

Uzi Landman

List of Publications by Year in descending order

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papers

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364
times ranked

16971
citing authors

#	ARTICLE	IF	CITATIONS
1	Nanotribology: friction, wear and lubrication at the atomic scale. Nature, 1995, 374, 607-616.	13.7	1,514
2	When Gold Is Not Noble: Nanoscale Gold Catalysts. Journal of Physical Chemistry A, 1999, 103, 9573-9578.	1.1	1,375
3	Charging Effects on Bonding and Catalyzed Oxidation of CO on Au ₈ Clusters on MgO. Science, 2005, 307, 403-407.	6.0	1,358
4	Nanocrystal gold molecules. Advanced Materials, 1996, 8, 428-433.	11.1	1,179
5	Ultrastable silver nanoparticles. Nature, 2013, 501, 399-402.	13.7	1,023
6	Bonding in Cu, Ag, and Au Clusters: Relativistic Effects, Trends, and Surprises. Physical Review Letters, 2002, 89, 033401.	2.9	611
7	On the Electronic and Atomic Structures of Small Au _N - (N = 4-14) Clusters: A Photoelectron Spectroscopy and Density-Functional Study. Journal of Physical Chemistry A, 2003, 107, 6168-6175.	1.1	598
8	Born-Oppenheimer molecular-dynamics simulations of finite systems: Structure and dynamics of (H ₂ O) ₂ . Physical Review B, 1993, 48, 2081-2097.	1.1	551
9	Structural, Electronic, and Impurity-Doping Effects in Nanoscale Chemistry: Supported Gold Nanoclusters. Angewandte Chemie - International Edition, 2003, 42, 1297-1300.	7.2	547
10	Total Structure and Electronic Properties of the Gold Nanocrystal Au ₃₆ (SR) ₂₄ . Angewandte Chemie - International Edition, 2012, 51, 13114-13118.	7.2	519
11	Structural Evolution of Smaller Gold Nanocrystals: The Truncated Decahedral Motif. Physical Review Letters, 1997, 79, 1873-1876.	2.9	460
12	Frictional Forces and Amontons' Law: From the Molecular to the Macroscopic Scale. Journal of Physical Chemistry B, 2004, 108, 3410-3425.	1.2	455
13	Gold clusters(Au _N , 2 ≤ N ≤ 10) and their anions. Physical Review B, 2000, 62, R2287-R2290.	1.1	454
14	Structure, Dynamics, and Thermodynamics of Passivated Gold Nanocrystallites and Their Assemblies. The Journal of Physical Chemistry, 1996, 100, 13323-13329.	2.9	410
15	Catalytic CO Oxidation by Free Au ₂ : Experiment and Theory. Journal of the American Chemical Society, 2003, 125, 10437-10445.	6.6	386
16	Charge Migration in DNA: Ion-Gated Transport. Science, 2001, 294, 567-571.	6.0	373
17	The energetics and structure of nickel clusters: Size dependence. Journal of Chemical Physics, 1991, 94, 7376-7396.	1.2	359
18	Interaction of O ₂ with Gold Clusters: Molecular and Dissociative Adsorption. Journal of Physical Chemistry A, 2003, 107, 4066-4071.	1.1	349

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19	Formation, Stability, and Breakup of Nanojets. <i>Science</i> , 2000, 289, 1165-1169.	6.0	344
20	Layering Transitions and Dynamics of Confined Liquid Films. <i>Physical Review Letters</i> , 1997, 79, 705-708.	2.9	303
21	Oxidation of DNA: Damage to Nucleobases. <i>Accounts of Chemical Research</i> , 2010, 43, 280-287.	7.6	300
22	Photoelectron spectra of aluminum cluster anions: Temperature effects and ab initio simulations. <i>Physical Review B</i> , 1999, 60, R11297-R11300.	1.1	289
23	Bonding Trends and Dimensionality Crossover of Gold Nanoclusters on Metal-Supported MgO Thin Films. <i>Physical Review Letters</i> , 2006, 97, 036106.	2.9	268
24	Electron localization in water clusters. II. Surface and internal states. <i>Journal of Chemical Physics</i> , 1988, 88, 4429-4447.	1.2	251
25	Melting of gold clusters. <i>Physical Review B</i> , 1999, 60, 5065-5077.	1.1	242
26	Small is different: energetic, structural, thermal, and mechanical properties of passivated nanocluster assemblies. <i>Faraday Discussions</i> , 2004, 125, 1.	1.6	239
27	Structural evolution of Au nanoclusters: From planar to cage to tubular motifs. <i>Physical Review B</i> , 2006, 74, .	1.1	234
28	Structure and Thermodynamics of Self-Assembled Monolayers on Gold Nanocrystallites. <i>Journal of Physical Chemistry B</i> , 1998, 102, 6566-6572.	1.2	231
29	Gas-Phase Catalytic Oxidation of CO by Au ₂ ⁻ . <i>Journal of the American Chemical Society</i> , 2001, 123, 9704-9705.	6.6	230
30	Slip Diffusion and Lévy Flights of an Adsorbed Gold Nanocluster. <i>Physical Review Letters</i> , 1999, 82, 3835-3838.	2.9	229
31	Spontaneous Symmetry Breaking in Single and Molecular Quantum Dots. <i>Physical Review Letters</i> , 1999, 82, 5325-5328.	2.9	224
32	Reversible Manipulations of Room Temperature Mechanical and Quantum Transport Properties in Nanowire Junctions. <i>Physical Review Letters</i> , 1996, 77, 1362-1365.	2.9	219
33	Water-Enhanced Catalysis of CO Oxidation on Free and Supported Gold Nanoclusters. <i>Physical Review Letters</i> , 2005, 95, 106102.	2.9	211
34	Control and Manipulation of Gold Nanocatalysis: Effects of Metal Oxide Support Thickness and Composition. <i>Journal of the American Chemical Society</i> , 2009, 131, 538-548.	6.6	203
35	Structure and solvation forces in confined films: Linear and branched alkanes. <i>Journal of Chemical Physics</i> , 1997, 106, 4309-4318.	1.2	202
36	Melting of Gold Clusters: Icosahedral Precursors. <i>Physical Review Letters</i> , 1998, 81, 2036-2039.	2.9	199

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37	Structure and Magnetism of Neutral and Anionic Palladium Clusters. <i>Physical Review Letters</i> , 2001, 86, 2545-2548.	2.9	198
38	Symmetry breaking and quantum correlations in finite systems: studies of quantum dots and ultracold Bose gases and related nuclear and chemical methods. <i>Reports on Progress in Physics</i> , 2007, 70, 2067-2148.	8.1	198
39	Size-Dependent Structural Evolution and Chemical Reactivity of Gold Clusters. <i>ChemPhysChem</i> , 2007, 8, 157-161.	1.0	197
40	Preparation, structure, dynamics, and energetics of amorphous silicon: A molecular-dynamics study. <i>Physical Review B</i> , 1989, 40, 1164-1174.	1.1	192
41	Interfacial alkane films. <i>Physical Review Letters</i> , 1992, 69, 1967-1970.	2.9	191
42	Factors in gold nanocatalysis: oxidation of CO in the non-scalable size regime. <i>Topics in Catalysis</i> , 2007, 44, 145-158.	1.3	190
43	Metal-Semiconductor Nanocontacts: Silicon Nanowires. <i>Physical Review Letters</i> , 2000, 85, 1958-1961.	2.9	188
44	Preparation and melting of amorphous silicon by molecular-dynamics simulations. <i>Physical Review B</i> , 1988, 37, 4656-4663.	1.1	186
45	Predicted Oxidation of CO Catalyzed by Au Nanoclusters on a Thin Defect-Free MgO Film Supported on a Mo(100) Surface. <i>Journal of the American Chemical Society</i> , 2007, 129, 2228-2229.	6.6	167
46	Atomistic mechanisms of adhesive contact formation and interfacial processes. <i>Wear</i> , 1992, 153, 3-30.	1.5	164
47	Electron Localization in Alkali-Halide Clusters. <i>Physical Review Letters</i> , 1985, 54, 1860-1863.	2.9	162
48	Electron localization in water clusters. I. Electron-water pseudopotential. <i>Journal of Chemical Physics</i> , 1988, 88, 4421-4428.	1.2	158
49	Structural and dynamical consequences of interactions in interfacial systems. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 1989, 7, 2829-2839.	0.9	154
50	Lattice relaxation at metal surfaces: An electrostatic model. <i>Physical Review B</i> , 1980, 21, 448-457.	1.1	148
51	Faceting at the silicon (100) crystal-melt interface: Theory and experiment. <i>Physical Review Letters</i> , 1986, 56, 155-158.	2.9	146
52	Atomic-Scale Issues in Tribology: Interfacial Junctions and Nano-elastohydrodynamics. <i>Langmuir</i> , 1996, 12, 4514-4528.	1.6	141
53	Au ₆₇ (SR) ₃₅ Nanomolecules: Characteristic Size-Specific Optical, Electrochemical, Structural Properties and First-Principles Theoretical Analysis. <i>Journal of Physical Chemistry A</i> , 2013, 117, 504-517.	1.1	140
54	Surface melting of Ni(110). <i>Physical Review B</i> , 1990, 41, 439-450.	1.1	137

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55	Methane Activation and Catalytic Ethylene Formation on Free Au ₂ ⁺ . <i>Angewandte Chemie - International Edition</i> , 2010, 49, 980-983.	7.2	137
56	Structures, solvation forces and shear of molecular films in a rough nano-confinement. <i>Tribology Letters</i> , 2000, 9, 3-13.	1.2	136
57	Gold Nanowires and Their Chemical Modifications. <i>Journal of Physical Chemistry B</i> , 1999, 103, 8814-8816.	1.2	135
58	Nanomechanics and dynamics of tip-substrate interactions. <i>Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , 1991, 9, 414.	1.6	134
59	Hydration of sodium in water clusters. <i>Physical Review Letters</i> , 1993, 70, 1775-1778.	2.9	134
60	Cluster-derived structures and conductance fluctuations in nanowires. <i>Nature</i> , 1997, 387, 788-791.	13.7	131
61	Friction Control in Thin-Film Lubrication. <i>Journal of Physical Chemistry B</i> , 1998, 102, 5033-5037.	1.2	129
62	Hydrogen-bonded structure and mechanical chiral response of a silver nanoparticle superlattice. <i>Nature Materials</i> , 2014, 13, 807-811.	13.3	128
63	Patterns and barriers for fission of charged small metal clusters. <i>Physical Review Letters</i> , 1991, 67, 3058-3061.	2.9	126
64	Electronic shell effects in triaxially deformed metal clusters: A systematic interpretation of experimental observations. <i>Physical Review B</i> , 1995, 51, 1902-1917.	1.1	125
65	Origins of Solvation Forces in Confined Films. <i>Journal of Physical Chemistry B</i> , 1997, 101, 4013-4023.	1.2	125
66	Stabilized-jellium description of neutral and multiply charged fullerenes C _x ±60. <i>Chemical Physics Letters</i> , 1994, 217, 175-185.	1.2	123
67	Chemistry and Structure of Silver Molecular Nanoparticles. <i>Accounts of Chemical Research</i> , 2018, 51, 3104-3113.	7.6	123
68	Surface states of excess electrons on water clusters. <i>Physical Review Letters</i> , 1987, 59, 811-814.	2.9	122
69	STEM Electron Diffraction and High-Resolution Images Used in the Determination of the Crystal Structure of the Au ₁₄₄ (SR) ₆₀ Cluster. <i>Journal of Physical Chemistry Letters</i> , 2013, 4, 975-981.	2.1	122
70	CO Combustion on Supported Gold Clusters. <i>ChemPhysChem</i> , 2006, 7, 1871-1879.	1.0	121
71	The Superstable 25 kDa Monolayer Protected Silver Nanoparticle: Measurements and Interpretation as an Icosahedral Ag ₁₅₂ (SCH ₂ CH ₂ Ph) ₆₀ Cluster. <i>Nano Letters</i> , 2012, 12, 5861-5866.	4.5	121
72	Collective and Independent-Particle Motion in Two-Electron Artificial Atoms. <i>Physical Review Letters</i> , 2000, 85, 1726-1729.	2.9	119

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73	Relaxation dynamics following transition of solvated electrons. <i>Journal of Chemical Physics</i> , 1989, 90, 4413-4422.	1.2	117
74	Structure sensitivity in the non-scalable regime explored via catalysed ethylene hydrogenation on supported platinum nanoclusters. <i>Nature Communications</i> , 2016, 7, 10389.	5.8	115
75	Collective excitations of multishell carbon microstructures: Multishell fullerenes and coaxial nanotubes. <i>Physical Review B</i> , 1996, 53, 10225-10236.	1.1	113
76	Hydrogen-Promoted Oxygen Activation by Free Gold Cluster Cations. <i>Journal of the American Chemical Society</i> , 2009, 131, 8939-8951.	6.6	113
77	Aluminum cluster anions: Photoelectron spectroscopy and ab initio simulations. <i>Physical Review B</i> , 2000, 62, 13216-13228.	1.1	111
78	Controlled Deposition and Classification of Copper Nanoclusters. <i>The Journal of Physical Chemistry</i> , 1994, 98, 3527-3537.	2.9	110
79	Theory of Physisorption: He on Metals. <i>Physical Review B</i> , 1973, 8, 5484-5495.	1.1	109
80	Dynamics and spectra of a solvated electron in water clusters. <i>Journal of Chemical Physics</i> , 1988, 89, 2242-2256.	1.2	106
81	Optical spectra of localized excess electrons in alkali halide clusters. <i>Physical Review Letters</i> , 1990, 64, 2933-2936.	2.9	106
82	Surface premelting of Cu(110). <i>Physical Review B</i> , 1991, 44, 3226-3239.	1.1	106
83	Nanowire Gold Chains: Formation Mechanisms and Conductance. <i>Journal of Physical Chemistry B</i> , 2000, 104, 9063-9066.	1.2	106
84	Metallization of ionic clusters. <i>Physical Review Letters</i> , 1991, 67, 727-730.	2.9	104
85	Superheating, melting, and annealing of copper surfaces. <i>Physical Review Letters</i> , 1993, 71, 1023-1026.	2.9	103
86	Quantum dynamical simulations of nonadiabatic processes: Solvation dynamics of the hydrated electron. <i>Physical Review Letters</i> , 1991, 67, 1011-1014.	2.9	101
87	Structure and dynamics of n-alkanes confined by solid surfaces. I. Stationary crystalline boundaries. <i>Journal of Chemical Physics</i> , 1992, 97, 1937-1949.	1.2	99
88	Size dependence of the energetics of electron attachment to large water clusters. <i>Chemical Physics Letters</i> , 1988, 145, 382-386.	1.2	97
89	Multilayer lattice relaxation at metal surfaces: A total-energy minimization. <i>Physical Review B</i> , 1983, 28, 1685-1695.	1.1	96
90	Genetic Algorithms for Structural Cluster Optimization. <i>Journal of Physical Chemistry A</i> , 1998, 102, 6129-6137.	1.1	94

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91	Instability Driven Fragmentation of Nanoscale Fractal Islands. <i>Physical Review Letters</i> , 2002, 88, 196103.	2.9	94
92	Quantum electronic transport through three-dimensional microconstrictions with variable shapes. <i>Physical Review B</i> , 1996, 53, 4054-4064.	1.1	92
93	Molecular-orbital-self-consistent-field cluster model of H ₂ O adsorption on copper. <i>Physical Review B</i> , 1985, 32, 1430-1433.	1.1	91
94	Nanojets, Electrospray, and Ion Field Evaporation: Molecular Dynamics Simulations and Laboratory Experiments. <i>Journal of Physical Chemistry A</i> , 2008, 112, 9628-9649.	1.1	91
95	Infinite Conical Well: An Analytic Model for Quantum Mechanical Hindered Rotors. <i>Physical Review Letters</i> , 1982, 49, 426-430.	2.9	88
96	Dynamics and energy release in fission of small doubly charged clusters. <i>Physical Review Letters</i> , 1994, 72, 1636-1639.	2.9	87
97	Born-Oppenheimer dynamics using density-functional theory: Equilibrium and fragmentation of small sodium clusters. <i>Journal of Chemical Physics</i> , 1991, 94, 608-616.	1.2	85
98	Excited-state dynamics of rare-gas clusters. <i>Journal of Chemical Physics</i> , 1988, 88, 4273-4288.	1.2	84
99	All-quantum simulations: H ₃ O ⁺ and H ₅ O ₂ ⁺ . <i>Chemical Physics Letters</i> , 1995, 237, 161-170.	1.2	78
100	Molecular-dynamics simulations of epitaxial crystal growth from the melt. I. Si(100). <i>Physical Review B</i> , 1988, 37, 4637-4646.	1.1	77
101	Two-dimensional quantum dots in high magnetic fields: Rotating-electron-molecule versus composite-fermion approach. <i>Physical Review B</i> , 2003, 68, .	1.1	77
102	Size-Selected Monodisperse Nanoclusters on Supported Graphene: Bonding, Isomerism, and Mobility. <i>Nano Letters</i> , 2012, 12, 5907-5912.	4.5	76
103	Crystal-melt and melt-vapor interfaces of nickel. <i>Physical Review B</i> , 1989, 40, 924-932.	1.1	75
104	Multilayer lattice relaxation at metal surfaces. <i>Physical Review B</i> , 1983, 27, 6534-6537.	1.1	73
105	Edge states, Aharonov-Bohm oscillations, and thermodynamic and spectral properties in a two-dimensional electron gas with an antidot. <i>Physical Review B</i> , 1995, 52, 14067-14077.	1.1	73
106	Structure and Energetics of Ionized Water Clusters: $(\text{H}_2\text{O})_n^+$, $n = 2 \sim 5$. <i>Journal of Physical Chemistry A</i> , 1997, 101, 164-169.	1.1	73
107	Shell-correction method for calculating the binding energy of metal clusters: Application to multiply charged anions. <i>Physical Review B</i> , 1993, 48, 8376-8387.	1.1	72
108	Intercalation of Trioxatriangulenium Ion in DNA: Binding, Electron Transfer, X-ray Crystallography, and Electronic Structure. <i>Journal of the American Chemical Society</i> , 2003, 125, 2072-2083.	6.6	72

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109	Metal-on-metal thin-film growth: Au/Ni(001) and Ni/Au(001). <i>Physical Review B</i> , 1991, 44, 5970-5972.	1.1	71
110	Selective C-H Bond Cleavage in Methane by Small Gold Clusters. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 13406-13410.	7.2	71
111	Surface and internal excess electron states in molecular clusters. <i>Accounts of Chemical Research</i> , 1989, 22, 350-357.	7.6	69
112	Molecular Dynamics in Shape Space and Femtosecond Vibrational Spectroscopy of Metal Clusters. <i>Journal of Physical Chemistry A</i> , 1998, 102, 2505-2508.	1.1	68
113	Cluster isomerization induced by electron attachment. <i>Journal of Chemical Physics</i> , 1987, 87, 2716-2723.	1.2	67
114	Energetics and structures of aluminum-lithium clusters. <i>Physical Review B</i> , 1993, 48, 1820-1824.	1.1	67
115	Trial wave functions with long-range Coulomb correlations for two-dimensional N-electron systems in high magnetic fields. <i>Physical Review B</i> , 2002, 66, .	1.1	67
116	Energetics and structures of neutral and charged S_n ($n \leq 10$) and sodium-doped S_nNa clusters. <i>Physical Review B</i> , 1997, 55, 7935-7944.	1.1	66
117	Hydrogen Welding and Hydrogen Switches in a Monatomic Gold Nanowire. <i>Nano Letters</i> , 2004, 4, 1845-1852.	4.5	66
118	Multiply Charged Metal Cluster Anions. <i>Physical Review Letters</i> , 2001, 86, 2996-2999.	2.9	64
119	Ethylene hydrogenation on supported Ni, Pd and Pt nanoparticles: Catalyst activity, deactivation and the d-band model. <i>Journal of Catalysis</i> , 2016, 333, 51-58.	3.1	62
120	Dynamics of excess electron migration, solvation, and spectra in polar molecular clusters. <i>Journal of Chemical Physics</i> , 1989, 91, 5567-5580.	1.2	60
121	Quantum simulations and ab initio electronic structure studies of $(H_2O)_n$. <i>Journal of Chemical Physics</i> , 1989, 91, 7797-7808.	1.2	59
122	Energetics, forces, and quantized conductance in jellium-modeled metallic nanowires. <i>Physical Review B</i> , 1998, 57, 4872-4882.	1.1	59
123	Effect of Base Sequence and Hydration on the Electronic and Hole Transport Properties of Duplex DNA: A Theory and Experiment. <i>Journal of Physical Chemistry A</i> , 2003, 107, 3525-3537.	1.1	58
124	Electric Field Control of Structure, Dimensionality, and Reactivity of Gold Nanoclusters on Metal-Supported MgO Films. <i>Physical Review Letters</i> , 2008, 100, 056102.	2.9	58
125	Temperature-Tunable Selective Methane Catalysis on Au_{20} : From Cryogenic Partial Oxidation Yielding Formaldehyde to Cold Ethylene Production. <i>Journal of Physical Chemistry C</i> , 2011, 115, 6788-6795.	1.5	57
126	Effect of Spatial Dispersion upon Physisorption Energies: He on Metals. <i>Physical Review Letters</i> , 1974, 33, 524-527.	2.9	56

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127	Nanotribology and the Stability of Nanostructures. Japanese Journal of Applied Physics, 1993, 32, 1444-1462.	0.8	56
128	Theoretical studies of the spectroscopy of excess electrons in water clusters. Journal of Chemical Physics, 1990, 93, 6226-6238.	1.2	55
129	Solid and liquid junctions. Computational Materials Science, 1992, 1, 1-24.	1.4	55
130	On Mesoscopic Forces and Quantized Conductance in Model Metallic Nanowires. Journal of Physical Chemistry B, 1997, 101, 5780-5783.	1.2	55
131	Structure and dynamics of surface crystallization of liquidn-alkanes. Physical Review B, 1993, 48, 11313-11316.	1.1	54
132	Multilayer Relaxation of Interlayer Registry and Spacing at High-Index Metal Surfaces. Physical Review Letters, 1983, 51, 1359-1361.	2.9	53
133	Excess electrons in polar molecular clusters. Journal of Chemical Physics, 1988, 88, 6670-6671.	1.2	53
134	Materials by numbers: Computations as tools of discovery. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 6671-6678.	3.3	53
135	Molecular-dynamics studies of the growth modes and structure of amorphous silicon films via atom deposition. Physical Review B, 1989, 40, 11733-11746.	1.1	52
136	Formation and control of electron molecules in artificial atoms: Impurity and magnetic-field effects. Physical Review B, 2000, 61, 15895-15904.	1.1	52
137	Einfluss der geometrischen und elektronischen Struktur sowie der elementaren Zusammensetzung von Clustern auf chemische Prozesse in der Nanometerskala. Angewandte Chemie, 2003, 115, 1335-1338.	1.6	52
138	Fundamental Insight into the Substrate-Dependent Ripening of Monodisperse Clusters. ChemCatChem, 2013, 5, 3330-3341.	1.8	52
139	Excess electrons in ammonia clusters. Chemical Physics Letters, 1988, 148, 249-252.	1.2	51
140	Molecular-dynamics simulations of epitaxial crystal growth from the melt. II. Si(111). Physical Review B, 1988, 37, 4647-4655.	1.1	51
141	Multiply charged anionic metal clusters. Chemical Physics Letters, 1993, 210, 437-442.	1.2	51
142	Electronic Entropy, Shell Structure, and Size-Evolutionary Patterns of Metal Clusters. Physical Review Letters, 1997, 78, 1424-1427.	2.9	49
143	Stochastic theory of multistate diffusion in perfect and defective systems. I. Mathematical formalism. Physical Review B, 1979, 19, 6207-6219.	1.1	48
144	Stability and Collapse of Metallic Structures on Surfaces. Physical Review Letters, 1994, 73, 569-572.	2.9	48

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145	Photoabsorption Spectra of Nan+ Clusters: Thermal Line-Broadening Mechanisms. <i>Physical Review Letters</i> , 2001, 87, 053401.	2.9	48
146	Group theoretical analysis of symmetry breaking in two-dimensional quantum dots. <i>Physical Review B</i> , 2003, 68, .	1.1	48
147	The Missing Link: Au ₁₉₁ (SPh-tBu) ₆₆ Janus Nanoparticle with Molecular and Bulk-Metal-like Properties. <i>Journal of the American Chemical Society</i> , 2020, 142, 15799-15814.	6.6	48
148	Low-Temperature CO Oxidation Catalyzed by Free Palladium Clusters: Similarities and Differences to Pd Surfaces and Supported Particles. <i>ACS Catalysis</i> , 2015, 5, 2275-2289.	5.5	47
149	Epitaxial Crystallization from a Melt: A Surface Molecular-Dynamics Study. <i>Physical Review Letters</i> , 1980, 45, 2032-2035.	2.9	46
150	Dimensionality crossovers of the ĩf plasmon in coaxial carbon nanotubes. <i>Physical Review B</i> , 1994, 50, 7977-7980.	1.1	45
151	Dynamical simulations of stress, strain, and finite deformations. <i>Physical Review B</i> , 1988, 38, 9522-9537.	1.1	44
152	Dynamics of Electron Localization, Solvation, and Migration in Polar Molecular Clusters. <i>Physical Review Letters</i> , 1989, 62, 106-109.	2.9	44
153	Crystalline Boson Phases in Harmonic Traps: Beyond the Gross-Pitaevskii Mean Field. <i>Physical Review Letters</i> , 2004, 93, 230405.	2.9	44
154	Adsorption on heterogeneous surfaces. I. Evaluation of the energy distribution function via the Wiener and Hopf method. <i>Journal of Chemical Physics</i> , 1976, 64, 1762-1767.	1.2	43
155	Further evaluation of the transform-deconvolution method for surface-structure determination by analysis of low-energy electron-diffraction intensities. <i>Physical Review B</i> , 1977, 15, 3775-3787.	1.1	43
156	Dielectrons in water clusters. <i>Journal of Chemical Physics</i> , 1992, 97, 1365-1377.	1.2	43
157	Oxidation State and Symmetry of Magnesia-Supported Pd ₁₃ O _x Nanocatalysts Influence Activation Barriers of CO Oxidation. <i>Journal of the American Chemical Society</i> , 2012, 134, 7690-7699.	6.6	43
158	Diffusion of Gold Clusters on Defective Graphite Surfaces. <i>Journal of Physical Chemistry B</i> , 2003, 107, 5882-5891.	1.2	42
159	Molecular Dynamics of a Laser-Annealing Experiment. <i>Physical Review Letters</i> , 1982, 49, 790-793.	2.9	41
160	Structure, collective hydrogen transfer, and formation of Si(OH) ₄ in SiO ₂ •(H ₂ O) _n clusters. <i>Journal of Chemical Physics</i> , 2002, 116, 9300-9304.	1.2	41
161	Microscopic theory of thermal desorption and dissociation processes catalyzed by a solid surface. <i>Physical Review B</i> , 1980, 21, 3256-3268.	1.1	40
162	Size-Dependent Binding Energies of Methane to Small Gold Clusters. <i>ChemPhysChem</i> , 2010, 11, 1570-1577.	1.0	40

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163	Oxidation of Magnesia-Supported Pd ₃₀ Nanoclusters and Catalyzed CO Combustion: Size-Selected Experiments and First-Principles Theory. <i>Journal of Physical Chemistry C</i> , 2012, 116, 9594-9607.	1.5	40
164	Atomically Precise Silver Clusters as New SERS Substrates. <i>Journal of Physical Chemistry Letters</i> , 2013, 4, 2769-2773.	2.1	40
165	Structural Variations and Multiple Charge Transfer Transitions between Chloranil and Carbazole Derivatives. <i>Macromolecules</i> , 1976, 9, 833-839.	2.2	39
166	Confirmation of a de novo structure prediction for an atomically precise monolayer-coated silver nanoparticle. <i>Science Advances</i> , 2016, 2, e1601609.	4.7	39
167	Structural properties of electrons in quantum dots in high magnetic fields: Crystalline character of cusp states and excitation spectra. <i>Physical Review B</i> , 2004, 70, .	1.1	38
168	High-Frequency Mechanical Stirring Initiates Anisotropic Growth of Seeds Requisite for Synthesis of Asymmetric Metallic Nanoparticles like Silver Nanorods. <i>Nano Letters</i> , 2013, 13, 4739-4745.	4.5	38
169	Dimensionality Dependent Water Splitting Mechanisms on Free Manganese Oxide Clusters. <i>Nano Letters</i> , 2013, 13, 5549-5555.	4.5	38
170	Surface structure determination via a transform-deconvolution method. <i>Journal of Vacuum Science and Technology</i> , 1974, 11, 195-200.	1.9	37
171	Molecular-dynamics study of elasticity and failure of ideal solids. <i>Physical Review B</i> , 1991, 44, 378-381.	1.1	37
172	Strongly correlated wavefunctions for artificial atoms and molecules. <i>Journal of Physics Condensed Matter</i> , 2002, 14, L591-L598.	0.7	37
173	Dielectron Attachment and Hydrogen Evolution Reaction in Water Clusters. <i>Journal of Physical Chemistry A</i> , 2011, 115, 7378-7391.	1.1	37
174	M ₄ Ag ₄₄ (p-MBA) ₃₀ Molecular Nanoparticles. <i>Journal of Physical Chemistry C</i> , 2015, 119, 11238-11249.	1.5	37
175	Pd ₆ O ₄ ⁺ : An Oxidation Resistant yet Highly Catalytically Active Nano-oxide Cluster. <i>Journal of the American Chemical Society</i> , 2012, 134, 20654-20659.	6.6	36
176	Assessing the concept of structure sensitivity or insensitivity for sub-nanometer catalyst materials. <i>Surface Science</i> , 2016, 652, 7-19.	0.8	36
177	Stochastic theory of multistate diffusion in perfect and defective systems. II. Case studies. <i>Physical Review B</i> , 1979, 19, 6220-6237.	1.1	35
178	Excess electron transport in water. <i>Journal of Chemical Physics</i> , 1990, 93, 8187-8195.	1.2	35
179	Water Adsorption and Reactions on Small Sodium Chloride Clusters. <i>The Journal of Physical Chemistry</i> , 1996, 100, 13950-13958.	2.9	34
180	Nonlinear Peltier effect and thermoconductance in nanowires. <i>Physical Review B</i> , 1999, 60, 11678-11682.	1.1	34

#	ARTICLE	IF	CITATIONS
181	Oxidative Damage to DNA: A Counterion-Assisted Addition of Water to Ionized DNA. <i>Journal of the American Chemical Society</i> , 2006, 128, 10795-10800.	6.6	34
182	M ₃ Ag ₁₇ (SPh) ₁₂ Nanoparticles and Their Structure Prediction. <i>Journal of the American Chemical Society</i> , 2015, 137, 11550-11553.	6.6	33
183	Cluster motion on surfaces: A stochastic model. <i>Physical Review B</i> , 1977, 16, 3389-3405.	1.1	32
184	Theoretical considerations of energetics, dynamics, and structure at interfaces. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 1985, 3, 1574-1587.	0.9	32
185	Magnetic-field manipulation of chemical bonding in artificial molecules. <i>International Journal of Quantum Chemistry</i> , 2002, 90, 699-708.	1.0	32
186	Chemical and Catalytic Properties of Size-Selected Free and Supported Clusters. <i>Nanoscience and Technology</i> , 2007, , 1-191.	1.5	32
187	Three-electron anisotropic quantum dots in variable magnetic fields: Exact results for excitation spectra, spin structures, and entanglement. <i>Physical Review B</i> , 2007, 76, .	1.1	32
188	Controlling Ethylene Hydrogenation Reactivity on Pt ₁₃ Clusters by Varying the Stoichiometry of the Amorphous Silica Support. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 8953-8957.	7.2	32
189	Direct Transform-Deconvolution Method for Surface-Structure Determination. <i>Physical Review Letters</i> , 1974, 33, 585-589.	2.9	31
190	Bonding, Conductance, and Magnetization of Oxygenated Au Nanowires. <i>Physical Review Letters</i> , 2008, 100, 046801.	2.9	31
191	Oxidative Thymine Mutation in DNA: Water-Wire-Mediated Proton-Coupled Electron Transfer. <i>Journal of the American Chemical Society</i> , 2013, 135, 3904-3914.	6.6	31
192	Selective C-H Bond Cleavage in Methane by Small Gold Clusters. <i>Angewandte Chemie</i> , 2017, 129, 13591-13595.	1.6	31
193	Electrical and mechanical properties of metallic nanowires: Conductance quantization and localization. <i>Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , 1995, 13, 1280.	1.6	30
194	Cluster size and composition dependent water deprotonation by free manganese oxide clusters. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 15727-15737.	1.3	30
195	Interaction of Iron-Sulfur Clusters with N ₂ : Biomimetic Systems in the Gas Phase. <i>Journal of Physical Chemistry C</i> , 2016, 120, 12549-12558.	1.5	30
196	Energetics, structure and excess electrons in small sodium-chloride clusters. <i>Chemical Physics Letters</i> , 1995, 232, 79-89.	1.2	29
197	Magnetic switching and thermal enhancement of quantum transport through nanowires. <i>Physical Review B</i> , 1996, 53, R13246-R13249.	1.1	29
198	Unified description of floppy and rigid rotating Wigner molecules formed in quantum dots. <i>Physical Review B</i> , 2004, 69, .	1.1	29

#	ARTICLE	IF	CITATIONS
199	Ethene to Graphene: Surface Catalyzed Chemical Pathways, Intermediates, and Assembly. <i>Journal of Physical Chemistry C</i> , 2017, 121, 9413-9423.	1.5	29
200	Single-ion and pair-interaction potentials near simple metal surfaces. <i>Physical Review B</i> , 1983, 28, 1667-1684.	1.1	28
201	On nanotribological interactions: Hard and soft interfacial junctions. <i>Solid State Communications</i> , 1998, 107, 693-708.	0.9	28
202	Thermopower of quantum nanowires in a magnetic field. <i>Physical Review B</i> , 1996, 54, R11094-R11097.	1.1	27
203	Atomic Dimer Shuttling and Two-Level Conductance Fluctuations in Nb Nanowires. <i>Physical Review Letters</i> , 2007, 98, 046802.	2.9	27
204	High-frequency vibrational modes at stepped Pt(111) surfaces. <i>Physical Review B</i> , 1979, 20, 1755-1757.	1.1	26
205	Reactions in clusters. <i>Journal of Chemical Physics</i> , 1991, 95, 4997-5013.	1.2	26
206	Equilibrium interphase interfaces and premelting of the Pb(110) surface. <i>Physical Review B</i> , 1995, 51, 10972-10980.	1.1	26
207	Shape effects on conductance quantization in three-dimensional nanowires: Hard versus soft potentials. <i>Physical Review B</i> , 1997, 56, 1065-1068.	1.1	26
208	Oxidation of small gas phase Pd clusters: A density functional study. <i>Computational Materials Science</i> , 2006, 35, 371-374.	1.4	26
209	Dielectric Nanodroplets: Structure, Stability, Thermodynamics, Shape Transitions and Electrocrystallization in Applied Electric Fields. <i>Journal of Physical Chemistry C</i> , 2011, 115, 20343-20358.	1.5	26
210	Motion of Clusters on Surfaces. <i>Physical Review Letters</i> , 1977, 38, 285-289.	2.9	25
211	Structure and Dynamics of a Metallic Glass: Molecular-Dynamics Simulations. <i>Physical Review Letters</i> , 1985, 55, 2035-2038.	2.9	25
212	Vibrational predissociation induced by exciton trapping in inert-gas clusters. <i>Chemical Physics Letters</i> , 1986, 126, 495-500.	1.2	25
213	Dynamics and excitations of a solvated electron in molecular clusters. <i>Physical Review A</i> , 1988, 38, 2178-2181.	1.0	25
214	Energetics and structure of He4 droplets at a finite temperature. <i>Physical Review B</i> , 1989, 39, 117-123.	1.1	25
215	Molecular evaporation and condensation of liquid n-alkane films. <i>Journal of Chemical Physics</i> , 1994, 101, 2498-2507.	1.2	25
216	Rapidly rotating boson molecules with long- or short-range repulsion: An exact diagonalization study. <i>Physical Review A</i> , 2007, 75, .	1.0	25

#	ARTICLE	IF	CITATIONS
217	New Molecular-Dynamics Method for Metallic Systems. <i>Physical Review Letters</i> , 1985, 54, 1679-1682.	2.9	24
218	Primary events following electron injection into water and adsorbed water layers. <i>Journal of Chemical Physics</i> , 1990, 93, 6535-6542.	1.2	24
219	Edge states in graphene quantum dots: Fractional quantum Hall effect analogies and differences at zero magnetic field. <i>Physical Review B</i> , 2009, 79, .	1.1	24
220	The Interaction of Water with Free $Mn^{4+}O^{4-}$ Clusters: Deprotonation and Adsorption-Induced Structural Transformations. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 15113-15117.	7.2	24
221	Can Support Acidity Predict Sub-Nanometer Catalyst Activity Trends?. <i>ACS Catalysis</i> , 2017, 7, 6738-6744.	5.5	24
222	Bare Clusters Derived from Protein Templates: Au_{25}^{+} , Au_{38}^{+} and Au_{102}^{+} . <i>ChemPhysChem</i> , 2013, 14, 1272-1282.	1.0	23
223	Double-Well Ultracold-Fermions Computational Microscopy: Wave-Function Anatomy of Attractive-Pairing and Wigner-Molecule Entanglement and Natural Orbitals. <i>Nano Letters</i> , 2015, 15, 7105-7111.	4.5	23
224	Hindered and modulated rotations of adsorbed diatomic molecules: States and spectra. <i>Physical Review B</i> , 1984, 29, 4313-4326.	1.1	22
225	Dynamics, Spectra, and Relaxation Phenomena of Excess Electrons in Clusters. <i>Israel Journal of Chemistry</i> , 1990, 30, 85-105.	1.0	22
226	Magneto-optics of electronic transport in nanowires. <i>Physical Review B</i> , 1998, 58, 16305-16314.	1.1	22
227	From a few to many electrons in quantum dots under strong magnetic fields: Properties of rotating electron molecules with multiple rings. <i>Physical Review B</i> , 2006, 73, .	1.1	22
228	Unique nature of the lowest Landau level in finite graphene samples with zigzag edges: Dirac electrons with mixed bulk-edge character. <i>Physical Review B</i> , 2011, 83, .	1.1	22
229	Size-Dependent Self-Limiting Oxidation of Free Palladium Clusters. <i>Journal of Physical Chemistry A</i> , 2014, 118, 8572-8582.	1.1	22
230	Water Deprotonation via Oxo-Bridge Hydroxylation and ^{18}O -Exchange in Free Tetra-Manganese Oxide Clusters. <i>Journal of Physical Chemistry C</i> , 2015, 119, 10881-10887.	1.5	22
231	Ultracold few fermionic atoms in needle-shaped double wells: spin chains and resonating spin clusters from microscopic Hamiltonians emulated via antiferromagnetic Heisenberg and t - J models. <i>New Journal of Physics</i> , 2016, 18, 073018.	1.2	22
232	Synthetic and Postsynthetic Chemistry of $M_4Au_xAg_{44-x}$ ($M = Pt, Au$) Alloy Nanoparticles. <i>Journal of Physical Chemistry C</i> , 2018, 122, 13166-13174.	1.5	22
233	Variational solutions of simple quantum systems subject to variable boundary conditions. II. Shallow donor impurities near semiconductor interfaces: Si, Ge. <i>Physical Review B</i> , 1984, 29, 4524-4533.	1.1	21
234	Nonuniversal Transmission Phase Lapses through a Quantum Dot: An Exact Diagonalization of the Many-Body Transport Problem. <i>Physical Review Letters</i> , 2008, 101, 136803.	2.9	21

#	ARTICLE	IF	CITATIONS
235	Barriers and Deformation in Fission of Charged Metal Clusters. The Journal of Physical Chemistry, 1995, 99, 14577-14581.	2.9	20
236	Patterns of the Aharonov-Bohm oscillations in graphene nanorings. Physical Review B, 2012, 85, .	1.1	20
237	Nonlinear magnetoconductance of nanowires. Physical Review B, 1997, 56, 14917-14920.	1.1	19
238	Decay channels and appearance sizes of doubly anionic gold and silver clusters. Physical Review B, 2000, 61, R10587-R10589.	1.1	19
239	Heat current fluctuations in quantum wires. Physical Review B, 2001, 64, .	1.1	19
240	SMALL IS DIFFERENT. International Journal of Modern Physics B, 1992, 06, 3623-3642.	1.0	18
241	Atomistic dynamics of interfacial processes: films, junctions and nanostructures. Applied Surface Science, 1996, 92, 237-256.	3.1	18
242	Nonlinear peltier effect in quantum point contacts. Solid State Communications, 1998, 108, 851-855.	0.9	18
243	Bosonic Molecules in Rotating Traps. Physical Review Letters, 2006, 97, 090401.	2.9	18
244	Steric Effects on Water Accessibility Control Sequence-Selectivity of Radical Cation Reactions in DNA. Journal of the American Chemical Society, 2007, 129, 8408-8409.	6.6	18
245	Electronic energy spectra in antiferromagnetic media with broken reciprocity. Physical Review B, 1997, 55, 12566-12571.	1.1	17
246	Noise in three-dimensional nanowires. Physical Review B, 1998, 57, 6654-6661.	1.1	17
247	Electron and boson clusters in confined geometries: Symmetry breaking in quantum dots and harmonic traps. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 10600-10605.	3.3	17
248	Prediction of Physisorption Interaction Energies: He on Metals. Physical Review Letters, 1973, 31, 707-710.	2.9	16
249	Surface segregation in simple metal alloys: An electronic theory. Physical Review B, 1983, 28, 6647-6658.	1.1	16
250	Artificial quantum-dot helium molecules: Electronic spectra, spin structures, and Heisenberg clusters. Physical Review B, 2009, 80, .	1.1	16
251	Unified microscopic approach to the interplay of pinned-Wigner-solid and liquid behavior of the lowest Landau-level states in the neighborhood of $\nu = 1/2$. Physical Review B, 2011, 84, .	1.1	16
252	Dynamic fluxionality and enhanced CO adsorption in the presence of coadsorbed H2O on free gold cluster cations. International Journal of Mass Spectrometry, 2015, 377, 393-402.	0.7	16

#	ARTICLE	IF	CITATIONS
253	Thermal Dehydrogenation of Methane Enhanced by η^2 -Oxo Ligands in Tantalum Cluster Cations $[\text{Ta}_x\text{O}]^+$, $x = 4, 5$. Journal of Physical Chemistry C, 2018, 122, 25628-25637.	1.5	16
254	Study of the transform-deconvolution method for surface structure determination. Surface Science, 1975, 51, 149-173.	0.8	15
255	Atomic and molecular quantum mechanics by the path integral molecular dynamics method. Chemical Physics Letters, 1986, 130, 504-510.	1.2	15
256	Thermopower of an infinite Luttinger liquid. Physical Review B, 2002, 65, .	1.1	15
257	Thermal bending of nanojets: Molecular dynamics simulations of an asymmetrically heated nozzle. Applied Physics Letters, 2008, 93, .	1.5	15
258	On Models of Interactive Dynamical Processes at Surfaces. Israel Journal of Chemistry, 1982, 22, 339-359.	1.0	14
259	Shapes of He_3 clusters. Physical Review B, 1996, 54, 7690-7693.	1.1	14
260	Thermoelectric effects in a Luttinger liquid. Low Temperature Physics, 2001, 27, 821-830.	0.2	14
261	Spin-guide source for the generation of highly spin-polarized currents. Physical Review B, 2003, 68, .	1.1	14
262	Topological effects and particle physics analogies beyond the massless Dirac-Weyl fermion in graphene nanorings. Physical Review B, 2013, 87, .	1.1	14
263	Two-point momentum correlations of few ultracold quasi-one-dimensional trapped fermions: Diffraction patterns. Physical Review A, 2017, 96, .	1.0	14
264	Highly Ordered Boron Nitride/Epigraphene Epitaxial Films on Silicon Carbide by Lateral Epitaxial Deposition. ACS Nano, 2020, 14, 12962-12971.	7.3	14
265	Optical absorption spectra of $(\text{H}_2\text{O})_n$. Chemical Physics Letters, 1988, 152, 353-357.	1.2	13
266	Quantum mechanical simulations of water and ammonia molecules and their clusters. International Journal of Quantum Chemistry, 1995, 56, 615-620.	1.0	13
267	Interaction enhanced thermopower in a Luttinger liquid. Physical Review B, 2001, 63, .	1.1	13
268	Beyond the constant-mass Dirac physics: Solitons, charge fractionization, and the emergence of topological insulators in graphene rings. Physical Review B, 2014, 89, .	1.1	13
269	Transport, Aharonov-Bohm, and Topological Effects in Graphene Molecular Junctions and Graphene Nanorings. Journal of Physical Chemistry C, 2015, 119, 11131-11142.	1.5	13
270	Interatomic interaction effects on second-order momentum correlations and Hong-Ou-Mandel interference of double-well-trapped ultracold fermionic atoms. Physical Review A, 2018, 97, .	1.0	13

#	ARTICLE	IF	CITATIONS
271	Infrared Spectroscopy of Gas-Phase MnO_2 Complexes. <i>Journal of Physical Chemistry A</i> , 2020, 124, 1561-1566.	1.1	13
272	Truncation, potential, and temperature effects in the transform ² deconvolution method. <i>Journal of Vacuum Science and Technology</i> , 1975, 12, 260-262.	1.9	12
273	Diffusion processes in defective crystals and multistate diffusion. <i>Solid State Communications</i> , 1978, 27, 939-942.	0.9	12
274	The interaction of ethylene with free gold cluster cations: infrared photodissociation spectroscopy combined with electronic and vibrational structure calculations. <i>Journal of Physics Condensed Matter</i> , 2018, 30, 504001.	0.7	12
275	Liquidlike Cu atom diffusion in weakly ionic compounds S_{Cu}^{2+} and S_{Cu}^{1+} . <i>Physical Review B</i> , 2020, 102, .	1.1	12
276	Dynamics of tip-substrate interactions in atomic force microscopy. <i>Surface Science Letters</i> , 1989, 210, L177-L184.	0.1	11
277	Comment on "Density functional theory study of some structural and energetic properties of small lithium clusters". <i>J. Chem. Phys.</i> 105, 9933 (1996)]. <i>Journal of Chemical Physics</i> , 1997, 107, 1032-1033.	1.2	11
278	Nanowires: size evolution, reversibility, and one-atom contacts. <i>Zeitschrift für Physik D-Atoms Molecules and Clusters</i> , 1997, 40, 282-287.	1.0	11
279	Thermal Quenching of Electronic Shells and Channel Competition in Cluster Fission. <i>Physical Review Letters</i> , 2002, 89, 173403.	2.9	11
280	Symmetry breaking and Wigner molecules in few-electron quantum dots. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2006, 203, 1160-1171.	0.8	11
281	Alternating current Josephson effect and resonant superconducting transport through vibrating Nb nanowires. <i>Nature Nanotechnology</i> , 2007, 2, 481-485.	15.6	11
282	Local and nonlocal effects in the theory of physisorption. <i>Journal of Vacuum Science and Technology</i> , 1975, 12, 206-209.	1.9	10
283	A magnetic-field-effect transistor and spin transport. <i>Applied Physics Letters</i> , 2003, 83, 4577-4579.	1.5	10
284	A Gas-Phase $CaMn_4O_4$ Cluster Model for the Oxygen-Evolving Complex of Photosystem II. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 8504-8509.	7.2	10
285	Carbide Dihydrides: Carbonaceous Species Identified in Ta_4 -Mediated Methane Dehydrogenation. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 23631-23635.	7.2	10
286	Model dielectric function for semiconductors: Si. <i>Physical Review B</i> , 1976, 14, 1597-1604.	1.1	9
287	Aharonov-Bohm and Aharonov-Casher tunneling effects and edge states in double-barrier structures. <i>Physical Review B</i> , 1994, 50, 2678-2680.	1.1	9
288	Quantal molecular description and universal aspects of the spectra of bosons and fermions in the lowest Landau level. <i>Physical Review A</i> , 2010, 81, .	1.0	9

#	ARTICLE	IF	CITATIONS
289	A Gas-Phase Calcium-Manganese-Oxygen Cluster Model for the Oxygen-Evolving Complex of Photosystem II. <i>Angewandte Chemie</i> , 2019, 131, 8592-8597.	1.6	9
290	Selective C-H bond activation of ethane by free gold clusters. <i>International Journal of Mass Spectrometry</i> , 2019, 435, 241-250.	0.7	9
291	Isomeric Thiolate Monolayer Protected Au ₉₂ and Au ₁₀₂ Nanomolecules. <i>Journal of Physical Chemistry C</i> , 2020, 124, 1655-1666.	1.5	9
292	Room-Temperature Methane Activation Mediated by Free Tantalum Cluster Cations: Size-by-Size Reactivity. <i>Journal of Physical Chemistry A</i> , 2021, 125, 5289-5302.	1.1	9
293	Thermal stability of iron-sulfur clusters. <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 7781-7790.	1.3	8
294	Infrared photodissociation spectroscopy of di-manganese oxide cluster cations. <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 23922-23930.	1.3	8
295	Nanocrystal Gold Molecules. , 1996, , 475-490.		8
296	Molecular formations and spectra due to electron correlations in three-electron hybrid double-well qubits. <i>Physical Review B</i> , 2022, 105, .	1.1	8
297	Variational solutions of simple quantum systems subject to variable boundary conditions. I. A model for physisorption. <i>Journal of Chemical Physics</i> , 1984, 80, 1691-1702.	1.2	7
298	Shell structure and shapes of fermion microsystems: A comparative study of 3He and Na clusters. <i>Journal of Chemical Physics</i> , 1996, 105, 8734-8740.	1.2	7
299	QUANTUM DOTS BASED ON PARABOLIC QUANTUM WELLS: IMPORTANCE OF ELECTRONIC CORRELATIONS. <i>International Journal of Modern Physics B</i> , 2007, 21, 1316-1325.	1.0	7
300	Edge and bulk components of lowest-Landau-level orbitals, correlated fractional quantum Hall effect incompressible states, and insulating behavior in finite graphene samples. <i>Physical Review B</i> , 2010, 82, .	1.1	7
301	Interference, spectral momentum correlations, entanglement, and Bell inequality for a trapped interacting ultracold atomic dimer: Analogies with biphoton interferometry. <i>Physical Review A</i> , 2019, 99, .	1.0	7
302	Stochastic Theory of Bimolecular, Heterogeneous, Surface Catalytic Reactions. <i>Physical Review Letters</i> , 1978, 41, 1174-1178.	2.9	6
303	Electron localization in clusters. <i>International Journal of Quantum Chemistry</i> , 1987, 32, 573-587.	1.0	6
304	Barnett and Landman reply. <i>Physical Review Letters</i> , 1992, 69, 1472-1472.	2.9	6
305	Small can be different. <i>Zeitschrift für Physik D-Atoms Molecules and Clusters</i> , 1993, 26, 119-125.	1.0	6
306	Graphene flakes with defective edge terminations: Universal and topological aspects, and one-dimensional quantum behavior. <i>Physical Review B</i> , 2012, 86, .	1.1	6

#	ARTICLE	IF	CITATIONS
307	Co-adsorption of O ₂ and C ₂ H ₄ on a Free Gold Dimer Probed via Infrared Photodissociation Spectroscopy. <i>Journal of the American Society for Mass Spectrometry</i> , 2019, 30, 1895-1905.	1.2	6
308	Nanotuning via Local Work Function Control: Ethylene Hydrogenation on Supported Pt Nanoclusters. <i>ACS Catalysis</i> , 2020, 10, 1799-1809.	5.5	6
309	$\langle i \rangle M \langle i \rangle \langle sub \rangle 4 \langle /sub \rangle Au \langle sub \rangle 12 \langle /sub \rangle Ag \langle sub \rangle 32 \langle /sub \rangle (\langle i \rangle p \langle i \rangle - MBA) \langle sub \rangle 30 \langle /sub \rangle (\langle i \rangle M \langle i \rangle = Na,) Tj ETQq1 1 0.784314 rg$ E: Crystallographic Communications, 2018, 74, 987-993.	0.2	6
310	Fourier transforms in surface structure determination from LEED. The transform-deconvolution method. <i>Faraday Discussions of the Chemical Society</i> , 1975, 60, 230.	2.2	5
311	Microscopic Phenomena of Macroscopic Consequences: Interfaces, Glasses, and Small Aggregates. <i>Materials Research Society Symposia Proceedings</i> , 1985, 63, 273.	0.1	5
312	Phase-Controlled Force and Magnetization Oscillations in Superconducting Ballistic Nanowires. <i>Physical Review Letters</i> , 2004, 92, 126802.	2.9	5
313	Interplay of relativistic and nonrelativistic transport in atomically precise segmented graphene nanoribbons. <i>Scientific Reports</i> , 2015, 5, 7893.	1.6	5
314	Anyon optics with time-of-flight two-particle interference of double-well-trapped interacting ultracold atoms. <i>Physical Review A</i> , 2019, 100, .	1.0	5
315	Size, Stoichiometry, Dimensionality, and Ca Doping of Manganese Oxide-Based Water Oxidation Clusters: An Oxy/Hydroxy Mechanism for Oxygen-Oxygen Coupling. <i>Journal of Physical Chemistry Letters</i> , 2021, 12, 5248-5255.	2.1	5
316	Wigner molecules and hybrid qubits. <i>Journal of Physics Condensed Matter</i> , 2022, 34, 21LT01.	0.7	5
317	Perturbation Treatment of the Variable-Phase Method. <i>Physical Review A</i> , 1972, 5, 1-4.	1.0	4
318	Micromechanics and Microdynamics Via Atomistic Simulations. <i>Materials Research Society Symposia Proceedings</i> , 1988, 140, 101.	0.1	4
319	Magnetocohesion of nanowires. <i>Physical Review B</i> , 2000, 62, 10467-10473.	1.1	4
320	Third-order momentum correlation interferometry maps for entangled quantal states of three singly trapped massive ultracold fermions. <i>Physical Review A</i> , 2019, 100, .	1.0	4
321	Exact closed-form analytic wave functions in two dimensions: Contact-interacting fermionic spinful ultracold atoms in a rapidly rotating trap. <i>Physical Review Research</i> , 2021, 3, .	1.3	4
322	Mechanism for anisotropic diffusion of liquid-like Cu atoms in hexagonal $\langle mml:math \mathit{xmlns:mml="http://www.w3.org/1998/Math/MathML"} \langle mml:mi \rangle \hat{I}^2 \langle /mml:mi \rangle \langle mml:mo \rangle \hat{\wedge} \langle /mml:mo \rangle \langle mml:msub \rangle \langle mml:mi \rangle \mathit{mathvariant="normal"} \rangle Cu \langle /mml:mi \rangle \langle mml:mn \rangle 2 \langle /mml:mn \rangle \langle /mml:msub \rangle \langle mml:mi \mathit{mathvariant="normal"} \rangle S \langle /mml:mi \rangle \langle /mml:math \rangle$. <i>Physical Review Materials</i> , 2021, 5, .	0.9	4
323	Nanomolecular Metallurgy: Transformation from Au ₁₄₄ (SCH ₂ CH ₂ Ph) ₆₀ to Au ₂₇₉ (SPh-t-Bu) ₈₄ . <i>Journal of Physical Chemistry C</i> , 2021, 125, 20488-20502.	1.5	4
324	Materials by numbers. <i>Physica D: Nonlinear Phenomena</i> , 1993, 66, 87-107.	1.3	3

#	ARTICLE	IF	CITATIONS
325	Ultrathin magnesia films as support for molecules and metal clusters: Tuning reactivity by thickness and composition. <i>Physica Status Solidi (B): Basic Research</i> , 2010, 247, 1001-1015.	0.7	3
326	Shell-Correction and Orbital-Free Density-Functional Methods for Finite Systems. <i>Recent Advances in Computational</i> , 2013, , 203-249.	0.8	3
327	Bottom-up configuration-interaction emulations of ultracold fermions in entangled optical plaquettes: Building blocks of unconventional superconductivity. <i>Physical Review A</i> , 2017, 95, .	1.0	3
328	Methanol C–O Bond Activation by Free Gold Clusters Probed via Infrared Photodissociation Spectroscopy. <i>Zeitschrift Fur Physikalische Chemie</i> , 2019, 233, 865-880.	1.4	3
329	All-order momentum correlations of three ultracold bosonic atoms confined in triple-well traps: Signatures of emergent many-body quantum phase transitions and analogies with three-photon quantum-optics interference. <i>Physical Review A</i> , 2020, 101, .	1.0	3
330	Energetic Stabilization of Carboxylic Acid Conformers by Manganese Atoms and Clusters. <i>Journal of Physical Chemistry A</i> , 2020, 124, 4990-4997.	1.1	3
331	Structure Relaxation and Liquidlike Enhanced Cu Diffusion at the Surface of β^2 -Cu ₂ S Chalcocite. <i>Nano Letters</i> , 2021, 21, 8895-8900.	4.5	3
332	Interfacial Segregation, Structure, and Diffusion of <i>n</i> -Alkane Mixture Films Adsorbed on Smooth and Rough Gold Surfaces. <i>Journal of Physical Chemistry C</i> , 2022, 126, 4209-4219.	1.5	3
333	Substrate effects on long-range order and scattering from low-dimensional systems. <i>Physical Review B</i> , 1980, 22, 1784-1788.	1.1	2
334	Diffusion and segregation at surfaces and interfaces. <i>Physical Review B</i> , 1982, 25, 7255-7262.	1.1	2
335	Influence of electron–electron scattering on spin-polarized current states in magnetically wrapped nanowires. <i>Low Temperature Physics</i> , 2003, 29, 606-608.	0.2	2
336	Trial wave functions for ring-trapped ions and neutral atoms: Microscopic description of the quantum space-time crystal. <i>Physical Review A</i> , 2017, 96, .	1.0	2
337	Oxygen Sensitivity of Free Nonligated Iron–Sulfur Clusters. <i>Journal of Physical Chemistry C</i> , 2019, 123, 27681-27689.	1.5	2
338	Fractional quantum Hall physics and higher-order momentum correlations in a few spinful fermionic contact-interacting ultracold atoms in rotating traps. <i>Physical Review A</i> , 2020, 102, .	1.0	2
339	Cluster Size Dependent Interaction of Free Manganese Oxide Clusters with Acetic Acid and Methyl Acetate. <i>Journal of Physical Chemistry A</i> , 2021, 125, 4435-4445.	1.1	2
340	Carbid–Dihydride: kohlenstoffhaltige Spezies identifiziert in der Ta 4 + –vermittelten Methandehydrierung. <i>Angewandte Chemie</i> , 2020, 132, 23838-23842.	1.6	2
341	Basic research needs and opportunities at the solid-gas interface. <i>Materials Science and Engineering</i> , 1982, 53, 113-124.	0.1	1
342	Formation of Facets at the Solid-Melt Interface in Silicon. <i>Materials Research Society Symposia Proceedings</i> , 1985, 53, 21.	0.1	1

#	ARTICLE	IF	CITATIONS
343	Energetics and dynamics of clusters. The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties, 1987, 56, 803-804.	0.6	1
344	Energetics of aluminum-lithium clusters. Zeitschrift für Physik D-Atoms Molecules and Clusters, 1993, 26, 296-300.	1.0	1
345	Structural and transport properties of Nb nanowires. Physica Status Solidi (A) Applications and Materials Science, 2007, 204, 1712-1720.	0.8	1
346	Controlling Ethylene Hydrogenation Reactivity on Pt ₁₃ Clusters by Varying the Stoichiometry of the Amorphous Silica Support. Angewandte Chemie, 2016, 128, 9099-9103.	1.6	1
347	Rovibrational Excitation within the Infinite Conical Well: Desorption of Diatomic Molecules. Studies in Surface Science and Catalysis, 1983, 14, 103-110.	1.5	0
348	The onset of disorder in Al(110) surfaces below the melting point. Surface Science Letters, 1989, 220, L693-L700.	0.1	0
349	On some issues in computational materials science. Computational Materials Science, 1994, 2, 209-211.	1.4	0
350	Structure and Binding of Neutral and Charged SinH ₂ O (n = 1, 2, 7) Clusters. Journal of Physical Chemistry A, 1997, 101, 5035-5037.	1.1	0
351	Giant magnetization of a superconductor-two-dimensional electron gas-superconductor structure. Low Temperature Physics, 2008, 34, 868-874.	0.2	0
352	Titelbild: Methanaktivierung und katalytische Ethylenbildung an freiem Au ₂ ⁺ (Angew. Chem. 5/2010). Angewandte Chemie, 2010, 122, 833-833.	1.6	0
353	Cover Picture: Methane Activation and Catalytic Ethylene Formation on Free Au ₂ ⁺ (Angew. Chem. Int.) Tj ETQq1 1 0,784314 ggBT /Over	1.2	0
354	A Novel Transform-Deconvolution Method for Surface Structure Determination from LEED Intensities. Japanese Journal of Applied Physics, 1974, 13, A918B.	0.8	0