

# Peter Zapol

## List of Publications by Year in descending order

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155  
papers

12,181  
citations

34105  
52  
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25787  
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157  
all docs

157  
docs citations

157  
times ranked

15746  
citing authors

#	ARTICLE	IF	CITATIONS
1	Measurements of near-ultimate strength for multiwalled carbon nanotubes and irradiation-induced crosslinking improvements. <i>Nature Nanotechnology</i> , 2008, 3, 626-631.	31.5	972
2	Nanostructured transition metal dichalcogenide electrocatalysts for CO <sub>2</sub> reduction in ionic liquid. <i>Science</i> , 2016, 353, 467-470.	12.6	778
3	Subnanometre platinum clusters as highly active and selective catalysts for the oxidative dehydrogenation of propane. <i>Nature Materials</i> , 2009, 8, 213-216.	27.5	725
4	Hierarchical Nanoassembly of MoS <sub>2</sub> /Co <sub>9</sub> S <sub>8</sub> /Ni <sub>3</sub> S <sub>2</sub> /Ni as a Highly Efficient Electrocatalyst for Overall Water Splitting in a Wide pH Range. <i>Journal of the American Chemical Society</i> , 2019, 141, 10417-10430.	13.7	653
5	Dynamic stability of active sites in hydr(oxy)oxides for the oxygen evolution reaction. <i>Nature Energy</i> , 2020, 5, 222-230.	39.5	540
6	Synthesis and characterization of highly-conducting nitrogen-doped ultrananocrystalline diamond films. <i>Applied Physics Letters</i> , 2001, 79, 1441-1443.	3.3	465
7	Role of Water and Carbonates in Photocatalytic Transformation of CO <sub>2</sub> to CH <sub>4</sub> on Titania. <i>Journal of the American Chemical Society</i> , 2011, 133, 3964-3971.	13.7	416
8	Carbon Dioxide Conversion to Methanol over Size-Selected Cu <sub>4</sub> Clusters at Low Pressures. <i>Journal of the American Chemical Society</i> , 2015, 137, 8676-8679.	13.7	299
9	Tight-binding molecular-dynamics simulation of impurities in ultrananocrystalline diamond grain boundaries. <i>Physical Review B</i> , 2001, 65, .	3.2	267
10	A model for the phase stability of arbitrary nanoparticles as a function of size and shape. <i>Journal of Chemical Physics</i> , 2004, 121, 4276-4283.	3.0	253
11	Assessment of Gaussian-3 and Density Functional Theories for Enthalpies of Formation of C <sub>1</sub> -C <sub>16</sub> Alkanes. <i>Journal of Physical Chemistry A</i> , 2000, 104, 5850-5854.	2.5	231
12	Lyotropic Liquid-Crystalline Gel Formation in a Room-Temperature Ionic Liquid. <i>Langmuir</i> , 2002, 18, 7258-7260.	3.5	229
13	Dopant-Dependent Stability of Garnet Solid Electrolyte Interfaces with Lithium Metal. <i>Advanced Energy Materials</i> , 2019, 9, 1803440.	19.5	217
14	Computational Studies of Catechol and Water Interactions with Titanium Oxide Nanoparticles. <i>Journal of Physical Chemistry B</i> , 2003, 107, 11419-11427.	2.6	208
15	Tailoring the Edge Structure of Molybdenum Disulfide toward Electrocatalytic Reduction of Carbon Dioxide. <i>ACS Nano</i> , 2017, 11, 453-460.	14.6	208
16	Effects of particle morphology and surface hydrogenation on the phase stability of TiO <sub>2</sub> . <i>Physical Review B</i> , 2004, 70, .	3.2	200
17	Modeling the Morphology and Phase Stability of TiO <sub>2</sub> Nanocrystals in Water. <i>Journal of Chemical Theory and Computation</i> , 2005, 1, 107-116.	5.3	191
18	Cathode Based on Molybdenum Disulfide Nanoflakes for Lithium-Oxygen Batteries. <i>ACS Nano</i> , 2016, 10, 2167-2175.	14.6	184

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19	Microporous polyphenylenes with tunable pore size for hydrogen storage. <i>Chemical Communications</i> , 2010, 46, 4547.	4.1	170
20	Charge Transfer Across the Nanocrystalline-DNA Interface: A Probing DNA Recognition. <i>Nano Letters</i> , 2004, 4, 1017-1023.	9.1	164
21	A Theoretical Study of CO <sub>2</sub> Anions on Anatase (101) Surface. <i>Journal of Physical Chemistry C</i> , 2010, 114, 21474-21481.	3.1	159
22	Revisiting the Corrosion of the Aluminum Current Collector in Lithium-Ion Batteries. <i>Journal of Physical Chemistry Letters</i> , 2017, 8, 1072-1077.	4.6	156
23	Dynamically Stable Active Sites from Surface Evolution of Perovskite Materials during the Oxygen Evolution Reaction. <i>Journal of the American Chemical Society</i> , 2021, 143, 2741-2750.	13.7	156
24	Copper Cluster Size Effect in Methanol Synthesis from CO <sub>2</sub> . <i>Journal of Physical Chemistry C</i> , 2017, 121, 10406-10412.	3.1	144
25	Computational screening of dopants for photocatalytic two-electron reduction of CO <sub>2</sub> on anatase (101) surfaces. <i>Energy and Environmental Science</i> , 2012, 5, 6196.	30.8	138
26	Shape-Dependent Activity of Platinum Array Catalyst. <i>Journal of the American Chemical Society</i> , 2009, 131, 5732-5733.	13.7	134
27	Photoredox Reactions and the Catalytic Cycle for Carbon Dioxide Fixation and Methanogenesis on Metal Oxides. <i>Journal of Physical Chemistry C</i> , 2012, 116, 9450-9460.	3.1	129
28	Shaping Nanometer-Scale Architecture Through Surface Chemistry. <i>Advanced Materials</i> , 2005, 17, 965-971.	21.0	125
29	The effect of nitrogen addition to Ar/CH <sub>4</sub> plasmas on the growth, morphology and field emission of ultrananocrystalline diamond. <i>Diamond and Related Materials</i> , 2002, 11, 43-48.	3.9	121
30	2D Copper Tetrahydroxyquinone Conductive Metal-Organic Framework for Selective CO <sub>2</sub> Electrocatalysis at Low Overpotentials. <i>Advanced Materials</i> , 2021, 33, e2004393.	21.0	120
31	Vacancy-Mediated Anion Photosegregation Kinetics in Mixed Halide Hybrid Perovskites: Coupled Kinetic Monte Carlo and Optical Measurements. <i>ACS Energy Letters</i> , 2018, 3, 2321-2328.	17.4	119
32	Predicting the Energetics, Phase Stability, and Morphology Evolution of Faceted and Spherical Anatase Nanocrystals. <i>Journal of Physical Chemistry B</i> , 2004, 108, 18435-18440.	2.6	115
33	Anatase and rutile surfaces with adsorbates representative of acidic and basic conditions. <i>Surface Science</i> , 2005, 582, 173-188.	1.9	107
34	Diffusion mechanisms of native point defects in rutile TiO <sub>2</sub> :Ab initio total-energy calculations. <i>Physical Review B</i> , 2007, 75, .	3.2	107
35	Ab Initio and Density Functional Study of the Activation Barrier for Ethane Cracking in Cluster Models of Zeolite H-ZSM-5. <i>Journal of Physical Chemistry B</i> , 2000, 104, 1944-1949.	2.6	106
36	Avalanching strain dynamics during the hydriding phase transformation in individual palladium nanoparticles. <i>Nature Communications</i> , 2015, 6, 10092.	12.8	87

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37	Catalytic Fe-xN Sites in Carbon Nanotubes. <i>Journal of Physical Chemistry C</i> , 2009, 113, 21629-21634.	3.1	83
38	Atomistic simulations of amorphous alumina surfaces. <i>Physical Review B</i> , 2006, 74, .	3.2	81
39	Three-dimensional imaging of dislocation dynamics during the hydriding phase transformation. <i>Nature Materials</i> , 2017, 16, 565-571.	27.5	81
40	Charge Distribution and Stability of Charged Carbon Nanotubes. <i>Physical Review Letters</i> , 2002, 89, 255503.	7.8	79
41	Interfacial control of oxygen vacancy doping and electrical conduction in thin film oxide heterostructures. <i>Nature Communications</i> , 2016, 7, 11892.	12.8	77
42	Oxidative Decomposition of Methanol on Subnanometer Palladium Clusters: The Effect of Catalyst Size and Support Composition. <i>Journal of Physical Chemistry C</i> , 2010, 114, 10342-10348.	3.1	76
43	Carbon Ad-Dimer Defects in Carbon Nanotubes. <i>Physical Review Letters</i> , 2006, 96, 075506.	7.8	70
44	Density functional study of the TiO <sub>2</sub> -dopamine complex. <i>Chemical Physics Letters</i> , 2005, 406, 306-311.	2.6	67
45	First-principles Study of Hydrolysis Reaction Barriers in a Sodium Borosilicate Glass. <i>International Journal of Applied Glass Science</i> , 2013, 4, 395-407.	2.0	66
46	An interatomic potential study of the properties of gallium nitride. <i>Journal of Physics Condensed Matter</i> , 1997, 9, 9517-9525.	1.8	65
47	High-Voltage Phosphate Cathodes for Rechargeable Ca-Ion Batteries. <i>ACS Energy Letters</i> , 2020, 5, 3203-3211.	17.4	65
48	Computational studies of electrochemical CO <sub>2</sub> reduction on subnanometer transition metal clusters. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 26584-26599.	2.8	62
49	Theoretical Studies on Nanocrystalline Diamond: Nucleation by Dicarbon and Electronic Structure of Planar Defects. <i>Journal of Physical Chemistry B</i> , 1999, 103, 5459-5467.	2.6	58
50	Ab initio prediction of GaN (101̄0) and (110) anomalous surface relaxation. <i>Physical Review B</i> , 1996, 53, R4209-R4212.	3.2	56
51	Quantum Chemical Study of Mechanisms for Oxidative Dehydrogenation of Propane on Vanadium Oxide. <i>Journal of Physical Chemistry B</i> , 2006, 110, 8363-8371.	2.6	54
52	Modeling the structure and electronic properties of TiO <sub>2</sub> nanoparticles. <i>Physical Review B</i> , 2006, 73, .	3.2	53
53	Structure and Morphology of Hydroxylated Amorphous Alumina Surfaces. <i>Journal of Physical Chemistry C</i> , 2007, 111, 7422-7429.	3.1	53
54	Carbon dimers on the diamond (100) surface: Growth and nucleation. <i>Physical Review B</i> , 2003, 68, .	3.2	52

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55	Monomeric Vanadium Oxide on a $\text{Al}_{2}\text{O}_3$ Support: A Combined Experimental/Theoretical Study. <i>Journal of Physical Chemistry C</i> , 2009, 113, 8836-8843.	3.1	52
56	High Voltage Mg-Ion Battery Cathode via a Solid Solution $\text{Cr}_x\text{Mn}$ Spinel Oxide. <i>Chemistry of Materials</i> , 2020, 32, 6577-6587.	6.7	48
57	High Capacity for $\text{Mg}^{2+}$ Deintercalation in Spinel Vanadium Oxide Nanocrystals. <i>ACS Energy Letters</i> , 2020, 5, 2721-2727.	17.4	48
58	Atomistic calculations of defects in $\text{ZnGeP}_2$ . <i>Journal of Applied Physics</i> , 1996, 79, 671.	2.5	45
59	Tailoring the Load Carrying Capacity of MWCNTs Through Inter-shell Atomic Bridging. <i>Experimental Mechanics</i> , 2009, 49, 169-182.	2.0	45
60	Heteroatom-Transfer Coupled Photoreduction and Carbon Dioxide Fixation on Metal Oxides. <i>Journal of Physical Chemistry C</i> , 2012, 116, 9461-9471.	3.1	45
61	Ab initio study of hydrogen adsorption on the $\text{ZnO}(101\bar{1},0)$ surface. <i>Surface Science</i> , 1999, 422, 1-7.	1.9	43
62	New Class of Electrocatalysts Based on 2D Transition Metal Dichalcogenides in Ionic Liquid. <i>Advanced Materials</i> , 2019, 31, e1804453.	21.0	43
63	Shape of Platinum Nanoparticles Supported on $\text{SrTiO}_3$ : Experiment and Theory. <i>Journal of Physical Chemistry C</i> , 2007, 111, 14782-14789.	3.1	42
64	Transport properties of n-type ultrananocrystalline diamond films. <i>Physical Review B</i> , 2006, 74, . <i>First-principles study of the atomic and electronic structures of misfit-layered calcium cobaltite</i>	3.2	40
65			

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73	Theoretical study of nonpolar surfaces of aluminum nitride: Zinc blende (110) and wurtzite (101- Am0). Physical Review B, 1997, 55, R16009-R16012.		3.2	28
74	Total-Reflection Inelastic X-Ray Scattering from a 10-nm Thick $\times$ Film. Physical Review Letters, 2011, 106, 037401.	$\text{La}^{0.6}$ $\text{Si}_{7.8}$ $\text{Al}_{27}$	7.8	27
75	Graphene-Supported Monometallic and Bimetallic Dimers for Electrochemical CO <sub>2</sub> Reduction. Journal of Physical Chemistry C, 2018, 122, 28629-28636.		3.1	27
76	Coherent X-ray spectroscopy reveals the persistence of island arrangements during layer-by-layer growth. Nature Physics, 2019, 15, 589-594.		16.7	26
77	MoO <sub>x</sub> S <sub>y</sub> Ni <sub>3</sub> S <sub>2</sub> Microspheres on Ni Foam as Highly Efficient, Durable Electrocatalysts for Hydrogen Evolution Reaction. Chemistry of Materials, 2022, 34, 798-808.		6.7	26
78	Stable Subnanometer Cobalt Oxide Clusters on Ultrananocrystalline Diamond and Alumina Supports: Oxidation State and the Origin of Sintering Resistance. Journal of Physical Chemistry C, 2012, 116, 24027-24034.		3.1	24
79	Periodic ab initio calculations of orthoboric acid. Journal of Chemical Physics, 2000, 113, 3338-3343.		3.0	23
80	Increased reactivity of single wall carbon nanotubes at carbon ad-dimer defect sites. Chemical Physics Letters, 2007, 450, 71-75.		2.6	23
81	Highly Active Rhenium-, Ruthenium-, and Iridium-Based Dichalcogenide Electrocatalysts for Oxygen Reduction and Oxygen Evolution Reactions in Aprotic Media. Chemistry of Materials, 2020, 32, 2764-2773.		6.7	23
82	SIPs. ACM Transactions on Mathematical Software, 2007, 33, 9.		2.9	22
83	Nanostructured Conductive Metal Organic Frameworks for Sustainable Low Charge Overpotentials in Li <sup>+</sup> Air Batteries. Small, 2022, 18, e2102902.		10.0	22
84	Excited State Dynamics and Structures of Functionalized Phthalocyanines. 1. Self-Regulated Assembly of Zinc Helicenocyanine. Journal of Physical Chemistry B, 2005, 109, 16598-16609.		2.6	21
85	Size-Selective Reactivity of Subnanometer Ag <sub>4</sub> and Ag <sub>16</sub> Clusters on a TiO <sub>2</sub> Surface. Journal of Physical Chemistry C, 2017, 121, 6614-6625.		3.1	21
86	Ca Cobaltites as Potential Cathode Materials for Rechargeable Ca-Ion Batteries: Theory and Experiment. Journal of Physical Chemistry C, 2020, 124, 5902-5909.		3.1	21
87	Atomic-Scale Study of Ambient-Pressure Redox-Induced Changes for an Oxide-Supported Submonolayer Catalyst: VO <sub>x</sub> / $\pm$ -TiO <sub>2</sub> (110). Journal of Physical Chemistry Letters, 2012, 3, 2845-2850.		4.6	20
88	Water Oxidation Catalysis via Size-Selected Iridium Clusters. Journal of Physical Chemistry C, 2018, 122, 9965-9972.		3.1	20
89	Direct Observation of Electron Beam-Induced Phase Transition in MgCrMnO <sub>4</sub> . Chemistry of Materials, 2020, 32, 10456-10462.		6.7	18
90	Theoretical analysis of hole self-trapping in ionic solids: Application to the KCl crystal. Physical Review B, 1993, 47, 14875-14885.		3.2	17

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91	Phonon and thermal transport properties of the misfit-layered oxide thermoelectric Ca <sub>3</sub> Co <sub>4</sub> O <sub>9</sub> from first principles. <i>Applied Physics Letters</i> , 2014, 104, 251910.	3.3	17
92	On the variation of dissolution rates at the orthoclase (0 0 1) surface with pH and temperature. <i>Geochimica Et Cosmochimica Acta</i> , 2014, 141, 598-611.	3.9	16
93	Electronic and magnetic properties of $\text{mml:math}$ xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>T</mml:mi><mml:msub><mml:mi>mathvariant="normal">i</mml:mi><mml:mn>4</mml:mn></mml:msub><mml:msub><mml:mi>mathvariant="normal">O</mml:mi><mml:mn>7</mml:mn></mml:msub></mml:math> predicted by self-interaction-corrected density functional theory. <i>Physical Review B</i> , 2015, 91, .	3.2	16
94	Anomalous Kondo resonance mediated by semiconducting graphene nanoribbons in a molecular heterostructure. <i>Nature Communications</i> , 2017, 8, 946.	12.8	16
95	Investigation of Ca Insertion into $\hat{\text{I}}\pm\text{MoO}_3$ Nanoparticles for High Capacity Ca-Ion Cathodes. <i>Nano Letters</i> , 2022, 22, 2228-2235.	9.1	16
96	Quantum chemical study of TiO <sub>2</sub> /dopamine-DNA triads. <i>Chemical Physics</i> , 2007, 339, 164-172.	1.9	15
97	First-Principles Study of Carbon and Vacancy Structures in Niobium. <i>Journal of Physical Chemistry C</i> , 2015, 119, 14728-14736.	3.1	15
98	Shift-and-invert parallel spectral transformation eigensolver: Massively parallel performance for density-functional based tight-binding. <i>Journal of Computational Chemistry</i> , 2016, 37, 448-459.	3.3	15
99	Kinetic Monte Carlo simulations of GaN homoepitaxy on c- and m-plane surfaces. <i>Journal of Chemical Physics</i> , 2017, 146, 144702.	3.0	15
100	Increasing Ionic Conductivity of Poly(ethylene oxide) by Reaction with Metallic Li. <i>Advanced Energy and Sustainability Research</i> , 2022, 3, 2100142.	5.8	15
101	Fabrication and characterization of platinum nanoparticle arrays of controlled size, shape and orientation. <i>Electrochimica Acta</i> , 2010, 55, 7934-7938.	5.2	14
102	Metallicity of InN and GaN surfaces exposed to NH <sub>3</sub> . <i>Physical Review B</i> , 2012, 85, .	3.2	14
103	Density functional study of the structure, thermodynamics and electronic properties of CdGeAs <sub>2</sub> . <i>Journal of Physics Condensed Matter</i> , 1999, 11, 4517-4526.	1.8	13
104	A DFT study of reaction pathways of NH <sub>3</sub> decomposition on InN (0001) surface. <i>Journal of Chemical Physics</i> , 2012, 137, 054708.	3.0	13
105	Dynamic Field Modulation of the Octahedral Framework in Metal Oxide Heterostructures. <i>Advanced Materials</i> , 2018, 30, e1804775.	21.0	13
106	Theoretical Studies of CN and C <sub>2</sub> Addition to a (100) Diamond Surface: Nanocrystalline Diamond Growth Mechanisms. <i>Journal of Computational and Theoretical Nanoscience</i> , 2005, 2, 207-213.	0.4	13
107	Density Functional Based Tight Binding Study of C <sub>2</sub> and CN Deposition On (100) Diamond Surface. <i>Materials Research Society Symposia Proceedings</i> , 2001, 675, 1. First-principles study of compensation mechanisms in negatively charged LaGaO <sub>3</sub> xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline">><mml:msub><mml:mrow>/><mml:mn>3</mml:mn></mml:msub></mml:math>/MgAl<mml:math>	0.1	12
108	xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline">><mml:msub><mml:mrow>/><mml:mn>2</mml:mn></mml:msub></mml:math>O<mml:math> xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline">><mml:msub><mml:mrow>/><mml:mn>1</mml:mn></mml:msub></mml:math>	3.2	12

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109	Oxygen-modulated quantum conductance for ultrathin $\text{HfO}_{2}$ -based memristive switching devices. <i>Physical Review B</i> , 2016, 94, .	3.2	11
110	Real-time x-ray studies of crystal growth modes during metal-organic vapor phase epitaxy of GaN on c- and m-plane single crystals. <i>Applied Physics Letters</i> , 2014, 105, .	3.3	10
111	Atomic relaxation of the BeO (101̄,0) surface. <i>Surface Science</i> , 1997, 381, L563-L567.	1.9	9
112	Theoretical study of the ionization potential of thymine: effect of adding conjugated functional groups. <i>Chemical Physics Letters</i> , 2003, 380, 54-62.	2.6	9
113	Self-consistent tight binding molecular dynamics study of TiO <sub>2</sub> nanoclusters in water. <i>Journal of Electroanalytical Chemistry</i> , 2007, 607, 147-157.	3.8	9
114	Crystal Orientation-Dependent Reactivity of Oxide Surfaces in Contact with Lithium Metal. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 17471-17479.	8.0	9
115	Dissociative adsorption of hydrogen on the ZrB <sub>2</sub> (0001) surface. <i>Surface Science</i> , 2012, 606, 1808-1814.	1.9	8
116	Layered Transition Metal Oxides as Ca Intercalation Cathodes: A Systematic First-principles Evaluation. <i>Advanced Energy Materials</i> , 2021, 11, 2101698.	19.5	8
117	Giant two-phonon Raman scattering from nanoscale NbC precipitates in Nb. <i>Physical Review B</i> , 2015, 91, .	3.2	7
118	SIESTA-SIPs: Massively parallel spectrum-slicing eigensolver for an <i>ab initio</i> molecular dynamics package. <i>Journal of Computational Chemistry</i> , 2018, 39, 1806-1814.	3.3	7
119	Quasicontinuum-Like Reduction of Density Functional Theory Calculations of Nanostructures. <i>Journal of Nanoscience and Nanotechnology</i> , 2008, 8, 3729-3740.	0.9	6
120	Dissociative adsorption of ammonia on the ZrB <sub>2</sub> (0001) surface. <i>Surface Science</i> , 2013, 615, 110-118.	1.9	6
121	Regioselective Oxidation of Strained Graphene for Controllable Synthesis of Nanoribbons. <i>Journal of Physical Chemistry C</i> , 2013, 117, 19160-19166.	3.1	6
122	In situ microbeam surface X-ray scattering reveals alternating step kinetics during crystal growth. <i>Nature Communications</i> , 2021, 12, 1721.	12.8	6
123	Designing silicon carbide heterostructures for quantum information science: challenges and opportunities. <i>Materials for Quantum Technology</i> , 2022, 2, 023001.	3.1	6
124	C <sub>2</sub> adsorption on the (100) diamond surface: periodic and large cluster calculations. <i>Molecular Physics</i> , 2005, 103, 1017-1025.	1.7	5
125	Carbon nanotunnels form from single-walled carbon nanotubes interacting with a diamond (100)-(2Å-1) surface. <i>Diamond and Related Materials</i> , 2011, 20, 1103-1109.	3.9	5
126	Dissociation of trimethylgallium on the ZrB <sub>2</sub> (0001) surface. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2013, 31, 061405.	2.1	5

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127	Fluorescence intermittency originates from reclustering in two-dimensional organic semiconductors. <i>Nature Communications</i> , 2017, 8, 14521.	12.8	5
128	Thermodynamic and kinetic properties of layered-CaCo <sub>2</sub> O <sub>4</sub> for the Ca-ion batteries: a systematic first-principles study. <i>Journal of Materials Chemistry A</i> , 2020, 8, 21700-21710.	10.3	5
129	Island dynamics and anisotropy during vapor phase epitaxy of m-plane GaN. <i>Applied Physics Letters</i> , 2017, 111, .	3.3	5
130	Epitaxial oxide bilayer on Pt (001) nanofacets. <i>Journal of Chemical Physics</i> , 2012, 136, 044704.	3.0	4
131	Monitoring of dielectric permittivity in accelerated alkali-silica reaction concrete with microwave backscattering. <i>Materials and Structures/Materiaux Et Constructions</i> , 2020, 53, 1.	3.1	4
132	Effective diffusion coefficient and diffusion-controlled reactions in insulating solids with defects. <i>Radiation Effects and Defects in Solids</i> , 1995, 137, 295-297.	1.2	3
133	A note on the regularity of reduced models obtained by nonlocal quasi-continuum-like approaches. <i>Mathematical Programming</i> , 2009, 118, 207-236.	2.4	3
134	Electrocatalytic activity of surface oxides on platinum nanofacets and surfaces. <i>Electrochimica Acta</i> , 2013, 109, 440-446.	5.2	3
135	Structure and Reactivity of Molecularly Adsorbed Ammonia on the ZrB <sub>2</sub> (0001) Surface. <i>Journal of Physical Chemistry C</i> , 2014, 118, 29260-29269.	3.1	3
136	An atomistic mechanism study of GaN step-flow growth in vicinal m-plane orientations. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 29239-29248.	2.8	3
137	Atomic-Scale Structure of Chemically Distinct Surface Oxygens in Redox Reactions. <i>Journal of the American Chemical Society</i> , 2021, 143, 17937-17941.	13.7	3
138	Theoretical investigation of the vibrational properties of $\text{BeH}$ . <i>Physical Review B</i> , 2009, 80, .	3.2	2
139	First-principles calculations of surfactant-assisted growth of polar CaO(111) oxide film: The case of water-based surfactant. <i>Physical Review B</i> , 2012, 86, .	3.2	2
140	Crystal truncation rods from miscut surfaces with alternating terminations. <i>Physical Review B</i> , 2021, 103, .	3.2	2
141	Simulating Nanoscale Processes in Solids Using DFT and the Quasicontinuum Method. , 2005, , .		2
142	Theoretical Studies of Growth Reactions on Diamond Surfaces. , 2004, , 266-307.		2
143	Theoretical investigation of the self-trapped hole in alkali halides. I. Long-range effects within the model hamiltonian approach. <i>Physica Status Solidi (B): Basic Research</i> , 1994, 183, 201-221.	1.5	1
144	Theoretical Studies of UNCD Synthesis and Properties. , 2006, , 273-302.		1

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145	Theoretical Studies of UNCD Properties. , 2012, , 85-102.	1	
146	Ab initio modeling of transport and thermodynamic stability for hafnia memristive devices. Journal of Computational Electronics, 2017, 16, 1066-1076.	2.5	1
147	Decomposition of ammonia on ZrB2(0001). Chemical Physics Letters, 2020, 739, 136984.	2.6	1
148	Theoretical evidence of water serving as a promoter for lithium superoxide disproportionation in Li <sub>2</sub> O batteries. Physical Chemistry Chemical Physics, 2021, 23, 10440-10447.	2.8	1
149	Burton-Cabrera-Frank theory for surfaces with alternating step types. Physical Review B, 2022, 105, .	3.2	1
150	First-Principles Study of $\epsilon$ -Bonded (100) Planar Defects in Diamond. Materials Research Society Symposia Proceedings, 1998, 538, 371.	0.1	0
151	Electronic Structure Studies of the Interaction of Water with a Cu(100) Surface. ACS Symposium Series, 2001, , 3-9.	0.5	0
152	Predicting the Energetics, Phase Stability, and Morphology Evolution of Faceted and Spherical Anatase Nanocrystals. ChemInform, 2005, 36, no.	0.0	0
153	Modeling Block Copolymer Interactions with Biomimetic Membranes. Materials Research Society Symposia Proceedings, 2006, 950, 1.	0.1	0
154	Explicit expressions for totally symmetric spherical functions and symmetry-dependent properties of multipoles. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2014, 470, 20140435.	2.1	0
155	A Real-Space Parallel Optimization Model Reduction Approach for Electronic Structure Computation in Large Nanostructures Using Orbital-Free Density Functional Theory. , 2006, , .	0	