

Publications (First author: 12, corresponding author: 5)

[1] [A. Kostopoulou](#), I. Tsiaoussis and A. Lappas*

"Magneto-optical properties of iron oxide nanoclusters"

AIP Conference Proceedings, 1288, **2010**.

[2] [A. Kostopoulou](#), I. Tsiaoussis and A. Lappas*

"Magnetic Iron Oxide Nanoclusters with Tunable Optical Response"

Photon. Nanostruct: Fundam. Appl. **2011**, 9 (2), 201-206

[3] [A. Kostopoulou](#), F. Th  tiot, I. Tsiaoussis, M. Androulidaki, P. D. Cozzoli, and A. Lappas*

"Colloidal Anisotropic ZnO-Fe@Fe_xO_y Nanoarchitectures with Interface-Mediated Exchange-Bias and Band-Edge Ultraviolet Fluorescence"

Chem. Mater., **2012**, 24 (14), 2722-2732.

[4] E. Magoulakis, [A. Kostopoulou](#), G. N. Arvanitakis, A. G. Kanaras, A. N. Andriotis, A. Lappas and P. A. Loukakos*

"Porosity-moderated ultrafast electron transport in Au nanowire networks"

Applied Physics A, **2013**, 111 (3), 711-717.

[5] D. Fragouli, B. Torre, F. Villafiorita-Monteleone, [A. Kostopoulou](#), G. Nanni, A. Falqui, A. Casu, A. Lappas, R. Cingolani, A. Athanassiou*

"Nanocomposite pattern-mediated magnetic interactions for localized deposition of nanomaterials"

ACS Appl. Mater. Interfaces, **2013**, 5 (15), 7253–7257

[6] [A. Kostopoulou](#), K. Brintakis, A. Lascialfari, M. Angelakeris, M. Vasilakaki, K.N. Trohidou, A.P. Douvalis, S. Psycharakis, A. Ranella, L. Manna, A. Lappas*

"Iron-oxide colloidal nanoclusters: From fundamental physical properties to diagnosis and therapy"

Progress in Biomedical Optics and Imaging - Proceedings of SPIE, **2014**

[7] [A. Kostopoulou](#), K. Brintakis, M. Vasilakaki, K.N. Trohidou, A.P. Douvalis, A. Lascialfari, L. Manna, A. Lappas*

"Assembly-mediated Interplay of Dipolar Interactions and Surface Spin Disorder in Colloidal Maghemite Nanoclusters" (*Editor's choice as a "Hot Article"*)

Nanoscale, **2014**, 6, 3764-3776

[8] [A. Kostopoulou](#), S. K. P. Velu, K. Thangavel, F. Orsini, K. Brintakis, S. Psycharakis, A. Ranella, L. Bordonali, A. Lappas, A. Lascialfari*

"Colloidal Assemblies of Oriented Maghemite Nanocrystals and their NMR Relaxometric Properties"

Dalton Transactions, **2014**, 43, 8395-9404

[9] E. Y. Yuzik-Klimova, N. V Kuchkina, S. Sorokina, D. G. Morgan, L. Z. Nikoshvili, N. L., V. G. Matveeva, E. M Sulman, B. D Stein, W. E Mahmoud, A. A. Al-Ghamdi, [A. Kostopoulou](#), A. Lappas, Z. B Shifrina and L. M. Bronstein*

"Magnetically Recoverable Catalysts Based on Polyphenylenepyridyl Dendrons and Dendrimers: Control over Nanoparticle Formation and Catalytic Properties"

RSC Adv., **2014**, *4*, 23271-23280

[10] E. Kasotakis, [A. Kostopoulou](#), M. Spuch-Calvar, M. Androulidaki, N. Pelekanos, A. G. Kanaras, A. Mitraki, A. Lappas*

"Assembly of quantum dots on peptide nanostructures and their spectroscopic properties"

Appl. Phys. A, **2014**, *116*, 977-985

[11] E. Kasotakis, [A. Kostopoulou](#), M. Spuch-Calvar, M. Androulidaki, N. Pelekanos, A. G. Kanaras, A. Mitraki, A. Lappas*

"Thin film mesoscale organization of nanoparticles by using biomolecular peptide tools" (Conference paper)

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[12] G.M. Morgan, B.S. Boris, N.V. Kuchkina, E.Y. Yuzik-Klimova, S.A. Sorokina, B.D. Stein, D.I. Svergun, A. Spilotros, [A. Kostopoulou](#), A. Lappas, Z.B. Shifrina, L.M. Bronstein*

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Langmuir, **2014**, *30*, 8543-8550.

[13] N.V. Kuchkina, D.G. Morgan, [A. Kostopoulou](#), A. Lappas, K. Brintakis, B.S. Boris, E.Y. Yuzik-Klimov, B.D. Stein, D.I. Svergun, A. Spilotros, M.G. Sulman, L. Zh. Nikoshvili, E.M. Sulman, Z.B. Shifrina, L.M. Bronstein*

"Hydrophobic periphery tails of polyphenylenepyridyl dendrons control nanoparticle formation and catalytic properties"

Chem. Mater., **2014**, *26*, 5654–5663

[14] [A. Kostopoulou](#), A. Lappas*

"Colloidal magnetic nanocrystal clusters: Variable length-scale interaction mechanisms, synergetic functionalities and technological advantages" (Review)

Nanotechnology Reviews, **2015**, *4*, 595-624

[15] D. Sakellari, K. Brintakis, [A. Kostopoulou](#), K. Simeonidis, A. Lappas and M. Angelakeris*

"Ferrimagnetic nanocrystal assemblies as versatile magnetic particle hyperthermia mediators"

Materials Science and Engineering: C, **2016**, *58*, 187-193

[16] [A. Kostopoulou](#),* M. Sygletou, K. Brintakis, A. Lappas and E. Stratakis*

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[17] [A. Kostopoulou](#), E. Kymakis, E. Stratakis

"Perovskite nanostructures for photovoltaic and energy storage devices"

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[18] A. Kostopoulou, K. Brintakis, E. Fragogeorgi, A. Anthousi, L. Manna, S. Begin-Colin, C. Billotey, A. Ranella, G. Loudos, I. Athanassakis, A. Lappas*

"Iron Oxide Colloidal Nanoclusters as Theranostic Vehicles and Their Interactions at the Cellular Level"

Nanomaterials, **2018**, 8, 315 (**Front cover**)

[19] K. Alexaki, A. Kostopoulou,* M. Sygletou, G. Kenanakis, E. Stratakis*

"Unveiling the Structure of MoS_x Nanocrystals Produced upon Laser Fragmentation of MoS₂ Platelets"

ACS Omega, **2018**, 3, 16728–16734

[20] A. Kostopoulou,* D. Vernardou,* K. Savva, E. Stratakis*

"All-inorganic lead halide perovskite nanohexagons for high performance air-stable lithium batteries"

Nanoscale **2019**, 11, 882-889.

[21] A. Kostopoulou,* K. Brintakis, NK. Nasikas, E. Stratakis*

"Perovskite nanocrystals for energy conversion and storage"

Nanophotonics **2019**, 8, 1607-1640.

[22] A. Heuer-Jungemann, N. Feliu, I. Bakaimi, M. Hamaly, A. Alkilany, I. Chakraborty, A. Masood, M. F. Casula, A. Kostopoulou, E. Oh, K. Susumu, M. H. Stewart, I. L. Medintz, E. Stratakis, W. J. Parak, A. G. Kanaras,*

"The role of ligands in the chemical synthesis and applications of inorganic nanoparticles"

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[23] K. Brintakis, E. Gagaoudakis, A. Kostopoulou,* V. Faka, K. Argyrou, V. Binas, G. Kiriakidis, E. Stratakis,*

"Ligand-free all-inorganic metal halide nanocubes for fast, ultra-sensitive and self-powered ozone sensors"

Nanoscale Adv. **2019**, 1, 2699-2706.

[24] A. Lappas,* G. Antonaropoulos, K. Brintakis, M. Vasilakaki, K. N. Trohidou, V. Iannotti, G. Ausanio, A. Kostopoulou, M. Abeykoon, I. K. Robinson, E. S. Bozin

"Vacancy-Driven Noncubic Local Structure and Magnetic Anisotropy Tailoring in Fe_xO-Fe_{3-δ}O₄ Nanocrystals"

Phys. Rev. X **2019**, 9, 041044.

Book Chapter

[1] "Ferrocene-containing polyphenylenes as precursors for magnetic nanomaterials"

R.A. Dvorikova, Y.V. Korshak, L.N. Nikitin, M.I. Buzin, V.A. Shanditsev, Z.S. Klemenkova, A.L. Rusanov, A.R. Khokhlov, A. Lappas, A. Kostopoulou

Characterization and Development of Novel Materials Research Compendium, **2013**, 169-182

[2] "Magnetic Nanoparticles in Polymers"

R.A. Dvorikova, Y.V. Korshak, L.N. Nikitin, M.I. Buzin, V.A. Shanditsev, Z.S. Klemenkova, A.L. Rusanov, A.R. Khokhlov, A. Lappas, A. Kostopoulou

Engineering of Polymers and Chemical Complexity, Volume II, 2014, pp. 145-160

[3] "Metal Nanoparticles in Polymers"

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