Spain; December 11-15, 2017 (oral).
55. “Photocatalytic properties of TiO<sub>2</sub> thin films doped with noble metals”,  
G. A. Mousdis\*, G. Petropoulou, Ch. Moslah, M. Ksibi, M. M. Islam, and M. Kandyla,  
TO-BE Spring Meeting 2017, Neumünster Abbey, Luxembourg; April 3-5, 2017 (poster).
56. “Preparation and study of resistivity chemical sensors based on metal oxides with metal nanoparticles as catalysts”,  
G. Petropoulou\*, G.A. Mousdis, M. Kompitsas, and M. Kandyla,  
TO-BE Spring Meeting 2017, Neumünster Abbey, Luxembourg; April 3-5, 2017 (poster).
57. “Fusion of synchronous fluorescence spectra with application to argan oil for adulteration analysis”  
T.D. Stokes\*, F. Mellou, B. Brownfield, J.H. Kalivas, G.A. Mousdis, A. Amine, and C.A. Georgiou,  
Idaho Conference for Undergraduate Research, Boise, USA; July 26-27, 2017 (poster).

58. “Photocatalytic properties of TiO<sub>2</sub> thin films doped with noble metals (Ag, Au, Pd and Pt) for decontamination of water”,  
G. A. Mousdis\*, G. Petropoulou, C. Moslah, M. Ksibi, M. M. Islam, and M. Kandyla,  
Detection CBRN-Nanostructures Materials, NATO Advanced Research Workshop, Kiev, Ukraine;  
August 14-17, 2017 (invited talk).
59. “Photocatalytic properties of TiO<sub>2</sub> thin films doped with noble metals (Ag, Au, Pd and Pt)”  
M. Kandyla, C. Moslah, M. M. Islam, G. Petropoulou\*, G. A. Mousdis, and M. Ksibi,  
European Congress and Exhibition on Advanced Materials and Processes (EUROMAT 2017),  
Thessaloniki, Greece; September 17-22, 2017 (oral).
60. “Cryo-NIR spectroscopic investigation of montmorillonite”,  
C. Tsiantos, V. Gionis\*, and G. D. Chryssikos,  
16<sup>th</sup> International Clay Conference, (ICC 2017), Granada, Spain; July 17-21, 2017 (oral).
61. “Smectite in bentonite: Chemometric prediction of layer charge by NIR spectroscopy”,  
C. Tsiantos, V. Gionis, and G.D. Chryssikos\*,  
16<sup>th</sup> International Clay Conference, (ICC 2017), Granada, Spain; July 17-21, 2017 (oral).
62. “The O-D method applied to an odd system: Surface charge of illite-smectite”,  
A. Kuligiewicz\*, A. Derkowski, J. Środoń, V. Gionis, and G.D. Chryssikos  
16<sup>th</sup> International Clay Conference, (ICC 2017), Granada, Spain; July 17-21, 2017 (oral).
63. “Surface coupling of electric and entropic currents mediates current stability at the nanoscale”,  
A.C. Cefalas\*, V. Gavriil, Z. Kollia, V. V. Semashko, and E. Sarantopoulou,  
EMN meeting, FFSCI-NanoScience/EMN Croatia Meeting, Dubrovnik, Croatia; May 03-07, 2017  
(invited)
64. “Dynamics of 1-D (necklace-like) self-assembled nanostructures of core-shells”,  
E. Sarantopoulou\*, V. Gavriil, Z. Kollia, and A.C. Cefalas,  
EMN meeting, FFSCI-NanoScience/EMN Croatia Meeting, Dubrovnik, Croatia; May 03-07, 2017  
(poster).
65. “Non-functionalized rare-earth fluoride nanoparticles promote tumour growth in vitro”,  
A. Ferraro, M. Pudovkin, V. Gavriil, E. Sarantopoulou\*, P. Zelenikhin, A. Nitzamudinov, Z. Kollia, V.V.  
Semashko, and A.C. Cefalas,  
EMN meeting, FFSCI-NanoScience/EMN Croatia Meeting, Dubrovnik, Croatia; May 03-07, 2017  
(poster).
66. “Biomimetics: The holy grail of life sciences”,  
A.C. Cefalas,  
1<sup>st</sup> Hellenic-Chinese Congress on Health, Athens Meeting, Athens, Greece; 11-14 May 2017 (plenary).
67. “Polymeric surfaces imitate polar –entropic completion in living cells”,  
V. Gavriil,  
1<sup>st</sup> Hellenic-Chinese Congress on Health, Athens Meeting, Athens, Greece; 11-14 May 2017 (invited).

68. “Current stability in amorphous semiconductors correlates with translational symmetries along conductive paths at the nanoscale”,  
A.C. Cefalas,  
16<sup>th</sup> International Scientific School, Materials of Nano-micro Electronics and Fiber Optics: Physical Properties and Applications, Saransk, Mordovia, Russian Federation, 19-22 Sept. 2017 (invited guest lecture).
69. “Non-functionalized fluoride-based nanoparticles increase growth of carcinogenic cells”,  
A. Ferraro, M. Pudovkin, V. Gavriil\*, E. Sarantopoulou, P. Zelenikhin, A. Nizamutdinov, V. Semashko, and A.C. Cefalas.  
14th International Conference on Nanosciences and Nanotechnologies (NN17), Thessaloniki, Greece; July 4-7, 2017 (oral).
70. “Νανοεπιστήμες και πολυπλοκότητα αποκρυπτογραφούν τον δρόμο των βιολογικών επιστημών”,  
Α.Κ. Κεφαλάς,  
2<sup>ο</sup> Θερινό Σχολείο Φυσικής-Αστρονομίας, Αργοστόλι, Κεφαλονιά, 25-30, Ιουνίου 2017 (προσκεκλημένη ομιλία).
71. “Anthracene-containing electrospun fibers for ammonia gas sensing”,  
K. Christodoulou, A. Petropoulou, C. Polydorou, T. Krasia Christoforou, and C. Riziotis,  
Electrospinning Conference: From Design and Processing to Advanced Nanomaterials and Applications, Nicosia, Cyprus; 19-21 April 2017 (oral).

## **7. Popular Conference Presentations**

1. “Laser technology in physics and astrophysics”,  
M. Kandyla,  
Harvard Club of Greece scientific lectures, Athens, Greece; December 4, 2017 (invited presentation).
- “Ηλιος πηγή ενέργειας και καθαριότητας: Φωτοβολταϊκά-φωτοδιάσπαση νερού, φωτοκαταλυτικός καθαρισμός αέρα και νερού”,  
Γ.Α. Μούσδης,  
Η Φυσική Μαγεία, ΤΕΙ Αθηνών; 15-17 Δεκεμβρίου 2017 (προσκεκλημένη ομιλία).

## **8. Invited Talks**

1. “Carbon-based nanostructured materials for energy conversion”,  
N. Tagmatarchis,  
National and Kapodistrian University of Athens, Athens, Greece; March 9, 2017 (invited lecture).