# Doru Constantin

## List of Publications by Year in descending order



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|---|---|---|---|
| 79 papers | 1,291 citations | 361413 20 h-index | 434195 31 g-index |
| 86 all docs | 86 docs citations | 86 times ranked | 1856 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Acoustic Vibration Modes of Goldâ€“Silver Coreâ€“Shell Nanoparticles. Chemosensors, 2022, 10, 193. | 3.6 | 1 |
| 2 | Shape-Controlled Second-Harmonic Scattering from Gold Nanotetrapods. Journal of Physical Chemistry C, 2022, 126, 9831-9835. | 3.1 | 1 |
| 3 | Two-step assembly kinetics of gold nanoparticles. Journal of Materials Chemistry C, 2021, 9, 1730-1739. | 5.5 | 5 |
| 4 | Interplay of Structure and Dynamics in Lithium/Ionic Liquid Electrolytes: Experiment and Molecular Simulation. Journal of Physical Chemistry B, 2021, 125, 1618-1631. | 2.6 | 10 |
| 5 | Sharp Spectral Variations of the Ultrafast Transient Light Extinction by Bimetallic Nanoparticles in the Nearâ€UV. Advanced Optical Materials, 2021, 9, 2001778. | 7.3 | 2 |
| 6 | Doxorubicin-Loaded Metal-Organic Frameworks Nanoparticles with Engineered Cyclodextrin Coatings: Insights on Drug Location by Solid State NMR Spectroscopy. Nanomaterials, 2021, 11, 945. | 4.1 | 20 |
| 7 | Symmetry Breaking in Seed-Mediated Silver Nanorod Growth Induced by Dimethyl Sulfoxide. Chemistry of Materials, 2021, 33, 2948-2956. | 6.7 | 9 |
| 8 | Structure and Formation Kinetics of Millimeterâ€Size Single Domain Supercrystals. Advanced Functional Materials, 2021, 31, 2101869. | 14.9 | 9 |
| 9 | FrÃ©edericksz-Like Transition in a Biaxial Smectic- <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>A</mml:mi></mml:math> Phase. Physical Review X, 2021, 11, . | 8.9 | 5 |
| 10 | Softness-driven complexity in supercrystals of gold nanoparticles. Soft Matter, 2021, 17, 6461-6469. | 2.7 | 8 |
| 11 | Grazing Incidence X-ray Diffraction Studies of Lipidâ€“Peptide Mixed Monolayers during Shear Flow. ACS Omega, 2020, 5, 14555-14563. | 3.5 | 4 |
| 12 | Revealing the Dynamics of Functional Nanomaterials in Their Formation and Application Media with Liquid and Gas-phase TEM. Microscopy and Microanalysis, 2020, 26, 196-198. | 0.4 | 1 |
| 13 | Determining the morphology and concentration of coreâ€“shell Au/Ag nanoparticles. Nanoscale Advances, 2020, 2, 4522-4528. | 4.6 | 5 |
| 14 | Growth Kinetics of Coreâ€“Shell Au/Ag Nanoparticles. Journal of Physical Chemistry C, 2020, 124, 21717-21721. | 3.1 | 3 |
| 15 | Real-Time In Situ Observations Reveal a Double Role for Ascorbic Acid in the Anisotropic Growth of Silver on Gold. Journal of Physical Chemistry Letters, 2020, 11, 2830-2837. | 4.6 | 21 |
| 16 | Interactions Between Topological Defects and Nanoparticles. Frontiers in Physics, 2020, 7, . | 2.1 | 2 |
| 17 | From Chains to Monolayers: Nanoparticle Assembly Driven by Smectic Topological Defects. Nano Letters, 2020, 20, 1598-1606. | 9.1 | 19 |
| 18 | Design of Engineered Cyclodextrin Derivatives for Spontaneous Coating of Highly Porous Metal-Organic Framework Nanoparticles in Aqueous Media. Nanomaterials, 2019, 9, 1103. | 4.1 | 28 |

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|---|---|---|---|
| 19 | Insights into the Formation Mechanism of CdSe Nanoplatelets Using in Situ X-ray Scattering. Nano Letters, 2019, 19, 6466-6474. | 9.1 | 26 |
| 20 | Plasmonic Oligomers with Tunable Conductive Nanojunctions. Journal of Physical Chemistry Letters, 2019, 10, 7093-7099. | 4.6 | 12 |
| 21 | Interaction and structuration of membrane-binding and membrane-excluding colloidal particles in lamellar phases. Soft Matter, 2019, 15, 4351-4362. | 2.7 | 0 |
| 22 | The effect of gramicidin inclusions on the local order of membrane components. European Physical Journal E, 2018, 41, 44. | 1.6 | 1 |
| 23 | Coupling between Inclusions and Membranes at the Nanoscale. Physical Review Letters, 2018, 120, 128104. | 7.8 | 9 |
| 24 | Membrane-Mediated Interactions. , 2018, , 311-350. | | 3 |
| 25 | Nanoparticle-Templated Self-Assembly of Viral Capsids Probed by Time-Resolved Absorbance Spectroscopy and X-Ray Scattering. Physical Review Applied, 2018, 10, . | 3.8 | 5 |
| 26 | Controlling the symmetry of supercrystals formed by plasmonic coreâ€“shell nanorods with tunable cross-section. Nanoscale, 2018, 10, 18362-18369. | 5.6 | 12 |
| 27 | Nonequilibrium Self-Assembly Dynamics of Icosahedral Viral Capsids Packaging Genome. Biophysical Journal, 2018, 114, 60a. | 0.5 | 2 |
| 28 | Direct Liquid to Crystal Transition in a Quasi-Two-Dimensional Colloidal Membrane. Journal of Physical Chemistry Letters, 2018, 9, 4302-4307. | 4.6 | 6 |
| 29 | Nonequilibrium self-assembly dynamics of icosahedral viral capsids packaging genome or polyelectrolyte. Nature Communications, 2018, 9, 3071. | 12.8 | 59 |
| 30 | Isotropic, nematic, and lamellar phases in colloidal suspensions of nanosheets. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 6662-6667. | 7.1 | 67 |
| 31 | Nanostructuration of ionic liquids: impact on the cation mobility. A multi-scale study. Nanoscale, 2017, 9, 1901-1908. | 5.6 | 26 |
| 32 | Reversible strain alignment and reshuffling of nanoplatelet stacks confined in a lamellar block copolymer matrix. Nanoscale, 2017, 9, 17371-17377. | 5.6 | 12 |
| 33 | Ionic Liquids: evidence of the viscosity scale-dependence. Scientific Reports, 2017, 7, 2241. | 3.3 | 21 |
| 34 | Identification of a major intermediate along the self-assembly pathway of an icosahedral viral capsid by using an analytical model of a spherical patch. Soft Matter, 2016, 12, 6728-6736. | 2.7 | 14 |
| 35 | Solution self-assembly of plasmonic Janus nanoparticles. Soft Matter, 2016, 12, 9666-9673. | 2.7 | 16 |
| 36 | Varying the counter ion changes the kinetics, but not the final structure of colloidal gels. Journal of Colloid and Interface Science, 2016, 463, 137-144. | 9.4 | 6 |

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|---|---|---|---|
| 37 | Solution scattering from colloidal curved plates: barrel tiles, scrolls and spherical patches. Journal of Applied Crystallography, 2015, 48, 1901-1906. | 4.5 | 4 |
| 38 | Strain-controlled fluorescence polarization in a CdSe nanoplateletâ€“block copolymer composite. Chemical Communications, 2015, 51, 4051-4054. | 4.1 | 20 |
| 39 | Real-Time in Situ Probing of High-Temperature Quantum Dots Solution Synthesis. Nano Letters, 2015, 15, 2620-2626. | 9.1 | 84 |
| 40 | Reconstruction of the Disassembly Pathway of an Icosahedral Viral Capsid and Shape Determination of Two Successive Intermediates. Journal of Physical Chemistry Letters, 2015, 6, 3471-3476. | 4.6 | 23 |
| 41 | Why the aspect ratio? Shape equivalence for the extinction spectra of gold nanoparticles. European Physical Journal E, 2015, 38, 116. | 1.6 | 8 |
| 42 | A two-dimensional nematic phase of magnetic nanorods. Journal of Chemical Physics, 2014, 140, 104904. | 3.0 | 22 |
| 43 | Lamellar L <sub>Î±</sub> Mesophases Doped with Inorganic Nanoparticles. ChemPhysChem, 2014, 15, 1270-1282. | 2.1 | 14 |
| 44 | Mesostructured silica matrix for irinotecan delivery systems. Open Chemistry, 2014, 12, 813-820. | 1.9 | 8 |
| 45 | Infrared dichroism of gold nanorods controlled using a magnetically addressable mesophase. Journal of Materials Chemistry C, 2014, 2, 5087. | 5.5 | 2 |
| 46 | Hybrid Nanocomposites with Tunable Alignment of the Magnetic Nanorod Filler. ACS Applied Materials & Interfaces, 2014, 6, 1583-1588. | 8.0 | 8 |
| 47 | The Amine Content of PEGylated Chitosan Bombyx mori Nanoparticles Acts as a Trigger for Protein Delivery. Langmuir, 2014, 30, 965-975. | 3.5 | 17 |
| 48 | Morphology of gold nanoparticles determined by full-curve fitting of the light absorption spectrum. Comparison with X-ray scattering and electron microscopy data. Nanoscale, 2014, 6, 13527-13534. | 5.6 | 15 |
| 49 | Norovirus Capsid Proteins Self-Assemble through Biphasic Kinetics via Long-Lived Stave-like Intermediates. Journal of the American Chemical Society, 2013, 135, 15373-15381. | 13.7 | 50 |
| 50 | Elasticity of Lipid Bilayer Membranes at the Nanoscale: The Need for New Terms. Biophysical Journal, 2013, 104, 244a. | 0.5 | 0 |
| 51 | Structure, thermodynamics and dynamics of the isotropic phase of spherical non-ionic surfactant micelles. Journal of Colloid and Interface Science, 2013, 393, 161-173. | 9.4 | 7 |
| 52 | Smectic mesophases of functionalized silver and gold nanoparticles with anisotropic plasmonic properties. Chemical Communications, 2013, 49, 7845. | 4.1 | 29 |
| 53 | The interaction of charged nanoparticles at interfaces. Europhysics Letters, 2012, 100, 18002. | 2.0 | 4 |
| 54 | Bilayer Elasticity at the Nanoscale: The Need for New Terms. PLoS ONE, 2012, 7, e48306. | 2.5 | 33 |

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|---|---|---|---|
| 55 | Insertion of Gold Nanoparticles in Fluid Mesophases: Size Filtering and Control of Interactions. Journal of Physical Chemistry C, 2011, 115, 17682-17687. | 3.1 | 11 |
| 56 | Slow dynamics of a colloidal lamellar phase. Journal of Chemical Physics, 2010, 133, 224902. | 3.0 | 6 |
| 57 | Communications: Short-range dynamics of a nematic liquid-crystalline phase. Journal of Chemical Physics, 2010, 132, 091101. | 3.0 | 10 |
| 58 | The interaction of hybrid nanoparticles inserted within surfactant bilayers. Journal of Chemical Physics, 2010, 133, 144901. | 3.0 | 9 |
| 59 | Lyotropic Lamellar Phase Doped with a Nematic Phase of Magnetic Nanorods. Langmuir, 2010, 26, 4586-4589. | 3.5 | 23 |
| 60 | A PGSE-NMR Study of Molecular Self-Diffusion in Lamellar Phases Doped with Polyoxometalates. Journal of Physical Chemistry B, 2010, 114, 220-227. | 2.6 | 17 |
| 61 | Membrane-mediated repulsion between gramicidin pores. Biochimica Et Biophysica Acta - Biomembranes, 2009, 1788, 1782-1789. | 2.6 | 13 |
| 62 | Magnetic Nanorods Confined in a Lamellar Lyotropic Phase. Langmuir, 2008, 24, 8205-8209. | 3.5 | 34 |
| 63 | Photochromic Hybrid Organicâ"Inorganic Liquid-Crystalline Materials Built from Nonionic Surfactants and Polyoxometalates: Elaboration and Structural Study. Langmuir, 2008, 24, 6285-6291. | 3.5 | 42 |
| 64 | Intermittent Brownian dynamics over a rigid strand: Heavily tailed relocation statistics in a simple geometry. Physical Review E, 2008, 78, 030102. | 2.1 | 47 |
| 65 | Repulsion Between Inorganic Particles Inserted Within Surfactant Bilayers. Physical Review Letters, 2008, 101, 098101. | 7.8 | 21 |
| 66 | Interaction of Alamethicin Pores in DMPC Bilayers. Biophysical Journal, 2007, 92, 3978-3987. | 0.5 | 32 |
| 67 | Structure and interaction potentials in solid-supported lipid membranes studied by X-ray reflectivity at varied osmotic pressure. European Physical Journal E, 2006, 20, 221-230. | 1.6 | 22 |
| 68 | Dynamics of bulk fluctuations in a lamellar phase studied by coherent x-ray scattering. Physical Review E, 2006, 74, 031706. | 2.1 | 10 |
| 69 | Coherent X-ray scattering and speckle pattern of solid-supported multilayers of surfactant bilayers. Physica B: Condensed Matter, 2005, 357, 61-65. | 2.7 | 6 |
| 70 | Electric field unbinding of solid-supported lipid multilayers. European Physical Journal E, 2005, 18, 273-278. | 1.6 | 17 |
| 71 | Lipid membranes on a surface grating studied by neutron reflectometry. Europhysics Letters, 2005, 71, 311-317. | 2.0 | 5 |
| 72 | Biomimetic membranes of lipidâ€"peptide model systems prepared on solid support. Journal of Physics Condensed Matter, 2004, 16, S2439-S2453. | 1.8 | 27 |

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|---|---|---|---|
| 73 | Solid-supported lipid multilayers: Structure factor and fluctuations. European Physical Journal E, 2003, 12, 283-290. | 1.6 | 33 |
| 74 | Structural Transition in the Isotropic Phase of the C12EO6/H2O Lyotropic Mixture:Â A Rheological Investigation. Langmuir, 2003, 19, 2554-2559. | 3.5 | 19 |
| 75 | Comment on â€œTracer Diffusion in a Dislocated Lamellar Systemâ€• Physical Review Letters, 2003, 91, 039801; author reply 039802. | 7.8 | 4 |
| 76 | High-frequency rheological behaviour of a multiconnected lyotropic phase. Europhysics Letters, 2002, 58, 236-242. | 2.0 | 13 |
| 77 | Connectivity of the Hexagonal, Cubic, and Isotropic Phases of the C12EO6/H2O Lyotropic Mixture Investigated by Tracer Diffusion and X-ray Scattering. Journal of Physical Chemistry B, 2001, 105, 668-673. | 2.6 | 34 |
| 78 | Diffusion Coefficients in a Lamellar Lyotropic Phase: Evidence for Defects Connecting the Surfactant Structure. Physical Review Letters, 2000, 85, 4297-4300. | 7.8 | 37 |
| 79 | Kinetics of phase ordering of nematic liquid crystals confined in porous media. Physical Review E, 1999, 60, 1812-1814. | 2.1 | 1 |