

Jeffrey B Neaton

List of Publications by Year in descending order

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256
papers

31,229
citations

4658

85
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4432

172
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261
all docs

261
docs citations

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times ranked

30097
citing authors

#	ARTICLE	IF	CITATIONS
1	Accelerated Discovery of CH ₄ Uptake Capacity Metal-Organic Frameworks Using Bayesian Optimization. <i>Advanced Theory and Simulations</i> , 2022, 5, .	2.8	7
2	Density of states prediction for materials discovery via contrastive learning from probabilistic embeddings. <i>Nature Communications</i> , 2022, 13, 949.	12.8	26
3	An assessment of density functionals for predicting CO ₂ adsorption in diamine-functionalized metal-organic frameworks. <i>Journal of Chemical Physics</i> , 2022, 156, 154113.	3.0	7
4	Room-temperature skyrmion lattice in a layered magnet (Fe _{0.5} Co _{0.5}) ₅ GeTe ₂ . <i>Science Advances</i> , 2022, 8, eabm7103.	10.3	55
5	Highly Tunable Magnetic Phases in Transition-Metal Dichalcogenide $\frac{1}{3}FeMn_2S_4$. <i>Physical Review X</i> , 2022, 12, .	3.0	1
6	Optimally tuned starting point for single-shot GW calculations of solids. <i>Physical Review Materials</i> , 2022, 6, .	3.0	1
7	Screening of Excitons by Organic Cations in Quasi-Two-Dimensional Organic-Inorganic Lead-Halide Perovskites. <i>Nano Letters</i> , 2022, 22, 4870-4878.	9.1	24
8	Addressing solar photochemistry durability with an amorphous nickel antimonate photoanode. <i>Cell Reports Physical Science</i> , 2022, 3, 100959.	5.6	6
9	Anisotropic 2D excitons unveiled in organic-inorganic quantum wells. <i>Materials Horizons</i> , 2021, 8, 197-208.	12.2	17
10	Reduced scaling formulation of CASPT2 analytical gradients using the supporting subspace method. <i>Journal of Chemical Physics</i> , 2021, 154, 014103.	3.0	19
11	Chemically Localized Resonant Excitons in Silver-Pnictogen Halide Double Perovskites. <i>Journal of Physical Chemistry Letters</i> , 2021, 12, 2057-2063.	4.6	31
12	Gold-Cage Perovskites: A Three-Dimensional Au ^{III} -X Framework Encasing Isolated MX ₆ Octahedra (M ^{III} = In, Sb, Bi; X = Cl ⁻), <i>ACS Central Science</i> , 2021, 7, 1317-1326.	11.3	17
13	Origins of anisotropic transport in the electrically switchable antiferromagnet $\frac{1}{3}FeMn_2S_4$. <i>Physical Review B</i> , 2021, 103, .	3.0	1
14	A diagrammatic approach for automatically deriving analytical gradients of tensor hyper-contracted electronic structure methods. <i>Journal of Chemical Physics</i> , 2021, 155, 024108.	3.0	2
15	Exchange Bias in a Layered Metal-Organic Topological Spin Glass. <i>ACS Central Science</i> , 2021, 7, 1317-1326.	11.3	17
16	Software for the frontiers of quantum chemistry: An overview of developments in the Q-Chem 5 package. <i>Journal of Chemical Physics</i> , 2021, 155, 084801.	3.0	518
17	Band gaps of crystalline solids from Wannier-localization-based optimal tuning of a screened range-separated hybrid functional. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	7.1	49
18	Phonon Screening of Excitons in Semiconductors: Halide Perovskites and Beyond. <i>Physical Review Letters</i> , 2021, 127, 067401.	7.8	42

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37	Origins of the Pressure-Induced Phase Transition and Metallization in the Halide Perovskite (CH ₃ NH ₃)Pb ₃ . ACS Energy Letters, 2020, 5, 2174-2181.	17.4	34
38	Half-magnetization plateau and the origin of threefold symmetry breaking in an electrically switchable triangular antiferromagnet. Physical Review Research, 2020, 2, .	3.6	14
39	High Compression-Induced Conductivity in a Layered CuBr Perovskite. Angewandte Chemie, 2020, 132, 4046-4051.	2.0	7
40	Water Enables Efficient CO ₂ Capture from Natural Gas Flue Emissions in an Oxidation-Resistant Diamine-Appended Metal-Organic Framework. Journal of the American Chemical Society, 2019, 141, 13171-13186.	13.7	107
41	Identifying substitutional oxygen as a prolific point defect in monolayer transition metal dichalcogenides. Nature Communications, 2019, 10, 3382.	12.8	196
42	Superlattice-induced ferroelectricity in charge-ordered La _{1/3} Sr _{2/3} FeO ₃ . Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 23972-23976.	7.1	7
43	Accelerating GW-Based Energy Level Alignment Calculations for Molecule-Metal Interfaces Using a Substrate Screening Approach. Journal of Chemical Theory and Computation, 2019, 15, 4218-4227.	5.3	34
44	Emergence of topological electronic phases in elemental lithium under pressure. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 9197-9201.	7.1	10
45	First-Principles Approach to the Conductance of Covalently Bound Molecular Junctions. Journal of Physical Chemistry C, 2019, 123, 6379-6387.	3.1	10
46	Non-chemisorbed gold-sulfur binding prevails in self-assembled monolayers. Nature Chemistry, 2019, 11, 351-358.	13.6	202
47	Resonance Raman Characterization of Tetracene Monomer and Nanocrystals: Excited State Lattice Distortions With Implications For Efficient Singlet Fission. Journal of Physical Chemistry A, 2019, 123, 3863-3875.	2.5	5
48	Tuning the bandgap of Cs ₂ AgBiBr ₆ through dilute tin alloying. Chemical Science, 2019, 10, 10620-10628.	7.4	58
49	Push it to the limit: comparing periodic and local approaches to density functional theory for intermolecular interactions. Molecular Physics, 2019, 117, 1298-1305.	1.7	6
50	Ferroelectricity in [111]-oriented epitaxially strained SrTiO ₃ from first principles. Physical Review Materials, 2019, 3, .	2.4	11
51	Topological semimetal features in the multiferroic hexagonal manganites. Physical Review Materials, 2019, 3, .	2.4	9
52	Comparing time-dependent density functional theory with many-body perturbation theory for semiconductors: Screened range-separated hybrids and the G ₀ W ₀ plus Bethe-Salpeter approach. Physical Review Materials, 2019, 3, .	2.4	61
53	Towards predictive band gaps for halide perovskites: Lessons from one-shot and eigenvalue self-consistent G ₀ W ₀ . Physical Review Materials, 2019, 3, .	2.4	39
54	Detection of sub-MeV dark matter with three-dimensional Dirac materials. Physical Review D, 2018, 97, .	4.7	142

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55	Enrichment of molecular antenna triplets amplifies upconverting nanoparticle emission. Nature Photonics, 2018, 12, 402-407.	31.4	200
56	Alkaline-stable nickel manganese oxides with ideal band gap for solar fuel photoanodes. Chemical Communications, 2018, 54, 4625-4628.	4.1	2
57	Reducing Coercive-Field Scaling in Ferroelectric Thin Films <i>via</i> Orientation Control. ACS Nano, 2018, 12, 4736-4743.	14.6	47
58	Probing Charge Transport through Peptide Bonds. Journal of Physical Chemistry Letters, 2018, 9, 763-767.	4.6	38
59	Long-Lived Correlated Triplet Pairs in a π -Stacked Crystalline Pentacene Derivative. Journal of the American Chemical Society, 2018, 140, 2326-2335.	13.7	68
60	Thermodynamic signature of Dirac electrons across a possible topological transition in $ZrTe_5$. Physical Review B, 2018, 97, .	7.1	35
61	Low-lying excited states in crystalline perylene. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 284-289.	7.1	35
62	Observation of a two-dimensional Fermi surface and Dirac dispersion in $YbMnSb_2$. Physical Review B, 2018, 97, .	13.7	293
63	Layered Halide Double Perovskites: Dimensional Reduction of $Cs_2AgBiBr_6$. Journal of the American Chemical Society, 2018, 140, 5235-5240.	13.7	293
64	Topological materials discovery using electron filling constraints. Nature Physics, 2018, 14, 55-61.	16.7	39
65	Anisotropic Dirac Fermions in $BaMnBi_2$ and $BaZnBi_2$. Scientific Reports, 2018, 8, 15322.	3.3	14
66	Elucidating CO_2 Chemisorption in Diamine-Appended Metal-Organic Frameworks. Journal of the American Chemical Society, 2018, 140, 18016-18031.	13.7	107
67	Bi-Containing n- $FeWO_4$ Thin Films Provide the Largest Photovoltage and Highest Stability for a Sub-2 eV Band Gap Photoanode. ACS Energy Letters, 2018, 3, 2769-2774.	17.4	20
68	Defect-Induced Modification of Low-Lying Excitons and Valley Selectivity in Monolayer Transition Metal Dichalcogenides. Physical Review Letters, 2018, 121, 167402.	7.8	109
69	Formation of the layered conductive magnet $CrCl_2(\text{pyrazine})_2$ through redox-active coordination chemistry. Nature Chemistry, 2018, 10, 1056-1061.	13.6	108
70	Enhancement of CO_2 binding and mechanical properties upon diamine functionalization of $M_2(\text{dobpdc})$ metal-organic frameworks. Chemical Science, 2018, 9, 5197-5206.	7.4	39
71	Quantitative Prediction of Optical Absorption in Molecular Solids from an Optimally Tuned Screened Range-Separated Hybrid Functional. Journal of Chemical Theory and Computation, 2018, 14, 2919-2929.	5.3	51
72	Cooperative Gas Adsorption without a Phase Transition in Metal-Organic Frameworks. Physical Review Letters, 2018, 121, 015701.	7.8	17

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73	Excited-state vibrational dynamics toward the polaron in methylammonium lead iodide perovskite. <i>Nature Communications</i> , 2018, 9, 2525.	12.8	129
74	Inversion symmetry and bulk Rashba effect in methylammonium lead iodide perovskite single crystals. <i>Nature Communications</i> , 2018, 9, 1829.	12.8	189
75	Small-Band-Gap Halide Double Perovskites. <i>Angewandte Chemie</i> , 2018, 130, 12947-12952.	2.0	19
76	Small-Band-Gap Halide Double Perovskites. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 12765-12770.	13.8	136
77	Electron delocalization and charge mobility as a function of reduction in a metal-organic framework. <i>Nature Materials</i> , 2018, 17, 625-632.	27.5	255
78	Energy level alignment at molecule-metal interfaces from an optimally tuned range-separated hybrid functional. <i>Journal of Chemical Physics</i> , 2017, 146, .	3.0	59
79	Solar fuels photoanode materials discovery by integrating high-throughput theory and experiment. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, 3040-3043.	7.1	157
80	Assessing DFT-D3 Damping Functions Across Widely Used Density Functionals: Can We Do Better?. <i>Journal of Chemical Theory and Computation</i> , 2017, 13, 2043-2052.	5.3	71
81	Performance of van der Waals Corrected Functionals for Guest Adsorption in the $M_2(\text{dobdc})$ Metal-Organic Frameworks. <i>Journal of Physical Chemistry A</i> , 2017, 121, 4139-4151.	2.5	41
82	An assessment of low-lying excitation energies and triplet instabilities of organic molecules with an <i>ab initio</i> Bethe-Salpeter equation approach and the Tamm-Dancoff approximation. <i>Journal of Chemical Physics</i> , 2017, 146, 194108.	3.0	81
83	Parameter-free driven Liouville-von Neumann approach for time-dependent electronic transport simulations in open quantum systems. <i>Journal of Chemical Physics</i> , 2017, 146, 092331.	3.0	40
84	Defect-Induced Band-Edge Reconstruction of a Bismuth-Halide Double Perovskite for Visible-Light Absorption. <i>Journal of the American Chemical Society</i> , 2017, 139, 5015-5018.	13.7	288
85	A reversible single-molecule switch based on activated antiaromaticity. <i>Science Advances</i> , 2017, 3, eaao2615.	10.3	94
86	Electronically Transparent Au-N Bonds for Molecular Junctions. <i>Journal of the American Chemical Society</i> , 2017, 139, 14845-14848.	13.7	76
87	A direct look at halogen bonds. <i>Science</i> , 2017, 358, 167-168.	12.6	20
88	Voltage Dependence of Molecule-Electrode Coupling in Biased Molecular Junctions. <i>Journal of Physical Chemistry C</i> , 2017, 121, 21136-21144.	3.1	24
89	Discovery of Manganese-Based Solar Fuel Photoanodes via Integration of Electronic Structure Calculations, Pourbaix Stability Modeling, and High-Throughput Experiments. <i>ACS Energy Letters</i> , 2017, 2, 2307-2312.	17.4	36
90	Assessment of two hybrid van der Waals density functionals for covalent and non-covalent binding of molecules. <i>Journal of Chemical Physics</i> , 2017, 146, 234106.	3.0	33

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91	Large Bulk Photovoltaic Effect and Spontaneous Polarization of Single-Layer Monochalcogenides. <i>Physical Review Letters</i> , 2017, 119, 067402.	7.8	182
92	Atomate: A high-level interface to generate, execute, and analyze computational materials science workflows. <i>Computational Materials Science</i> , 2017, 139, 140-152.	3.0	223
93	Effective empirical corrections for basis set superposition error in the def2-SVPD basis: gCP and DFT-C. <i>Journal of Chemical Physics</i> , 2017, 146, 234105.	3.0	39
94	Origins of Singlet Fission in Solid Pentacene from an <i>ab initio</i> Green's Function Approach. <i>Physical Review Letters</i> , 2017, 119, 267401.	7.8	55
95	Prediction of TiRhAs as a Dirac nodal line semimetal via first-principles calculations. <i>Physical Review B</i> , 2017, 96, .	3.2	4
96	The energy level alignment at metal-molecule interfaces using Wannier-Koopmans method. <i>Applied Physics Letters</i> , 2016, 108, .	3.3	8
97	First-principles Hubbard U approach for small molecule binding in metal-organic frameworks. <i>Journal of Chemical Physics</i> , 2016, 144, 174104.	3.0	73
98	Push it to the limit: Characterizing the convergence of common sequences of basis sets for intermolecular interactions as described by density functional theory. <i>Journal of Chemical Physics</i> , 2016, 144, 194306.	3.0	41
99	Stability and self-passivation of copper vanadate photoanodes under chemical, electrochemical, and photoelectrochemical operation. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 9349-9352.	2.8	56
100	Force Field Development from Periodic Density Functional Theory Calculations for Gas Separation Applications Using Metal-Organic Frameworks. <i>Journal of Physical Chemistry C</i> , 2016, 120, 12590-12604.	3.1	95
101	Excited-State Properties of Molecular Solids from First Principles. <i>Annual Review of Physical Chemistry</i> , 2016, 67, 587-616.	10.8	88
102	Solar fuel photoanodes prepared by inkjet printing of copper vanadates. <i>Journal of Materials Chemistry A</i> , 2016, 4, 7483-7494.	10.3	56
103	Charge density wave order in 1D mirror twin boundaries of single-layer MoSe ₂ . <i>Nature Physics</i> , 2016, 12, 751-756.	16.7	209
104	Evaluating the <i>GW</i> Approximation with CCSD(T) for Charged Excitations Across the Oligoacenes. <i>Journal of Chemical Theory and Computation</i> , 2016, 12, 2834-2842.	5.3	71
105	Electric Field- and Strain-Induced Rashba Effect in Hybrid Halide Perovskites. <i>Journal of Physical Chemistry Letters</i> , 2016, 7, 3683-3689.	4.6	104
106	Ab initio electronic relaxation times and transport in noble metals. <i>Physical Review B</i> , 2016, 94, .	3.2	56
107	Effects of quantum confinement on excited state properties of SrTiO_3 <i>ab initio</i> many-body perturbation theory. <i>Physical Review B</i> , 2016, 94, .	3.2	11
108	Structural and excited-state properties of oligoacene crystals from first principles. <i>Physical Review B</i> , 2016, 93, .	3.2	89

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109	<i>Ab initio</i> phonon dispersion in crystalline naphthalene using van der Waals density functionals. <i>Physical Review B</i> , 2016, 93, .	3.2	41
110	molgw 1: Many-body perturbation theory software for atoms, molecules, and clusters. <i>Computer Physics Communications</i> , 2016, 208, 149-161.	7.5	139
111	Energy level alignment of self-assembled linear chains of benzenediamine on Au(111) from first principles. <i>Physical Review B</i> , 2016, 93, .	3.2	8
112	Covalent Functionalization of GaP(110) Surfaces via a Staudinger-Type Reaction with Perfluorophenyl Azide. <i>Journal of Physical Chemistry C</i> , 2016, 120, 26448-26452.	3.1	4
113	Mapping the Transmission Functions of Single-Molecule Junctions. <i>Nano Letters</i> , 2016, 16, 3949-3954.	9.1	58
114	Interplay of Bias-Driven Charging and the Vibrational Stark Effect in Molecular Junctions. <i>Nano Letters</i> , 2016, 16, 1104-1109.	9.1	40
115	Multidisciplinary Science at the Molecular Foundry. <i>Advanced Materials</i> , 2015, 27, 5634-5636.	21.0	1
116	Dirac metal to topological metal transition at a structural phase change in Au_2Pb and prediction of topology	3.2	55
117	Solid-state optical absorption from optimally tuned time-dependent range-separated hybrid density functional theory. <i>Physical Review B</i> , 2015, 92, .	3.2	210
118	Understanding Small-Molecule Interactions in Metal-Organic Frameworks: Coupling Experiment with Theory. <i>Advanced Materials</i> , 2015, 27, 5785-5796.	21.0	33
119	High Throughput Discovery of Solar Fuels Photoanodes in the Cu_2O_5 System. <i>Advanced Energy Materials</i> , 2015, 5, 1500968.	19.5	82
120	Theory and computation of hot carriers generated by surface plasmon polaritons in noble metals. <i>Nature Communications</i> , 2015, 6, 7044.	12.8	317
121	Single-molecule diodes with high rectification ratios through environmental control. <i>Nature Nanotechnology</i> , 2015, 10, 522-527.	31.5	360
122	First-principles study of electronic structure and photocatalytic properties of MnNiO_3 as an alkaline oxygen-evolution photocatalyst. <i>Chemical Communications</i> , 2015, 51, 2867-2870.	4.1	13
123	Numerical integration for ab initio many-electron self energy calculations within the GW approximation. <i>Journal of Computational Physics</i> , 2015, 286, 1-13.	3.8	15
124	Low-Lying Electronic Excited States of Pentacene Oligomers: A Comparative Electronic Structure Study in the Context of Singlet Fission. <i>Journal of Chemical Theory and Computation</i> , 2015, 11, 147-156.	5.3	63
125	$\text{Mn}_2\text{V}_2\text{O}_7$: An Earth Abundant Light Absorber for Solar Water Splitting. <i>Advanced Energy Materials</i> , 2015, 5, 1401840.	19.5	61
126	Small-Molecule Adsorption in Open-Site Metal-Organic Frameworks: A Systematic Density Functional Theory Study for Rational Design. <i>Chemistry of Materials</i> , 2015, 27, 668-678.	6.7	248

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127	Cooperative insertion of CO ₂ in diamine-appended metal-organic frameworks. <i>Nature</i> , 2015, 519, 303-308.	27.8	1,026
128	Adsorption-Induced Solvent-Based Electrostatic Gating of Charge Transport through Molecular Junctions. <i>Nano Letters</i> , 2015, 15, 4498-4503.	9.1	34
129	CO ₂ induced phase transitions in diamine-appended metal-organic frameworks. <i>Chemical Science</i> , 2015, 6, 5177-5185.	7.4	45
130	Reliable Energy Level Alignment at Physisorbed Molecule-Metal Interfaces from Density Functional Theory. <i>Nano Letters</i> , 2015, 15, 2448-2455.	9.1	112
131	Ab initio study of hot electrons in GaAs. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 5291-5296.	7.1	104
132	Dehydrogenation of Ammonia on Ru(0001) by Electronic Excitations. <i>Journal of Physical Chemistry C</i> , 2015, 119, 10520-10525.	3.1	3
133	Beyond Energies: Geometries of Nonbonded Molecular Complexes as Metrics for Assessing Electronic Structure Approaches. <i>Journal of Chemical Theory and Computation</i> , 2015, 11, 1481-1492.	5.3	90
134	GW100: Benchmarking G ₀ W ₀ for Molecular Systems. <i>Journal of Chemical Theory and Computation</i> , 2015, 11, 5665-5687.	5.3	280
135	Probing the mechanism of CO ₂ capture in diamine-appended metal-organic frameworks using measured and simulated X-ray spectroscopy. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 21448-21457.	2.8	43
136	A systematic benchmark of the ab initio Bethe-Salpeter equation approach for low-lying optical excitations of small organic molecules. <i>Journal of Chemical Physics</i> , 2015, 142, 244101.	3.0	137
137	Relating the Physical Structure and Optoelectronic Function of Crystalline TIPS-Pentacene. <i>Advanced Functional Materials</i> , 2015, 25, 2038-2046.	14.9	77
138	Controlling the Thermoelectric Properties of Thiophene-Derived Single-Molecule Junctions. <i>Chemistry of Materials</i> , 2014, 26, 7229-7235.	6.7	52
139	Communication: Energy-dependent resonance broadening in symmetric and asymmetric molecular junctions from an ab initio non-equilibrium Green's function approach. <i>Journal of Chemical Physics</i> , 2014, 141, 131104.	3.0	19
140	Tuning the electronic structure of SrTiO ₃ /SrFeO ₃ superlattices via composition and vacancy control. <i>APL Materials</i> , 2014, 2, .	5.1	7
141	Ytterbium-driven strong enhancement of electron-phonon coupling in graphene. <i>Physical Review B</i> , 2014, 90, .	3.2	19
142	Elucidating heterogeneity in nanoplasmonic structures using nonlinear photon localization microscopy. <i>Journal of Optics (United Kingdom)</i> , 2014, 16, 114014.	2.2	3
143	Tunable Charge Transport in Single-Molecule Junctions via Electrolytic Gating. <i>Nano Letters</i> , 2014, 14, 1400-1404.	9.1	107
144	Assessing electronic structure approaches for gas-ligand interactions in metal-organic frameworks: The CO ₂ -benzene complex. <i>Journal of Chemical Physics</i> , 2014, 140, 104707.	3.0	20

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145	Outer-valence Electron Spectra of Prototypical Aromatic Heterocycles from an Optimally Tuned Range-Separated Hybrid Functional. <i>Journal of Chemical Theory and Computation</i> , 2014, 10, 1934-1952.	5.3	128
146	Design of a Metal-Organic Framework with Enhanced Back Bonding for Separation of N ₂ and CH ₄ . <i>Journal of the American Chemical Society</i> , 2014, 136, 698-704.	13.7	157
147	Thermoelectricity at the gate. <i>Nature Nanotechnology</i> , 2014, 9, 876-877.	31.5	16
148	Effects of self-consistency and plasmon-pole models on ϵ for closed-shell molecules. <i>Physical Review B</i> , 2014, 90, .	3.2	24
149	Ligand Coupling Symmetry Correlates with Thermopower Enhancement in Small-Molecule/Nanocrystal Hybrid Materials. <i>ACS Nano</i> , 2014, 8, 10528-10536.	14.6	19
150	Control of Single-Molecule Junction Conductance of Porphyrins via a Transition-Metal Center. <i>Nano Letters</i> , 2014, 14, 5365-5370.	9.1	83
151	Efficient Determination of Accurate Force Fields for Porous Materials Using ab Initio Total Energy Calculations. <i>Journal of Physical Chemistry C</i> , 2014, 118, 2693-2701.	3.1	23
152	Using Molecular Design to Control the Performance of Hydrogen-Producing Polymer-Brush-Modified Photocathodes. <i>Journal of Physical Chemistry Letters</i> , 2014, 5, 3222-3226.	4.6	52
153	Comprehensive study of carbon dioxide adsorption in the metal-organic frameworks M ₂ (dobdc) (M = Mg, Mn, Fe, Co, Ni, Cu, Zn). <i>Chemical Science</i> , 2014, 5, 4569-4581.	7.4	342
154	Elastic Properties of Chemical-Vapor-Deposited Monolayer MoS ₂ , WS ₂ , and Their Bilayer Heterostructures. <i>Nano Letters</i> , 2014, 14, 5097-5103.	9.1	512
155	Determination of Energy Level Alignment and Coupling Strength in 4,4'-Bipyridine Single-Molecule Junctions. <i>Nano Letters</i> , 2014, 14, 794-798.	9.1	112
156	Charge transport and rectification in molecular junctions formed with carbon-based electrodes. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, 10928-10932.	7.1	95
157	Phosphonic Acid Adsorbates Tune the Surface Potential of TiO ₂ in Gas and Liquid Environments. <i>Journal of Physical Chemistry Letters</i> , 2014, 5, 2450-2454.	4.6	15
158	Ab Initio Study of Hot Carriers in the First Picosecond after Sunlight Absorption in Silicon. <i>Physical Review Letters</i> , 2014, 112, 257402.	7.8	203
159	Simultaneous Determination of Structures, Vibrations, and Frontier Orbital Energies from a Self-Consistent Range-Separated Hybrid Functional. <i>Journal of Physical Chemistry Letters</i> , 2014, 5, 2734-2741.	4.6	49
160	Force-Field Development from Electronic Structure Calculations with Periodic Boundary Conditions: Applications to Gaseous Adsorption and Transport in Metal-Organic Frameworks. <i>Journal of Chemical Theory and Computation</i> , 2014, 10, 1477-1488.	5.3	121
161	Density functional theory based calculation of small-polaron mobility in hematite. <i>Physical Review B</i> , 2014, 89, .	3.2	53
162	Reversible CO Binding Enables Tunable CO/H ₂ and CO/N ₂ Separations in Metal-Organic Frameworks with Exposed Divalent Metal Cations. <i>Journal of the American Chemical Society</i> , 2014, 136, 10752-10761.	13.7	210

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163	Voltage tuning of vibrational mode energies in single-molecule junctions. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 1282-1287.	7.1	63
164	Understanding Trends in CO ₂ Adsorption in Metal-Organic Frameworks with Open-Metal Sites. Journal of Physical Chemistry Letters, 2014, 5, 861-865.	4.6	139
165	Gap renormalization of molecular crystals from density-functional theory. Physical Review B, 2013, 88, .	3.2	239
166	Zigzag Inversion Domain Boundaries in Indium Zinc Oxide-Based Nanowires: Structure and Formation. ACS Nano, 2013, 7, 10747-10751.	14.6	19
167	Adsorption and Stability of π -Bonded Ethylene on GaP(110). Journal of Physical Chemistry C, 2013, 117, 26091-26096.	3.1	5
168	Tuning Rectification in Single-Molecular Diodes. Nano Letters, 2013, 13, 6233-6237.	9.1	169
169	Theory of Covalent Adsorbate Frontier Orbital Energies on Functionalized Light-Absorbing Semiconductor Surfaces. Journal of Physical Chemistry Letters, 2013, 4, 1701-1706.	4.6	29
170	Methane storage capabilities of diamond analogues. Physical Chemistry Chemical Physics, 2013, 15, 20937.	2.8	10
171	Effect of reduced dimensionality on the optical band gap of SrTiO ₃ . Applied Physics Letters, 2013, 102, .	3.3	52
172	Low-Energy Charge-Transfer Excitons in Organic Solids from First-Principles: The Case of Pentacene. Journal of Physical Chemistry Letters, 2013, 4, 2197-2201.	4.6	166
173	The Mechanism of Carbon Dioxide Adsorption in an Alkylamine-Functionalized Metal-Organic Framework. Journal of the American Chemical Society, 2013, 135, 7402-7405.	13.7	208
174	Probing Adsorption Interactions in Metal-Organic Frameworks using X-ray Spectroscopy. Journal of the American Chemical Society, 2013, 135, 18183-18190.	13.7	56
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