Davide Bochicchio

List of Publications by Year
in descending order

53 papers	2,412 citations	201575 27 h-index	206029 48 g-index
56 all docs	56 docs citations	56 times ranked	2508 citing authors

#	Article	IF	Citations
1	Morphological instability of core-shell metallic nanoparticles. Physical Review B, 2013, 87, .	1.1	209
2	Transition from coreâ€“shell to Janus chemical configuration for bimetallic nanoparticles. Nanoscale, 2012, 4, 3381.	2.8	163
3	Self-Sorted, Random, and Block Supramolecular Copolymers via Sequence Controlled, Multicomponent Self-Assembly. Journal of the American Chemical Society, 2020, 142, 7606-7617.	6.6	151
4	Size-Dependent Transition to High-Symmetry Chiral Structures in AgCu, AgCo, AgNi, and AuNi Nanoalloys. Nano Letters, 2010, 10, 4211-4216.	4.5	141
5	Competition between Icosahedral Motifs in AgCu, AgNi, and AgCo Nanoalloys: A Combined Atomisticâ€“DFT Study. Journal of Physical Chemistry C, 2013, 117, 26405-26413.	1.5	124
6	A Block Supramolecular Polymer and Its Kinetically Enhanced Stability. Journal of the American Chemical Society, 2018, 140, 10570-10577.	6.6	112
7	Into the Dynamics of a Supramolecular Polymer at Submolecular Resolution. Nature Communications, 2017, 8, 147.	5.8	106
8	MARTINI Coarse-Grained Models of Polyethylene and Polypropylene. Journal of Physical Chemistry B, 2015, 119, 8209-8216.	1.2	82
9	From Cooperative Self-Assembly to Water-Soluble Supramolecular Polymers Using Coarse-Grained Simulations. ACS Nano, 2017, 11, 1000-1011.	7.3	82
10	Monolayer-Protected Anionic Au Nanoparticles Walk into Lipid Membranes Step by Step. Journal of Physical Chemistry Letters, 2015, 6, 3175-3179.	2.1	79
11	Molecular photoswitches mediating the strain-driven disassembly of supramolecular tubules. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 11850-11855.	3.3	70
12	Biomimetic Synthesis of Sub-20 nm Covalent Organic Frameworks in Water. Journal of the American Chemical Society, 2020, 142, 3540-3547.	6.6	68
13	Au Nanoparticles in Lipid Bilayers: A Comparison between Atomistic and Coarse-Grained Models. Journal of Physical Chemistry C, 2017, 121, 10927-10935.	1.5	61
14	Calculating the free energy of transfer of small solutes into a model lipid membrane: Comparison between metadynamics and umbrella sampling. Journal of Chemical Physics, 2015, 143, 144108.	1.2	57
15	Interaction of hydrophobic polymers with model lipid bilayers. Scientific Reports, 2017, 7, 6357.	1.6	56
16	<i>Swarm-CG</i>: Automatic Parametrization of Bonded Terms in MARTINI-Based Coarse-Grained Models of Simple to Complex Molecules <i>via</i> Fuzzy Self-Tuning Particle Swarm Optimization. ACS Omega, 2020, 5, 32823-32843.	1.6	49
17	Living supramolecular polymerization of fluorinated cyclohexanes. Nature Communications, 2021, 12, 3134.	5.8	49
18	How Defects Control the Out-of-Equilibrium Dissipative Evolution of a Supramolecular Tubule. ACS Nano, 2019, 13, 4322-4334.	7.3	48

#	Article	IF	Citations
19	Tuning the Structure of Nanoparticles by Small Concentrations of Impurities. Chemistry of Materials, 2014, 26, 3354-3356.	3.2	44
20	Supramolecular Copolymerization as a Strategy to Control the Stability of Selfâ€Assembled Nanofibers. Angewandte Chemie - International Edition, 2018, 57, 6843-6847.	7.2	44
21	Structure and thermal stability of AgCu chiral nanoparticles. European Physical Journal D, 2012, 66, 1.	0.6	43
22	Molecular modelling of supramolecular polymers. Advances in Physics: X, 2018, 3, 1436408.	1.5	42
23	Crystalline Cyclophaneâ€“Protein Cage Frameworks. ACS Nano, 2018, 12, 8029-8036.	7.3	39
24	From isodesmic to highly cooperative: reverting the supramolecular polymerization mechanism in water by fine monomer design. Chemical Communications, 2018, 54, 4112-4115.	2.2	35
25	Identifying and Tracking Defects in Dynamic Supramolecular Polymers. Journal of Physical Chemistry B, 2020, 124, 589-599.	1.2	35
26	Aggregation in Colloidal Suspensions: Evaluation of the Role of Hydrodynamic Interactions by Means of Numerical Simulations. Journal of Physical Chemistry B, 2013, 117, 14509-14517.	1.2	32
27	Chemical ordering in magic-size Agâ€“Pd nanoparticles. Physical Chemistry Chemical Physics, 2014, 16, 26478-26484.	1.3	28
28	Aggregation kinetics and gel formation in modestly concentrated suspensions of oppositely charged model ceramic colloids: a numerical study. Physical Chemistry Chemical Physics, 2012, 14, 1431-1439.	1.3	26
29	Competition between structural motifs in goldâ€“platinum nanoalloys. Computational and Theoretical Chemistry, 2013, 1021, 177-182.	1.1	25
30	Effect of Concentration on the Supramolecular Polymerization Mechanism via Implicit-Solvent Coarse-Grained Simulations of Water-Soluble 1,3,5-Benzenetricarboxamide. Journal of Physical Chemistry Letters, 2017, 8, 3813-3819.	2.1	25
31	The Membrane Bending Modulus in Experiments and Simulations. Advances in Biomembranes and Lipid Self-Assembly, 2016, , 117-143.	0.3	24
32	Structures and segregation patterns of Agâ€“Cu and Agâ€“Ni nanoalloys adsorbed on MgO(0 0 1). Journal of Physics Condensed Matter, 2016, 28, 064005.	0.7	23
33	Amphiphilic gold nanoparticles perturb phase separation in multidomain lipid membranes. Nanoscale, 2020, 12, 19746-19759.	2.8	23
34	How the Dynamics of a Supramolecular Polymer Determines Its Dynamic Adaptivity and Stimuli-Responsiveness: Structureâ€“Dynamicsâ€“Property Relationships From Coarse-Grained Simulations. Journal of Physical Chemistry B, 2018, 122, 4169-4178.	1.2	21
35	Controlling Exchange Pathways in Dynamic Supramolecular Polymers by Controlling Defects. ACS Nano, 2021, 15, 14229-14241.	7.3	19
36	Three-Dimensional Directionality Is a Pivotal Structural Feature for the Bioactivity of Azabisphosphonate-Capped Poly(PhosphorHydrazone) Nanodrug Dendrimers. Biomacromolecules, 2018, 19, 712-720.	2.6	18

#	Article	IF	Citations
37	Symbiotic Self-Assembly Strategy toward Lipid-Encased Cross-Linked Polymer Nanoparticles for Efficient Gene Silencing. ACS Applied Materials & Interfaces, 2019, 11, 24971-24983.	4.0	18
38	Polystyrene perturbs the structure, dynamics, and mechanical properties of DPPC membranes: An experimental and computational study. Journal of Colloid and Interface Science, 2022, 605, 110-119.	5.0	15
39	Insights into the Kinetics of Supramolecular Comonomer Incorporation in Water. Macromolecules, 2019, 52, 3049-3055.	2.2	14
40	Amphiphilic nanoparticles generate curvature in lipid membranes and shape liposomeâ€“liposome interfaces. Nanoscale, 2021, 13, 16879-16884.	2.8	13
41	Heteroaggregation of ceramic colloids in suspensions. Advances in Physics: X, 2017, 2, 35-53.	1.5	12
42	Supramolecular Copolymerization as a Strategy to Control the Stability of Selfâ€Assembled Nanofibers. Angewandte Chemie, 2018, 130, 6959-6963.	1.6	12
43	Cholesterol Hinders the Passive Uptake of Amphiphilic Nanoparticles into Fluid Lipid Membranes. Journal of Physical Chemistry Letters, 2021, 12, 8583-8590.	2.1	12
44	Computation of shear viscosity of colloidal suspensions by SRD-MD. Journal of Chemical Physics, 2015, 142, 144101.	1.2	11
45	Kinetically driven ordered phase formation in binary colloidal crystals. Physical Review E, 2013, 87, 022304.	0.8	9
46	Ion-bridges and lipids drive aggregation of same-charge nanoparticles on lipid membranes. Nanoscale, 2022, 14, 6912-6921.	2.8	9
47	Nitrobenzoxadiazole-Appended Cell Membrane Modifiers for Efficient Optoporation with Noncoherent Light. Bioconjugate Chemistry, 2018, 29, 2068-2073.	1.8	8
48	Toward Chemotactic Supramolecular Nanoparticles: From Autonomous Surface Motion Following Specific Chemical Gradients to Multivalency-Controlled Disassembly. ACS Nano, 2021, 15, 16149-16161.	7.3	6
49	Compact and ordered colloidal clusters from assemblyâ€“disassembly cycles: A numerical study. Journal of Colloid and Interface Science, 2015, 440, 198-203.	5.0	5
50	Amphiphilic Gold Nanoparticles: A Biomimetic Tool to Gain Mechanistic Insights into Peptide-Lipid Interactions. Membranes, 2022, 12, 673.	1.4	5
51	Study of the B1-B2 transition in colloidal clusters. Journal of Chemical Physics, 2014, 140, 024911.	1.2	4
52	Discordant Supramolecular Fibres Reversibly Depolymerised by Temperature and Light. Chemistry - A European Journal, 2021, 27, 1829-1838.	1.7	3
53	Aggregation of binary colloidal suspensions on attractive walls. Physical Chemistry Chemical Physics, 2016, 18, 3073-3079.	1.3	1