Riccardo Ferrando

List of Publications by Year
in descending order

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264 papers	15,442 citations	29994 54 h-index	19690 117 g-index
269 all docs	269 docs citations	269 times ranked	9955 citing authors

#	Article	IF	Citations
1	Tempering of Au nanoclusters: capturing the temperature-dependent competition among structural motifs. Nanoscale, 2022, 14, 939-952.	2.8	14
2	Growth of size-matched nanoalloys â€“ a comparison of AuAg and PtPd. EPJ Applied Physics, 2022, 97, 28.	0.3	2
3	Global optimisation of gold-based nanoalloys: AuCo, AuCu, and AuRh. Frontiers of Nanoscience, 2022, , 71-91.	0.3	0
4	Growth mechanisms from tetrahedral seeds to multiply twinned Au nanoparticles revealed by atomistic simulations. Nanoscale Horizons, 2022, 7, 883-889.	4.1	15
5	Non-disruptive uptake of anionic and cationic gold nanoparticles in neutral zwitterionic membranes. Scientific Reports, 2021, 11, 1256.	1.6	20
6	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
7	Interaction between Biomimetic Lipid Membranes and Trodusquemine: An Atomic Force Microscopy Study. Biophysical Journal, 2021, 120, 325a.	0.2	1
8	Shape Changes in AuPd Alloy Nanoparticles Controlled by Anisotropic Surface Stress Relaxation. Journal of Physical Chemistry Letters, 2021, 12, 4609-4615.	2.1	22
9	Shape control of size-selected naked platinum nanocrystals. Nature Communications, 2021, 12, 3019.	5.8	36
10	Octahedral Growth of PtPd Nanocrystals. Catalysts, 2021, 11, 718.	1.6	11
11	Cholesterol Hinders the Passive Uptake of Amphiphilic Nanoparticles into Fluid Lipid Membranes. Journal of Physical Chemistry Letters, 2021, 12, 8583-8590.	2.1	12
12	Impurity diffusion in magic-size icosahedral clusters. Journal of Chemical Physics, 2021, 155, 144304.	1.2	11
13	Tuning the coalescence degree in the growth of Ptâ€“Pd nanoalloys. Nanoscale Advances, 2021, 3, 836-846.	2.2	20
14	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
15	A DFT study of chemical ordering and oxygen adsorption in AuPtPd ternary nanoalloys. Materials Today Communications, 2020, 25, 101545.	0.9	4
16	Making biological membrane resistant to the toxicity of misfolded protein oligomers: a lesson from trodusquemine. Nanoscale, 2020, 12, 22596-22614.	2.8	16
17	Water dynamics affects thermal transport at the surface of hydrophobic and hydrophilic irradiated nanoparticles. Nanoscale Advances, 2020, 2, 3181-3190.	2.2	11
18	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

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19	Structure and orientation effects in the coalescence of Au clusters. Nanoscale, 2020, 12, 7688-7699.	2.8	28
20	Kinetics of Nanoalloys: Nucleation, Mixing, Coalescence. , 2020, , 115-149.		2
21	Surface Diffusion. Springer Handbooks, 2020, , 45-70.	0.3	1
22	Adsorption and diffusion of Pt, Cu, Ag and Au on missing row reconstructed Pt(110) surfaces: An ab initio investigation. Surface Science, 2019, 690, 121463.	0.8	3
23	Coreâ€“shell vs. multi-shell formation in nanoalloy evolution from disordered configurations. Nanoscale, 2019, 11, 13040-13050.	2.8	83
24	Tailored Agâ€“Cuâ€“Mg multielemental nanoparticles for wide-spectrum antibacterial coating. Nanoscale, 2019, 11, 1626-1635.	2.8	57
25	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
26	Siteâ€Specific Wetting of Iron Nanocubes by Gold Atoms in Gasâ€Phase Synthesis. Advanced Science, 2019, 6, 1900447.	5.6	36
27	Reversed size-dependent stabilization of ordered nanophases. Nature Communications, 2019, 10, 1982.	5.8	42
28	Density functional theory global optimization of chemical ordering in AgAu nanoalloys. Journal of Alloys and Compounds, 2019, 779, 582-589.	2.8	15
29	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
30	Experimental determination of the energy difference between competing isomers of deposited, size-selected gold nanoclusters. Nature Communications, 2018, 9, 1323.	5.8	65
31	Computer simulations of heteroaggregation with large size asymmetric colloids. Journal of Colloid and Interface Science, 2018, 514, 694-703.	5.0	6
32	Unravelling the nucleation mechanism of bimetallic nanoparticles with composition-tunable coreâ€“shell arrangement. Nanoscale, 2018, 10, 6684-6694.	2.8	48
33	Stress-driven structural transitions in bimetallic nanoparticles. Frontiers of Nanoscience, 2018, 12, 189-204.	0.3	8
34	Determining the equilibrium structures of nanoalloys by computational methods. Journal of Nanoparticle Research, 2018, 20, 1.	0.8	33
35	Origin of enhanced stability and oxygen adsorption capacity of medium-sized Ptâ€“Ni nanoclusters. Journal of Physics Condensed Matter, 2018, 30, 285503.	0.7	6
36	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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37	Geometric Structure and Chemical Ordering of Large AuCu Clusters: A Computational Study. Journal of Physical Chemistry C, 2017, 121, 10809-10816.	1.5	38
38	Shear viscosity in hard-sphere and adhesive colloidal suspensions with reverse non-equilibrium molecular dynamics. Soft Matter, 2017, 13, 3909-3917.	1.2	9
39	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
40	Heterodiffusion of Ag adatoms on imperfect Au(1 1 0) surfaces. Chemical Physics Letters, 2017, 669, 150-155.	1.2	7
41	Nanoscale Effects on Phase Separation. Nano Letters, 2017, 17, 5394-5401.	4.5	69
42	Local Enhancement of Lipid Membrane Permeability Induced by Irradiated Gold Nanoparticles. ACS Nano, 2017, 11, 12553-12561.	7.3	30
43	Interdiffusion and crystallization of oppositely charged colloids. Physical Chemistry Chemical Physics, 2017, 19, 31094-31102.	1.3	1
44	Heteroaggregation of ceramic colloids in suspensions. Advances in Physics: X, 2017, 2, 35-53.	1.5	12
45	Geometric structures and chemical ordering in nanoalloys. Frontiers of Nanoscience, 2016, , 13-45.	0.3	3
46	Nonequilibrium phenomena in nanoalloys. Frontiers of Nanoscience, 2016, , 185-228.	0.3	3
47	Magnetism in nanoalloys. Frontiers of Nanoscience, 2016, 10, 245-266.	0.3	10
48	Theoretical and computational methods for nanoalloy structure and thermodynamics. Frontiers of Nanoscience, 2016, , 75-129.	0.3	7
49	Synthesis and experimental characterization of nanoalloy structures. Frontiers of Nanoscience, 2016, 10, 47-74.	0.3	5
50	Equilibrium structures of nanoalloys. Frontiers of Nanoscience, 2016, 10, 131-183.	0.3	4
51	Nanoalloys in catalysis. Frontiers of Nanoscience, 2016, 10, 229-243.	0.3	2
52	Optical properties of nanoalloys. Frontiers of Nanoscience, 2016, , 267-287.	0.3	16
53	Strain-induced restructuring of the surface in core@shell nanoalloys. Nanoscale, 2016, 8, 15911-15919.	2.8	71
54	Shape and scale dependent diffusivity of colloidal nanoclusters and aggregates. European Physical Journal: Special Topics, 2016, 225, 729-739.	1.2	1

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55	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
56	Aggregation of binary colloidal suspensions on attractive walls. Physical Chemistry Chemical Physics, 2016, 18, 3073-3079.	1.3	1
57	Solid-solid transitions in Pd-Pt nanoalloys. Physical Review B, 2015, 92, .	1.1	24
58	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
59	Understanding the Structure of Electrodes in Li-Ion Batteries: A Numerical Study. Journal of the Electrochemical Society, 2015, 162, A1485-A1492.	1.3	28
60	Metastability of the atomic structures of size-selected gold nanoparticles. Nanoscale, 2015, 7, 6498-6503.	2.8	94
61	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
62	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
63	Monolayer-Protected Anionic Au Nanoparticles Walk into Lipid Membranes Step by Step. Journal of Physical Chemistry Letters, 2015, 6, 3175-3179.	2.1	79
64	Doped golden fullerene cages. Physical Chemistry Chemical Physics, 2015, 17, 28256-28261.	1.3	18
65	Interpretation of surface diffusion data with Langevin simulations: a quantitative assessment. Journal of Physics Condensed Matter, 2015, 27, 125008.	0.7	1
66	Recent advances in the chemical physics of nanoalloys. Physical Chemistry Chemical Physics, 2015, 17, 27920-27921.	1.3	8
67	Computation of shear viscosity of colloidal suspensions by SRD-MD. Journal of Chemical Physics, 2015, 142, 144101.	1.2	11
68	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
69	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
70	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
71	Symmetry breaking and morphological instabilities in core-shell metallic nanoparticles. Journal of Physics Condensed Matter, 2015, 27, 013003.	0.7	113
72	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

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73	Preferential faceting of coherent interfaces in binary nanocrystals. Physical Review B, 2014, 90, .	1.1	11
74	Study of the B1-B2 transition in colloidal clusters. Journal of Chemical Physics, 2014, 140, 024911.	1.2	4
75	Atomic Details of Interfacial Interaction in Gold Nanoparticles Supported on MgO(001). Journal of Physical Chemistry Letters, 2014, 5, 131-137.	2.1	19
76	Jump diffusion in the strong-collision model on a two-dimensional triangular lattice. Chemical Physics Letters, 2014, 608, 360-365.	1.2	4
77	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
78	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
79	Modeling Nanoscale Inhomogeneities for Quantitative HAADF STEM Imaging. Physical Review Letters, 2014, 113, 075501.	2.9	20
80	Chemical ordering in magic-size Agâ€“Pd nanoparticles. Physical Chemistry Chemical Physics, 2014, 16, 26478-26484.	1.3	28
81	Structure and solid solution properties of Cuâ€“Ag nanoalloys. Journal of Physics Condensed Matter, 2014, 26, 275301.	0.7	39
82	Tuning the Structure of Nanoparticles by Small Concentrations of Impurities. Chemistry of Materials, 2014, 26, 3354-3356.	3.2	44
83	Kinetic aspects. , 2013, , 175-202.		0
84	Competition between structural motifs in goldâ€“platinum nanoalloys. Computational and Theoretical Chemistry, 2013, 1021, 177-182.	1.1	25
85	Structure, chemical ordering and thermal stability of Ptâ€“Ni alloy nanoclusters. Journal of Physics Condensed Matter, 2013, 25, 355008.	0.7	19
86	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
87	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
88	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
89	Au144â^'xPdx(SR)60 nanomolecules. Chemical Communications, 2013, 49, 10850.	2.2	38
90	Programming Hierarchical Supramolecular Nanostructures by Molecular Design. Journal of Physical Chemistry C, 2013, 117, 3440-3445.	1.5	20

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91	Global Optimization of Free and Supported Clusters. Nanostructure Science and Technology, 2013, , 195-214.	0.1	0
92	Morphological instability of core-shell metallic nanoparticles. Physical Review B, 2013, 87, .	1.1	209
93	Structures of small Pdâ€“Au clusters adsorbed on stepped MgO(100): A density-functional study. Chemical Physics Letters, 2013, 573, 70-76.	1.2	4
94	Coreâ€“shell and matryoshka structures in MgNi nanoalloys: a computational study. RSC Advances, 2013, 3, 9419.	1.7	12
95	Kinetically driven ordered phase formation in binary colloidal crystals. Physical Review E, 2013, 87, 022304.	0.8	9
96	System-dependent melting behavior of icosahedral anti-Mackay nanoalloys. RSC Advances, 2013, 3, 21981.	1.7	17
97	Computational Methods for Predicting the Structures of Nanoalloys. Engineering Materials, 2012, , 259-286.	0.3	7
98	Determination of the structures of small gold clusters on stepped magnesia by density functional calculations. Nanoscale, 2012, 4, 1101-1108.	2.8	7
99	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
100	Brownian Dynamics Simulations of Colloidal Suspensions Containing Polymers as Precursors of Composite Electrodes for Lithium Batteries. Langmuir, 2012, 28, 10713-10724.	1.6	36
101	Theoretical study of AuCu nanoalloys adsorbed on MgO(001). Surface Science, 2012, 606, 938-944.	0.8	11
102	Theoretical Modelling of Oxide-Supported Metal Nanoclusters and Nanoalloys. Frontiers of Nanoscience, 2012, , 159-211.	0.3	2
103	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
104	Interaction of l-cysteine with naked gold nanoparticles supported on HOPG: a high resolution XPS investigation. Nanoscale, 2012, 4, 7727.	2.8	41
105	Transition from coreâ€“shell to Janus chemical configuration for bimetallic nanoparticles. Nanoscale, 2012, 4, 3381.	2.8	163
106	Structure and thermal stability of AgCu chiral nanoparticles. European Physical Journal D, 2012, 66, 1.	0.6	43
107	Optimization of chemical ordering in AgAu nanoalloys. Physical Chemistry Chemical Physics, 2011, 13, 10232.	1.3	55
108	Interface Effects on the Magnetism of CoPt-Supported Nanostructures. Nano Letters, 2011, 11, 5542-5547.	4.5	27

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109	Structures of AgPd nanoclusters adsorbed on MgO(100): A computational study. Surface Science, 2011, 605, 483-488.	0.8	24
110	Structures of small Au clusters on MgO(001) studied by density-functional calculations. Physical Review B, 2011, 83, .	1.1	29
111	Study of Protein Dynamics vs. Amyloid Formation. Zeitschrift Fur Physikalische Chemie, 2010, 224, 215-225.	1.4	2
112	Size-Dependent Transition to High-Symmetry Chiral Structures in AgCu, AgCo, AgNi, and AuNi Nanoalloys. Nano Letters, 2010, 10, 4211-4216.	4.5	141
113	Simulations of heteroaggregation in a suspension of alumina and silica particles: Effect of dilution. Journal of Chemical Physics, 2010, 132, 084701.	1.2	24
114	Detection of Populations of Amyloid-Like Protofibrils with Different Physical Properties. Biophysical Journal, 2010, 98, 1277-1284.	0.2	47
115	Exotic Supported CoPt Nanostructures: From Clusters to Wires. Journal of Physical Chemistry Letters, 2010, 1, 111-115.	2.1	41
116	Oppositely Charged Model Ceramic Colloids: Numerical Predictions and Experimental Observations by Confocal Laser Scanning Microscopy. Langmuir, 2010, 26, 12540-12547.	1.6	41
117	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
118	Structures of gas-phase Agâ€“Pd nanoclusters: A computational study. Journal of Chemical Physics, 2010, 132, 234703.	1.2	44
119	Self-assembly of oppositely charged particles in dilute ceramic suspensions: predictive role of simulations. Soft Matter, 2010, 6, 370-382.	1.2	51
120	Surface-Supported Gold Cages. Physical Review Letters, 2009, 102, 216102.	2.9	34
121	Canonical molecular dynamics simulations for crystallization of metallic nanodroplets on MgO(100). Physical Review B, 2009, 79, .	1.1	8
122	Structures of metal nanoparticles adsorbed on MgO(001). II. Pt and Pd. Journal of Chemical Physics, 2009, 130, 174703.	1.2	48
123	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
124	Simulation of the heteroagglomeration between highly size-asymmetric ceramic particles. Journal of Colloid and Interface Science, 2009, 332, 360-365.	5.0	24
125	Diffusion of adatoms and small clusters on magnesium oxide surfaces. Journal of Physics Condensed Matter, 2009, 21, 264001.	0.7	22
126	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

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127	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
128	Structures of metal nanoparticles adsorbed on MgO(001). I. Ag and Au. Journal of Chemical Physics, 2009, 130, 174702.	1.2	75
129	Structure and chemical ordering in CoPt nanoalloys. Faraday Discussions, 2008, 138, 193-210.	1.6	109
130	Nanoalloys:â€‰ From Theory to Applications of Alloy Clusters and Nanoparticles. Chemical Reviews, 2008, 108, 845-910.	23.0	3,234
131	Global optimisation and growth simulation of AuCu clusters. Faraday Discussions, 2008, 138, 49-58.	1.6	47
132	Searching for the optimum structures of alloy nanoclusters. Physical Chemistry Chemical Physics, 2008, 10, 640-649.	1.3	185
133	Preface. Faraday Discussions, 2008, 138, 9-10.	1.6	18
134	Observation of Uncorrelated Microscopic Motion in a Strongly Interacting Adsorbate System. Journal of the American Chemical Society, 2008, 130, 6789-6794.	6.6	39
135	Growth of Co isolated clusters in the gas phase: Experiment and molecular dynamics simulations. Physical Review B, 2008, 77, .	1.1	42
136	Interface-Stabilized Phases of Metal-on-Oxide Nanodots. ACS Nano, 2008, 2, 1849-1856.	7.3	58
137	Heteroaggregation between Al₂O₃ Submicrometer Particles and SiO₂ Nanoparticles:â€‰ Experiment and Simulation. Langmuir, 2008, 24, 3001-3008.	1.6	80
138	Melting of core-shell Ag-Ni and Ag-Co nanoclusters studied via molecular dynamics simulations. Physical Review B, 2008, 77, .	1.1	75
139	Freezing of gold nanoclusters into poly-decahedral structures. Nanotechnology, 2007, 18, 225706.	1.3	53
140	Epitaxy, Truncations, and Overhangs in Palladium Nanoclusters Adsorbed on MgO(001). Physical Review Letters, 2007, 98, 156101.	2.9	38
141	First-principles isomer-specific absorption spectra ofAg11. Physical Review B, 2007, 75, .	1.1	28
142	Nanofinger growth on Au(111) arising from kinetic instability. Physical Review B, 2007, 75, .	1.1	5
143	Aggregation phenomena in a system of molecules with two internal states. Physical Review E, 2007, 76, 041604.	0.8	7
144	Chapter 2 Structural properties of pure and binary nanoclusters investigated by computer simulations. Theoretical and Computational Chemistry, 2007, , 35-58.	0.2	0

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145	Theoretical investigations of nanopatterning on the Au(111) surface. Surface Science, 2007, 601, 4175-4179.	0.8	2
146	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
147	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
148	Theoretical study of structure and segregation in 38-atom Ag-Au nanoalloys. European Physical Journal D, 2007, 43, 53-56.	0.6	35
149	Density-functional global optimization of gold nanoclusters. Physical Review B, 2006, 73, .	1.1	106
150	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
151	Electronic and Structural Shell Closure in AgCu and AuCu Nanoclusters. Journal of Physical Chemistry B, 2006, 110, 23197-23203.	1.2	90
152	Surface Diffusion: Simulations. , 2006, , 1-6.		0
153	Global optimization by excitable walkers. Chemical Physics Letters, 2006, 423, 17-22.	1.2	69
154	Numerical study of growth and relaxation of small C60 nanoclusters. Surface Science, 2006, 600, 995-1003.	0.8	6
155	Impact-driven effects in thin-film growth: steering and transient mobility at the Ag(110) surface. Nanotechnology, 2006, 17, 3556-3562.	1.3	6
156	Jump rate and jump probabilities in the two-dimensional strong-collision model. New Journal of Physics, 2005, 7, 19-19.	1.2	13
157	Molecular dynamics simulations of the indentation of a crystalline surface by an atomic force microscope tip. Physical Review B, 2005, 72, .	1.1	3
158	Quantum effects on the structure of pure and binary metallic nanoclusters. Physical Review B, 2005, 72, .	1.1	174
159	Structural properties of nanoclusters: Energetic, thermodynamic, and kinetic effects. Reviews of Modern Physics, 2005, 77, 371-423.	16.4	1,609
160	Diffusion of Palladium Clusters on Magnesium Oxide. Physical Review Letters, 2005, 95, 246103.	2.9	62
161	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
162	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

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163	Single Impurity Effect on the Melting of Nanoclusters. Physical Review Letters, 2005, 95, 035501.	2.9	182
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	Melting of metallic nanoclusters: Alloying and support effects. European Journal of Control, 2005, 30, 303-313.	1.6	4
166	Dynamical effects in the formation of magic cluster structures. Physical Review B, 2004, 69, .	1.1	64
167	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
168	Growth and energetic stability of AgNi coreâ€“shell clusters. Surface Science, 2004, 566-568, 192-196.	0.8	66
169	Leapfrog-induced selective faceting in the growth of missing-row (110) surfaces. Chemical Physics Letters, 2004, 398, 50-55.	1.2	5
170	Magic Polyicosahedral Core-Shell Clusters. Physical Review Letters, 2004, 93, 105503.	2.9	361
171	Modeling free and supported metallic nanoclusters: structure and dynamics. Phase Transitions, 2004, 77, 101-113.	0.6	83
172	Energetics of fcc and decahedral nanowires of Ag, Cu, Ni, andC60:A quenched molecular dynamics study. Physical Review B, 2004, 69, .	1.1	26
173	Amorphization Mechanism of Icosahedral Metal Nanoclusters. Physical Review Letters, 2004, 93, 065502.	2.9	113
174	Time evolution of Ag-Cu and Ag-Pd core-shell nanoclusters. European Physical Journal D, 2003, 24, 233-236.	0.6	23
175	Adsorption and diffusion on nanoclusters of C60 molecules. Surface Science, 2003, 532-535, 898-904.	0.8	5
176	A single step growth model with leapfrog diffusion mechanism. Physica A: Statistical Mechanics and Its Applications, 2003, 319, 36-48.	1.2	4
177	Growth of Three-Shell Onionlike Bimetallic Nanoparticles. Physical Review Letters, 2003, 90, 135504.	2.9	268
178	Stimulated diffusion of an adsorbed dimer. Physical Review E, 2003, 68, 051101.	0.8	33
179	Evidence of Kinetic Trapping in Clusters ofC60Molecules. Physical Review Letters, 2002, 88, 075503.	2.9	32
180	Spontaneous atomic shuffle in flat terraces:â€ƒAg(100). Physical Review B, 2002, 66, .	1.1	19

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181	Role of long jumps in surface diffusion. Physical Review E, 2002, 65, 061107.	0.8	52
182	DIFFUSION IN PERIODIC INTERACTING SYSTEMS: QUASI-ELASTIC SPECTRUM IN BISTABLE POTENTIALS. International Journal of Modern Physics B, 2002, 16, 4887-4896.	1.0	4
183	Crossover among structural motifs in transition and noble-metal clusters. Journal of Chemical Physics, 2002, 116, 3856-3863.	1.2	431
184	Growth simulations of silver shells on copper and palladium nanoclusters. Physical Review B, 2002, 66, .	1.1	186
185	Multilayer growth of Ag: a simulation study. Surface Science, 2002, 515, 575-587.	0.8	23
186	An efficient method for computing collective diffusion in a strongly interacting lattice gas. Surface Science, 2002, 515, 588-596.	0.8	12
187	Freezing of silver nanodroplets. Chemical Physics Letters, 2002, 354, 82-87.	1.2	58
188	Collective and single particle diffusion on surfaces. Advances in Physics, 2002, 51, 949-1078.	35.9	487
189	Growth of an Anisotropic Surface: The Case of Ag/Ag(110). , 2002, , 121-127.		1
190	Microscopic mechanisms of the growth of metastable silver icosahedra. Physical Review B, 2001, 63, .	1.1	196
191	Submonolayer homoepitaxial growth on Ag(110). Surface Science, 2001, 487, 49-54.	0.8	26
192	Island adsorption and adatom diffusion on 3D non-crystalline silver nanoclusters. Surface Science, 2001, 490, 361-375.	0.8	21
193	Jump rate and jump lengths in periodic systems with memory. Chemical Physics Letters, 2001, 347, 487-492.	1.2	5
194	Non-crystalline structures in the growth of silver nanoclusters. European Physical Journal D, 2001, 16, 25-28.	0.6	7
195	Ripple formation and rotation in the growth of Ag/Ag(110): A microscopic view. Physical Review B, 2001, 63, .	1.1	24
196	Diffusion of Adatoms and Small Clusters on Missing-Row-Reconstructed Surfaces. NATO Science Series Series II, Mathematics, Physics and Chemistry, 2001, , 237-245.	0.1	0
197	Comment on â€œScaling behavior of one-dimensional Pt chains migration on Pt(110)-(1Ã—2) surfaceâ€• Physics Letters, Section A: General, Atomic and Solid State Physics, 2000, 277, 185-187.	0.9	0
198	The kinetic spin-1 Blume-Capel model with competing dynamics. European Physical Journal B, 2000, 16, 681-686.	0.6	8

#	Article	IF	Citations
199	Probability of dimer reassociation in two dimensions. Physical Review E, 2000, 61, 3411-3416.	0.8	4
200	Long jumps in the strong-collision model. Physical Review E, 2000, 61, 6344-6350.	0.8	18
201	Diffusion of one-dimensional clusters on Au and Pt(110) (1Ã—2). Surface Science, 2000, 454-456, 575-578.	0.8	5
202	Molecular dynamics simulations of surface diffusion and growth on silver and gold clusters. Surface Science, 2000, 446, 31-45.	0.8	106
203	Reentrant Morphology Transition in the Growth of Free Silver Nanoclusters. Physical Review Letters, 2000, 84, 5544-5547.	2.9	136
204	Mobility of atomic chains on channeled surfaces. Journal of Chemical Physics, 2000, 113, 349-356.	1.2	7
205	Leapfrog Diffusion Mechanism for One-Dimensional Chains on Missing-Row Reconstructed Surfaces. Physical Review Letters, 1999, 82, 1498-1501.	2.9	90
206	Universal law for piecewise dimer diffusion. Physical Review B, 1999, 60, 11102-11109.	1.1	8
207	Reentrant morphological instability of epitaxial islands. Physical Review B, 1999, 60, 17016-17022.	1.1	11
208	Long-jump probabilities in a BGK model for surface diffusion. Chemical Physics Letters, 1999, 315, 153-157.	1.2	9
209	Simulation of the submonolayer homoepitaxial clusters growth on Ag(110). European Physical Journal D, 1999, 9, 561-564.	0.6	10
210	Dimers diffusion on (110) (1Ã—2) metal surfaces. Surface Science, 1999, 432, 27-36.	0.8	24
211	An MD study of adatom self-diffusion on Au(110) surfaces. Surface Science, 1999, 433-435, 445-448.	0.8	13
212	Time evolution of adatom and vacancy clusters on Ag(110). Surface Science, 1999, 440, 451-459.	0.8	30
213	Jumps and concerted moves in Cu, Ag, and Au(110) adatom self-diffusion. Physical Review B, 1999, 59, 5881-5891.	1.1	131
214	Simulation of the submonolayer homoepitaxial clusters growth on Ag(110). , 1999, , 561-564.		0
215	Resonant diffusion in periodic systems with memory. Chemical Physics Letters, 1998, 290, 509-513.	1.2	12
216	The Kramers problem in 2D-coupled periodic potentials. Chemical Physics, 1998, 235, 157-170.	0.9	29

#	Article	IF	Citations
217	A numerical study of the epitaxial growth of silver on silver (110). Physica A: Statistical Mechanics and Its Applications, 1998, 248, 288-304.	1.2	4
218	Collective surface diffusion on a triangular lattice in presence of ordered phases. Surface Science, 1998, 402-404, 281-285.	0.8	14
219	Cluster morphology transitions in the submonolayer epitaxial growth of Ag on Ag(110). Surface Science, 1998, 402-404, 286-289.	0.8	9
220	Collective surface diffusion on triangular and square interacting lattice gases. Surface Science, 1998, 409, 117-129.	0.8	29
221	A Monte Carlo simulation of submonolayer homoepitaxial growth on Ag(110) and Cu(110). Surface Science, 1998, 417, 220-237.	0.8	81
222	Competing mechanisms in adatom diffusion on a channeled surface: Jumps versus metastable walks. Physical Review B, 1998, 58, 3617-3620.	1.1	50
223	Underdamped diffusion in the egg-carton potential. Physical Review E, 1997, 55, 4810-4811.	0.8	13
224	Morphologies in anisotropic cluster growth:â€ƒA Monte Carlo study on Ag(110). Physical Review B, 1997, 56, R4406-R4409.	1.1	43
225	Lattice-Gas Theory of Collective Diffusion in Adsorbed Layers. International Journal of Modern Physics B, 1997, 11, 2217-2279.	1.0	101
226	OVERDAMPED DIFFUSION IN COUPLED POTENTIALS. Surface Review and Letters, 1997, 04, 847-850.	0.5	2
227	Step-descent mechanisms on Ag and Au(111). Surface Science, 1997, 377-379, 843-846.	0.8	9
228	An analytical approximation to the diffusion coefficient in overdamped multidimensional systems. Physica A: Statistical Mechanics and Its Applications, 1997, 246, 115-131.	1.2	5
229	Chemical surface diffusion with long jumps. Chemical Physics Letters, 1997, 274, 323-327.	1.2	8
230	High-Temperature Simulation of Diffusion of Ag on Ag(110). NATO ASI Series Series B: Physics, 1997, , 581-587.	0.2	0
231	Diffusion processes relevant to the epitaxial growth of Ag on Ag(110). Surface Science, 1996, 366, 306-316.	0.8	56
232	Multi-site correlation functions in two-dimensional lattice gases. Physica A: Statistical Mechanics and Its Applications, 1996, 223, 149-166.	1.2	2
233	Correlated Jump-Exchange Processes in the Diffusion of Ag on Ag(110). Physical Review Letters, 1996, 76, 4195-4198.	2.9	79
234	High-Temperature Study of the Schwoebel Effect in Au(111). Physical Review Letters, 1996, 76, 2109-2112.	2.9	36

#	Article	IF	Citations
235	Noise-activated diffusion in the egg-carton potential. Physical Review E, 1996, 54, 4708-4721.	0.8	49
236	Lattice-gas model of diffusion of NH3 on Re(0001). Chemical Physics Letters, 1995, 236, 533-537.	1.2	13
237	Retrapping and velocity inversion in jump diffusion. Physical Review E, 1995, 51, 126-130.	0.8	22
238	Numerical test of finite-barrier corrections for the hopping rate in the underdamped regime. Physical Review E, 1995, 51, R1645-R1648.	0.8	28
239	Tight-binding molecular dynamics study of diffusion on Au and Ag(111). Surface Science, 1995, 331-333, 920-924.	0.8	42
240	Pair-correlation function in two-dimensional lattice gases. Physical Review E, 1994, 49, 513-520.	0.8	3
241	Anisotropy of diffusion along steps on the (111) faces of gold and silver. Physical Review B, 1994, 50, 12104-12117.	1.1	68
242	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
243	Separation of time scales in rate problems at very low barriers. Chemical Physics Letters, 1994, 224, 308-312.	1.2	7
244	Erratum to â€œCollective diffusion in a lattice gas: application to O/W(110)â€•[Surface Science 307â€“309 (1994) 565]. Surface Science, 1994, 318, 443.	0.8	0
245	Collective diffusion in a lattice gas: application to O/W(110). Surface Science, 1994, 307-309, 565-569.	0.8	9
246	Correlation functions in surface diffusion: the multiple-jump regime. Surface Science, 1994, 311, 411-421.	0.8	63
247	Diffusion in a periodic potential in the strong collision limit. Chemical Physics Letters, 1993, 202, 248-252.	1.2	18
248	Collective and tracer diffusion in low-coverage adsorbates. Journal of Electron Spectroscopy and Related Phenomena, 1993, 64-65, 813-818.	0.8	0
249	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
250	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
251	Theory of diffusion in premelting systems. Nuovo Cimento Della Societa Italiana Di Fisica D - Condensed Matter, Atomic, Molecular and Chemical Physics, Biophysics, 1993, 15, 557-563.	0.4	4
252	Self-diffusion in a 2D lattice gas with lateral interactions. Surface Science, 1993, 281, 178-190.	0.8	23

#	Article	IF	Citations
253	The diffusion coefficient beyond TST and jump theory. Surface Science, 1993, 287-288, 886-890.	0.8	7
254	Incoherent scattering width in 2D systems with lateral interactions. Surface Science, 1993, 287-288, 907-910.	0.8	4
255	Kramers problem in periodic potentials: Jump rate and jump lengths. Physical Review E, 1993, 48, 2437-2451.	0.8	146
256	Surface viscosity of monomolecular films at the air-water interface. , 1993, , 340-340.		0
257	Fokker-Planck dynamics at premelting surfaces. Physical Review B, 1992, 45, 444-447.	1.1	21
258	Exact solution of the Kramers problem in periodic potentials. Physical Review A, 1992, 46, R699-R702.	1.0	47
259	Theory of diffusion in periodic systems: the diffusion coefficient. Surface Science, 1992, 265, 273-282.	0.8	48
260	Brownian theory of adsorbate diffusion. Surface Science, 1992, 269-270, 184-188.	0.8	6
261	Theory of classical diffusion in two dimensional periodic systems. Surface Science, 1991, 251-252, 773-777.	0.8	20
262	Diffusion in classical periodic systems: The Smoluchowski equation approach. Physica A: Statistical Mechanics and Its Applications, 1991, 173, 141-154.	1.2	15
263	Extreme distribution of mooring loads based on outcrossing methods. Structural Safety, 1990, 8, 195-208.	2.8	0
264	Mass Transport in Nanoalloys Studied by Atomistic Models. , 0, 12, 23-37.		3