

TPCI (IOPX) 2024

1. Publications in Refereed Journals

1. “Thermoluminescence characteristics of BeO doped with Si, Mg, and Cr: Density functional theory calculations and one trap - one recombination center model simulations”,
E. Tsoutsoumanos, D. Tzeli, A. Avramopoulos, N. Laskaris, P. G. Konstantinidis, E. Travlou, N. Korakis, N. N. Lathiotakis, G. Kitis, G. S. Polymeris, T. Karakasidis, *Physica B: Condens. Matter* **2024**, 697, 416700.
DOI: [10.1016/j.physb.2024.416700](https://doi.org/10.1016/j.physb.2024.416700)
2. “Permeability of gas molecules through sub-nanometer nitrogen-terminated porous graphene membranes: A DFT study”,
Z. G. Fthenakis, I. D. Petsalakis, N. N. Lathiotakis, *J. Membr. Sci.* **2024**, 713, 123329.
DOI: [10.1016/j.memsci.2024.123329](https://doi.org/10.1016/j.memsci.2024.123329)
3. “Molecular logic gates based on ferrocene-containing compounds”,
C. E. Tzeliou, K.-P. Zois, D. Tzeli, *Inorganics* **2024**, 12, 106.
DOI: [10.3390/inorganics12040106](https://doi.org/10.3390/inorganics12040106)
4. “Computational and spectroscopic studies on the formation of halogen-bonded complexes between tertiary amines and CBr₄ and application in the light-mediated amino acid coupling”,
E. A. Routsis, C. Mantzourani, M. Rrapi, O. G. Mountanea, M. G. Kokotou, D. Tzeli, C. G. Kokotos, G. Kokotos, *ChemPlusChem* **2024**, 89, e202400019.
DOI: [10.1002/cplu.202400019](https://doi.org/10.1002/cplu.202400019)
5. “Synthesis of thiazolidin-4-ones derivatives, 2D-NMR spectra, theoretical isomerization reaction paths and discovery of potential biological targets”,
N. Georgiou, D. Karta, F. Merzel, D. Tzeli, S. Vassiliou, T. Mavromoustakos, *Molecules* **2024**, 29, 2458.
DOI: [10.3390/molecules29112458](https://doi.org/10.3390/molecules29112458)
6. “Quadruple bonds in MoC: Accurate calculations and precise measurement of the dissociation energy of low-lying states of MoC”,
A. Androutsopoulos, D. Tzeli, K. Tomchak, M. D. Morse, *J. Chem. Phys.* **2024**, 160, 234304.
DOI: [10.1063/5.0211422](https://doi.org/10.1063/5.0211422)
7. “Density functional theory and enzyme studies support interactions between angiotensin receptor blockers and angiotensin converting enzyme-2: Relevance to coronavirus 2019”,
V. Apostolopoulos, N. Georgiou, D. Tzeli, T. Mavromoustakos, G. J. Moore, K. Kelaidonis, M.-T. Matsoukas, S. Tsiodras, J. Swiderski, L. K. Gadanec, A. Zulli, C. T. Chasapis, J. M. Matsoukas, *Bioorg. Chem.* **2024**, 150, 107602.
DOI: [10.1016/j.bioorg.2024.107602](https://doi.org/10.1016/j.bioorg.2024.107602)
8. “Docking, MD simulations, and DFT calculations: Assessing W254's function and sartan binding in furin”,
N. Georgiou, T. Mavromoustakos, D. Tzeli,

- Curr. Issues Mol. Biol.* **2024**, *46*, 8226.
DOI: [10.3390/cimb46080486](https://doi.org/10.3390/cimb46080486)
9. “Copper-catalyzed α -alkylation of aryl acetonitriles with benzyl alcohol”,
M. Danopoulou, L. P. Zorba, A. Karantoni, D. Tzeli, G. C. Vougioukalakis,
J. Org. Chem. **2024**, *89*, 14242.
DOI: [10.1021/acs.joc.4c01662](https://doi.org/10.1021/acs.joc.4c01662)
 10. “Electron donor-acceptor complex-assisted photochemical conversion of O-2-nitrobenzyl protected hydroxamates to amides”,
O. G. Mountanea, E. A. Routsis, D. Tzeli, C. G. Kokotos, G. Kokotos,
Chem. Eur. J. **2024**, e202402984.
DOI: [10.1002/chem.202402984](https://doi.org/10.1002/chem.202402984)
 11. “Exploring hypertension: The role of AT1 receptors, sartans, and lipid bilayers”,
N. Georgiou, E. Chontzopoulou, E. A. Routsis, I. G. Stavarakaki, E. Petsas, N. Zoupanou, M. G. Kakava, D. Tzeli, T. Mavromoustakos, S. Kiriakidi,
ACS Omega **2024**, *9*, 44876.
DOI: [10.1021/acsomega.4c06351](https://doi.org/10.1021/acsomega.4c06351)
 12. “The importance of electron correlation on the geometry and electronic structure of [2Fe-2S] systems: A benchmark study of the $[\text{Fe}_2\text{S}_2(\text{SCH}_3)_4]^{2-,3-,4-}$, $[\text{Fe}_2\text{S}_2(\text{SCys})_4]^{2-}$, $[\text{Fe}_2\text{S}_2(\text{S-p-tol})_4]^{2-}$, and $[\text{Fe}_2\text{S}_2(\text{S-o-xy})_4]^{2-}$ complexes”,
D. Tzeli, M. Matoušek, J. Brabec, K. Pernal, P. Golub, L. Veis, S. Raugei, S. S. Xantheas,
J. Chem. Theory Comput. **2024**, *20*, 10406.
DOI: [10.1021/acs.jctc.4c00781](https://doi.org/10.1021/acs.jctc.4c00781)
 13. “Critical look at density functional theory in chemistry: Untangling its strengths and weaknesses”,
K. P. Zois, D. Tzeli,
Atoms **2024**, *12*, 65.
DOI: [10.3390/atoms12120065](https://doi.org/10.3390/atoms12120065)
 14. “Pillared graphene oxide frameworks for the adsorption and separation of polar protic and aprotic liquid solvents: The cases of pure water, methanol, dimethyl sulfoxide, and dimethyl sulfoxide–water mixtures”,
I. Skarmoutsos, E. N. Koukaras, E. Klontzas,
J. Chem. Phys. **2024**, *160*, 184701.
DOI: <https://doi.org/10.1063/5.0203165>
 15. “A DFT computational study of Type-I clathrates $\text{A}_8\text{Sn}_{46-x}$ (A = Cs or NH_4 , x = 0 or 2)”,
N. Kelaidis, E. Klontzas, A. Kaltzoglou,
Materials **2024**, *17*, 4595.
DOI: <https://doi.org/10.3390/ma17184595>
 16. “Quasinormal mode theory for multiresonant metasurfaces with superwavelength periodicity involving two-dimensional materials”,
T. Christopoulos, G. Nousios, E. E. Kriezis, O. Tsilipakos,
Phys. Rev. B **2024**, *110*, 245407.
DOI: [10.1103/PhysRevB.110.245407](https://doi.org/10.1103/PhysRevB.110.245407)

17. "Shaping the profile and dispersion of waves guided between spatiotemporally dispersive, electrically and magnetically conductive metasurface boundaries", O. Tsilipakos, T. Koschny, *IEEE Trans. Antennas Propag.* **2024**, 72(8), 6472.
DOI: [10.1109/TAP.2024.3420443](https://doi.org/10.1109/TAP.2024.3420443)
18. "Cactus-like metamaterial structures for electromagnetically induced transparency at THz frequencies", S. Papamakarios, O. Tsilipakos, I. Katsantonis, A. D. Koulouklidis, M. Manousidaki, G. Zyla, C. Daskalaki, S. Tzortzakis, M. Kafesaki, M. Farsari, *ACS Photonics* **2024**, 12, 87.
DOI: [10.1021/acsp Photonics.4c01179](https://doi.org/10.1021/acsp Photonics.4c01179)
19. "Theoretical analysis of integrated nanophotonic Q-Switched laser based on gain and saturable absorption by two-dimensional materials", G. Nousios, T. Christopoulos, O. Tsilipakos, E. E. Kriezis, *Adv. Photonics Res.* **2024**, 5(6), 2300249.
DOI: [10.1002/adpr.202300249](https://doi.org/10.1002/adpr.202300249)
20. "Impact of hybrid electromagnetic surface modes on the formation of low spatial frequency LIPSS: A universal approach", G. Perrakis, O. Tsilipakos, G. D. Tsibidis, E. Stratakis, *Laser Photonics Rev.* **2024**, 18, 2301090.
DOI: [10.1002/lpor.202301090](https://doi.org/10.1002/lpor.202301090)
21. "Temporal coupled-mode theory in nonlinear resonant photonics: From basic principles to contemporary systems with 2D materials, dispersion, loss, and gain", T. Christopoulos, O. Tsilipakos, E. E. Kriezis, *J. Appl. Phys.* **2024**, 136, 011101.
DOI: [10.1063/5.0190631](https://doi.org/10.1063/5.0190631)
22. "Engraved complementary toroidal metasurfaces for potential energy harvesting applications in microwave band", G. Fanourakis, P. Marraki, A. Theodosi, O. Tsilipakos, Z. Viskadourakis, G. Kenanakis, *J. Appl. Phys.* **2024**, 135, 213101.
DOI: [10.1063/5.0190763](https://doi.org/10.1063/5.0190763)
23. "Engraved split-ring resonators as potential microwave sensors for olive oil quality control", Z. Viskadourakis, A. Theodosi, K. Katsara, M. Sevastaki, G. Fanourakis, O. Tsilipakos, V. M. Papadakis, G. Kenanakis, *ACS Appl. Electronic Mater.* **2024**, 6, 3846.
DOI: [10.1021/acsaelm.4c00430](https://doi.org/10.1021/acsaelm.4c00430)
24. "Varying the degree of oxidation of graphite: Effect of the oxidation time and the oxidant mass", I. Karnis, F. Krasanakis, L. Sygellou, A. N. Rissanou, K. Karatasos, K. Chrissopoulou, *Phys. Chem. Chem. Phys.* **2024**, 26, 10054.
DOI: [10.1039/D3CP05268K](https://doi.org/10.1039/D3CP05268K)
25. "Therapeutic stapled peptides: efficacy and molecular targets", Y. Li, M. Wu, Y. Fu, J. Xue, F. Yuan, T. Qu, A. N. Rissanou, Y. Wang, X. Li, H. Hu, *Pharmacol. Res.* **2024**, 203, 107137.

- DOI: [10.1016/j.phrs.2024.107137](https://doi.org/10.1016/j.phrs.2024.107137)
26. “Exploring the origins of association of poly(acrylic acid) polyelectrolyte with Lysozyme in aqueous environment through molecular simulations and experiments”, M. Arnittali, S. N. Tegopoulos, A. Kyritsis, V. Harmandaris, A. Papagiannopoulos, A. N. Rissanou, *Polymers* **2024**, *16*(18), 2565.
DOI: [10.3390/polym16182565](https://doi.org/10.3390/polym16182565)
 27. “Interfacial interactions between DNA and polysaccharide-coated magnetic nanoparticles: Insight from simulations and experiments”, M. Psarrou, M. Vamvakaki, K. Karatasos, A. N. Rissanou, *Colloids Surf. B: Biointerfaces* **2024**, *246*, 114386.
DOI: [10.1016/j.colsurfb.2024.114386](https://doi.org/10.1016/j.colsurfb.2024.114386)
 28. “Thermal relaxation in Janus transition metal dichalcogenide bilayers”, A. P. Sgouros, F. I. Michos, M. M. Sigalas, G. Kalosakas, *Materials* **2024**, *17*, 4200.
DOI: [10.3390/ma17174200](https://doi.org/10.3390/ma17174200)
 29. “Chalcogen doping in SnO₂: A DFT investigation of optical and electronic properties for enhanced photocatalytic applications”, N. Kelaidis, Y. Panayiotatos, A. Chroneos, *Materials* **2024**, *17*, 3910.
DOI: [10.3390/ma17163910](https://doi.org/10.3390/ma17163910)
 30. “Managing photoinduced electronic interactions on a molybdenum disulfide/diblock copolymer/anionic porphyrin nanoensemble”, G. Karantanais, M. P. Minadakis, V. Chrysostomou, H. J. Ojeda-Galvan, M. Quintana, S. Pispas, N. Tagmatarchis, *Colloids Surf. A: Physicochem. Engin. Aspects* **2024**, *682*, 132755.
DOI: [10.1016/j.colsurfa.2023.132755](https://doi.org/10.1016/j.colsurfa.2023.132755)
 31. “Covalent post-functionalization of Kevlar with graphene-oxide-melamine for UV-light protection and antibacterial properties”, R. Canton-Vitoria, A. Kagkoura, E. Tonis, N. Heliopoulos, A. Galeou, A. Prombona, K. Stamatakis, N. Boukos, D. Siamidis, G. C. Vougioukalakis, N. Tagmatarchis, *Mater. Today Chem.* **2024**, *37*, 102041.
DOI: [10.1016/j.mtchem.2024.102041](https://doi.org/10.1016/j.mtchem.2024.102041)
 32. “Sustainable photocatalytic acylation of transition metal dichalcogenides with atom economy”, I. K. Sideri, R. Canton-Vitoria, H. J. Ojeda-Galvan, M. Quintana, N. Tagmatarchis, *Small* **2024**, *20*, 2311045.
DOI: [10.1002/sml.202311045](https://doi.org/10.1002/sml.202311045)
 33. “Hybrid nanoparticles from random polyelectrolytes and carbon dots”, S. Theodoropoulou, A. Vardaxi, A. Kagkoura, N. Tagmatarchis, S. Pispas, *Materials* **2024**, *17*, 2462.
DOI: [10.3390/ma17102462](https://doi.org/10.3390/ma17102462)
 34. “Tether-directed regioselective synthesis of new *cis*-2' azafullerene bisadducts”, K. Asad, R. Canton-Vitoria, A. Kourtellaris, N. Chronakis, N. Tagmatarchis, *Carbon* **2024**, *228*, 119377.
DOI: [10.1016/j.carbon.2024.119377](https://doi.org/10.1016/j.carbon.2024.119377)

35. "Complexation of poly(methacrylic acid) star polyelectrolytes with lysozyme",
D. Fotaki, M. Karayianni, A. Skandalis, E. Haladjova, A. Forys, B. Trzebicka, S. Rangelov, S. Pispas,
Eur. Polym. J. **2024**, *206*, 112773.
DOI: [10.1016/j.eurpolymj.2024.112773](https://doi.org/10.1016/j.eurpolymj.2024.112773)
36. "Fabricating hybrid DSPC:DOPC:P(OEGMA-co-LMA) structures: Self-assembly as the milestone of their performance",
E. Triantafyllopoulou, D. Selianitis, A. Balafouti, N. Lagopati, M. Gazouli, G. Valsami, S. Pispas, N. Pippa,
Colloids Surf. A: Physicochem. Engin. Aspects **2024**, *684*, 133015.
DOI: [10.1016/j.colsurfa.2023.133015](https://doi.org/10.1016/j.colsurfa.2023.133015)
37. "A sustainable bioprocess to produce bacterial cellulose (BC) using waste streams from wine distilleries and the biodiesel industry: evaluation of BC for adsorption of phenolic compounds, dyes and metals",
E. Tsouko, S. Pilafidis, K. Kourmentza, H. I. Gomes, G. Sarris, P. Koralli, A. Papagiannopoulos, S. Pispas, D. Sarris,
Biotechnol. Biofuels Bioproducts **2024**, *17*, 40.
DOI: [10.1186/s13068-024-02488-3](https://doi.org/10.1186/s13068-024-02488-3)
38. "Evaluation of alternative sugar beet pulp refining strategies for efficient pectin extraction and poly(3-hydroxybutyrate) production",
M. Sarafidou, O. Vittou, O. Psaki, K. Filippi, E. Tsouko, A. Vardaxi, S. Pispas, A. Koutinas, E. Stylianou,
Biochem. Eng. J. **2024**, *208*, 109368.
DOI: [10.1016/j.bej.2024.109368](https://doi.org/10.1016/j.bej.2024.109368)
39. "Efficient pectin recovery from sugar beet pulp as effective bio-based coating for Pacific white shrimp preservation",
S. Tsokri, M. Sarafidou, E. Tsouko, E. Athanasopoulou, A. Vardaxi, S. Pispas, T. Tsironi, A. Koutinas,
Int. J. Biol. Macromolecules **2024**, *282*, 136754.
DOI: [10.1016/j.ijbiomac.2024.136754](https://doi.org/10.1016/j.ijbiomac.2024.136754)
40. "Fabricating polymer/surfactant/cyclodextrin hybrid particles for possible nose-to-brain delivery of ropinirole hydrochloride: in vitro and ex vivo evaluation",
E.-M. Saitani, N. Pippa, D. R. Perinelli, A. Forys, P. Papakyriakopoulou, N. Lagopati, G. Bonacucina, B. Trzebicka, M. Gazouli, S. Pispas, G. Valsami,
Int. J. Mol. Sci. **2024**, *25*, 1162.
DOI: [10.3390/ijms25021162](https://doi.org/10.3390/ijms25021162)
41. "Chemotherapeutic drug delivery nanoplatfrom development: from physicochemical to preclinical evaluation",
O. Kontogiannis, D. Selianitis, K. Palikaras, N. Pippa, S. Pispas, E. Efstathopoulos, M. Gazouli,
Int. J. Mol. Sci. **2024**, *25*, 11520.
DOI: [10.3390/ijms252111520](https://doi.org/10.3390/ijms252111520)
42. "Ionic strength and anion-specificity effects on the interfacial behavior of double hydrophilic block copolymer PNIPAM-b-POEGA",
W. Pan, G. Wen, D. Giaouzi, S. Pispas, H. Chen,
J. Appl. Polym. Sci. **2024**, *141*, e55462.
DOI: [10.1002/app.55462](https://doi.org/10.1002/app.55462)

43. "PEO-b-PCL/Tween 80/cyclodextrin systems: from bioinspired fabrication to possible nasal administration of ropinirole hydrochloride",
E.-M. Saitani, N. Pippa, D. R. Perinelli, A. Forys, P. Papakyriakopoulou, N. Lagopati, G. Bonacucina, B. Trzebicka, M. Gazouli, S. Pispas, G. Valsami,
J. Mater. Chem. B **2024**, *12*, 6587.
DOI: [10.1039/d4tb00489b](https://doi.org/10.1039/d4tb00489b)
44. "Closely packed core-shell micelle structures of double hydrophilic miktoarm star copolymers at the air-water interface",
Y. Zhang, G. Wen, D. Giaouzi, S. Pispas, J. Li,
Langmuir **2024**, *40*, 8284.
DOI: [10.1021/acs.langmuir.4c00437](https://doi.org/10.1021/acs.langmuir.4c00437)
45. "Deciphering the lipid-random copolymer interactions and encoding their properties to design a hybrid system",
E. Triantafyllopoulou, A. Forys, D. R. Perinelli, A. Balafouti, M. Karayianni, B. Trzebicka, G. Bonacucina, G. Valsami, N. Pippa, S. Pispas,
Langmuir **2024**, *40*, 11936.
DOI: [10.1021/acs.langmuir.4c00278](https://doi.org/10.1021/acs.langmuir.4c00278)
46. "Using RAFT polymerization methodologies to create branched and nanogel-type copolymers",
A. Skandalis, T. Sentoukas, D. Selianitis, A. Balafouti, S. Pispas,
Materials **2024**, *17*, 1947.
DOI: [10.3390/ma17091947](https://doi.org/10.3390/ma17091947)
47. "Dense monolayer network structures of double hydrophilic hyperbranched copolymers at the air/water interface",
Y. Tu, Wen, D. Selianitis, S. Pispas,
Macromol. Rapid Commun. **2024**, *45*, 2300548.
DOI: [10.1002/marc.202300548](https://doi.org/10.1002/marc.202300548)
48. "Co-assembled nanosystems exhibiting intrinsic fluorescence by complexation of amino terpolymer and its quaternized analog with aggregation-induced emission (AIE) dye",
M. A. Pantelaiou, D. Vagenas, E. S. Karvelis, G. Rotas, S. Pispas,
Nanomaterials **2024**, *14*, 1631.
DOI: [10.3390/nano14201631](https://doi.org/10.3390/nano14201631)
49. "Zein/polysaccharide nanoscale electrostatic complexes: preparation, drug encapsulation and antibacterial properties",
E. D. Lotos, M. Mihai, A. L. Vasiliu, I. Rosca, A. Mija, B. C. Simionescu, S. Pispas,
Nanomaterials **2024**, *14*, 197.
DOI: [10.3390/nano14020197](https://doi.org/10.3390/nano14020197)
50. "Cyclodextrins-block copolymer drug delivery systems: From design and development to preclinical studies",
E. M. Saitani, D. Selianitis, N. Pippa, S. Pispas, G. Valsami,
Nanotechnology Reviews **2024**, *13*, 20230204.
DOI: [10.1515/ntrev-2023-0204](https://doi.org/10.1515/ntrev-2023-0204)
51. "Nanogel-type nano-objects from a random polyelectrolyte through intermolecular cross-linking",
A. Vardaxi, A. Forys, B. Trzebicka, S. Pispas,
Nano-Structures & Nano-Objects **2024**, *38*, 101122.

DOI: [10.1016/j.nanoso.2024.101122](https://doi.org/10.1016/j.nanoso.2024.101122)

52. “PDEGMA-b-PDMAEMA-b-PLMA triblock terpolymers and their cationic analogues: synthesis, stimuli responsive self-assembly and micelleplex formation”,
D. Giaouzi, S. Pispas,
Polym. Chem. **2024**, *15*, 1536.
DOI: [10.1039/d4py00144c](https://doi.org/10.1039/d4py00144c)
53. “Association of thermoresponsive diblock copolymer PDEGMA-b-PDIPAEMA in aqueous solutions: the influence of terminal groups”,
A. Skorna, D. Selianitis, S. Pispas, M. Stepanek,
Polymers **2024**, *16*, 2102.
DOI: [10.3390/polym16152102](https://doi.org/10.3390/polym16152102)
54. “Double hydrophilic hyperbranched copolymer-based lipomer nanoparticles: copolymer synthesis and co-assembly studies”,
A. M. Gerardos, S. Pispas,
Polymers **2024**, *16*, 3129.
DOI: [10.3390/polym16223129](https://doi.org/10.3390/polym16223129)
55. “Structure-based evaluation of hybrid lipid–polymer nanoparticles: the role of the polymeric guest”,
M. Chountoulesi, N. Pippa, A. Forys, B. Trzebicka, S. Pispas,
Polymers **2024**, *16*, 290.
DOI: [10.3390/polym16020290](https://doi.org/10.3390/polym16020290)
56. “Block and statistical copolymers of methacrylate monomers with dimethylamino and diisopropylamino groups on the side chains: Synthesis, chemical modification and self-assembly in aqueous media”,
K. Makri, S. Pispas,
Polymers **2024**, *16*, 1284.
DOI: [10.3390/polym16091284](https://doi.org/10.3390/polym16091284)
57. “Synthesis of thermoresponsive chitosan-graft-poly(N-isopropylacrylamide) hybrid copolymer and its complexation with DNA”,
M.-M. Zaharia, F. Bucatariu, M. Karayianni, E. D. Lotos, M. Mihai, S. Pispas,
Polymers **2024**, *16*, 1315.
DOI: [10.3390/polym16101315](https://doi.org/10.3390/polym16101315)
58. “Four-component statistical copolymers by RAFT polymerization”,
D. Vagenas, S. Pispas,
Polymers **2024**, *16*, 1321.
DOI: [10.3390/polym16101321](https://doi.org/10.3390/polym16101321)
59. “Physicochemical and spectroscopic characterization of glycogen and glycogen phosphorylase b complexes”,
P. Karakousi, M. Karayianni, E. D. Chrysina, S. Pispas,
Polysaccharides **2024**, *5*, 225.
DOI: [10.3390/polysaccharides5030017](https://doi.org/10.3390/polysaccharides5030017)
60. “Antagonistic manipulation of ER-protein quality control between biotrophic pathogenic fungi and host induced defense”,
T. Margaritopoulou, K. Kotsaridis, M. Samiotaki, S. Nastos, M. Maratos, I. Zoidakis, D. Tsiriva, S. Pispas, E. Markellou,
Plant Stress **2024**, *14*, 100693.

DOI: [10.1016/j.stress.2024.100693](https://doi.org/10.1016/j.stress.2024.100693)

61. “Effects of subphase pH and temperature on the interfacial behavior of double hydrophilic diblock copolymer PDEGMA-b-PDIPAEMA”,
J. Li, G. Wen, D. Selianitis, S. Pispas, Y. Zhang, H. Li,
J. Appl. Polym. Sci. **2024**, *141*, e54898.
DOI: [10.1002/app.54898](https://doi.org/10.1002/app.54898)
62. “Nanophase segregation drives heterogeneous dynamics in amphiphilic PLMA-b-POEGMA block-copolymers with densely grafted architecture”,
A. Pipertzis, A. Skandalis, S. Pispas, G. Floudas,
Macromol. Chem. Phys. **2024**, *225*, 2400180.
DOI: [10.1002/macp.202400180](https://doi.org/10.1002/macp.202400180)
63. “Hydroxypropyl methacrylate stars as versatile carriers of therapeutic agents”,
T. Sentoukas, A. Forys, L. Otulakowski, A. Marcinkowski, S. Pispas, B. Trzebicka,
J. Appl. Polym. Sci. **2024**, *141*, e55305.
DOI: [10.1002/app.55305](https://doi.org/10.1002/app.55305)
64. “Molecular dynamics and self-assembly in double hydrophilic block and random copolymers”,
A. Pipertzis, A. Chroni, S. Pispas, J. Swenson,
J. Phys. Chem. B **2024**, *128*, 11267.
DOI: [10.1021/acs.jpcc.4c05398](https://doi.org/10.1021/acs.jpcc.4c05398)
65. “Aggregation behavior and inner structure of nanoparticles from trypsin and chondroitin sulfate in a wide pH range—implications for the design of biocompatible nanocarriers”,
J. Allwang, S. Da Vela, A. Chroni, D. Selianitis, A. Papagiannopoulos, C. M. Papadakis,
ACS Appl. Nano Mater. **2024**, *7*, 18318.
DOI: [10.1021/acsanm.3c03826](https://doi.org/10.1021/acsanm.3c03826)
66. “Thermally stabilized chondroitin sulfate-hemoglobin nanoparticles and their interaction with bioactive compounds”,
A. Papagiannopoulos, A. Sklapani, N. Spiliopoulos,
Biophys. Chem. **2024**, *304*, 107127.
DOI: [10.1016/j.bpc.2023.107127](https://doi.org/10.1016/j.bpc.2023.107127)
67. “Hydration effects on thermal transitions and molecular mobility in Xanthan gum polysaccharides”,
S. N. Tegopoulos, A. Papagiannopoulos, A. Kyritsis,
Phys. Chem. Chem. Phys. **2024**, *26*, 3462.
DOI: [10.1039/d3cp04643e](https://doi.org/10.1039/d3cp04643e)
68. “Advances in small angle neutron scattering on polysaccharide materials”,
Fanova, K. Sotiropoulos, A. Radulescu, A. Papagiannopoulos,
Polymers **2024**, *16*, 490.
DOI: [10.3390/polym16040490](https://doi.org/10.3390/polym16040490)
69. “pH-response of protein-polysaccharide multilayers adsorbed on a flat gold surface: A surface plasmon resonance study”,
N. Katsenou, N. Spiliopoulos, D. L. Anastassopoulos, A. Papagiannopoulos, C. Toprakcioglu,
Biopolymers **2024**, *115*, e23609.

DOI: [10.1002/bip.23609](https://doi.org/10.1002/bip.23609)

70. “Green preparation of nanoparticles with potential as nanocarriers for bioactive compounds using the valorisable biopolymers hyaluronic acid and hemoglobin”, A. Papagiannopoulos, A. Sklapani, E. Tsouko, N. Spiliopoulos, *Food Biosci.* **2024**, *61*, 104912.
DOI: [10.1016/j.fbio.2024.104912](https://doi.org/10.1016/j.fbio.2024.104912)
71. “Biocompatible preparation of beta-lactoglobulin/chondroitin sulfate carrier nanoparticles and modification of their colloidal and hydrophobic properties by tween 80”, I. Pispas, N. Spiliopoulos, A. Papagiannopoulos, *Polymers* **2024**, *16*, 1995.
DOI: [10.3390/polym16141995](https://doi.org/10.3390/polym16141995)
72. “Controlled release of cobalt ions from polyphosphate glasses”, W. Hartrampf, K. Griebenow, Y. Oi, T. Grammes, N. Sawangboon, E. I. Kamitsos, T. Kasuga, D. S. Brauer, *Mater. Lett.* **2024**, *365*, 136438.
DOI: [10.1016/j.matlet.2024.136438](https://doi.org/10.1016/j.matlet.2024.136438)
73. “Dispersion, ionic bonding and vibrational shifts in phospho-aluminosilicate glasses”, T. Grammes, D. de Ligny, D. Mathew, K. Griebenow, F. Scheffler, F. Lindner, C. Aichele, J. Dellith, L. van Wüllen, E. I. Kamitsos, D. S. Brauer, *Phys. Chem. Chem. Phys.* **2024**, *26*, 13826.
DOI: [10.1039/D4CP00685B](https://doi.org/10.1039/D4CP00685B)
74. “Pure TeO₂ glass: Influence of synthesis conditions on linear and non-linear optical, magneto-optical and structural properties”, J. Hrabovsky, N. S. Tagiara, J. Mistrik, L. Strizik, P. Rysanek, V. Kopecky, J. Kozlik, J. Orava, S. Wang, T. Ishibashi, E. I. Kamitsos, M. Veis, *J. Alloys Comp.* **2024**, *997*, 174788; Corrigendum: *J. Alloys Comp.* **2024**, *997*, 175943.
DOI: [10.1016/j.jallcom.2024.174788](https://doi.org/10.1016/j.jallcom.2024.174788); DOI: [10.1016/j.jallcom.2024.175943](https://doi.org/10.1016/j.jallcom.2024.175943)
75. “Unusually high oxidation states of manganese in high optical basicity silicate glasses”, A. Ashjari, B. Topper, L. H. Hess, L. Greiner, J. Tolliver, F. Cormack, D. Palles, E. I. Kamitsos, M. Brik, D. Möncke, *Opt. Mater.: X* **2024**, *24*, 100371.
DOI: [10.1016/j.omx.2024.100371](https://doi.org/10.1016/j.omx.2024.100371)
76. “The complementary use of Raman, ATR-FTIR spectroscopy and chemometrics for investigating the deterioration of artificially aged parchment”, E. Malea, S.C. Boyatzis, D. Karlis, D. Palles, S. Boghosian, S. Zervos, *J. Raman Spectr.* **2024**, *55*, 1266.
DOI: [10.1002/jrs.6755](https://doi.org/10.1002/jrs.6755)
77. “Structure of tubular halloysite-(10 Å) and its transition to -(7 Å) by infrared spectroscopy and X-Ray diffraction”, E. Siranidi, S. Hillier, G. D. Chryssikos, *Clays Clay Min.* **2024**, *73*, e33, 1-14.
DOI: [10.1017/cmn.2024.37](https://doi.org/10.1017/cmn.2024.37)

78. "Experimental and theoretical investigation of GS-441524 using Density Functional Theory, FTIR, Raman, and UV-VIS spectroscopy",
N. Georgopoulou, I. Necitailaite, C. D. Zeinalipour-Yazdi, D. Palles, G. Mousdis, C. Garoufalis, S. Marinakis,
J. Engin. Sci. Technol. Rev. **2024**, *17*, 1.
DOI: [10.25103/jestr.175.01](https://doi.org/10.25103/jestr.175.01)
79. "Structural investigation, spectroscopic properties, DFT calculations and electrical properties of $[C_6H_9N_2]_2 Sb_2Cl_8$ hybrid compound",
I. Tlili, H. Triki, M. S. M. Abdelbaky, A. Oueslati, G. Mousdis, S. García-Granda, S. Chaabouni,
J. Cluster Sci. **2024**, *35*, 1233.
DOI: [10.1007/s10876-024-02545-9](https://doi.org/10.1007/s10876-024-02545-9)
80. "Salicylic acid-modified Sm-TiO₂ for photoluminescence and photocatalysis under real sunlight: Synergistic effects between ligand-to-metal charge transfer (LMCT) and Sm³⁺ dopant",
R. Lakhdar, F. S. Freyria, G. A. Mousdis, B. Bonelli, K. Elghniji,
J. Phys. Chem. C., **2024**, *128*, 13445.
DOI: [10.1021/acs.jpcc.4c03459](https://doi.org/10.1021/acs.jpcc.4c03459)
81. "Exploring the potential of powder-to-film processing for proof-of-concept BaZrS₃ perovskite solar cells",
P. Dallas, K. Gkini, A. Kaltzoglou, L. Givalou, M. Konstantakou, A. Kalafatis, S. Orfanoudakis, N. Boukos, E. Sakellis, P. Tsipas, A. Dimoulas, A.G. Karydas, A. Lagogiannis, P. Falaras, V. Psycharis, T. Stergiopoulos,
Mater. Today Commun. **2024**, *39*, 108608.
DOI: [10.1016/j.mtcomm.2024.108608](https://doi.org/10.1016/j.mtcomm.2024.108608)
82. "Synthesis, crystal structure and luminescence of $[(CH_3)_3S]_2ZrCl_6$ ",
N. Tagiara, V. Psycharis, A. Kaltzoglou,
J. Coord. Chem. **2024**, *77*, 286.
DOI: [10.1080/00958972.2024.2312456](https://doi.org/10.1080/00958972.2024.2312456)
83. "Water-soluble photocatalysts based on porphyrin-carbon dot conjugates produce H₂ under visible light irradiation",
K. Achilleos, A. Katsari, E. Nikoloudakis, F. Chatzipetri, D. Tsikritzis, K. Ladomenou, G. Charalambidis, E. Stratakis, A. G. Coutsolelos,
Dalton Trans. **2024**, *54*, 328.
DOI: [10.1039/D4DT02101K](https://doi.org/10.1039/D4DT02101K)
84. "Amphiphilic chlorin-β-cyclodextrin conjugates in photo-triggered drug delivery: The role of aggregation",
S. Panagiotakis, B. Mavroidi, A. Athanasopoulos, G. Charalambidis, A. G. Coutsolelos, M. Pelecanou, K. Yannakopoulou,
ChemPlusChem **2024**, *89*, e202300743.
DOI: [10.1002/cplu.202300743](https://doi.org/10.1002/cplu.202300743)
85. "Dye-sensitized photocatalysis: Hydrogen evolution and alcohol-to-aldehyde oxidation without sacrificial electron donor",
D. Romito, C. Govind, V. Nikolaou, R. J. Fernández-Terán, A. Stoumpidi, E. Agapaki, G. Charalambidis, S. Diring, E. Vauthey, A. G. Coutsolelos, F. Odobel,
Angew. Chem. Int. Ed. **2024**, *63*, e202318868.
DOI: [10.1002/anie.202318868](https://doi.org/10.1002/anie.202318868)

86. “Antimicrobial potency of Fmoc-Phe-Phe dipeptide hydrogels with encapsulated porphyrin chromophores is a promising alternative in antimicrobial resistance”, C. P. Apostolidou, C. Kokotidou, V. Platania, V. Nikolaou, G. Landrou, E. Nikoloudakis, G. Charalambidis, M. Chatzinikolaidou, A. G. Coutsolelos, A. Mitraki, *Biomolecules* **2024**, *14*, 226.
DOI: [10.3390/biom14020226](https://doi.org/10.3390/biom14020226)
87. “Porphyrins – valuable pigments of life”, V. Nikolaou, E. Nikoloudakis, K. Ladomenou, G. Charalambidis, A. G. Coutsolelos, *Front. Chem. Biol.* **2024**, *2*, 1346465.
DOI: [10.3389/fchbi.2023.1346465](https://doi.org/10.3389/fchbi.2023.1346465)
88. “Reticular synthesis of flexible rare-earth metal-organic frameworks: Control of structural dynamics and sorption properties through ligand functionalization”, E. Loukopoulos, G. K. Angeli, C. Tsangarakis, E. Traka, K. G. Froudas, P. N. Trikalitis, *Chem. Eur. J.* **2024**, *30*, e202302709.
DOI: [10.1002/chem.202302709](https://doi.org/10.1002/chem.202302709)
89. “Nanowire integration in silica based integrated optical circuits: limitations and challenges towards quantum computing”, K. Tsimvrakidis, S. I. Tsintzos, J. C. Gates, P. G. R. Smith, A. W. Elshaari, V. Zwiller, C. Riziotis, *Optics & Laser Technol.* **2024**, *170*, 110276.
DOI: [10.1016/j.optlastec.2023.110276](https://doi.org/10.1016/j.optlastec.2023.110276)
90. “Structural health monitoring of solid rocket motors: from destructive testing to perspectives of photonic-based sensing”, G. Korompili, G. Mussbach, C. Riziotis, *Instruments* **2024**, *8*, 16.
DOI: [10.3390/instruments8010016](https://doi.org/10.3390/instruments8010016)
91. “Coupling nanowire quantum dots to optical waveguides by microsphere-induced photonic nanojet”, S. I. Tsintzos, K. Tsimvrakidis, J. C. Gates, P. G. R. Smith, A. W. Elshaari, V. Zwiller, C. Riziotis, *Photonics* **2024**, *11*, 343.
DOI: [10.3390/photonics11040343](https://doi.org/10.3390/photonics11040343)
92. “Structural diagnosis of solid rocket motors using neural networks and embedded optical strain sensors”, G. Korompili, N. Cholevas, K. N. Anyfantis, G. Mußbach, C. Riziotis, *Photonics* **2024**, *11*, 799.
DOI: [10.3390/photonics11090799](https://doi.org/10.3390/photonics11090799)
93. “Laser processing of intraocular lenses”, A. Sinani, D. Palles, C. Bacharis, D. Mouzakis, M. Kandyla, C. Riziotis, *Appl. Sci.* **2024**, *14*, 6071.
DOI: [10.3390/app14146071](https://doi.org/10.3390/app14146071)
94. “Enhancing the photocatalytic activity of immobilized TiO₂ using laser-micropatterned surfaces”, T. Giannakis, S.-K. Zervou, T. M. Triantis, C. Christophoridis, E. Bizani, S. Starinskiy, P. Koralli, G. Mousdis, A. Hiskia, M. Kandyla,

Appl. Sci. **2024**, *14*, 3033.
DOI: [10.3390/app14073033](https://doi.org/10.3390/app14073033)

95. “Ultrafast all-optical control of light chirality with nanostructured graphene”,
N. Matthaiaakakis, S. Droulias, G. Kakarantzas,
Adv. Optical Mater. **2024**, *12*, 2303181.
DOI: [10.1002/adom.202303181](https://doi.org/10.1002/adom.202303181)

2. Publications in Conference Proceedings

1. “Polymeric optical metasurfaces by two-photon lithography: Practical designs for beam steering”,
O. Tsilipakos, G. Perrakis, M. Farsari, M. Kafesaki,
Proc. Metamaterials 2024: 18th International Congress on Artificial Materials for Novel Wave Phenomena, Chania, Greece, (9-12 September 2024), pp. 1-3.
DOI: [10.1109/Metamaterials62190.2024.10703264](https://doi.org/10.1109/Metamaterials62190.2024.10703264)
2. “Modelling 2D-material-enhanced metasurfaces and gratings with quasinormal modes”,
T. Christopoulos, G. Nousios, E. E. Kriezis, O. Tsilipakos,
Proc. SPIE 12990, Metamaterials XIV, 1299003 (10 June 2024).
DOI: [10.1117/12.3021970](https://doi.org/10.1117/12.3021970)
3. “Optical metasurfaces with two-photon lithography: design considerations for beam steering applications”,
G. Perrakis, M. Kafesaki, O. Tsilipakos,
Proc. SPIE 13023, Computational Optics 2024, 1302307 (17 June 2024).
DOI: [10.1117/12.3017370](https://doi.org/10.1117/12.3017370)
4. “Electromagnetically induced transparency in 3D THz metallodielectric metamaterial fabricated via multiphoton lithography”,
S. Papamakarios, O. Tsilipakos, A. Koulouklidis, M. Manousidaki, G. Zyla, I. Katsantonis, S. Tzortzakis, M. Farsari, M. Kafesaki,
Proc. SPIE PC12874, Nanoscale and Quantum Materials: From Synthesis and Laser Processing to Applications 2024, PC1287409 (13 March 2024).
DOI: [10.1117/12.3005793](https://doi.org/10.1117/12.3005793)
5. “Analysis and design of vector holographic metasurfaces”,
A. Pitilakis, O. Tsilipakos, A.C. Tasolamprou, A. Tsioliaridou, N.V. Kantartzis, S. Ioannidis, C. Liaskos, M. Kafesaki,
Proc. PIERS 2024: Photonics & Electromagnetics Research Symposium, 21-25 April, Chengdu, China.
DOI: [10.1109/PIERS62282.2024.10618760](https://doi.org/10.1109/PIERS62282.2024.10618760)
6. “Graph Theoretical Analysis as an Aid in the Elucidation of Structure-Property Relations of Perovskite Materials”,
V. Raptis, A. Kaltzoglou,
AIP Conf. Proc. **2024**, *3030*, 110005.
DOI: [10.1063/5.0193237](https://doi.org/10.1063/5.0193237)
7. Enabling light coupling between nanowires and low refractive index contrast optical waveguides towards scalable quantum circuits",
S. I. Tsintzos, K. Tsimvrakidis, A. Sinani, J. C. Gates, A. W. Elshaari, P. G. R. Smith, V. Zwiller, C. Riziotis,

Proceedings of SPIE PHOTONICS WEST 2024. Conference OE201 Integrated Optics: Devices, Materials, and Technologies XXVIII. (SPIE PHOTONICS WEST, 27 January-01 February 2024) San Francisco, USA. SPIE OPTO, vol. 12889, 1288913, March 2024.

DOI: [10.1117/12.3003074](https://doi.org/10.1117/12.3003074)

8. "Sub-diffraction limited direct diode laser patterning of methacrylic polymer thin films doped with silver nanoparticles",
A. Sinani, K. Karachousos-Spiliotakopoulos, V. Tangoulis, T. Manouras, E. Angelakos, C. Riziotis,
Proceedings of SPIE PHOTONICS WEST 2024. Conference LA302: Laser-based Micro- and Nanoprocessing XVII (SPIE PHOTONICS WEST, 27 January - 1 February 2024), San Francisco, US. SPIE LASE, vol. 12873, 12873Q, March 2024.
DOI: [10.1117/12.3003577](https://doi.org/10.1117/12.3003577)
9. "Computational and experimental study of photophysical properties and processes in dyes and systems PMMA-dyes",
C. Kolokytha, A. Sinani, T. Manouras, E. Angelakos, N. N. Lathiotakis, C. Riziotis, D. Tzeli,
Proceedings of the 14th Panhellenic Conference of Chemical Engineering, Thessaloniki, Greece, May 29-31, 2024.
10. "Femtosecond laser writing and micromachining",
A. Sinani, C. Riziotis,
Proceedings of the first Siberian-Attica International Workshop on Laser Processing for Thermophysical Applications, Novosibirsk-Athens, June 29, 2024.
ISBN: 978-5-89017-086-6.

3. Book Chapters

1. "Organic-inorganic hybrid hydrogels as smart strain sensors",
T. Sentoukas, A. Skandalis, S. Pispas,
Organic and Inorganic Materials Based Sensors, Eds: S. Das, S. Thomas, P. P. Das, Wiley, **2024**, Chapter 6, pp. 93-108. ISBN: 978-3-527-34955-5
DOI: [10.1002/9783527834266.ch6](https://doi.org/10.1002/9783527834266.ch6)
2. "Production of fungal bioproducts valorizing renewable resources: New hope for environmental sustainability"
S. Pilafidis, A. Papagiannopoulos, E. Tsouko,
Enzyme Biotechnology for Environmental Sustainability, Eds: P. Dahiya, J. Singh, A. Kumar, Academic Press, **2024**, Chapter 4, pp. 55-91.
ISBN: 978-0-443-22072-2
DOI: [10.1016/B978-0-443-22072-2.00017-6](https://doi.org/10.1016/B978-0-443-22072-2.00017-6)
3. "Biopolymer-based nanopesticides for pesticide degradations"
C. Maraveas, G. K. Angeli, A. Vatsanidou, M. I. Kotzabasaki
Biopolymeric Nanoparticles for Agricultural Applications Cham: Springer Nature Switzerland, **2024**, 241-270.
ISBN: 978-3-031-68833-1
DOI: [10.1007/978-3-031-68834-8_9](https://doi.org/10.1007/978-3-031-68834-8_9)

4. Books

5. Dissertations

a. PhD theses

1. “Computational insights into the protein folding problem and the protein stability through all-atom molecular dynamics simulations and free energy calculations”
M. Arnittali,
Member of Examination Board: Dr. A. Rissanou,
Department of Mathematics and Applied Department University of Crete, Greece (06.2024).
2. “Integrated nanophotonic elements utilizing two-dimensional materials for switching applications and light sources”
G. Nousios,
Member of Examination Board: Dr. O. Tsilipakos,
Department of Electrical and Computer Engineering, Aristotle University of Thessaloniki (10.2024).
3. “Development of computational techniques for Maxwell’s equations using formulations of mixed finite elements in electromagnetic wave propagation problems”
V. Salonikios,
Member of Examination Board: Dr. O. Tsilipakos,
Department of Electrical and Computer Engineering, Aristotle University of Thessaloniki (04.2024).
4. “Drug design of novel selective inhibitors targeting lipoxygenase enzyme and molecular study on the mechanism of action of anti-hypertensive drugs”,
A. Chontzopoulou,
Member of Examination Board: Dr. D. Tzeli,
Department of Chemistry, National and Kapodistrian University of Athens (06.2024).
5. “Study of CO₂ reduction via homogeneous photocatalysis redox”,
A. G. Sarantou,
Member of Examination Board: Dr. D. Tzeli,
Department of Chemistry, University of Ioannina (07.2024).
6. “Study of induced luminescence phenomena with phenomenological and First principle’s models in microscale dimensions through simulations in a programming environment”,
E. Tsoutsoumanos,
Member of Examination Board: Dr. D. Tzeli,
Department of Physics, University of Thessaly (10.2024).
7. “Studies on polysaccharide/protein multilayer structures on interfaces”,
G. Tassis,
Supervisors: Dr. S. Pispas, Dr. A. Papagiannopoulos,
Department of Physics, University of Patras (09.2024).
8. “Pharmaceutical nanotechnology: Design and development of nanocarriers for gene therapy”,
V. Chrysostomou,
Supervisor: Dr. S. Pispas
Department of Pharmacy, National and Kapodistrian University of Athens (11.2024).

9. “Metal-organic frameworks as materials for the construction of electrochemical sensors and heavy metal ions sorbents”
P. Oikonomopoulos,
Member of Examination Board: Dr. G. Angeli,
Department of Chemistry, National and Kapodistrian University of Athens,
(10.2024).
10. “Design and development of photonic devices using direct laser writing techniques”
A. Sinani,
Supervisor: Dr. C. Riziotis,
Department of Informatics and Computer Engineering, University of West Attica
(10.2024).

b. MSc theses

1. “Computational studies on the photophysics of Cu-NHC complexes and the chemistry of thiosemicarbazone Co-complexes”,
K. P. Zois,
Supervisor: Dr. D. Tzeli,
Department of Chemistry, National and Kapodistrian University of Athens (06.2024).
2. “Evaluation of pharmaceutical compounds with therapeutic action against Myasthenia Gravis”,
E. Petsa,
Member of Examination Board: Dr. D. Tzeli,
Department of Chemistry, National and Kapodistrian University of Athens
(02.2024).
3. “Theoretical ab initio study of the XNgX systems, where Ng = Ar, Kr, Xe & X = F, Cl, Br and of ClXeF and HXeF”,
D. Kolovos,
Member of Examination Board: Dr. D. Tzeli,
Department of Chemistry, National and Kapodistrian University of Athens
(02.2024).
4. “Investigating clustering and cluster transfer in peripheral collisions of ^{40}Ar on ^{64}Ni at 15 MeV/nucleon”,
C. Gianitsa,
Member of Examination Board: Dr. D. Tzeli,
Department of Chemistry, National and Kapodistrian University of Athens
(10.2024).
5. “Synthesis and electrocatalytic properties evaluation of nanohybrid N-heterocyclic carbene complexes of Au and Ag with two-dimensional transition metal dichalcogenides”,
D. Leousi,
Supervisor: Dr. N. Tagmatarchis,
Department of Chemistry, National and Kapodistrian University of Athens
(02.2024).
7. “Electrocatalytic hydrogen production from Co-complexes immobilized onto MoS_2 ”,
C. Gkeka,
Member of Examination Board: Dr. N. Tagmatarchis,

Department of Chemistry, National and Kapodistrian University of Athens (02.2024).

8. “Diblock and statistical copolymers from methacrylic monomers with side dimethylamine groups: Synthesis, chemical modification and self-assembly in aqueous solutions”,
K. Makri,
Supervisor: Dr. S. Pispas,
Department of Chemistry, National and Kapodistrian University of Athens (02.2024).
9. “Hybrid nanoparticles from random polyelectrolyte copolymers and carbon dots”,
S. Theodoropoulou,
Supervisor: Dr. S. Pispas,
Department of Chemistry, National and Kapodistrian University of Athens (02.2024).
10. “Polymeric nanosystems encapsulating Aggregation Induced Emission (AIE) dyes for bioimaging”
A. M. Pantelaiou,
Supervisor: Dr. S. Pispas,
Medical School, National and Kapodistrian University of Athens (10.2024).
11. “Polymer micellar nanostructures encapsulating bioimaging agents”,
A. Drolapas,
Supervisor: Dr. S. Pispas,
Medical School, National and Kapodistrian University of Athens (06.2024).
12. “Preparation, characterization and properties of beta-lactoglobulin/chondroitin sulfate/tween 80nanoparticles”,
I. Pispas,
Supervisor: Dr. A. Papagiannopoulos,
Department of Physics, School of Applied Mathematical and Physical Sciences, National Technical University of Athens (02. 2024).
6. “Development of Si/ZnO photodetectors”,
M. D. Tsanakas,
Supervisor: Dr. M. Kandyla,
Joint Master’s Program in Microsystems and Nanodevices, National Technical University of Athens (03.2024).

c. Diploma theses

1. “Theoretical study of the interaction of environmentally relevant molecules with chemically modified nanomaterials”,
T. Xanthopoulos,
Supervisor: E. Klontzas,
Department of Physics, University of Crete (10.2024).
2. “Molecular logic gates: computational study of BODIPY derivatives”,
G. Ampeliatis,
Supervisor: Dr. D. Tzeli,
Department of Chemistry, National and Kapodistrian University of Athens (06.2024).

3. “Investigating diphenylalanine-graphene interactions in water using molecular dynamics simulations”,
Elena Markopoulou,
Supervisor: Dr. A. Rissanou,
Department of Materials Science and Engineering, University of Crete (04.2024).
4. “Double helical model study of DNA Polymerase I and DNA with benzo[a]pyrene added in complex with protein using all-atom molecular dynamics simulations”,
Evaggelos Merziotis,
Supervisor: Dr. A. Rissanou,
School of Applied Mathematical and Physical Sciences, National Technical University of Athens (09.2024).
5. “Nanoscale copolymer/nucleic acid complexes as gene carriers”,
I. Koutouzi,
Supervisor: Dr. S. Pispas
Department of Pharmacy, National and Kapodistrian University of Athens (09.2024).
6. “Development of a polymer carrier/carbon dot/photosensitizer system for photodynamic therapy applications”,
E. N. Stefanou,
Supervisor: Dr. S. Pispas,
Department of Chemical Engineering, National Technical University of Athens (06.2024).
7. “Synthesis of fluorescent copper nanoparticles in the presence of amine containing polymers”,
S. Amarantos,
Supervisors: Dr. S. Pispas, Dr. G. Mousdis,
Department of Materials Science and Engineering, University of Ioannina (09.2024).
8. “Mineralogical and spectroscopical study of ordinary chondrites and implications on potential asteroid mining”,
M. Simopoulou,
Member of Diploma Thesis Committee: D. Palles.
School of Mineral Resources Engineering, Technical University of Crete (06.2024).
9. “Data driven structural health monitoring for crack detection in 3d cylindrical geometries”,
N. Simosis,
Supervisor: Dr. C. Riziotis,
School of Naval Architecture and Marine Engineering, National Technical University of Athens (12.2024).
10. “ZnO/Si heterodiodes for optoelectronic applications”,
A. Peolidis,
Supervisor: Dr. M. Kandyla,
School of Electrical Engineering and Computer Science, National Technical University of Athens (02.2024).

d. Internships

1. “Computational simulations of biological systems”,
Preparation of part of a doctoral dissertation,
S. Ektirici,

- Supervisor: Dr. A. Rissanou,
Cyprus Institute in Nicosia, Cyprus (09.2024-10.2024).
2. “Using computational tools to create models for Carrageenan polymer chains and metal organic frameworks”,
E. Merziotis,
Supervisor: Dr. A. Rissanou,
School of Applied Mathematical and Physics Science, National Technical University of Athens (06.2024-08.24).
 3. “Molecular simulations of nanostructured systems”,
P. Nikolakis,
Supervisor: Dr. A. Rissanou,
Department of Physics, School of Science, National and Kapodistrian University of Athens (07.2024-09.2024).
 4. “Molecular dynamics simulations of polymeric and biological systems”,
K. Kloutsinoti,
Supervisor: Dr. A. Rissanou,
Department of Computer Science and Biomedical Informatics, University of Thessaly (07.2024-10.24).
 5. “Computational study of transition metal complexes”,
C. E. Tzeliou,
Supervisor: Dr. D. Tzeli,
Department of Chemistry, National and Kapodistrian University of Athens (10.2023-04.2024).
 6. “MoS₂/C₆₀ heterostructure with activity in hydrogen evolution reaction”,
I. Athanasoulas,
Supervisor: Dr. N. Tagmatarchis,
Department of Chemistry, University of Patras, Greece (07.2024-09.2024).
 7. “Synthesis of PMMA-PLMA mikto-arm star copolymers by RAFT polymerization”,
A. Nega,
Supervisor: Dr. S. Pispas,
Department of Materials Science and Engineering, University of Crete, Greece (06.2024).
 8. “Preparation and physicochemical characterization of biopolymeric systems”,
G. Tsoutsikou,
Supervisor: Dr. A. Papagiannopoulos,
Department of Physics, School of Applied Mathematical and Physical Sciences, National Technical University of Athens (08.2024).
 9. “Synthesis and characterization of hybrid low-dimensional perovskites”,
E. Orfanos,
Supervisor: Dr. G. Mousdis,
Department of Materials Science Engineering, University of Ioannina (08.2024-09.2024).
 10. “Synthesis and characterization of compounds with application in photocatalysis”,
I. Seitaridi,
Supervisor: Dr. G. Charalambidis,
Department of Chemistry, University of Ioannina, Greece (08.2024).

11. "Development and Characterization of Metal Organic Frameworks (MOFs)",
G. Paschos,
Supervisor: Dr. G. Angeli,
Department of Materials Science & Engineering, University of Ioannina, Greece
(09.2024).
12. "Development and Characterization of Metal Organic Frameworks (MOFs)",
A. Maragkakis,
Supervisor: Dr. G. Angeli,
Department of Materials Science & Engineering, University of Ioannina, Greece
(09.2024).
13. "Study of fiber optic sensors",
A. A. Balusa,
Supervisor: Dr. C. Riziotis,
Technical University of Cluj-Napoca, Department of Electronics
Telecommunications and Information Technology, Cluj Napoca, Romania, (07.2024-
09.2024).
14. "Study of fiber optic sensors",
A. E. Tatar,
Supervisor: Dr. C. Riziotis,
Technical University of Cluj-Napoca, Department of Electronics
Telecommunications and Information Technology, Cluj Napoca, Romania, (07.2024-
09.2024).
15. "Study of photonic metamaterials using numerical methods"
L. Teste
Supervisor: Dr. G. Kakarantzas
Telecom Physics, School of Engineering, University of Strasbourg, France (06.2024-
08.2024).

6. Conference & Workshop Presentations

1. "Graphene-based nonlinear metasurfaces for efficient third harmonic generation at THz frequencies",
O. Tsilipakos*, A. Theodosi, M. Kafesaki, T. Christopoulos, E. E. Kriezis,
"PIERS 2024, 45th Photonics and Electromagnetics Research Symposium",
Chengdu, China, April 21-25, 2024 (invited talk).
2. "Metasurfaces enhanced with 2D photonic materials: Analysis based on quasinormal modes",
T. Christopoulos, G. Nousios, E. E. Kriezis, O. Tsilipakos*,
"AES 2024: 10th International Conference on Antennas and Electromagnetic
Systems", Rome, Italy, June 25-28, 2024 (invited talk).
3. "Broadband dispersion compensation with ultrathin multiresonant metasurfaces",
O. Tsilipakos*, T. Koschny,
"AES 2024: 10th International Conference on Antennas and Electromagnetic
Systems", Rome, Italy, June 25-28, 2024 (invited talk).
4. "Laser-based 3D printing of structures to control electromagnetic radiation: Bridging 2D, 2.5D, and 3D",

- G. Zyla*, O. Tsilipakos, D. Zografopoulos, S. Papamakarios, M. Farsari, “META 2024: 14th International Conference on Metamaterials, Photonic Crystals and Plasmonics”, Toyama, Japan, July 16-19, 2024 (invited talk).
5. “Tailoring the optical properties of 3D photonic crystals coated with Aluminum Zinc Oxide in the telecommunication wavelength”,
D. Ladika*, A. Theodosi, O. Tsilipakos, A. Klini, P. Loukakos, M. Kafesaki, M. Farsari, D. Gray,
“META 2024: 14th International Conference on Metamaterials, Photonic Crystals and Plasmonics”, Toyama, Japan, July 16-19, 2024 (invited talk).
 6. “Hybrid nonlinear graphene-gold metasurfaces,”
A. Theodosi*, O. Tsilipakos, A. Koulouklidis, I. A. Otoo, P. Kuzhir, S. Tzortzakis, M. Kafesaki,
“Metamaterials 2024: 18th International Congress on Artificial Materials for Novel Wave Phenomena”, Chania, Greece, September 9-12, 2024 (poster).
 7. “Hybrid electromagnetic surface modes impact on low spatial frequency LIPSS formation and periodicity reduction”,
G. Perrakis*, O. Tsilipakos, G. D. Tsibidis, and E. Stratakis,
“COLA 2024: 17th International Conference on Laser Ablation”, Hersonissos, Crete, Greece, September 29 – October 4, 2024 (poster).
 8. “Photonic metasurfaces enhanced with 2D materials for nonlinear applications and optoelectronics”,
O. Tsilipakos,
“Future Materials 2024: 5th International Conference on Materials Science and Nanotechnology”, Athens, Greece, October 21-25, 2024 (invited talk).
 9. “Metasurfaces and 2D materials for free-space and guided-wave photonics”,
O. Tsilipakos,
Photonics Hellenic symposium (PHOS), FORTH, Heraklion, Crete, Greece, October 7-8, 2024 (oral).
 10. “Electromagnetic phenomena in laser processing of materials”,
O. Tsilipakos,
First Siberian-Attica International Workshop on Laser Processing for Thermophysical Applications, June 28-29, 2024 (oral).
 11. “Metamaterials and metasurfaces for advanced electromagnetic wave control”,
A. Tasolamprou*, M. Kafesaki, O. Tsilipakos, A. Pitilakis, G. Perrakis, I. Katsantonis, A. Theodosi, E. N. Economou,
“FORTH Retreat 2024”, Scientific Retreat of Foundation for Research and Technology Hellas, International Olympic Academy, Ancient Olympia, Greece, October 11-13, 2024 (oral).
 12. “Tuning the photophysical properties of heterocyclic compounds and complexes”,
E. Papamichalis, C. E. Tzeliou, K. P. Zois, E. Dimou, C. Kolokytha, D. Tzeli*,
“Final General Meeting of the MD-GAS COST Action CA18212”, Hamburg, Germany, April 8-12, 2024 (poster).
 13. “Accurate computational studies of photophysical processes of chemosensors”,
D. Tzeli*, C. E. Tzeliou, E. Papamichalis, I. D. Petsalakis, G. Theodorakopoulos,
“1st Global Action Meeting, Casa San Marco, Abano Terme”, Italy, April 18-19, 2024 (oral).

14. "Halogen-bonded complexes (XBCs) between tertiary amines and CBr₄ in solution: A thorough study",
E. A. Routsis*, C. Mantzourani, M. Rrapi, O. G. Mountanea, M. G. Kokotou, D. Tzeli, C. G. Kokotos, G. Kokotos,
"3rd Symposium of Graduate Students of the Chemistry Department", National and Kapodistrian University of Athens, Athens, Greece, June 4-5, 2024 (oral).
15. "UV-Vis and DFT studies on the photochemical N–O bond cleavage of O-benzyl hydroxamic analogs",
E. A. Routsis*, A.-D. Gerogiannopoulou, O. G. Mountanea, D. Tzeli, C. G. Kokotos, G. Kokotos,
"3rd Symposium of Graduate Students of the Chemistry Department", National and Kapodistrian University of Athens, Athens, Greece, June 4-5, 2024 (poster).
16. "The story of N-heterocyclic carbenes told again: an ab initio computational study",
K. P. Zois*, A. A. Danopoulos, D. Tzeli,
"3rd Symposium of Graduate Students of the Chemistry Department", National and Kapodistrian University of Athens, Athens, Greece, June 4-5, 2024 (poster).
17. "Electronic structure and chemical bonding of the 1st, 2nd, and 3rd row transition metal monoborides; formation of quadruple bonds in RhB, RuB, and TcB",
C. Demetriou*, C. E. Tzeliou, A. Androutsopoulos, D. Tzeli,
"3rd Symposium of Graduate Students of the Chemistry Department", National and Kapodistrian University of Athens, Athens, Greece, June 4-5, 2024 (oral).
18. "Theoretical study of pseudo-hemi-indigo derivatives with potential application as molecular logic gates",
C. E. Tzeliou*, D. Tzeli,
"3rd Symposium of Graduate Students of the Chemistry Department", National and Kapodistrian University of Athens, Athens, Greece, June 4-5, 2024 (poster).
19. "Theoretical investigation of substitutional Si, Mg, and Cr doping effects in BeO via density functional theory and one trap-one recombination center model for thermoluminescence analysis",
N. Korakis*, E. Travlou, E. Tsoutsoumanos, D. Tzeli, A. Avramopoulos, N. Laskaris, P. G. Konstantinidis, N. Lathiotakis, G. Kitis, G. S. Polymeris, T. Karakasidis,
"3rd Symposium of Graduate Students of the Chemistry Department", National and Kapodistrian University of Athens, Athens, Greece, June 4-5, 2024 (poster).
20. "Chalcones and azathioprine as potential lead molecules against inflammation Leishmania and Zika Virus diseases",
N. Georgiou*, E. Petsas, A. Tzani, I. Kostopoulou, M.-A. Karadendrou, K. Vavougyiou, T. Niemi-Aro, D. Tzeli, A. Detsi, T. Mavromoustakos,
"ISIDORE Scientific conference", Brussels, Belgium, May 28, 2024 (poster).
21. "DFT calculations of the interactions of sartans with ACE2 active center. Study of proton transfer in ACE2",
N. Georgiou*, D. Tzeli, T. Mavromoustakos,
"ISDBP2024, International Society of Quantum Biology and Pharmacology", Biomedical Research Foundation, Academy of Athens, Athens, Greece, May 19-21, 2024 (poster).
22. "Accurate theoretical investigations of photophysical processes of chemosensors",
D. Tzeli,
"19th Central European Symposium on Theoretical Chemistry (CESTC)", Sveti

- Martin na Muri, Croatia, September 11-14, 2024 (oral).
23. “Pseudo-hemi-indigo derivatives: a theoretical study and the potential application as molecular logic gates”,
C. E. Tzeliou*, D. Tzeli,
“23rd Panhellenic Chemistry Conference 100years of Association of Greek Chemists, «Chemistry for a Better World»”, National and Kapodistrian University of Athens, Athens, Greece, September 25-28, 2024 (poster).
 24. “Photoacids: A computational investigation of schreiner’s thiourea and its derivatives”,
E. A. Routsis*, S. Serviou, D. Tzeli, C. G. Kokotos,
“23rd Panhellenic Chemistry Conference 100years of Association of Greek Chemists, «Chemistry for a Better World»”, National and Kapodistrian University of Athens, Athens, Greece, September 25-28, 2024 (poster).
 25. “Tuning the photophysical properties of heterocyclic compounds and transition metal complexes”,
E. Papamichalis, K. P. Zois, E. Dimou, G. Ampeliatis, D. Tzeli*,
“23rd Panhellenic Chemistry Conference 100years of Association of Greek Chemists, «Chemistry for a Better World»”, National and Kapodistrian University of Athens, Athens, Greece, September 25-28, 2024 (oral).
 26. “A molecular level study of the aqueous microsolvation of alkali metal chlorides and alcohols”,
P. A. Karantoni*, D. Tzeli,
“23rd Panhellenic Chemistry Conference – 100 Years of Association of Greek Chemists, «Chemistry for a Better World»”, National and Kapodistrian University of Athens, Athens, Greece, September 25-28, 2024 (poster).
 27. “Breaking covalent bonds in the context of the many-body expansion”,
D. Tzeli*, J. Mato, S. S. Xantheas,
“Athens Conference on Advances in Chemistry (ACAC2024)”, National and Kapodistrian University of Athens, Athens, Greece, November 6-8, 2024 (oral).
 28. “Chalcones and 4-hydroxy-2-quinolinone-triazole hybrid derivatives a, b and c as potential anti-inflammatory agents”,
N. Georgiou*, A. Tzani, I. Kostopoulou, M.-A. Karadendrou, K. Vavougyiou, P. Sketc, J. Plavec, D. Tzeli, A. Detsi, T. Mavromoustakos,
“Athens Conference on Advances in Chemistry (ACAC2024)”, National and Kapodistrian University of Athens, Athens, Greece, November 6-8, 2024 (oral).
 29. “Halogen bonded complexes (XBCs) in solution: A spectroscopic and DFT Study”,
E. A. Routsis*, M. Rrapi, O. G. Mountanea, C. G. Kokotos, D. Tzeli, G. Kokotos,
“Athens Conference on Advances in Chemistry (ACAC2024)” National and Kapodistrian University of Athens, Athens, Greece, November 6-8, 2024 (poster).
 30. “The solvent and nitrogen geometry effect on the absorption spectra of a ferrocene-naphthalimide derivative”,
C. E. Tzeliou*, D. Tzeli,
“Athens Conference on Advances in Chemistry (ACAC2024)”, National and Kapodistrian University of Athens, Athens, Greece, November 6-8, 2024 (poster).
 31. “Photophysical properties of donor-acceptor (D-A) fluorescent sensors”,
G. Ampeliatis*, E. Papamichalis, D. Tzeli,

- “Athens Conference on Advances in Chemistry (ACAC2024)”, National and Kapodistrian University of Athens, Athens, Greece, November 6-8, 2024 (poster).
32. “Electronic structure of the MoLi, MoBe, and RuB molecules: Ground and low-lying states”,
C. Demetriou*, N. Korakis, D. Tzeli,
“Athens Conference on Advances in Chemistry (ACAC2024)”, National and Kapodistrian University of Athens, Athens, Greece, November 6-8, 2024 (poster).
33. “Computational study of the copper-catalyzed α -alkylation of aryl acetonitriles with benzyl alcohols”,
A. P. Karantoni*, M. Danopoulou, L. P. Zorba, G. C. Vougioukalakis, D. Tzeli,
“Athens Conference on Advances in Chemistry (ACAC2024)”, National and Kapodistrian University of Athens, Athens, Greece, November 6-8, 2024 (poster).
34. “Chalcones derivatives as potential anti-inflammatory agents”,
N. Georgiou*, A. Tzani, K. Vavougyiou, C. Papadopoulos, N. Eleftheriadis, P. Sket, D. Tzeli, T. Niemi-Aro, A. Detsi, T. Mavromoustakos,
“1st Anglo Italian Chemical Biology Bilateral Meeting (AICBBM-1)”, Perugia, Italy, December 15-17, 2024, (poster).
35. “Computational and experimental study of photophysical properties and processes in dyes and systems PMMA-dyes”,
C. Kolokytha*, A. Sinani, T. Manouras, E. Angelakos, N. N. Lathiotakis, C. Riziotis, D. Tzeli,
“14th Panhellenic Research Conference Chemical Engineering”, Thessaloniki, Greece, May 29-31, 2024 (poster).
36. “Electronic and magnetic properties of Prussian Blue through periodic DFT”,
P. M. Levendis*, N. N. Lathiotakis, S. Marinakis,
“14th Panhellenic Research Conference Chemical Engineering”, Thessaloniki, Greece, May 29-31, 2024 (oral).
37. “Electronic structure and modeling properties of perovskite A_2ZrX_6 materials where $A = (CH_3)_3S$ or $H_2C(NH_2)_2$ and $X = Cl, Br, I$ ”,
C. Kolokytha*, N. N. Lathiotakis, D. Tzeli,
“XXXVIII Panhellenic Conference on Solid State Physics & Materials Science”, University of Ioannina, Ioannina, Greece, September 15-18, 2024 (poster).
38. “Porous carbon nitride fullerenes: a DFT study on a novel family of porous cage molecules”,
Z. G. Fthenakis*, N. N. Lathiotakis,
“XXXVIII Panhellenic Conference on Solid State Physics & Materials Science”, University of Ioannina, Ioannina, Greece, September 15-18, 2024 (oral).
39. “Electronic structure and modeling properties of perovskite A_2ZrX_6 materials, where $A = (CH_3)_3S, CH_3NH_3, CH_2(NH_2)_2$ and $X = Cl, Br, I$ ”,
C. Kolokytha*, N. N. Lathiotakis, A. Kaltzoglou, D. Tzeli,
“23rd Panhellenic Chemistry Conference 100years of Association of Greek Chemists, «Chemistry for a Better World»”, National and Kapodistrian University of Athens, Athens, Greece, September 25-28, 2024 (oral).
40. “Exploring nanoscale materials with density functional theory: probing structural mechanical and electronic properties”,
N. N. Lathiotakis,

- “Computational Materials Science 2024, Online workshop”, Department of Physics, University of Thessaly - Department of Materials Science, University of Crete, December 14-15, 2024 (invited talk).
41. “Kohn Sham potentials in ensemble DFT via density inversion and the OEP method”, N. N. Lathiotakis*, S. Bousiadi, B. J. Pearce, N. I. Gidopoulos, “EDFT Workshop 2024: Progress in Ensemble Density Functional Theory: Opportunities and Challenges”, Durham U.K., July 22-25, 2024 (invited talk).
 42. “Utilizing molecular dynamics simulations to assess the potential of self-assembling dipeptides as drug delivery vehicles”, A. Rissanou, “International Workshop on "Computational Modeling of Molecular Systems: From Atoms to the In-silico Design of Materials”, The Cyprus Institute, Nicosia, Cyprus, May 20-22, 2024 (invited talk).
 43. “Hydrated graphene oxide / polymer nanocomposites: A computational study”, A. Rissanou*, K. Karatasos, “Polymers 2024 conference - Polymers for a Safe and Sustainable Future”, Athens, Greece, May 28-31, 2024 (oral).
 44. “Employing molecular simulations to explore the behavior of diphenylalanine nanocomposites reinforced with graphene-based nanofillers”, E. Markopoulou, G. Savvakis, M. Athanasiou, A. N. Rissanou*, “Polymers 2024 Conference - Polymers for a Safe and Sustainable Future”, Athens, Greece, May 28-31, 2024 (oral).
 45. “In silico design of self-assembling drug delivery systems”, A. Rissanou, “2nd International Summit on Biopolymers and Polymer Science”, Gaia, Porto, Portugal, June 10-12, 2024 (invited talk).
 46. “Investigating the complexation propensity of self-assembling dipeptides with the anticancer peptide-drug bortezomib: A computational study”, A. Rissanou, “5th International Conference on Materials Science & Nanotechnology”, Athens, Greece, October 21-23, 2024 (oral).
 47. “Peptide/graphene nanocomposites: An in-silico investigation”, E. Markopoulou*, G. Savvakis, A. N. Rissanou, “5th International Conference on Materials Science & Nanotechnology”, Athens, Greece, October 21-23, 2024 (poster).
 48. “Investigating the properties of polybutadiene and styrene-butadiene copolymers: A comparative study using atomistic and systematic coarse-grained models”, A. Rissanou, “5th International Conference on advanced polymer science and engineering (Polymer Connect)”, Athens, Greece, October 23-25, 2024 (keynote talk).
 49. “Theoretical calculations on electronic properties of defect-perovskite materials A_2ZrX_6 ($A = (CH_3)_3S, CH_3NH_3^+, CH(NH_2)_2^+$ and $X = Cl, Br, I$)”, C. Kolokytha*, N. N. Lathiotakis, A. Kaltzoglou, D. Tzeli, 23rd Panhellenic Chemistry Conference, 2024, Athens, September 25-28, 2024 (poster).
 50. “Sustainable photocatalytic acylation of transition metal dichalcogenides with atom

- economy”,
I. K. Sideri*, R. Canton-Vitoria, N. Tagmatarchis,
E-MRS Spring Meeting 2024, Symposium J: “Chemical Functionalization of 2D Materials”, Strasbourg, France, May 26-31, 2024 (oral).
51. “Molybdenum disulfide/di-block copolymer electrostatically interfacing an anionic porphyrin”,
M. P. Minadakis*, G. Karantanais, V. Chrysostomou, H. J. Ojeda-Galvan, M. Quintana, S. Pispas, N. Tagmatarchis,
E-MRS Spring Meeting 2024, Symposium J: “Chemical Functionalization of 2D Materials”, Strasbourg, France, May 26-31, 2024 (poster).
52. “Coordinated metallo-porphyrin and metallo-phthalocyanine onto modified MoS₂”,
E. Nikoli*, I. K. Sideri, N. Tagmatarchis,
E-MRS Spring Meeting 2024, Symposium J: “Chemical Functionalization of 2D Materials”, Strasbourg, France, May 26-31, 2024 (poster).
53. “Terpyridine-functionalized single-walled carbon nanotubes towards oxygen reduction reaction: Mechanistic insights”,
I. K. Sideri*, N. Tagmatarchis,
E-MRS Spring Meeting 2024, Symposium J: “Chemical Functionalization of 2D Materials”, Strasbourg, France, May 26-31, 2024 (poster).
54. “Functionalization of transition metal dichalcogenides and hybrids for energy conversion”,
N. Tagmatarchis,
24th International Conference on Photochemical Conversion and Storage of Solar Energy / International Conference on Artificial Photosynthesis (IPS-24/ICARP2024), Hiroshima, Japan, July 28 – August 2, 2024 (invited talk).
55. “Carbon nanoribbon formation by in-situ TEM manipulation of a C₅₉N-dithiolane derivative encapsulated into SWNTs”,
M. Pelaez-Fernandez*, A. Stergiou, N. Tagmatarchis, C. Ewels, R. Arenal,
European Microscopy Congress – EMC2024, Copenhagen, Denmark, August 25-30, 2024 (oral).
56. “Synthesis, characterization and optical and redox properties of perylene modified MoS₂ nanosheets”,
E. Nikoli*, R. Canton-Vitoria, N. Zink-Lorre, A. M. Gutierrez-Vilchez, F. Fernandez-Lazaro, N. Tagmatarchis,
Carbon Nanoscience and Nanotechnology-NanoteC24, Nantes, France, August 27–30, 2024 (oral).
57. “Functionalized two-dimensional transition metal dichalcogenides for energy applications”,
I. K. Sideri*, N. Tagmatarchis,
Carbon Nanoscience and Nanotechnology-NanoteC24, Nantes, France, August 27–30, 2024 (oral).
58. “Design and preparation of hybrid nanocarbon-MOF materials”,
I. K. Sideri*, G. Basina, G. K. Angeli, N. Tagmatarchis,
Carbon Nanoscience and Nanotechnology-NanoteC24, Nantes, France, August 27–30, 2024 (poster).
59. “A Hamilton-type recognition motif realized on the surface of MoS₂ for the

- electrochemical detection of barbiturates”,
I. K. Sideri*, A. Liapi, C. Stangel, A. Stergiou, N. Tagmatarchis,
23rd Panhellenic Chemistry Conference, Athens, September 25-28, 2024 (oral).
60. “Tungsten disulfide-nickel porphyrin with photo-enhanced electrocatalytic activity against water oxidation”,
E. Nikoli*, R. Canton-Vitoria, N. Tagmatarchis,
23rd Panhellenic Chemistry Conference, Athens, Greece, September 25-28, 2024 (oral).
61. “Synthesis and characterization of chemically modified MoS₂ nanosheets with perylene derivatives”,
M. P. Minadakis*, N. Tagmatarchis,
23rd Panhellenic Chemistry Conference, Athens, Greece, September 25-28, 2024 (oral).
62. “Synthesis and characterization of MoS₂ nanosheets coordinated with metallo-porphyrin and metallo-phthalocyanine”,
E. Nikoli*, I. K. Sideri, N. Tagmatarchis,
23rd Panhellenic Chemistry Conference, Athens, Greece, September 25-28, 2024 (poster).
63. “Graphene-manganese porphyrin nanoensembles for energy applications”,
M. P. Minadakis*, N. Tagmatarchis,
23rd Panhellenic Chemistry Conference, Athens, Greece, September 25-28, 2024 (poster).
64. “Synthesis, characterization and properties assessment of chemically modified MoS₂ nanosheets with zinc phthalocyanine”,
M. Tsigkou*, E. Nikoli, I. K. Sideri, N. Tagmatarchis,
23rd Panhellenic Chemistry Conference, Athens, Greece, September 25-28, 2024 (poster).
65. “Coulombic association of ammonium-modified MoS₂ with carboxylated zinc porphyrin”,
M. Kardaras*, I. K. Sideri, E. Nikoli, N. Tagmatarchis,
23rd Panhellenic Chemistry Conference, Athens, Greece, September 25-28, 2024 (poster).
66. “Engineering of advanced nanocarbons for MOF hybridization”,
I. K. Sideri*, G. Basina, G. K. Angeli, N. Tagmatarchis,
23rd Panhellenic Chemistry Conference, Athens, Greece, September 25-28, 2024 (poster).
67. “Ideal metal organic frameworks (MOFs)-platforms for the development of multifunction MOF-nanocarbon hybrids”,
G. K. Angeli*, G. Basina, I. K. Sideri, N. Tagmatarchis,
5th International Conference on Materials Science & Nanotechnology, Athens, Greece, October 21–23, 2024 (poster).
68. “Challenges in characterizing polysaccharide/synthetic polymer hybrid macromolecules”,
S. Pispas,
PolyChar World Forum on Advanced Materials 30th Edition, Iasi, Romania, September 11-13, 2024 (plenary talk).

69. “Macromolecular materials and nanostructures based on polysaccharides”,
S. Pispas,
Future Materials 2024 - 5th International conference on Materials Science & Nanotechnology, Athens, Greece, October 21-23, 2024 (keynote talk).
70. “Hybrid polymeric nanostructures from synthetic polymers and biological macromolecules”,
S. Pispas,
Polymer Connect 2024 - 5th International Conference on Advanced Polymer Science and Engineering, Athens, Greece, October 23-25, 2024 (invited talk).
71. “Novel synthetic copolymers for creating biohybrid nanostructures”,
A. Balafouti, S. Pispas*,
ACAC 2024, Athens Conference on Advances in Chemistry, Athens, Greece, November 6-8, 2024 (invited talk).
72. “Molecular dynamics and self-assembly in double hydrophilic copolymers with densely grafted macromolecular architecture”,
A. Pipertzis*, A. Chroni, S. Pispas, J. Swenson,
12th Conference on Broadband Dielectric Spectroscopy and its Applications (BDS2024), Lisbon, Portugal, September 1-6, 2024 (poster).
73. “Self-assembled nanosystems exhibiting enhanced fluorescence: Complexation of an amino terpolymer and its quaternized analogue with aggregation-induced emission (AIE) dye”,
M. A. Pantelaiou*, D. Vagenas, E. S. Karvelis, G. Rotas, S. Pispas,
2nd Panhellenic Conference on Medical Physics, Athens, Greece, October 4-6, 2024 (oral).
74. “Comparative study of transdermal delivery of quercetin nanoparticles”,
E. Dalla*, E. Triantafyllopoulou, A. Sarika, N. Pippa, S. Pispas,
2nd Panhellenic Conference on Medical Physics, Athens, Greece, October 4-6, 2024, (oral).
75. “Hybrid nanostructures design by in-situ gold nanoparticles synthesis using chitosan-g-poly(n-isopropylacrylamide”,
M.-M. Zaharia*, E. D. Lotos, F. Bucatariu, M. M. Bazarghideanu, D. Rusu, S. Pispas, M. Mihai,
EmergeMAT-7th International Conference on Emerging Technologies in Materials Engineering, Bucharest, Romania, October 30-31, 2024 (oral).
76. “Laccase/ chitosan-g-PNIPAM hybrid nanostructures for potential environmental applications”,
L.-M. Petrila*, M. Karayianni, M. Mihai, S. Pispas,
EmergeMAT-7th International Conference on Emerging Technologies in Materials Engineering, Bucharest, Romania, October 30-31, 2024 (oral).
77. “Graft copolymers based on starch and poly(acrylic acid)”,
D. F. Loghin*, S. Racovita, M. M. Bazarghideanu, S. Pispas, M. Mihai, S. Vasiliu,
EmergeMAT-7th International Conference on Emerging Technologies in Materials Engineering, Bucharest, Romania, October 30-31, 2024 (oral).
78. “Novel and sustainable food-grade O/W pickering emulsions valorizing complexes of bacterial nanocellulose and chitosan”,
A. Vardaxi*, A. Papagiannopoulos, S. Pispas, E. Tsouko,

FCT-2024 - 10th International Conference on Food Chemistry and Technology, Valencia, Spain, November 25-27, 2024 (oral).

79. "Co-assembled, physically cross-linked nanogels of tannic acid and biocompatible double hydrophilic random copolymers encapsulating ovalbumin",
A. Vardaxi*, S. Pispas,
FCT-2024 - 10th International Conference on Food Chemistry and Technology, Valencia, Spain, November 25-27, 2024 (poster).
80. "Graft copolymers derived from amylopectin and synthetic homopolymers",
M. M. Bazarghideanu*, M. M. Zaharia, C. G. Marandis, S. Pispas, M. Mihai,
National Conference of Chemistry, XXXVII Edition, Targoviste, Romania, September 25-27, 2024 (oral).
81. "In-situ synthesis of gold nanoparticles mediated by chitosan-g-poly(N-isopropylacrylamide)",
M. M. Zaharia*, M. M. Bazarghideanu, F. Bucatariu, E. D. Lotos, S. Pispas, M. Mihai,
National Conference of Chemistry, XXXVII Edition, Targoviste, Romania, September 25-27, 2024 (oral).
82. "Interpolyelectrolyte complexes based on chit-g-PNIPAM and HAS with pH/temperature responsiveness",
F. Bucatariu*, M. M. Zaharia, E. D. Lotos, M. M. Bazarghideanu, M. Mihai, S. Pispas,
PolyChar World Forum on Advanced Materials 30th Edition, Iasi, Romania, September 11-13, 2024 (oral).
83. "Chit-g-PNIPAM: A versatile pH/temperature multi-responsive copolymer in aqueous environment",
C. G. Marandis*, M. M. Zaharia, L. M. Petrilă, E. D. Lotos, F. Bucatariu, M. Mihai, S. Pispas,
PolyChar World Forum on Advanced Materials 30th Edition, Iasi, Romania, September 11-13, 2024 (poster).
84. "Synthesis and characterization of grafted copolymers based on gellan and poly(N-isopropylacrylamide)",
S. Racovita*, D. F. Loghin, M. Mihai, S. Pispas, S. Vasiliu,
PolyChar World Forum on Advanced Materials 30th Edition, Iasi, Romania, September 11-13, 2024 (poster).
85. "Polymeric nanomaterials based on natural polysaccharides functionalized by synthetic polymers",
M. M. Zaharia, E. D. Lotos, M. M. Bazarghideanu, F. Bucatariu, S. Pispas, M. Mihai*,
IUPAC 50th World Polymer Conference, Warwick, U.K., July 1-4, 2024 (oral).
86. "Co-assembly of chitosan-g-poly(N-isopropylacrylamide) copolymer with DNAs",
E.-D. Lotos*, M. Karayianni, M. Mihai, S. Pispas,
Open Door to the Future, MacroYouth 2024, 5th Edition, Iasi, Romania, November 15, 2024 (oral).
87. "Graft copolymerization of poly(N-isopropylacrylamide) onto amylopectin",
M. M. Bazarghideanu*, M. M. Zaharia, C. G. Marandis, S. Pispas, M. Mihai,
Open Door to the Future, MacroYouth 2024, 5th Edition, Iasi, Romania, November

- 15, 2024 (oral).
88. “Innovative rotary disk bioreactor for enhanced bacterial cellulose production and its application in biopolymeric packaging films”,
S. Pilafidis, A. Vardaxi, K. Kourmentza, S. Pispas, A. Papagiannopoulos, P. Tserotas, D. Briassoulis, E. Tsouko*,
IBA-2024, International Conference on Advanced Bioprocessing Technologies for Biomass Conversion - Sustainability and Bioresource Management, Hong Kong, China, December 1-4, 2024 (oral).
 89. “Characterization of renewable proteins derived from lathyrus species and their applicability in biofilms with food packaging potential”,
A. Vardaxi, A. Papagiannopoulos, S. Pispas, G. Mousdis, E. Tsouko*,
10th International Conference on Engineering for Waste and Biomass Valorisation, Sendai, Japan, August 20-23, 2024 (oral).
 90. “Sustainable and functional biofilms using blends of protein-isolates from grass pea and sunflower by-products: bacterial cellulose nanostructures as effective reinforcing agent”,
A. Vardaxi, A. Papagiannopoulos, S. Pispas, G. Mousdis, E. Tsouko*,
10th International Conference on Engineering for Waste and Biomass Valorisation, Sendai, Japan, August 20-23, 2024 (poster).
 91. “Self-organized protein/polysaccharide nano-assemblies for applications in biomedical and food sciences”,
A. Papagiannopoulos,
Biological Physics at the DPG spring meeting (SKM/condensed matter), Berlin, Germany, March 17-22, 2024 (invited talk).
 92. “Hydration effects on thermal transitions of xanthan gum hydrocolloid”,
S. N. Tegopoulos*, A. Papagiannopoulos, A. Kyritsis,
19th Food Colloids Conference, Thessaloniki, Greece, April 18-24 (poster).
 93. “Molecular mobility of Xanthan gum hydrocolloid and hydration effects”,
S. N. Tegopoulos*, A. Papagiannopoulos, A. Kyritsis,
19th Food Colloids Conference, Thessaloniki, Greece, April 18-24 (poster).
 94. “Synthesis, properties, and interaction with tween 80 in self-assembled beta-lactoglobulin/chondroitin sulfate nanoparticles”,
I. Pispas*, N. Spiliopoulos, A. Papagiannopoulos,
2nd Panhellenic Congress of Medical Physics, Athens, Greece, October 4-6, 2024 (e-poster).
 95. “Self-assembled biopolymer nanostructures for applications in food technology and biomedicine”,
A. Papagiannopoulos,
5th International Conference on Advanced Polymer Science and Engineering, Athens, Greece, October 23-25, 2024 (invited talk).
 96. “A review of the fraction of four-coordinated boron in binary borate glasses”,
R.M. Gabrielsson*, E. I. Kamitsos, A. C. Hannon, N. S. Tagiara, O. L. G. Alderman, I. Slagle, H. Hawbaker, P. Boggs, S. John, M. Wagner, A. Rossini, L. Rocha, R. M. Wilson, S. W. Martin, L. Song, Z. Fayan, S.A. Feller,
15th European Society of Glass Conference & 15th International Conference on the Structure of Non-Crystalline Materials (ESG15–NCM15), Cambridge, U.K.,

- July 15-19, 2024 (poster).
97. "Structure-property correlation in the $\text{Bi}_2\text{O}_3\text{-ZnO-B}_2\text{O}_3$ pyroborate glass system",
L. Haight-Stott, N. S. Tagiara, S. Carretto, E. Tsekrekas, E. I. Kamitsos, D. Möncke*,
MS&T Materials Science and Technology, Pittsburgh, Pennsylvania, USA, October 6-9, 2024, (oral).
 98. "Vibrational effects in metal organic frameworks induced by CO_2 uptake",
A. Kontos*, P. Falara, R. Vartian, D. Palles, G. Romanos, T. Steriotis, P. Trikalitis,
G. Angeli, Y. S. Raptis,
ICORS XXVIII, Rome, Italy, July 28 - August 2, 2024 (oral).
 99. "Re-classification, shock stage determination, and high-pressure polymorphs in the SLOBODKA Ordinary Chondrite",
M. Simopoulou*, I. Baziotis, L. Ferrière, C. Sanchez-Valle, D. Palles, P. N. Gamaletsos, P. D. Asimow,
86th Annual Meeting of the Meteoritical Society (METSOC 2024), Brussels, Belgium, July 28 - August 2, 2024 (oral).
 100. "Unusual shocked features in Northwest Africa 807 L6 Ordinary Chondrite",
M. Simopoulou, I. Baziotis, L. Ferrière, D. Palles, P. D. Asimow,
86th Annual Meeting of the Meteoritical Society (METSOC 2024), Brussels, Belgium, July 28 - August 2, 2024 (poster).
 101. "Raman spectroscopy of the Slobodka meteorite",
M. Simopoulou*, I. Baziotis, L. Ferrière, C. Sanchez-Valle, S. Klemme, J. Berndt,
E. Kakaratzas, D. Palles, P. N. Gamaletsos, P. D. Asimow,
GeoRAMAN Conference, Rhodes, Greece, September 24-27, 2024 (oral).
 102. "Near-infrared and X-ray diffraction *in situ* studies of smectite rehydration kinetics",
K. Rybka*, E. Siranidi, G.D. Chryssikos, M. Skiba, A. Derkowski,
11th Mid European Clay Conference, Pilsen, September 15-20, 2024 (oral).
 103. "In situ H/D exchange in clay minerals",
E. Siranidi*, G.D. Chryssikos, A. Derkowski,
11th Mid European Clay Conference, Pilsen, September 15-20, 2024 (oral).
 104. "Structural evolution of halloysite-(10Å) upon drying",
G.D. Chryssikos*, E. Siranidi, S. Hillier,
11th Mid European Clay Conference, Pilsen, September 15-20, 2024 (plenary talk).
 105. "Synthesis and study of some 2-dimensional hybrid lead based materials",
G. A. Mousdis*, V. Psycharis, C. P. Raptopoulou, N. Lathiotakis, C. Kolokytha, E. Apostolou,
Congress of Chemist and Technologists of Makedonia, Ohrid, N. Macedonia, September 20-23, 2024 (poster).
 106. "Synthesis of fluorescent copper nanoclusters in the presence of amine containing polymers",
S. Amarantos*, D. Vagenas, M. M. Zaharia, M. Mihai, G. Mousdis, S. Pispas
Solid State Physics & Materials Science, Ioannina, Greece, September 15-18, 2024 (poster).
 107. "Synthesis and characterization of hybrid compounds of Cadmium that exhibit

- intense fluorescence”
E. Apostolou*, Th. Mavromoustakos, G. A. Mousdis,
3rd Symposium of Postgraduate Students of the Department of Chemistry, National and Kapodistrian University of Athens, Greece, June 4-5, 2024 (poster).
108. “Luminescent Au polymer stabilized nanoparticles”
G. A. Mousdis*, A. Papagiannopoulos, S. Pispas,
1st LUCES global action meeting, Abano Terme (Padova), Italy, April 18-19, 2024,
(poster).
109. “Synthesis and characterization of hybrid compounds of Cadmium exhibiting intense fluorescence”
E. Apostolou*, Th. Mavromoustakos, G. A. Mousdis,
4th Athens Conference on Advances in Chemistry (ACAC 2024), Athens, Greece,
November 6-8, 2024, (poster).
110. “Synthesis and characterization of hybrid cadmium compounds exhibiting intense fluorescence”
E. Apostolou*, T. Mavromoustakos, G. Mousdis,
1st Anglo-Italian Chemical Biology Bilateral Meeting (AICBBM), Perugia,
Italy, December 5-17, 2024, (poster).
111. “A feasibility study of perovskite solar cells under Peltier cooling”,
E. Christopoulos, N. Tagiara*, P. Falaras, N. K. Nasikas, A. Kaltzoglou,
Hybrid and Organic Photovoltaics 2024, Valencia, Spain, May 13-15, 2024 (poster).
112. “A theoretical study on the type-I clathrate $(\text{NH}_4)_8\text{Sn}_{46-x}$ ($x = 0$ or 2)”,
N. Kelaidis*, E. Klontzas, A. Kaltzoglou,
40th International & 20th European Conference on Thermoelectrics 2024, Krakow,
Poland, June 30-July 4, 2024 (poster).
113. “Synthesis, Crystal Structure and Optoelectronic properties of $[(\text{CH}_3)_3\text{S}]\text{SnBr}_3$ ”,
J. Koutsoubogeras*, N. Tsoureas, A. Philippopoulos, A. Kaltzoglou,
International Symposium on Flexible Organic Electronics & Nanotechnology
Conference 2024, Thessaloniki, Greece, July 1-4, 2024 (poster).
114. “Semiconducting clathrates for thermoelectric applications”,
N. Moutzouris, N. Kelaidis, E. Klontzas, A. Kaltzoglou*,
23rd Panhellenic Chemistry Conference, Athens, Greece, September 25-28, 2024
(oral).
115. “Synthesis and characterization of hybrid organic/inorganic halide perovskites for optoelectronic applications”,
J. Koutsoubogeras*, N. Tsoureas, A. Philippopoulos, A. Kaltzoglou,
3rd Symposium of graduate students of the Chemistry Department, National and
Kapodistrian University of Athens, Greece, June 4-5, 2024 (oral).
116. “Development of dye-sensitized photocatalytic systems for hydrogen evolution”,
G. Charalambidis*, A. G. Coutsolelos, F. Odobel,
23rd Panhellenic Chemistry Conference, Athens, Greece, September 25-28, 2024
(oral).
117. “The pigments of life: A continuous source of inspiration for medical applications”,
A. G. Coutsolelos*, G. Charalambidis, K. Ladomenou, V. Nikolaou, E.
Nikoloudakis,

- 13th International Conference on Porphyrins and Phthalocyanines (ICPP-13), Buffalo, USA, June 23-28, 2024 (oral).
118. "DNA-templated multi-porphyrin systems",
E. Stulz*, V. Nikolaou, J. W. Wood, G. Charalambidis, A. Coutsolelos, J. R. Burns,
13th International Conference on Porphyrins and Phthalocyanines (ICPP-13),
Buffalo, USA, June 23-28, 2024 (oral).
119. "Utilizing reticular chemistry: Designing functional materials for environmental solutions"
G. K. Angeli*
5th International Conference on Materials Science & Nanotechnology, Athens, Greece, October 21-23, 2024 (invited talk).
120. "MOF-nanocarbon composites: Synthesis and beyond",
G. K. Angeli*
MOF2H2 Workshop: Synthesis and Characterization of Photoactive MOFs,
Valencia, Spain, May 28-29, 2024 (invited talk).
121. "Enabling light coupling between nanowires and low refractive index contrast optical waveguides towards scalable quantum circuits",
S.I. Tsintzos, K. Tsimvrakidis, A. Sinani, J.C. Gates, A.W. Elshaari, P.G.R. Smith, V. Zwiller, C. Riziotis*,
SPIE PHOTONICS WEST 2024, Conference OE201 Integrated Optics: Devices, Materials, and Technologies XXVIII. San Francisco, USA, January 27 – February 1, 2024 (oral).
122. "Sub-diffraction limited direct diode laser patterning of methacrylic polymer thin films doped with silver nanoparticles",
A. Sinani, K. Karachousos-Spiliotakopoulos, V. Tangoulis, T. Manouras, E. Angelakos, C. Riziotis*,
SPIE PHOTONICS WEST 2024, Conference LA302: Laser-based Micro- and Nanoprocessing XVII, San Francisco, USA, January 27 – February 1, 2024 (oral).
123. "Femtosecond laser writing and micromachining",
A. Sinani*, C. Riziotis,
The first Siberian-Attica International Workshop on Laser Processing for Thermophysical Applications, Novosibirsk-Athens, June 29, 2024 (oral).
124. "Development and applications of cytogrid technology to cytological screening at the era of AI technology",
E. Tsiambas, C. Riziotis*, 12th Pan-Hellenic Conference of the Hellenic Society of Clinical and Molecular Cytology, War Museum, Athens, Greece, October 27-29 2024 (invited talk).
125. "Thermal treatment of intraocular lens surface with a Laser",
A. Sinani, D. Palles, C. Bacharis, D. Mouzakis*, M. Kandyla, and C. Riziotis,
10th Panhellenic Thermal Analysis and Calorimetry Conference, ΘEPMA2024, Greek Thermal Analysis Society (E.E.Θ.A.), University of Thessaly, Larissa, Greece, July 5-6, 2024 (keynote talk).
126. "Engineering photonic structures and optical materials towards devices development",
C. Riziotis,
1st Photonics Hellenic symposium (PHOS), organised by the Hellenic Institute of

Advanced Studies HIAS, Foundation of Research and Technology Hellas -FORTH Heraklion, Crete, Greece, October, 7-8 2024 (invited talk).

127. “Micro/nano-structured functional surfaces and devices by laser processing”,
M. Kandyla*,
23rd Panhellenic Chemistry Conference, Athens, Greece, September 25-28, 2024 (invited talk).
128. “Optimizing photocatalytic activity of Immobilized TiO₂ through laser micro-patterned surfaces”,
T. Giannakis*, S.-K. Zervou, T. Triantis, C. Christophoridis, E. Bizani, S. Starinskiy, P. Koralli, G. Mousdis, A. Hiskia, M. Kandyla,
FEMS Junior Euromat, Manchester, U.K., July 15-18, 2024 (oral).
129. “Emerging frontiers of chirality control using metasurfaces”,
G. Kakarantzas,
1st Photonics Hellenic symposium (PHOS), organised by the Hellenic Institute of Advanced Studies HIAS, Foundation of Research and Technology Hellas -FORTH Heraklion, Crete, Greece, October 7-8, 2024 (invited talk).

7. University and Research Organization Presentations

1. “Bridging the scales through systematic modeling of complex polymeric and biological systems”,
A. Rissanou,
Department of Chemistry, National and Kapodistrian University of Athens, Greece, April 1, 2024.
2. “Chemical functionalization of carbon nanostructures and 2D nanomaterials for energy-related applications”,
N. Tagmatarchis,
Graduate School of Engineering, Institute of Materials and Systems for Sustainability, Nagoya University, Japan, August 7, 2024.
3. “Semiconducting clathrates as thermoelectric materials”,
A. Kaltzoglou,
Department of Mechanical Engineering, University of Nicosia, Cyprus, March 8, 2024.
4. “Exploratory synthesis of semiconducting materials and advanced physical characterization methods”,
A. Kaltzoglou,
Department of Physics and Astronomy, Texas Tech University, Lubbock, USA, November 14, 2024.
5. “Engineering optical structures & functional materials towards photonic devices development”,
C. Riziotis,
LIGHTSTALK Webinar, AGU Photonics Group, IEEE Photonics Society and OPTICA Chapters of the Abdullah Gül University (AGU) and Middle East Technical University (METU), November 20, 2024.

8. Wider Public Dissemination

1. “Logic gates and molecular logic gates”,

C. E. Tzeliou*, D. Tzeli,
Encyclopedia, March 29, 2024 [encyclopedia.pub/entry/56522].

2. “Nanomaterials-light-energy conversion”,
E. Nikoli*, I. K. Sideri, N. Tagmatarchis,
Athens Science Festival, Athens, Greece, April 16-21, 2024.
3. “Discovery of new materials for thermoelectric applications via synchrotron facilities”,
A. Kaltzoglou,
ESRF-Greek Synchrotron Users Network, Acropolis Museum, Athens, March 13-14, 2024.
4. “Light for movement of objects”,
S. V. Starinskiy*, T. Giannakis, N. Chouchoumi, M. Kandyla,
Athens Science Festival, Athens, Greece, April 16-21, 2024.

9. Patent Applications

1. “Light coupling between nanowire and optical waveguide by microsphere photonic nanojet”,
Inventor: Dr. C. Riziotis,
International Patent Application WIPO PCT/EP2024/060953 (22.04.2024)