Giulia Rossi

List of Publications by Year
in descending order

73 papers	4,551 citations	87723 38 h-index	102304 66 g-index
74 all docs	74 docs citations	74 times ranked	3899 citing authors

#	Article	IF	Citations
1	Magic Polyicosahedral Core-Shell Clusters. Physical Review Letters, 2004, 93, 105503.	2.9	361
2	Global optimization of bimetallic cluster structures. I. Size-mismatched Agâ€“Cu, Agâ€“Ni, and Auâ€“Cu systems. Journal of Chemical Physics, 2005, 122, 194308.	1.2	307
3	Polystyrene Nanoparticles Perturb Lipid Membranes. Journal of Physical Chemistry Letters, 2014, 5, 241-246.	2.1	266
4	Coarse-graining polymers with the MARTINI force-field: polystyrene as a benchmark case. Soft Matter, 2011, 7, 698-708.	1.2	216
5	Global optimization of bimetallic cluster structures. II. Size-matched Ag-Pd, Ag-Au, and Pd-Pt systems. Journal of Chemical Physics, 2005, 122, 194309.	1.2	192
6	Single Impurity Effect on the Melting of Nanoclusters. Physical Review Letters, 2005, 95, 035501.	2.9	182
7	Quantum effects on the structure of pure and binary metallic nanoclusters. Physical Review B, 2005, 72, .	1.1	174
8	Structure and chemical ordering in CoPt nanoalloys. Faraday Discussions, 2008, 138, 193-210.	1.6	109
9	Searching for low-energy structures of nanoparticles: a comparison of different methods and algorithms. Journal of Physics Condensed Matter, 2009, 21, 084208.	0.7	102
10	Transferable MARTINI Model of Poly(ethylene Oxide). Journal of Physical Chemistry B, 2018, 122, 7436-7449.	1.2	99
11	Metastability of the atomic structures of size-selected gold nanoparticles. Nanoscale, 2015, 7, 6498-6503.	2.8	94
12	Electronic and Structural Shell Closure in AgCu and AuCu Nanoclusters. Journal of Physical Chemistry B, 2006, 110, 23197-23203.	1.2	90
13	A Coarse-Grained MARTINI Model of Polyethylene Glycol and of Polyoxyethylene Alkyl Ether Surfactants. Journal of Physical Chemistry B, 2012, 116, 14353-14362.	1.2	90
14	MARTINI Coarse-Grained Models of Polyethylene and Polypropylene. Journal of Physical Chemistry B, 2015, 119, 8209-8216.	1.2	82
15	Monolayer-Protected Anionic Au Nanoparticles Walk into Lipid Membranes Step by Step. Journal of Physical Chemistry Letters, 2015, 6, 3175-3179.	2.1	79
16	Influence of nanoparticle size, loading, and shape on the mechanical properties of polymer nanocomposites. Journal of Chemical Physics, 2012, 137, 214901.	1.2	77
17	Structure, Melting, and Thermal Stability of 55 Atom Agâ^'Au Nanoalloys. Journal of Physical Chemistry C, 2007, 111, 9157-9165.	1.5	76
18	Melting of core-shell Ag-Ni and Ag-Co nanoclusters studied via molecular dynamics simulations. Physical Review B, 2008, 77, .	1.1	75

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19	Structures of metal nanoparticles adsorbed on MgO(001). I. Ag and Au. Journal of Chemical Physics, 2009, 130, 174702.	1.2	75
20	Global optimization by excitable walkers. Chemical Physics Letters, 2006, 423, 17-22.	1.2	69
21	Improved Angle Potentials for Coarse-Grained Molecular Dynamics Simulations. Journal of Chemical Theory and Computation, 2013, 9, 3282-3292.	2.3	67
22	Gold nanoparticles in model biological membranes: A computational perspective. Biochimica Et Biophysica Acta - Biomembranes, 2016, 1858, 2380-2389.	1.4	67
23	Growth and energetic stability of AgNi coreâ€“shell clusters. Surface Science, 2004, 566-568, 192-196.	0.8	66
24	A MARTINI Coarse-Grained Model of a Thermoset Polyester Coating. Macromolecules, 2011, 44, 6198-6208.	2.2	66
25	Dynamical effects in the formation of magic cluster structures. Physical Review B, 2004, 69, .	1.1	64
26	Lipid Membranes as Solvents for Carbon Nanoparticles. Physical Review Letters, 2014, 112, 068102.	2.9	61
27	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
28	Interface-Stabilized Phases of Metal-on-Oxide Nanodots. ACS Nano, 2008, 2, 1849-1856.	7.3	58
29	Hydrophobic Compounds Reshape Membrane Domains. PLoS Computational Biology, 2014, 10, e1003873.	1.5	58
30	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
31	Interaction of hydrophobic polymers with model lipid bilayers. Scientific Reports, 2017, 7, 6357.	1.6	56
32	Patterning of Heteroepitaxial Overlayers from Nano to Micron Scales. Physical Review Letters, 2012, 108, 226102.	2.9	54
33	Freezing of gold nanoclusters into poly-decahedral structures. Nanotechnology, 2007, 18, 225706.	1.3	53
34	Structures of metal nanoparticles adsorbed on MgO(001). II. Pt and Pd. Journal of Chemical Physics, 2009, 130, 174703.	1.2	48
35	Global optimisation and growth simulation of AuCu clusters. Faraday Discussions, 2008, 138, 49-58.	1.6	47
36	Structures of gas-phase Agâ€“Pd nanoclusters: A computational study. Journal of Chemical Physics, 2010, 132, 234703.	1.2	44

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37	Tuning the Structure of Nanoparticles by Small Concentrations of Impurities. Chemistry of Materials, 2014, 26, 3354-3356.	3.2	44
38	Exotic Supported CoPt Nanostructures: From Clusters to Wires. Journal of Physical Chemistry Letters, 2010, 1, 111-115.	2.1	41
39	Epitaxy, Truncations, and Overhangs in Palladium Nanoclusters Adsorbed on MgO(001). Physical Review Letters, 2007, 98, 156101.	2.9	38
40	Theoretical study of structure and segregation in 38-atom Ag-Au nanoalloys. European Physical Journal D, 2007, 43, 53-56.	0.6	35
41	Correlations between mechanical, structural, and dynamical properties of polymer nanocomposites. Physical Review E, 2012, 85, 041803.	0.8	35
42	Combining shape-changing with exchange moves in the optimization of nanoalloys. Computational and Theoretical Chemistry, 2017, 1107, 66-73.	1.1	35
43	Modeling the effect of nano-sized polymer particles on the properties of lipid membranes. Journal of Physics Condensed Matter, 2014, 26, 503101.	0.7	34
44	Dynamic Heterogeneity in Random and Gradient Copolymers: A Computational Investigation. Macromolecules, 2013, 46, 5066-5079.	2.2	32
45	Molecular Dynamics Study of a MARTINI Coarse-Grained Polystyrene Brush in Good Solvent: Structure and Dynamics. Macromolecules, 2012, 45, 563-571.	2.2	30
46	Local Enhancement of Lipid Membrane Permeability Induced by Irradiated Gold Nanoparticles. ACS Nano, 2017, 11, 12553-12561.	7.3	30
47	Chemical ordering in magic-size Agâ€“Pd nanoparticles. Physical Chemistry Chemical Physics, 2014, 16, 26478-26484.	1.3	28
48	Structure and orientation effects in the coalescence of Au clusters. Nanoscale, 2020, 12, 7688-7699.	2.8	28
49	Formation Pathways and Energetic Stability of Icosahedral Ag_{shell}Co_{core} Nanoclusters. Journal of Computational and Theoretical Nanoscience, 2009, 6, 841-848.	0.4	27
50	Structures of AgPd nanoclusters adsorbed on MgO(100): A computational study. Surface Science, 2011, 605, 483-488.	0.8	24
51	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
52	Role of Ligand Conformation on Nanoparticleâ€“Protein Interactions. Journal of Physical Chemistry B, 2019, 123, 1764-1769.	1.2	23
53	Amphiphilic gold nanoparticles perturb phase separation in multidomain lipid membranes. Nanoscale, 2020, 12, 19746-19759.	2.8	23
54	A Martini Coarse Grained Model of Citrate-Capped Gold Nanoparticles Interacting with Lipid Bilayers. Journal of Chemical Theory and Computation, 2021, 17, 6597-6609.	2.3	22

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55	Global Optimization Study of Small (10 â‰¤Nâ‰¤ 120) Pd Clusters Supported on MgO(100). Journal of Physical Chemistry B, 2006, 110, 7436-7442.	1.2	21
56	Partitioning and solubility of C₆₀fullerene in lipid membranes. Physica Scripta, 2013, 87, 058503.	1.2	21
57	Simulating the interaction of lipid membranes with polymer and ligand-coated nanoparticles. Advances in Physics: X, 2016, 1, 276-296.	1.5	21
58	A Martini coarse-grained model of the calcein fluorescent dye. Journal Physics D: Applied Physics, 2018, 51, 384002.	1.3	20
59	Non-disruptive uptake of anionic and cationic gold nanoparticles in neutral zwitterionic membranes. Scientific Reports, 2021, 11, 1256.	1.6	20
60	Anionic nanoparticle-lipid membrane interactions: the protonation of anionic ligands at the membrane surface reduces membrane disruption. RSC Advances, 2019, 9, 13992-13997.	1.7	17
61	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
62	Membrane Phase Drives the Assembly of Gold Nanoparticles on Biomimetic Lipid Bilayers. Journal of Physical Chemistry C, 2022, 126, 4483-4494.	1.5	15
63	Stress release mechanisms for Cu on Pd(111) in the submonolayer and monolayer regimes. Physical Review B, 2010, 81, .	1.1	13
64	Size-dependent aggregation of hydrophobic nanoparticles in lipid membranes. Nanoscale, 2020, 12, 9452-9461.	2.8	13
65	Amphiphilic nanoparticles generate curvature in lipid membranes and shape liposomeâ€“liposome interfaces. Nanoscale, 2021, 13, 16879-16884.	2.8	13
66	Modeling self-organization of thin strained metallic overlayers from atomic to micron scales. Physical Review B, 2013, 88, .	1.1	12
67	Cholesterol Hinders the Passive Uptake of Amphiphilic Nanoparticles into Fluid Lipid Membranes. Journal of Physical Chemistry Letters, 2021, 12, 8583-8590.	2.1	12
68	Prediction of the structures of free and oxide-supported nanoparticles by means of atomistic approaches: the benchmark case of nickel clusters. Physical Chemistry Chemical Physics, 2010, 12, 8564.	1.3	11
69	Water dynamics affects thermal transport at the surface of hydrophobic and hydrophilic irradiated nanoparticles. Nanoscale Advances, 2020, 2, 3181-3190.	2.2	11
70	Ion-bridges and lipids drive aggregation of same-charge nanoparticles on lipid membranes. Nanoscale, 2022, 14, 6912-6921.	2.8	9
71	Canonical molecular dynamics simulations for crystallization of metallic nanodroplets on MgO(100). Physical Review B, 2009, 79, .	1.1	8
72	Melting of metallic nanoclusters: Alloying and support effects. European Journal of Control, 2005, 30, 303-313.	1.6	4

#	Article	IF	Citations
73	Chapter 2 Structural properties of pure and binary nanoclusters investigated by computer simulations. Theoretical and Computational Chemistry, 2007, , 35-58.	0.2	0