Riccardo Ferrando

List of Publications by Year
in descending order

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264 papers	15,442 citations	30047 54 h-index	19726 117 g-index
269 all docs	269 docs citations	269 times ranked	9955 citing authors

#	Article	IF	Citations
1	Nanoalloys:â€‰ From Theory to Applications of Alloy Clusters and Nanoparticles. Chemical Reviews, 2008, 108, 845-910.	23.0	3,234
2	Structural properties of nanoclusters: Energetic, thermodynamic, and kinetic effects. Reviews of Modern Physics, 2005, 77, 371-423.	16.4	1,609
3	Collective and single particle diffusion on surfaces. Advances in Physics, 2002, 51, 949-1078.	35.9	487
4	Crossover among structural motifs in transition and noble-metal clusters. Journal of Chemical Physics, 2002, 116, 3856-3863.	1.2	431
5	Magic Polyicosahedral Core-Shell Clusters. Physical Review Letters, 2004, 93, 105503.	2.9	361
6	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
7	Growth of Three-Shell Onionlike Bimetallic Nanoparticles. Physical Review Letters, 2003, 90, 135504.	2.9	268
8	Morphological instability of core-shell metallic nanoparticles. Physical Review B, 2013, 87, .	1.1	209
9	Microscopic mechanisms of the growth of metastable silver icosahedra. Physical Review B, 2001, 63, .	1.1	196
10	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
11	Growth simulations of silver shells on copper and palladium nanoclusters. Physical Review B, 2002, 66, .	1.1	186
12	Searching for the optimum structures of alloy nanoclusters. Physical Chemistry Chemical Physics, 2008, 10, 640-649.	1.3	185
13	Single Impurity Effect on the Melting of Nanoclusters. Physical Review Letters, 2005, 95, 035501.	2.9	182
14	Quantum effects on the structure of pure and binary metallic nanoclusters. Physical Review B, 2005, 72, .	1.1	174
15	Transition from coreâ€“shell to Janus chemical configuration for bimetallic nanoparticles. Nanoscale, 2012, 4, 3381.	2.8	163
16	Theoretical Studies of Palladiumâ^'Gold Nanoclusters: Pdâ^'Au Clusters with up to 50 Atoms. Journal of Physical Chemistry C, 2009, 113, 9141-9152.	1.5	152
17	Kramers problem in periodic potentials: Jump rate and jump lengths. Physical Review E, 1993, 48, 2437-2451.	0.8	146
18	Size-Dependent Transition to High-Symmetry Chiral Structures in AgCu, AgCo, AgNi, and AuNi Nanoalloys. Nano Letters, 2010, 10, 4211-4216.	4.5	141

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19	Reentrant Morphology Transition in the Growth of Free Silver Nanoclusters. Physical Review Letters, 2000, 84, 5544-5547.	2.9	136
20	Jumps and concerted moves in Cu, Ag, and Au(110) adatom self-diffusion. Physical Review B, 1999, 59, 5881-5891.	1.1	131
21	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
22	Amorphization Mechanism of Icosahedral Metal Nanoclusters. Physical Review Letters, 2004, 93, 065502.	2.9	113
23	Symmetry breaking and morphological instabilities in core-shell metallic nanoparticles. Journal of Physics Condensed Matter, 2015, 27, 013003.	0.7	113
24	Structure and chemical ordering in CoPt nanoalloys. Faraday Discussions, 2008, 138, 193-210.	1.6	109
25	Molecular dynamics simulations of surface diffusion and growth on silver and gold clusters. Surface Science, 2000, 446, 31-45.	0.8	106
26	Density-functional global optimization of gold nanoclusters. Physical Review B, 2006, 73, .	1.1	106
27	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
28	Lattice-Gas Theory of Collective Diffusion in Adsorbed Layers. International Journal of Modern Physics B, 1997, 11, 2217-2279.	1.0	101
29	Metastability of the atomic structures of size-selected gold nanoparticles. Nanoscale, 2015, 7, 6498-6503.	2.8	94
30	Leapfrog Diffusion Mechanism for One-Dimensional Chains on Missing-Row Reconstructed Surfaces. Physical Review Letters, 1999, 82, 1498-1501.	2.9	90
31	Electronic and Structural Shell Closure in AgCu and AuCu Nanoclusters. Journal of Physical Chemistry B, 2006, 110, 23197-23203.	1.2	90
32	Modeling free and supported metallic nanoclusters: structure and dynamics. Phase Transitions, 2004, 77, 101-113.	0.6	83
33	Coreâ€“shell vs. multi-shell formation in nanoalloy evolution from disordered configurations. Nanoscale, 2019, 11, 13040-13050.	2.8	83
34	A Monte Carlo simulation of submonolayer homoepitaxial growth on Ag(110) and Cu(110). Surface Science, 1998, 417, 220-237.	0.8	81
35	Heteroaggregation between Al₂O₃ Submicrometer Particles and SiO₂ Nanoparticles:â€‰ Experiment and Simulation. Langmuir, 2008, 24, 3001-3008.	1.6	80
36	Correlated Jump-Exchange Processes in the Diffusion of Ag on Ag(110). Physical Review Letters, 1996, 76, 4195-4198.	2.9	79

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37	Monolayer-Protected Anionic Au Nanoparticles Walk into Lipid Membranes Step by Step. Journal of Physical Chemistry Letters, 2015, 6, 3175-3179.	2.1	79
38	Melting of core-shell Ag-Ni and Ag-Co nanoclusters studied via molecular dynamics simulations. Physical Review B, 2008, 77, .	1.1	75
39	Structures of metal nanoparticles adsorbed on MgO(001). I. Ag and Au. Journal of Chemical Physics, 2009, 130, 174702.	1.2	75
40	Strain-induced restructuring of the surface in core@shell nanoalloys. Nanoscale, 2016, 8, 15911-15919.	2.8	71
41	How to determine accurate chemical ordering in several nanometer large bimetallic crystallites from electronic structure calculations. Chemical Science, 2015, 6, 3868-3880.	3.7	70
42	Global optimization by excitable walkers. Chemical Physics Letters, 2006, 423, 17-22.	1.2	69
43	Nanoscale Effects on Phase Separation. Nano Letters, 2017, 17, 5394-5401.	4.5	69
44	Anisotropy of diffusion along steps on the (111) faces of gold and silver. Physical Review B, 1994, 50, 12104-12117.	1.1	68
45	Growth and energetic stability of AgNi coreâ€“shell clusters. Surface Science, 2004, 566-568, 192-196.	0.8	66
46	Experimental determination of the energy difference between competing isomers of deposited, size-selected gold nanoclusters. Nature Communications, 2018, 9, 1323.	5.8	65
47	Dynamical effects in the formation of magic cluster structures. Physical Review B, 2004, 69, .	1.1	64
48	Correlation functions in surface diffusion: the multiple-jump regime. Surface Science, 1994, 311, 411-421.	0.8	63
49	Diffusion of Palladium Clusters on Magnesium Oxide. Physical Review Letters, 2005, 95, 246103.	2.9	62
50	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
51	Freezing of silver nanodroplets. Chemical Physics Letters, 2002, 354, 82-87.	1.2	58
52	Interface-Stabilized Phases of Metal-on-Oxide Nanodots. ACS Nano, 2008, 2, 1849-1856.	7.3	58
53	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
54	Tailored Agâ€“Cuâ€“Mg multielemental nanoparticles for wide-spectrum antibacterial coating. Nanoscale, 2019, 11, 1626-1635.	2.8	57

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55	Diffusion processes relevant to the epitaxial growth of Ag on Ag(110). Surface Science, 1996, 366, 306-316.	0.8	56
56	Optimization of chemical ordering in AgAu nanoalloys. Physical Chemistry Chemical Physics, 2011, 13, 10232.	1.3	55
57	Freezing of gold nanoclusters into poly-decahedral structures. Nanotechnology, 2007, 18, 225706.	1.3	53
58	Role of long jumps in surface diffusion. Physical Review E, 2002, 65, 061107.	0.8	52
59	Thermal Properties of Co/Au Nanoalloys and Comparison of Different Computer Simulation Techniques. Journal of Physical Chemistry C, 2012, 116, 17210-17218.	1.5	52
60	Self-assembly of oppositely charged particles in dilute ceramic suspensions: predictive role of simulations. Soft Matter, 2010, 6, 370-382.	1.2	51
61	Competing mechanisms in adatom diffusion on a channeled surface: Jumps versus metastable walks. Physical Review B, 1998, 58, 3617-3620.	1.1	50
62	Noise-activated diffusion in the egg-carton potential. Physical Review E, 1996, 54, 4708-4721.	0.8	49
63	Theory of diffusion in periodic systems: the diffusion coefficient. Surface Science, 1992, 265, 273-282.	0.8	48
64	Structures of metal nanoparticles adsorbed on MgO(001). II. Pt and Pd. Journal of Chemical Physics, 2009, 130, 174703.	1.2	48
65	Unravelling the nucleation mechanism of bimetallic nanoparticles with composition-tunable coreâ€“shell arrangement. Nanoscale, 2018, 10, 6684-6694.	2.8	48
66	Exact solution of the Kramers problem in periodic potentials. Physical Review A, 1992, 46, R699-R702.	1.0	47
67	Global optimisation and growth simulation of AuCu clusters. Faraday Discussions, 2008, 138, 49-58.	1.6	47
68	Detection of Populations of Amyloid-Like Protofibrils with Different Physical Properties. Biophysical Journal, 2010, 98, 1277-1284.	0.2	47
69	Structures of gas-phase Agâ€“Pd nanoclusters: A computational study. Journal of Chemical Physics, 2010, 132, 234703.	1.2	44
70	Tuning the Structure of Nanoparticles by Small Concentrations of Impurities. Chemistry of Materials, 2014, 26, 3354-3356.	3.2	44
71	Morphologies in anisotropic cluster growth:â€ƒA Monte Carlo study on Ag(110). Physical Review B, 1997, 56, R4406-R4409.	1.1	43
72	Structure and thermal stability of AgCu chiral nanoparticles. European Physical Journal D, 2012, 66, 1.	0.6	43

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73	Tight-binding molecular dynamics study of diffusion on Au and Ag(111). Surface Science, 1995, 331-333, 920-924.	0.8	42
74	Growth of Co isolated clusters in the gas phase: Experiment and molecular dynamics simulations. Physical Review B, 2008, 77, .	1.1	42
75	Reversed size-dependent stabilization of ordered nanophases. Nature Communications, 2019, 10, 1982.	5.8	42
76	Exotic Supported CoPt Nanostructures: From Clusters to Wires. Journal of Physical Chemistry Letters, 2010, 1, 111-115.	2.1	41
77	Oppositely Charged Model Ceramic Colloids: Numerical Predictions and Experimental Observations by Confocal Laser Scanning Microscopy. Langmuir, 2010, 26, 12540-12547.	1.6	41
78	Interaction of l-cysteine with naked gold nanoparticles supported on HOPG: a high resolution XPS investigation. Nanoscale, 2012, 4, 7727.	2.8	41
79	Observation of Uncorrelated Microscopic Motion in a Strongly Interacting Adsorbate System. Journal of the American Chemical Society, 2008, 130, 6789-6794.	6.6	39
80	Structure and solid solution properties of Cuâ€“Ag nanoalloys. Journal of Physics Condensed Matter, 2014, 26, 275301.	0.7	39
81	Epitaxy, Truncations, and Overhangs in Palladium Nanoclusters Adsorbed on MgO(001). Physical Review Letters, 2007, 98, 156101.	2.9	38
82	Au144â^'xPdx(SR)60 nanomolecules. Chemical Communications, 2013, 49, 10850.	2.2	38
83	Geometric Structure and Chemical Ordering of Large AuCu Clusters: A Computational Study. Journal of Physical Chemistry C, 2017, 121, 10809-10816.	1.5	38
84	Time scales and diffusion mechanisms in the Kramers equation with periodic potentials (I). Physica A: Statistical Mechanics and Its Applications, 1993, 195, 506-532.	1.2	37
85	High-Temperature Study of the Schwoebel Effect in Au(111). Physical Review Letters, 1996, 76, 2109-2112.	2.9	36
86	Brownian Dynamics Simulations of Colloidal Suspensions Containing Polymers as Precursors of Composite Electrodes for Lithium Batteries. Langmuir, 2012, 28, 10713-10724.	1.6	36
87	Siteâ€Specific Wetting of Iron Nanocubes by Gold Atoms in Gasâ€Phase Synthesis. Advanced Science, 2019, 6, 1900447.	5.6	36
88	Shape control of size-selected naked platinum nanocrystals. Nature Communications, 2021, 12, 3019.	5.8	36
89	Theoretical study of structure and segregation in 38-atom Ag-Au nanoalloys. European Physical Journal D, 2007, 43, 53-56.	0.6	35
90	Combining shape-changing with exchange moves in the optimization of nanoalloys. Computational and Theoretical Chemistry, 2017, 1107, 66-73.	1.1	35

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91	Surface-Supported Gold Cages. Physical Review Letters, 2009, 102, 216102.	2.9	34
92	Stimulated diffusion of an adsorbed dimer. Physical Review E, 2003, 68, 051101.	0.8	33
93	Numerical study of hetero-adsorption and diffusion on (100) and (110) surfaces of Cu, Ag and Au. Surface Science, 2015, 635, 64-69.	0.8	33
94	Determining the equilibrium structures of nanoalloys by computational methods. Journal of Nanoparticle Research, 2018, 20, 1.	0.8	33
95	Evidence of Kinetic Trapping in Clusters ofC60Molecules. Physical Review Letters, 2002, 88, 075503.	2.9	32
96	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
97	Numerical and Experimental Study of Suspensions Containing Carbon Blacks Used as Conductive Additives in Composite Electrodes for Lithium Batteries. Langmuir, 2014, 30, 2660-2669.	1.6	32
98	How Growing Conditions and Interfacial Oxygen Affect the Final Morphology of MgO/Ag(100) Films. Journal of Physical Chemistry C, 2014, 118, 26091-26102.	1.5	31
99	Time evolution of adatom and vacancy clusters on Ag(110). Surface Science, 1999, 440, 451-459.	0.8	30
100	Theoretical Study of the Structures and Chemical Ordering of Palladiumâ€“Gold Nanoalloys Supported on MgO(100). Journal of Physical Chemistry C, 2013, 117, 293-301.	1.5	30
101	Local Enhancement of Lipid Membrane Permeability Induced by Irradiated Gold Nanoparticles. ACS Nano, 2017, 11, 12553-12561.	7.3	30
102	The Kramers problem in 2D-coupled periodic potentials. Chemical Physics, 1998, 235, 157-170.	0.9	29
103	Collective surface diffusion on triangular and square interacting lattice gases. Surface Science, 1998, 409, 117-129.	0.8	29
104	Structures of small Au clusters on MgO(001) studied by density-functional calculations. Physical Review B, 2011, 83, .	1.1	29
105	Numerical test of finite-barrier corrections for the hopping rate in the underdamped regime. Physical Review E, 1995, 51, R1645-R1648.	0.8	28
106	First-principles isomer-specific absorption spectra ofAg11. Physical Review B, 2007, 75, .	1.1	28
107	Chemical ordering in magic-size Agâ€“Pd nanoparticles. Physical Chemistry Chemical Physics, 2014, 16, 26478-26484.	1.3	28
108	Understanding the Structure of Electrodes in Li-Ion Batteries: A Numerical Study. Journal of the Electrochemical Society, 2015, 162, A1485-A1492.	1.3	28

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109	Study of structures and thermodynamics of CuNi nanoalloys using a new DFT-fitted atomistic potential. Physical Chemistry Chemical Physics, 2015, 17, 28068-28075.	1.3	28
110	Structure and orientation effects in the coalescence of Au clusters. Nanoscale, 2020, 12, 7688-7699.	2.8	28
111	Projection-operator route to the generalized Darken equation. Physics Letters, Section A: General, Atomic and Solid State Physics, 1994, 186, 415-418.	0.9	27
112	Influence of the potential range on the aggregation of colloidal particles. Physica A: Statistical Mechanics and Its Applications, 2007, 374, 507-516.	1.2	27
113	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
114	Interface Effects on the Magnetism of CoPt-Supported Nanostructures. Nano Letters, 2011, 11, 5542-5547.	4.5	27
115	Submonolayer homoepitaxial growth on Ag(110). Surface Science, 2001, 487, 49-54.	0.8	26
116	Energetics of fcc and decahedral nanowires of Ag, Cu, Ni, andC60:A quenched molecular dynamics study. Physical Review B, 2004, 69, .	1.1	26
117	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
118	Competition between structural motifs in goldâ€“platinum nanoalloys. Computational and Theoretical Chemistry, 2013, 1021, 177-182.	1.1	25
119	One-Step Growth of Coreâ€“Shell (PtPd)@Pt and (PtPd)@Pd Nanoparticles in the Gas Phase. Journal of Physical Chemistry C, 2020, 124, 14338-14349.	1.5	25
120	Dimers diffusion on (110) (1Ã—2) metal surfaces. Surface Science, 1999, 432, 27-36.	0.8	24
121	Ripple formation and rotation in the growth of Ag/Ag(110): A microscopic view. Physical Review B, 2001, 63, .	1.1	24
122	Simulation of the heteroagglomeration between highly size-asymmetric ceramic particles. Journal of Colloid and Interface Science, 2009, 332, 360-365.	5.0	24
123	Simulations of heteroaggregation in a suspension of alumina and silica particles: Effect of dilution. Journal of Chemical Physics, 2010, 132, 084701.	1.2	24
124	Structures of AgPd nanoclusters adsorbed on MgO(100): A computational study. Surface Science, 2011, 605, 483-488.	0.8	24
125	Solid-solid transitions in Pd-Pt nanoalloys. Physical Review B, 2015, 92, .	1.1	24
126	Self-diffusion in a 2D lattice gas with lateral interactions. Surface Science, 1993, 281, 178-190.	0.8	23

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127	Multilayer growth of Ag: a simulation study. Surface Science, 2002, 515, 575-587.	0.8	23
128	Time evolution of Ag-Cu and Ag-Pd core-shell nanoclusters. European Physical Journal D, 2003, 24, 233-236.	0.6	23
129	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
130	Retrapping and velocity inversion in jump diffusion. Physical Review E, 1995, 51, 126-130.	0.8	22
131	Diffusion of adatoms and small clusters on magnesium oxide surfaces. Journal of Physics Condensed Matter, 2009, 21, 264001.	0.7	22
132	Shape Changes in AuPd Alloy Nanoparticles Controlled by Anisotropic Surface Stress Relaxation. Journal of Physical Chemistry Letters, 2021, 12, 4609-4615.	2.1	22
133	Fokker-Planck dynamics at premelting surfaces. Physical Review B, 1992, 45, 444-447.	1.1	21
134	Island adsorption and adatom diffusion on 3D non-crystalline silver nanoclusters. Surface Science, 2001, 490, 361-375.	0.8	21
135	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
136	Theory of classical diffusion in two dimensional periodic systems. Surface Science, 1991, 251-252, 773-777.	0.8	20
137	Programming Hierarchical Supramolecular Nanostructures by Molecular Design. Journal of Physical Chemistry C, 2013, 117, 3440-3445.	1.5	20
138	Modeling Nanoscale Inhomogeneities for Quantitative HAADF STEM Imaging. Physical Review Letters, 2014, 113, 075501.	2.9	20
139	Non-disruptive uptake of anionic and cationic gold nanoparticles in neutral zwitterionic membranes. Scientific Reports, 2021, 11, 1256.	1.6	20
140	Tuning the coalescence degree in the growth of Ptâ€“Pd nanoalloys. Nanoscale Advances, 2021, 3, 836-846.	2.2	20
141	Spontaneous atomic shuffle in flat terraces:â€ƒAg(100). Physical Review B, 2002, 66, .	1.1	19
142	Structure, chemical ordering and thermal stability of Ptâ€“Ni alloy nanoclusters. Journal of Physics Condensed Matter, 2013, 25, 355008.	0.7	19
143	Atomic Details of Interfacial Interaction in Gold Nanoparticles Supported on MgO(001). Journal of Physical Chemistry Letters, 2014, 5, 131-137.	2.1	19
144	Diffusion in a periodic potential in the strong collision limit. Chemical Physics Letters, 1993, 202, 248-252.	1.2	18

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145	Long jumps in the strong-collision model. Physical Review E, 2000, 61, 6344-6350.	0.8	18
146	Preface. Faraday Discussions, 2008, 138, 9-10.	1.6	18
147	Doped golden fullerene cages. Physical Chemistry Chemical Physics, 2015, 17, 28256-28261.	1.3	18
148	From metastability to equilibrium during the sequential growth of Coâ€“Ag supported clusters: a real-time investigation. Nanoscale, 2021, 13, 6096-6104.	2.8	18
149	System-dependent melting behavior of icosahedral anti-Mackay nanoalloys. RSC Advances, 2013, 3, 21981.	1.7	17
150	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
151	Optical properties of nanoalloys. Frontiers of Nanoscience, 2016, , 267-287.	0.3	16
152	Making biological membrane resistant to the toxicity of misfolded protein oligomers: a lesson from trodusquemine. Nanoscale, 2020, 12, 22596-22614.	2.8	16
153	Diffusion in classical periodic systems: The Smoluchowski equation approach. Physica A: Statistical Mechanics and Its Applications, 1991, 173, 141-154.	1.2	15
154	Spontaneous Oxidation of Ni Nanoclusters on MgO Monolayers Induced by Segregation of Interfacial Oxygen. Journal of Physical Chemistry Letters, 2015, 6, 3104-3109.	2.1	15
155	Density functional theory global optimization of chemical ordering in AgAu nanoalloys. Journal of Alloys and Compounds, 2019, 779, 582-589.	2.8	15
156	Growth mechanisms from tetrahedral seeds to multiply twinned Au nanoparticles revealed by atomistic simulations. Nanoscale Horizons, 2022, 7, 883-889.	4.1	15
157	Collective surface diffusion on a triangular lattice in presence of ordered phases. Surface Science, 1998, 402-404, 281-285.	0.8	14
158	Tempering of Au nanoclusters: capturing the temperature-dependent competition among structural motifs. Nanoscale, 2022, 14, 939-952.	2.8	14
159	Lattice-gas model of diffusion of NH3 on Re(0001). Chemical Physics Letters, 1995, 236, 533-537.	1.2	13
160	Underdamped diffusion in the egg-carton potential. Physical Review E, 1997, 55, 4810-4811.	0.8	13
161	An MD study of adatom self-diffusion on Au(110) surfaces. Surface Science, 1999, 433-435, 445-448.	0.8	13
162	Influence of the periodic potential shape on the Fokkerâ€“Planck dynamics. Physica A: Statistical Mechanics and Its Applications, 2004, 331, 365-377.	1.2	13

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163	Jump rate and jump probabilities in the two-dimensional strong-collision model. New Journal of Physics, 2005, 7, 19-19.	1.2	13
164	Numerical study of the stability of (111) and (331) microfacets on Au, Pt, and Ir (110) surfaces. Physical Review B, 2005, 72, .	1.1	13
165	Resonant diffusion in periodic systems with memory. Chemical Physics Letters, 1998, 290, 509-513.	1.2	12
166	An efficient method for computing collective diffusion in a strongly interacting lattice gas. Surface Science, 2002, 515, 588-596.	0.8	12
167	Influence of the potential range on the structure of binary nanoclusters. Physics Letters, Section A: General, Atomic and Solid State Physics, 2007, 367, 215-219.	0.9	12
168	Coreâ€“shell and matryoshka structures in MgNi nanoalloys: a computational study. RSC Advances, 2013, 3, 9419.	1.7	12
169	How colloidâ€“colloid interactions and hydrodynamic effects influence the percolation threshold: A simulation study in alumina suspensions. Journal of Colloid and Interface Science, 2015, 458, 241-246.	5.0	12
170	Heteroaggregation of ceramic colloids in suspensions. Advances in Physics: X, 2017, 2, 35-53.	1.5	12
171	Cholesterol Hinders the Passive Uptake of Amphiphilic Nanoparticles into Fluid Lipid Membranes. Journal of Physical Chemistry Letters, 2021, 12, 8583-8590.	2.1	12
172	Reentrant morphological instability of epitaxial islands. Physical Review B, 1999, 60, 17016-17022.	1.1	11
173	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
174	Theoretical study of AuCu nanoalloys adsorbed on MgO(001). Surface Science, 2012, 606, 938-944.	0.8	11
175	Preferential faceting of coherent interfaces in binary nanocrystals. Physical Review B, 2014, 90, .	1.1	11
176	Computation of shear viscosity of colloidal suspensions by SRD-MD. Journal of Chemical Physics, 2015, 142, 144101.	1.2	11
177	Water dynamics affects thermal transport at the surface of hydrophobic and hydrophilic irradiated nanoparticles. Nanoscale Advances, 2020, 2, 3181-3190.	2.2	11
178	Octahedral Growth of PtPd Nanocrystals. Catalysts, 2021, 11, 718.	1.6	11
179	Impurity diffusion in magic-size icosahedral clusters. Journal of Chemical Physics, 2021, 155, 144304.	1.2	11
180	Regression and clustering algorithms for AgCu nanoalloys: from mixing energy predictions to structure recognition. Physical Chemistry Chemical Physics, 2021, 23, 23325-23335.	1.3	11

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181	Simulation of the submonolayer homoepitaxial clusters growth on Ag(110). European Physical Journal D, 1999, 9, 561-564.	0.6	10
182	Magnetism in nanoalloys. Frontiers of Nanoscience, 2016, 10, 245-266.	0.3	10
183	Phase Separation in AgCu and AgNi Coreâ€“Shell Icosahedral Nanoparticles: A Harmonic Thermodynamics Study. Particle and Particle Systems Characterization, 2018, 35, 1700425.	1.2	10
184	Approximate analytical solution of the jump rate problem in a symmetric well with spatially varying friction. Physica A: Statistical Mechanics and Its Applications, 1993, 196, 83-92.	1.2	9
185	Collective diffusion in a lattice gas: application to O/W(110). Surface Science, 1994, 307-309, 565-569.	0.8	9
186	Step-descent mechanisms on Ag and Au(111). Surface Science, 1997, 377-379, 843-846.	0.8	9
187	Cluster morphology transitions in the submonolayer epitaxial growth of Ag on Ag(110). Surface Science, 1998, 402-404, 286-289.	0.8	9
188	Long-jump probabilities in a BGK model for surface diffusion. Chemical Physics Letters, 1999, 315, 153-157.	1.2	9
189	Kinetically driven ordered phase formation in binary colloidal crystals. Physical Review E, 2013, 87, 022304.	0.8	9
190	Shear viscosity in hard-sphere and adhesive colloidal suspensions with reverse non-equilibrium molecular dynamics. Soft Matter, 2017, 13, 3909-3917.	1.2	9
191	Chemical surface diffusion with long jumps. Chemical Physics Letters, 1997, 274, 323-327.	1.2	8
192	Universal law for piecewise dimer diffusion. Physical Review B, 1999, 60, 11102-11109.	1.1	8
193	The kinetic spin-1 Blume-Capel model with competing dynamics. European Physical Journal B, 2000, 16, 681-686.	0.6	8
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