

Weitao Yang

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/275634/publications.pdf>

Version: 2024-02-01

361
papers

134,720
citations

3731

89
h-index

663

255
g-index

365
all docs

365
docs citations

365
times ranked

72814
citing authors

#	ARTICLE	IF	CITATIONS
1	Multireference Density Functional Theory for Describing Ground and Excited States with Renormalized Singles. <i>Journal of Physical Chemistry Letters</i> , 2022, 13, 894-903.	4.6	8
2	LibSC: Library for Scaling Correction Methods in Density Functional Theory. <i>Journal of Chemical Theory and Computation</i> , 2022, 18, 840-850.	5.3	8
3	Combining Localized Orbital Scaling Correction and Bethe-Salpeter Equation for Accurate Excitation Energies. <i>Journal of Chemical Physics</i> , 2022, 156, 154101.	3.0	6
4	Reformulation of thermally assisted-occupation density functional theory in the Kohn-Sham framework. <i>Journal of Chemical Physics</i> , 2022, 156, 174108.	3.0	6
5	Regularized Localized Molecular Orbitals in a Divide-and-Conquer Approach for Linear Scaling Calculations. <i>Journal of Chemical Theory and Computation</i> , 2022, 18, 2975-2982.	5.3	3
6	Describing Chemical Reactivity with Frontier Molecular Orbitals. <i>Jacs Au</i> , 2022, 2, 1383-1394.	7.9	32
7	Describing polymer polarizability with localized orbital scaling correction in density functional theory. <i>Journal of Chemical Physics</i> , 2021, 154, 054302.	3.0	11
8	Exact Second-Order Corrections and Accurate Quasiparticle Energy Calculations in Density Functional Theory. <i>Journal of Physical Chemistry Letters</i> , 2021, 12, 7236-7244.	4.6	8
9	Renormalized Singles Green's Function in the T-Matrix Approximation for Accurate Quasiparticle Energy Calculation. <i>Journal of Physical Chemistry Letters</i> , 2021, 12, 6203-6210.	4.6	19
10	Mechanism of Reduction of an Aminyl Radical Intermediate in the Radical SAM GTP 3-Phosphoadenylyltransferase MoaA. <i>Journal of the American Chemical Society</i> , 2021, 143, 13835-13844.	13.7	7
11	Theoretical Studies on Triplet-state Driven Dissociation of Formaldehyde by Quasi-classical Molecular Dynamics Simulation on Machine-Learning Potential Energy Surface. <i>Journal of Chemical Physics</i> , 2021, 155, 214105.	3.0	3
12	Self-Consistent Calculation of the Localized Orbital Scaling Correction for Correct Electron Densities and Energy-Level Alignments in Density Functional Theory. <i>Journal of Physical Chemistry Letters</i> , 2020, 11, 10269-10277.	4.6	18
13	Piecewise All-Atom SMD Simulations Reveal Key Secondary Structures in Luciferase Unfolding Pathway. <i>Biophysical Journal</i> , 2020, 119, 2251-2261.	0.5	3
14	Arene Substitution Design for Controlled Conformational Changes of Dibenzocycloocta-1,5-dienes. <i>Journal of the American Chemical Society</i> , 2020, 142, 16651-16660.	13.7	11
15	Introductory lecture: when the density of the noninteracting reference system is not the density of the physical system in density functional theory. <i>Faraday Discussions</i> , 2020, 224, 9-26.	3.2	6
16	Cobalt(II)-Catalyzed [4+2] Annulation of Picolinamides with Alkynes via C-H Bond Activation. <i>Chemistry - A European Journal</i> , 2020, 26, 5607-5610.	3.3	11
17	Engineering Substrate Interaction To Improve Hydrogen Evolution Catalysis of Monolayer MoS ₂ Films beyond Pt. <i>ACS Nano</i> , 2020, 14, 1707-1714.	14.6	97
18	Preserving Symmetry and Degeneracy in the Localized Orbital Scaling Correction Approach. <i>Journal of Physical Chemistry Letters</i> , 2020, 11, 1528-1535.	4.6	31

#	ARTICLE	IF	CITATIONS
19	Mechanism of Rate Acceleration of Radical C–C Bond Formation Reaction by a Radical SAM GTP 3-Phosphoadenylyltransferase. <i>Journal of the American Chemical Society</i> , 2020, 142, 9314-9326.	13.7	15
20	Revisiting the Hole Size in Double Helical DNA with Localized Orbital Scaling Corrections. <i>Journal of Physical Chemistry B</i> , 2020, 124, 3428-3435.	2.6	5
21	Density Functional Prediction of Quasiparticle, Excitation, and Resonance Energies of Molecules With a Global Scaling Correction Approach. <i>Frontiers in Chemistry</i> , 2020, 8, 588808.	3.6	4
22	1,3-Dipolar cycloaddition of nitrones to oxa(aza)bicyclic alkenes. <i>Organic Chemistry Frontiers</i> , 2019, 6, 3360-3364.	4.5	19
23	Excited-State Potential Energy Surfaces, Conical Intersections, and Analytical Gradients from Ground-State Density Functional Theory. <i>Journal of Physical Chemistry Letters</i> , 2019, 10, 2538-2545.	4.6	23
24	Charge transfer excitation energies from ground state density functional theory calculations. <i>Journal of Chemical Physics</i> , 2019, 150, 144109.	3.0	10
25	Excitation Energies from the Single-Particle Green's Function with the <i>GW</i> Approximation. <i>Journal of Physical Chemistry A</i> , 2019, 123, 3199-3204.	2.5	7
26	Solvation Free Energy Calculations with Quantum Mechanics/Molecular Mechanics and Machine Learning Models. <i>Journal of Physical Chemistry B</i> , 2019, 123, 901-908.	2.6	25
27	Toward Building Protein Force Fields by Residue-Based Systematic Molecular Fragmentation and Neural Network. <i>Journal of Chemical Theory and Computation</i> , 2019, 15, 1409-1417.	5.3	18
28	Approximating Quasiparticle and Excitation Energies from Ground State Generalized Kohn-Sham Calculations. <i>Journal of Physical Chemistry A</i> , 2019, 123, 666-673.	2.5	26
29	Renormalized Singles Green's Function for Quasi-Particle Calculations beyond the <i>G₀W₀</i> Approximation. <i>Journal of Physical Chemistry Letters</i> , 2019, 10, 447-452.	4.6	17
30	Molecular Dynamics Simulations with Quantum Mechanics/Molecular Mechanics and Adaptive Neural Networks. <i>Journal of Chemical Theory and Computation</i> , 2018, 14, 1442-1455.	5.3	110
31	Plasmon-Enhanced Catalysis: Distinguishing Thermal and Nonthermal Effects. <i>Nano Letters</i> , 2018, 18, 1714-1723.	9.1	251
32	Localized orbital scaling correction for systematic elimination of delocalization error in density functional approximations. <i>National Science Review</i> , 2018, 5, 203-215.	9.5	110
33	Accurate density functional prediction of molecular electron affinity with the scaling corrected Kohn-Sham frontier orbital energies. <i>Molecular Physics</i> , 2018, 116, 927-934.	1.7	10
34	Spin-state energetics of iron(II) porphyrin from the particle-particle random phase approximation. <i>European Physical Journal B</i> , 2018, 91, 1.	1.5	5
35	Role of Conformational Fluctuations of Protein toward Methylation in DNA by Cytosine-5-methyltransferase. <i>Journal of Chemical Theory and Computation</i> , 2018, 14, 6679-6689.	5.3	3
36	Field Electron Emission Images Far Away from a Semi-Infinitely Long Emitter: A Multiscale Simulation. <i>Journal of Physical Chemistry C</i> , 2018, 122, 27754-27760.	3.1	2

#	ARTICLE	IF	CITATIONS
37	Describing strong correlation with fractional-spin correction in density functional theory. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 9678-9683.	7.1	56
38	Accurate Treatment of Charge-Transfer Excitations and Thermally Activated Delayed Fluorescence Using the Particle-Particle Random Phase Approximation. Journal of Chemical Theory and Computation, 2018, 14, 3196-3204.	5.3	12
39	Force Field for Water Based on Neural Network. Journal of Physical Chemistry Letters, 2018, 9, 3232-3240.	4.6	46
40	Single, Double Electronic Excitations and Exciton Effective Conjugation Lengths in π -Conjugated Systems. Journal of Physical Chemistry Letters, 2018, 9, 4029-4036.	4.6	6
41	Accurate Quantum Mechanical/Molecular Mechanical Calculations of Reduction Potentials in Azurin Variants. Journal of Chemical Theory and Computation, 2018, 14, 4948-4957.	5.3	15
42	Photocatalytic activity and the radiative lifetimes of excitons <i>via</i> an <i>ab initio</i> approach. Journal of Materials Chemistry A, 2018, 6, 15027-15032.	10.3	12
43	Perspective: Chemical Information Encoded in Electron Density. Wuli Huaxue Xuebao/ Acta Physico-Chimica Sinica, 2018, 34, 567-580.	4.9	4
44	Product selectivity in plasmonic photocatalysis for carbon dioxide hydrogenation. Nature Communications, 2017, 8, 14542.	12.8	348
45	Three Pyrimidine Decarboxylations in the Absence of a Catalyst. Biochemistry, 2017, 56, 1498-1503.	2.5	1
46	On the piecewise convex or concave nature of ground state energy as a function of fractional number of electrons for approximate density functionals. Journal of Chemical Physics, 2017, 146, 074107.	3.0	14
47	Understanding band gaps of solids in generalized Kohn-Sham theory. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 2801-2806.	7.1	423
48	Electron Density, Kohn-Sham Frontier Orbitals, and Fukui Functions. , 2017, , 303-306.		1
49	Competing Pathways and Multiple Folding Nuclei in a Large Multidomain Protein, Luciferase. Biophysical Journal, 2017, 112, 1829-1840.	0.5	12
50	On extending Kohn-Sham density functionals to systems with fractional number of electrons. Journal of Chemical Physics, 2017, 146, 214109.	3.0	5
51	Charge transfer excitations from particle-particle random phase approximation—Opportunities and challenges arising from two-electron deficient systems. Journal of Chemical Physics, 2017, 146, 124104.	3.0	10
52	Activating MoS ₂ for pH-Universal Hydrogen Evolution Catalysis. Journal of the American Chemical Society, 2017, 139, 16194-16200.	13.7	164
53	Excitation energies from particle-particle random phase approximation with accurate optimized effective potentials. Journal of Chemical Physics, 2017, 147, 134105.	3.0	4
54	Multireference Density Functional Theory with Generalized Auxiliary Systems for Ground and Excited States. Journal of Physical Chemistry Letters, 2017, 8, 4479-4485.	4.6	21

#	ARTICLE	IF	CITATIONS
55	Generalized Optimized Effective Potential for Orbital Functionals and Self-Consistent Calculation of Random Phase Approximations. <i>Journal of Physical Chemistry Letters</i> , 2017, 8, 4746-4751.	4.6	18
56	Time-Dependent Coupled Perturbed Hartree-Fock and Density-Functional-Theory Approach for Calculating Frequency-Dependent (Hyper)Polarizabilities with Nonorthogonal Localized Molecular Orbitals. <i>Journal of Chemical Theory and Computation</i> , 2017, 13, 4101-4112.	5.3	1
57	Internal force corrections with machine learning for quantum mechanics/molecular mechanics simulations. <i>Journal of Chemical Physics</i> , 2017, 147, 161732.	3.0	28
58	Accurate Quasiparticle Spectra from the T-Matrix Self-Energy and the Particle-Particle Random Phase Approximation. <i>Journal of Physical Chemistry Letters</i> , 2017, 8, 3223-3227.	4.6	18
59	Single-molecule Force Spectroscopy Reveals the Calcium Dependence of the Alternative Conformations in the Native State of a ^{125}I -Crystallin Protein. <i>Journal of Biological Chemistry</i> , 2016, 291, 18263-18275.	3.4	13
60	All The Catalytic Active Sites of MoS_2 for Hydrogen Evolution. <i>Journal of the American Chemical Society</i> , 2016, 138, 16632-16638.	13.7	664
61	Determining polarizable force fields with electrostatic potentials from quantum mechanical linear response theory. <i>Journal of Chemical Physics</i> , 2016, 144, 224107.	3.0	9
62	Accurate and efficient calculation of excitation energies with the active-space particle-particle random phase approximation. <i>Journal of Chemical Physics</i> , 2016, 145, 144105.	3.0	12
63	Quantum Mechanics/Molecular Mechanics Method Combined with Hybrid All-Atom and Coarse-Grained Model: Theory and Application on Redox Potential Calculations. <i>Journal of Chemical Theory and Computation</i> , 2016, 12, 2017-2027.	5.3	18
64	Direct Observation of Multimer Stabilization in the Mechanical Unfolding Pathway of a Protein Undergoing Oligomerization. <i>Biophysical Journal</i> , 2016, 110, 392a-393a.	0.5	0
65	Single-Molecule Force-Spectroscopy Reveals the Calcium Dependency of Folding Intermediates in the Multidomain Protein S. <i>Biophysical Journal</i> , 2016, 110, 393a.	0.5	0
66	Multiscale Quantum Mechanics/Molecular Mechanics Simulations with Neural Networks. <i>Journal of Chemical Theory and Computation</i> , 2016, 12, 4934-4946.	5.3	94
67	Nature of ground and electronic excited states of higher acenes. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, E5098-107.	7.1	147
68	Conical Intersections from Particle-Particle Random Phase and Tamm-Dancoff Approximations. <i>Journal of Physical Chemistry Letters</i> , 2016, 7, 2407-2411.	4.6	23
69	Diverse Optimal Molecular Libraries for Organic Light-Emitting Diodes. <i>Journal of Chemical Theory and Computation</i> , 2016, 12, 1942-1952.	5.3	15
70	Accurate atomic quantum defects from particle-particle random phase approximation. <i>Molecular Physics</i> , 2016, 114, 1189-1198.	1.7	4
71	Gentlest ascent dynamics for calculating first excited state and exploring energy landscape of Kohn-Sham density functionals. <i>Journal of Chemical Physics</i> , 2015, 143, 224110.	3.0	7
72	Orbital relaxation effects on Kohn-Sham frontier orbital energies in density functional theory. <i>Journal of Chemical Physics</i> , 2015, 142, 154113.	3.0	18

#	ARTICLE	IF	CITATIONS
73	Angular momentum dependent field emission energy distribution. , 2015, , .		0
74	Local Scaling Correction for Reducing Delocalization Error in Density Functional Approximations. Physical Review Letters, 2015, 114, 053001.	7.8	69
75	Coupled-Perturbed SCF Approach for Calculating Static Polarizabilities and Hyperpolarizabilities with Nonorthogonal Localized Molecular Orbitals. Journal of Chemical Theory and Computation, 2015, 11, 923-931.	5.3	2
76	Direct Observation of Multimer Stabilization in the Mechanical Unfolding Pathway of a Protein Undergoing Oligomerization. ACS Nano, 2015, 9, 1189-1197.	14.6	18
77	Strategy To Discover Diverse Optimal Molecules in the Small Molecule Universe. Journal of Chemical Information and Modeling, 2015, 55, 529-537.	5.4	57
78	Singlet-Triplet Energy Gaps for Diradicals from Particle-Particle Random Phase Approximation. Journal of Physical Chemistry A, 2015, 119, 4923-4932.	2.5	34
79	Scaling correction approaches for reducing delocalization error in density functional approximations. Science China Chemistry, 2015, 58, 1825-1844.	8.2	12
80	Analytic gradients, geometry optimization and excited state potential energy surfaces from the particle-particle random phase approximation. Physical Chemistry Chemical Physics, 2015, 17, 1025-1038.	2.8	21
81	A tribute to Guosen Yan. Theoretical Chemistry Accounts, 2014, 133, 1.	1.4	0
82	Restricted second random phase approximations and Tamm-Dancoff approximations for electronic excitation energy calculations. Journal of Chemical Physics, 2014, 141, 214102.	3.0	4
83	Exchange-correlation energy from pairing matrix fluctuation and the particle-particle random phase approximation. Journal of Chemical Physics, 2014, 140, 18A511.	3.0	34
84	Excitation energies from particle-particle random phase approximation: Davidson algorithm and benchmark studies. Journal of Chemical Physics, 2014, 141, 124104.	3.0	40
85	Tensor hypercontracted ppRPA: Reducing the cost of the particle-particle random phase approximation from $O(N^6)$ to $O(N^4)$. Journal of Chemical Physics, 2014, 141, 024119.	3.0	20
86	Chaperones Rescue Luciferase Folding by Separating Its Domains. Journal of Biological Chemistry, 2014, 289, 28607-28618.	3.4	31
87	Linear-response time-dependent density-functional theory with pairing fields. Journal of Chemical Physics, 2014, 140, 18A522.	3.0	30
88	Characterization of a Photoswitching Chelator with Light-Modulated Geometric, Electronic, and Metal-Binding Properties. Inorganic Chemistry, 2014, 53, 1397-1405.	4.0	23
89	Layer-Dependent Electrocatalysis of MoS ₂ for Hydrogen Evolution. Nano Letters, 2014, 14, 553-558.	9.1	667
90	Shifting Electronic Structure by Inherent Tension in Molecular Bottlebrushes with Polythiophene Backbones. ACS Macro Letters, 2014, 3, 738-742.	4.8	16

#	ARTICLE	IF	CITATIONS
91	Revisiting H ₂ O Nucleation around Au ⁺ and Hg ²⁺ : The Peculiar "Pseudo-Soft" Character of the Gold Cation. <i>Journal of Chemical Theory and Computation</i> , 2014, 10, 1900-1909.	5.3	7
92	Preface: Special Topic on Advances in Density Functional Theory. <i>Journal of Chemical Physics</i> , 2014, 140, 18A101.	3.0	6
93	Testing exchange"correlation functionals at fractional electron numbers. <i>Theoretical Chemistry Accounts</i> , 2014, 133, 1.	1.4	2
94	Fractional Charge Behavior and Band Gap Predictions with the XYG3 Type of Doubly Hybrid Density Functionals. <i>Journal of Physical Chemistry A</i> , 2014, 118, 9201-9211.	2.5	45
95	N-Terminal Domain of Luciferase Controls Misfolding Avoidance. <i>Biophysical Journal</i> , 2014, 106, 471a.	0.5	0
96	Stochastic Voyages into Uncharted Chemical Space Produce a Representative Library of All Possible Drug-Like Compounds. <i>Journal of the American Chemical Society</i> , 2013, 135, 7296-7303.	13.7	214
97	Effective preconditioning for ab initio ground state energy minimization with non-orthogonal localized molecular orbitals. <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 15518.	2.8	13
98	Concerted Proton Transfer Mechanism of <i>Clostridium thermocellum</i> Ribose-5-phosphate Isomerase. <i>Journal of Physical Chemistry B</i> , 2013, 117, 9354-9361.	2.6	8
99	Exchange-correlation energy from pairing matrix fluctuation and the particle-particle random-phase approximation. <i>Physical Review A</i> , 2013, 88, .	2.5	78
100	A nonempirical scaling correction approach for density functional methods involving substantial amount of Hartree-Fock exchange. <i>Journal of Chemical Physics</i> , 2013, 138, 174105.	3.0	23
101	The tensor hypercontracted parametric reduced density matrix algorithm: Coupled-cluster accuracy with O(r ⁴) scaling. <i>Journal of Chemical Physics</i> , 2013, 139, 054110.	3.0	20
102	Wave function methods for fractional electrons. <i>Journal of Chemical Physics</i> , 2013, 139, 074107.	3.0	19
103	Equivalence of particle-particle random phase approximation correlation energy and ladder-coupled-cluster doubles. <i>Journal of Chemical Physics</i> , 2013, 139, 104112.	3.0	51
104	Extension of many-body theory and approximate density functionals to fractional charges and fractional spins. <i>Journal of Chemical Physics</i> , 2013, 139, 104114.	3.0	29
105	Improving Single Molecule Force Spectroscopy through Automated Real-Time Data Collection and Quantification of Experimental Conditions. <i>Biophysical Journal</i> , 2013, 104, 512a.	0.5	0
106	Noncovalent Interaction Analysis in Fluctuating Environments. <i>Journal of Chemical Theory and Computation</i> , 2013, 9, 2226-2234.	5.3	150
107	Pushing the Boundaries of Intrinsically Stable Radicals: Inverse Design Using the Thiadiazinyl Radical as a Template. <i>Journal of Organic Chemistry</i> , 2013, 78, 3151-3158.	3.2	22
108	Fukui function and response function for nonlocal and fractional systems. <i>Journal of Chemical Physics</i> , 2013, 138, 184108.	3.0	18

#	ARTICLE	IF	CITATIONS
109	Dynamical second-order Bethe-Salpeter equation kernel: A method for electronic excitation beyond the adiabatic approximation. <i>Journal of Chemical Physics</i> , 2013, 139, 154109.	3.0	23
110	Accurate Computation of the Non-Interacting Kinetic Energy from Electron Densities. <i>Recent Advances in Computational</i> , 2013, , 13-29.	0.8	0
111	Double, Rydberg and charge transfer excitations from pairing matrix fluctuation and particle-particle random phase approximation. <i>Journal of Chemical Physics</i> , 2013, 139, 224105.	3.0	52
112	Pseudobond parameters for QM/MM studies involving nucleosides, nucleotides, and their analogs. <i>Journal of Chemical Physics</i> , 2013, 138, 045102.	3.0	5
113	Contributions of pauli repulsions to the energetics and physical properties computed in QM/MM methods. <i>Journal of Computational Chemistry</i> , 2013, 34, 2380-2388.	3.3	9
114	Benchmark tests and spin adaptation for the particle-particle random phase approximation. <i>Journal of Chemical Physics</i> , 2013, 139, 174110.	3.0	40
115	Failure of the random-phase-approximation correlation energy. <i>Physical Review A</i> , 2012, 85, .	2.5	51
116	Achieving partial decoherence in surface hopping through phase correction. <i>Journal of Chemical Physics</i> , 2012, 137, 22A528.	3.0	44
117	Delocalization error of density-functional approximations: A distinct manifestation in hydrogen molecular chains. <i>Journal of Chemical Physics</i> , 2012, 137, 214106.	3.0	66
118	Theoretical study of catalytic mechanism for single-site water oxidation process. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012, 109, 15669-15672.	7.1	51
119	Optimized effective potential for calculations with orbital-free potential functionals. <i>Molecular Physics</i> , 2012, 110, 925-934.	1.7	3
120	Insight and progress in density functional theory. <i>AIP Conference Proceedings</i> , 2012, , .	0.4	3
121	Fragment-Based Quantum Mechanical/Molecular Mechanical Simulations of Thermodynamic and Kinetic Process of the $\text{Ru}^{2+} \leftrightarrow \text{Ru}^{3+}$ Self-Exchange Electron Transfer. <i>Journal of Chemical Theory and Computation</i> , 2012, 8, 4960-4967.	5.3	18
122	Variational fractional-spin density-functional theory for diradicals. <i>Journal of Chemical Physics</i> , 2012, 137, 114112.	3.0	27
123	Higher-order split operator schemes for solving the Schrödinger equation in the time-dependent wave packet method: applications to triatomic reactive scattering calculations. <i>Physical Chemistry Chemical Physics</i> , 2012, 14, 1827.	2.8	38
124	Liquid water simulations with the density fragment interaction approach. <i>Physical Chemistry Chemical Physics</i> , 2012, 14, 7700.	2.8	14
125	Design of Coupled Porphyrin Chromophores with Unusually Large Hyperpolarizabilities. <i>Journal of Physical Chemistry C</i> , 2012, 116, 9724-9733.	3.1	33
126	Catalytic Mechanism of 4-Oxalocrotonate Tautomerase: Significances of Protein-Protein Interactions on Proton Transfer Pathways. <i>Journal of Physical Chemistry B</i> , 2012, 116, 6889-6897.	2.6	7

#	ARTICLE	IF	CITATIONS
127	Density-Functional Errors in Alkanes: A Real-Space Perspective. <i>Journal of Chemical Theory and Computation</i> , 2012, 8, 2676-2681.	5.3	16
128	Coupling Quantum Interpretative Techniques: Another Look at Chemical Mechanisms in Organic Reactions. <i>Journal of Chemical Theory and Computation</i> , 2012, 8, 3993-3997.	5.3	104
129	Analytical evaluation of Fukui functions and real-space linear response function. <i>Journal of Chemical Physics</i> , 2012, 136, 144110.	3.0	67
130	Derivative discontinuity, bandgap and lowest unoccupied molecular orbital in density functional theory. <i>Journal of Chemical Physics</i> , 2012, 136, 204111.	3.0	154
131	Mechanical Anisotropy of Ankyrin Repeats. <i>Biophysical Journal</i> , 2012, 102, 1118-1126.	0.5	20
132	Highly tunable spin-dependent electron transport through carbon atomic chains connecting two zigzag graphene nanoribbons. <i>Journal of Chemical Physics</i> , 2012, 137, 104107.	3.0	19
133	Inverse design of molecules with optimal reactivity properties: acidity of 2-naphthol derivatives. <i>Physical Chemistry Chemical Physics</i> , 2012, 14, 16002.	2.8	24
134	Challenges for Density Functional Theory. <i>Chemical Reviews</i> , 2012, 112, 289-320.	47.7	1,869
135	Sulfur-doped zinc oxide (ZnO) Nanostars: Synthesis and simulation of growth mechanism. <i>Nano Research</i> , 2012, 5, 20-26.	10.4	41
136	Single-Molecule Conductance of Pyridine-Terminated Dithienylethene Switch Molecules. <i>ACS Nano</i> , 2011, 5, 5115-5123.	14.6	95
137	Autocatalytic Intramolecular Isopeptide Bond Formation in Gram-Positive Bacterial Pili: A QM/MM Simulation. <i>Journal of the American Chemical Society</i> , 2011, 133, 478-485.	13.7	36
138	Improving Band Gap Prediction in Density Functional Theory from Molecules to Solids. <i>Physical Review Letters</i> , 2011, 107, 026403.	7.8	161
139	$\hat{\rho}$ -Metadynamics Approach To Compute Absolute Solvation Free Energy. <i>Journal of Physical Chemistry Letters</i> , 2011, 2, 2099-2103.	4.6	24
140	Phase-corrected surface hopping: Correcting the phase evolution of the electronic wavefunction. <i>Journal of Chemical Physics</i> , 2011, 135, 024101.	3.0	95
141	Analysis of Hydrogen-Bond Interaction Potentials from the Electron Density: Integration of Noncovalent Interaction Regions. <i>Journal of Physical Chemistry A</i> , 2011, 115, 12983-12990.	2.5	339
142	Conical intersections in solution: Formulation, algorithm, and implementation with combined quantum mechanics/molecular mechanics method. <i>Journal of Chemical Physics</i> , 2011, 134, 204115.	3.0	14
143	Singlet \sim Triplet Energy Gaps for Diradicals from Fractional-Spin Density-Functional Theory. <i>Journal of Physical Chemistry A</i> , 2011, 115, 76-83.	2.5	107
144	NCIPLOT: A Program for Plotting Noncovalent Interaction Regions. <i>Journal of Chemical Theory and Computation</i> , 2011, 7, 625-632.	5.3	2,897

#	ARTICLE	IF	CITATIONS
145	Simultaneous-trajectory surface hopping: A parameter-free algorithm for implementing decoherence in nonadiabatic dynamics. <i>Journal of Chemical Physics</i> , 2011, 134, 144102.	3.0	117
146	Communication: An exact short-time solver for the time-dependent Schrödinger equation. <i>Journal of Chemical Physics</i> , 2011, 134, 041101.	3.0	15
147	An algebraic operator approach to electronic structure. <i>Journal of Chemical Physics</i> , 2011, 135, 244111.	3.0	0
148	Accelerating self-consistent field convergence with the augmented Roothaan-Hall energy function. <i>Journal of Chemical Physics</i> , 2010, 132, 054109.	3.0	69
149	Revealing Noncovalent Interactions. <i>Journal of the American Chemical Society</i> , 2010, 132, 6498-6506.	13.7	6,465
150	Synthesis and chemical diversity analysis of bicyclo[3.3.1]non-3-en-2-ones. <i>Tetrahedron</i> , 2010, 66, 5852-5862.	1.9	17
151	A gradient-directed Monte Carlo approach for protein design. <i>Journal of Computational Chemistry</i> , 2010, 31, 2164-2168.	3.3	12
152	Concerted O atom-proton transfer in the O-O bond forming step in water oxidation. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010, 107, 7225-7229.	7.1	295
153	Full Reconstruction of a Vectorial Protein Folding Pathway by Atomic Force Microscopy and Molecular Dynamics Simulations*. <i>Journal of Biological Chemistry</i> , 2010, 285, 38167-38172.	3.4	36
154	Spin-state splittings, highest-occupied-molecular-orbital and lowest-unoccupied-molecular-orbital energies, and chemical hardness. <i>Journal of Chemical Physics</i> , 2010, 133, 164107.	3.0	14
155	Efficient Construction of Nonorthogonal Localized Molecular Orbitals in Large Systems. <i>Journal of Physical Chemistry A</i> , 2010, 114, 8878-8883.	2.5	10
156	Conductive junctions with parallel graphene sheets. <i>Journal of Chemical Physics</i> , 2010, 132, 114703.	3.0	11
157	Equilibrium Sampling for Biomolecules under Mechanical Tension. <i>Biophysical Journal</i> , 2010, 98, 733-740.	0.5	6
158	Predicting the Frequency Dispersion of Electronic Hyperpolarizabilities on the Basis of Absorption Data and Thomas-Kuhn Sum Rules. <i>Journal of Physical Chemistry C</i> , 2010, 114, 2349-2359.	3.1	56
159	Challenges with range-separated exchange-correlation functionals in time-dependent density functional theory calculations. <i>Molecular Physics</i> , 2010, 108, 2745-2750.	1.7	20
160	Elucidating Solvent Contributions to Solution Reactions with Ab Initio QM/MM Methods. <i>Journal of Physical Chemistry B</i> , 2010, 114, 2755-2759.	2.6	16
161	Time-dependent transport through molecular junctions. <i>Journal of Chemical Physics</i> , 2010, 132, 234105.	3.0	45
162	Structural manifestation of the delocalization error of density functional approximations: C ₄ N ₂ rings and C ₂₀ bowl, cage, and ring isomers. <i>Journal of Chemical Physics</i> , 2010, 132, 234113.	3.0	63

#	ARTICLE	IF	CITATIONS
163	Reformulating time-dependent density functional theory with non-orthogonal localized molecular orbitals. <i>Physical Chemistry Chemical Physics</i> , 2010, 12, 416-421.	2.8	26
164	Coarse-grained modeling of allosteric regulation in protein receptors. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009, 106, 14253-14258.	7.1	43
165	A gradient-directed Monte Carlo method for global optimization in a discrete space: Application to protein sequence design and folding. <i>Journal of Chemical Physics</i> , 2009, 131, 154117.	3.0	15
166	Development and application of ab initio QM/MM methods for mechanistic simulation of reactions in solution and in enzymes. <i>Computational and Theoretical Chemistry</i> , 2009, 898, 17-30.	1.5	78
167	Emergent strategies for inverse molecular design. <i>Science in China Series B: Chemistry</i> , 2009, 52, 1769-1776.	0.8	9
168	Analysis of HIF-1 inhibition by manassantin A and analogues with modified tetrahydrofuran configurations. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2009, 19, 3783-3786.	2.2	24
169	Discrete Optimization of Electronic Hyperpolarizabilities in a Chemical Subspace. <i>Journal of Chemical Theory and Computation</i> , 2009, 5, 3321-3329.	5.3	21
170	Discontinuous Nature of the Exchange-Correlation Functional in Strongly Correlated Systems. <i>Physical Review Letters</i> , 2009, 102, 066403.	7.8	206
171	Mechanism of Cdc25B Phosphatase with the Small Molecule Substrate <i>p</i> -Nitrophenyl Phosphate from QM/MM-MFEP Calculations. <i>Journal of Physical Chemistry B</i> , 2009, 113, 5217-5224.	2.6	25
172	Thermopower of Molecular Junctions: An ab Initio Study. <i>Nano Letters</i> , 2009, 9, 1011-1014.	9.1	91
173	Contact Geometry and Conductance of Crossed Nanotube Junctions under Pressure. <i>Nano Letters</i> , 2009, 9, 1759-1763.	9.1	9
174	Second-Order Perturbation Theory with Fractional Charges and Fractional Spins. <i>Journal of Chemical Theory and Computation</i> , 2009, 5, 786-792.	5.3	61
175	Calculating solution redox free energies with <i>ab initio</i> quantum mechanical/molecular mechanical minimum free energy path method. <i>Journal of Chemical Physics</i> , 2009, 130, 164111.	3.0	35
176	Comparison Of Reaction Barriers In Energy And Free Energy For Enzyme Catalysis. <i>Challenges and Advances in Computational Chemistry and Physics</i> , 2009, , 57-78.	0.6	1
177	Fukui Function. , 2009, , .		37
178	Free Energies of Chemical Reactions in Solution and in Enzymes with Ab Initio Quantum Mechanics/Molecular Mechanics Methods. <i>Annual Review of Physical Chemistry</i> , 2008, 59, 573-601.	10.8	394
179	Transport properties of an armchair carbon nanotube with a double vacancy under stretching. <i>Journal of Physics Condensed Matter</i> , 2008, 20, 345225.	1.8	2
180	<i>Ab initio</i> quantum mechanical/molecular mechanical simulation of electron transfer process: Fractional electron approach. <i>Journal of Chemical Physics</i> , 2008, 128, 124510.	3.0	61

#	ARTICLE	IF	CITATIONS
181	Localization and Delocalization Errors in Density Functional Theory and Implications for Band-Gap Prediction. <i>Physical Review Letters</i> , 2008, 100, 146401.	7.8	1,012
182	A Donor-Nanotube Paradigm for Nonlinear Optical Materials. <i>Nano Letters</i> , 2008, 8, 2814-2818.	9.1	106
183	Fractional charge perspective on the band gap in density-functional theory. <i>Physical Review B</i> , 2008, 77, .	3.2	491
184	Quantum-Interference-Controlled Molecular Electronics. <i>Nano Letters</i> , 2008, 8, 3257-3261.	9.1	221
185	Computational design, synthesis and biological evaluation of para-quinone-based inhibitors for redox regulation of the dual-specificity phosphatase Cdc25B. <i>Organic and Biomolecular Chemistry</i> , 2008, 6, 3256.	2.8	45
186	Molecular Design of Porphyrin-Based Nonlinear Optical Materials. <i>Journal of Physical Chemistry A</i> , 2008, 112, 12203-12207.	2.5	100
187	Insights into Current Limitations of Density Functional Theory. <i>Science</i> , 2008, 321, 792-794.	12.6	2,057
188	Mechanism of OMP Decarboxylation in Orotidine 5'-Monophosphate Decarboxylase. <i>Journal of the American Chemical Society</i> , 2008, 130, 14493-14503.	13.7	41
189	Hepatitis C Virus NS5B Polymerase: QM/MM Calculations Show the Important Role of the Internal Energy in Ligand Binding. <i>Journal of Physical Chemistry B</i> , 2008, 112, 3168-3176.	2.6	14
190	Exploring chemical space with discrete, gradient, and hybrid optimization methods. <i>Journal of Chemical Physics</i> , 2008, 129, 174105.	3.0	36
191	Inverse molecular design in a tight-binding framework. <i>Journal of Chemical Physics</i> , 2008, 129, 044106.	3.0	35
192	A gradient-directed Monte Carlo approach to molecular design. <i>Journal of Chemical Physics</i> , 2008, 129, 064102.	3.0	39
193	Density-fragment interaction approach for quantum-mechanical/molecular-mechanical calculations with application to the excited states of a Mg ²⁺ -sensitive dye. <i>Journal of Chemical Physics</i> , 2008, 129, 054102.	3.0	43
194	Optimized effective potentials from arbitrary basis sets. <i>Journal of Chemical Physics</i> , 2008, 129, 194102.	3.0	39
195	Delocalization errors in density functionals and implications for main-group thermochemistry. <i>Journal of Chemical Physics</i> , 2008, 129, 204112.	3.0	159
196	Fractional spins and static correlation error in density functional theory. <i>Journal of Chemical Physics</i> , 2008, 129, 121104.	3.0	215
197	Size extensivity of the direct optimized effective potential method. <i>Journal of Chemical Physics</i> , 2008, 128, 114702.	3.0	5
198	A pseudobond parametrization for improved electrostatics in quantum mechanical/molecular mechanical simulations of enzymes. <i>Journal of Chemical Physics</i> , 2008, 129, 154106.	3.0	31

#	ARTICLE	IF	CITATIONS
199	Linear-scaling quantum calculations using non-orthogonal localized molecular orbitals. <i>Journal of Physics Condensed Matter</i> , 2008, 20, 294209.	1.8	11
200	First-principles study for transport properties of armchair carbon nanotubes with a double vacancy under strain. <i>Journal of Applied Physics</i> , 2008, 103, 113714.	2.5	5
201	Lead-molecule coupling effects on the distortion-dependent conductance of carbon nanotubes. <i>Physical Review B</i> , 2008, 77, .	3.2	3
202	Quantum mechanics/molecular mechanics minimum free-energy path for accurate reaction energetics in solution and enzymes: Sequential sampling and optimization on the potential of mean force surface. <i>Journal of Chemical Physics</i> , 2008, 128, 034105.	3.0	110
203	Role of the exchange-correlation potential in ab initio electron transport calculations. <i>Journal of Chemical Physics</i> , 2007, 126, 201102.	3.0	103
204	Electron transport through single conjugated organic molecules: Basis set effects in ab initio calculations. <i>Journal of Chemical Physics</i> , 2007, 127, 144107.	3.0	43
205	Sequential quadratic programming method for determining the minimum energy path. <i>Journal of Chemical Physics</i> , 2007, 127, 164107.	3.0	28
206	Assessment and formal properties of exchange-correlation functionals constructed from the adiabatic connection. <i>Journal of Chemical Physics</i> , 2007, 127, 034101.	3.0	59
207	Spin-Potential Functional Formalism for Current-Carrying Noncollinear Magnetic Systems. <i>Physical Review Letters</i> , 2007, 98, 036403.	7.8	21
208	Optimized Effective Potentials in Finite Basis Sets. <i>Physical Review Letters</i> , 2007, 98, 256401.	7.8	116
209	QM/MM Minimum Free-Energy Path: Methodology and Application to Triosephosphate Isomerase. <i>Journal of Chemical Theory and Computation</i> , 2007, 3, 390-406.	5.3	135
210	Contact Transparency of Nanotube-Molecule-Nanotube Junctions. <i>Physical Review Letters</i> , 2007, 99, 146802.	7.8	50
211	Synthesis, Structures, and Optical Properties of Cadmium Iodide/Phenethylamine Hybrid Materials with Controlled Structures and Emissions. <i>Inorganic Chemistry</i> , 2007, 46, 10252-10260.	4.0	20
212	Cobaltocene as a spin filter. <i>Journal of Chemical Physics</i> , 2007, 127, 141104.	3.0	47
213	Fitting Molecular Electrostatic Potentials from Quantum Mechanical Calculations. <i>Journal of Chemical Theory and Computation</i> , 2007, 3, 1004-1013.	5.3	125
214	Optimized effective potentials from electron densities in finite basis sets. <i>Journal of Chemical Physics</i> , 2007, 127, 174101.	3.0	48
215	Designing Molecules with Optimal Properties Using the Linear Combination of Atomic Potentials Approach in an AM1 Semiempirical Framework. <i>Journal of Physical Chemistry A</i> , 2007, 111, 176-181.	2.5	50
216	Simulating Water with the Self-Consistent-Charge Density Functional Tight Binding Method: From Molecular Clusters to the Liquid State. <i>Journal of Physical Chemistry A</i> , 2007, 111, 5685-5691.	2.5	79

#	ARTICLE	IF	CITATIONS
217	Computational Study on the Relative Acidity of Acetic Acid by the QM/MM Method Combined with the Theory of Energy Representation. <i>Journal of Physical Chemistry B</i> , 2007, 111, 581-588.	2.6	24
218	Development of exchange-correlation functionals with minimal many-electron self-interaction error. <i>Journal of Chemical Physics</i> , 2007, 126, 191109.	3.0	290
219	Nuclear quantum effects on an enzyme-catalyzed reaction with reaction path potential: Proton transfer in triosephosphate isomerase. <i>Journal of Chemical Physics</i> , 2006, 124, 124516.	3.0	49
220	Negative Differential Resistance and Hysteresis through an Organometallic Molecule from Molecular-Level Crossing. <i>Journal of the American Chemical Society</i> , 2006, 128, 6274-6275.	13.7	71
221	Many-electron self-interaction error in approximate density functionals. <i>Journal of Chemical Physics</i> , 2006, 125, 201102.	3.0	630
222	Nanotube-metal junctions: 2- and 3-terminal electrical transport. <i>Journal of Chemical Physics</i> , 2006, 124, 181102.	3.0	20
223	Direct Detection of the Formation of V-Amylose Helix by Single Molecule Force Spectroscopy. <i>Journal of the American Chemical Society</i> , 2006, 128, 9387-9393.	13.7	51
224	Simulating Force-Induced Conformational Transitions in Polysaccharides with the SMD Replica Exchange Method. <i>Biophysical Journal</i> , 2006, 91, L57-L59.	0.5	7
225	Density functional theory investigation of the polarizability and second hyperpolarizability of polydiacetylene and polybutatriene chains: Treatment of exact exchange and role of correlation. <i>Journal of Chemical Physics</i> , 2006, 125, 194114.	3.0	59
226	Designing Molecules by Optimizing Potentials. <i>Journal of the American Chemical Society</i> , 2006, 128, 3228-3232.	13.7	138
227	Theoretical and Experimental Determination on Two Substrates Turned over by 4-Oxalocrotonate Tautomerase. <i>Journal of Physical Chemistry A</i> , 2006, 110, 700-708.	2.5	21
228	Self-interaction-free exchange-correlation functional for thermochemistry and kinetics. <i>Journal of Chemical Physics</i> , 2006, 124, 091102.	3.0	179
229	Automatic integration of the reaction path using diagonally implicit Runge-Kutta methods. <i>Journal of Chemical Physics</i> , 2006, 125, 244108.	3.0	9
230	Searching for the minimum energy path in the sulfur transfer reaction catalyzed by human estrogen sulfotransferase: Role of enzyme dynamics. <i>International Journal of Quantum Chemistry</i> , 2006, 106, 2981-2998.	2.0	16
231	A QM/MM study combined with the theory of energy representation: Solvation free energies for anti/syn acetic acids in aqueous solution. <i>Chemical Physics Letters</i> , 2006, 419, 240-244.	2.6	25
232	Quadratic string method for determining the minimum-energy path based on multiobjective optimization. <i>Journal of Chemical Physics</i> , 2006, 124, 054109.	3.0	93
233	A combined explicit-implicit method for high accuracy reaction path integration. <i>Journal of Chemical Physics</i> , 2006, 124, 224102.	3.0	9
234	Organometallic molecular rectification. <i>Journal of Chemical Physics</i> , 2006, 124, 024718.	3.0	71

#	ARTICLE	IF	CITATIONS
235	Legendre-transform functionals for spin-density-functional theory. <i>Journal of Chemical Physics</i> , 2006, 124, 224108.	3.0	60
236	Development of Ab Initio Calculation for Electron Transport and the Effects of Lead and Contact Structures in Molecular Electronics. <i>Journal of Computational and Theoretical Nanoscience</i> , 2006, 3, 819-823.	0.4	4
237	Orbital-dependent correlation energy in density-functional theory based on a second-order perturbation approach: Success and failure. <i>Journal of Chemical Physics</i> , 2005, 123, 062204.	3.0	99
238	Electron transport through molecules: Gate-induced polarization and potential shift. <i>Physical Review B</i> , 2005, 71, .	3.2	44
239	Interactions and broken time-reversal symmetry in chaotic quantum dots. <i>Physical Review B</i> , 2005, 71, .	3.2	2
240	Reaction path determination for quantum mechanical/molecular mechanical modeling of enzyme reactions by combining first order and second order "chain-of-replicas" methods. <i>Journal of Chemical Physics</i> , 2005, 122, 114502.	3.0	36
241	Contact atomic structure and electron transport through molecules. <i>Journal of Chemical Physics</i> , 2005, 122, 074704.	3.0	119
242	Scrambling and gate-induced fluctuations in realistic quantum dots. <i>Physical Review B</i> , 2005, 71, .	3.2	4
243	Analytic energy gradients of the optimized effective potential method. <i>Journal of Chemical Physics</i> , 2005, 123, 134111.	3.0	12
244	Dual-topology/dual-coordinate free-energy simulation using QM/MM force field. <i>Journal of Chemical Physics</i> , 2005, 123, 041102.	3.0	29
245	Excitation energies from time-dependent density functional theory with accurate exchange-correlation potentials. <i>Molecular Physics</i> , 2005, 103, 711-717.	1.7	19
246	Experimental Validation of the Docking Orientation of Cdc25 with Its Cdk2 ⁺ CycA Protein Substrate. <i>Biochemistry</i> , 2005, 44, 16563-16573.	2.5	43
247	Intermolecular effect in molecular electronics. <i>Journal of Chemical Physics</i> , 2005, 122, 044703.	3.0	51
248	Models of electrodes and contacts in molecular electronics. <i>Journal of Chemical Physics</i> , 2005, 123, 114701.	3.0	79
249	Near-perfect conduction through a ferrocene-based molecular wire. <i>Physical Review B</i> , 2005, 71, .	3.2	121
250	Organometallic Spintronics: A Dicobaltocene Switch. <i>Nano Letters</i> , 2005, 5, 1959-1962.	9.1	112
251	Density-functional theory (hyper)polarizabilities of push-pull π -conjugated systems: Treatment of exact exchange and role of correlation. <i>Journal of Chemical Physics</i> , 2005, 123, 014319.	3.0	120
252	Conjugate-gradient optimization method for orbital-free density functional calculations. <i>Journal of Chemical Physics</i> , 2004, 121, 2030-2036.	3.0	38

#	ARTICLE	IF	CITATIONS
253	Electron transport through molecules: Self-consistent and non-self-consistent approaches. <i>Physical Review B</i> , 2004, 70, .	3.2	205
254	Parallel iterative reaction path optimization in ab initio quantum mechanical/molecular mechanical modeling of enzyme reactions. <i>Journal of Chemical Physics</i> , 2004, 121, 697-706.	3.0	43
255	Adapting the nudged elastic band method for determining minimum-energy paths of chemical reactions in enzymes. <i>Journal of Chemical Physics</i> , 2004, 120, 8039-8052.	3.0	67
256	An efficient method for constructing nonorthogonal localized molecular orbitals. <i>Journal of Chemical Physics</i> , 2004, 120, 9458-9466.	3.0	26
257	Electron-electron interactions in isolated and realistic quantum dots: A density functional theory study. <i>Physical Review B</i> , 2004, 69, .	3.2	14
258	Transmission coefficient calculation for proton transfer in triosephosphate isomerase based on the reaction path potential method. <i>Journal of Chemical Physics</i> , 2004, 121, 101.	3.0	17
259	Landau Fermi-liquid picture of spin density functional theory: Strutinsky approach to quantum dots. <i>Physical Review B</i> , 2004, 70, .	3.2	12
260	Reaction path potential for complex systems derived from combined ab initio quantum mechanical and molecular mechanical calculations. <i>Journal of Chemical Physics</i> , 2004, 121, 89.	3.0	57
261	Calculation of nuclear magnetic resonance shielding constants using potential-based methods. <i>Chemical Physics Letters</i> , 2004, 399, 84-88.	2.6	25
262	Elastic Properties of Single Amylose Chains in Water: A Quantum Mechanical and AFM Study. <i>Journal of the American Chemical Society</i> , 2004, 126, 9033-9041.	13.7	45
263	The Protein Backbone Makes Important Contributions to 4-Oxalocrotonate Tautomerase Enzyme Catalysis: A Understanding from Theory and Experiment. <i>Biochemistry</i> , 2004, 43, 6885-6892.	2.5	64
264	Molecular Conductance: Chemical Trends of Anchoring Groups. <i>Journal of the American Chemical Society</i> , 2004, 126, 15897-15904.	13.7	92
265	Potential Functionals: Dual to Density Functionals and Solution to the Representability Problem. <i>Physical Review Letters</i> , 2004, 92, 146404.	7.8	94
266	Dramatic effect of homoallylic substitution on the rate of palladium-catalyzed diene cycloisomerization. <i>Journal of Organometallic Chemistry</i> , 2003, 687, 498-507.	1.8	15
267	Energetics of the Electron Transfer from Bacteriopheophytin to Ubiquinone in the Photosynthetic Reaction Center of <i>Rhodospseudomonas Viridis</i> : Theoretical Study. <i>Journal of Physical Chemistry B</i> , 2003, 107, 838-847.	2.6	19
268	Ab Initio QM/MM Study Shows There Is No General Acid in the Reaction Catalyzed by 4-Oxalocrotonate Tautomerase. <i>Journal of the American Chemical Society</i> , 2003, 125, 10384-10393.	13.7	89
269	Density-functional theory calculations with correct long-range potentials. <i>Journal of Chemical Physics</i> , 2003, 119, 2978-2990.	3.0	93
270	A direct optimization method for calculating density functionals and exchange correlation potentials from electron densities. <i>Journal of Chemical Physics</i> , 2003, 118, 2498.	3.0	267

#	ARTICLE	IF	CITATIONS
271	Addition Energies of Fullerenes and Carbon Nanotubes as Quantum Dots: The Role of Symmetry. <i>Physical Review Letters</i> , 2003, 91, 116803.	7.8	22
272	Spin and Conductance-Peak-Spacing Distributions in Large Quantum Dots: A Density-Functional Theory Study. <i>Physical Review Letters</i> , 2003, 90, 026806.	7.8	27
273	Density-functional theory simulation of large quantum dots. <i>Physical Review B</i> , 2003, 68, .	3.2	30
274	Accurate polymer polarizabilities with exact exchange density-functional theory. <i>Journal of Chemical Physics</i> , 2003, 119, 11001-11004.	3.0	154
275	ALGEBRAIC EQUATION AND ITERATIVE OPTIMIZATION FOR THE OPTIMIZED EFFECTIVE POTENTIAL IN DENSITY FUNCTIONAL THEORY. <i>Journal of Theoretical and Computational Chemistry</i> , 2003, 02, 627-638.	1.8	82
276	Density-Functional Theory. , 2003, , .		8
277	Direct Method for Optimized Effective Potentials in Density-Functional Theory. <i>Physical Review Letters</i> , 2002, 89, 143002.	7.8	250
278	PARAMETERIZATION OF COSMO SOLVENT MODEL FOR SELF-CONSISTENT CHARGE DENSITY-FUNCTIONAL BASED TIGHT-BINDING CALCULATIONS. , 2002, , 1606-1614.		3
279	Empirical correction to density functional theory for van der Waals interactions. <i>Journal of Chemical Physics</i> , 2002, 116, 515-524.	3.0	762
280	Ab Initio QM/MM and Free Energy Calculations of Enzyme Reactions. <i>Lecture Notes in Computational Science and Engineering</i> , 2002, , 333-355.	0.3	6
281	Using Density Functional Theory To Design DNA Base Analogues with Low Oxidation Potentials. <i>Journal of Physical Chemistry B</i> , 2001, 105, 6437-6444.	2.6	75
282	Quantum mechanics simulation of protein dynamics on long timescale. <i>Proteins: Structure, Function and Bioinformatics</i> , 2001, 44, 484-489.	2.6	140
283	Density functional study of a weakly hydrogen-bonded benzene-ammonia complex: The importance of the exchange functional. <i>International Journal of Quantum Chemistry</i> , 2000, 79, 325-329.	2.0	15
284	Perspective on "Density-functional theory for fractional particle number: derivative discontinuities of the energy". <i>Theoretical Chemistry Accounts</i> , 2000, 103, 346-348.	1.4	124
285	Degenerate Ground States and a Fractional Number of Electrons in Density and Reduced Density Matrix Functional Theory. <i>Physical Review Letters</i> , 2000, 84, 5172-5175.	7.8	390
286	Free energy calculation on enzyme reactions with an efficient iterative procedure to determine minimum energy paths on a combined ab initio QM/MM potential energy surface. <i>Journal of Chemical Physics</i> , 2000, 112, 3483-3492.	3.0	434
287	Perspective on "Density-functional theory for fractional particle number: derivative discontinuities of the energy", 2000, , 346-348.		14
288	Nonorthogonal localized molecular orbitals in electronic structure theory. <i>Journal of Chemical Physics</i> , 2000, 112, 1634-1644.	3.0	119

#	ARTICLE	IF	CITATIONS
289	How Is the Active Site of Enolase Organized To Catalyze Two Different Reaction Steps?. Journal of the American Chemical Society, 2000, 122, 6560-6570.	13.7	103
290	A Comparison of Calculated and Experimental Geometries for Crowded polycyclic Aromatic Hydrocarbons and their Metabolites. Polycyclic Aromatic Compounds, 1999, 14, 53-61.	2.6	6
291	A Linear-Scaling Quantum Mechanical Investigation of Cytidine Deaminase. Journal of Computational Physics, 1999, 151, 242-263.	3.8	18
292	A pseudobond approach to combining quantum mechanical and molecular mechanical methods. Journal of Chemical Physics, 1999, 110, 46-54.	3.0	460
293	On the scaling of multipole methods for particle-particle interactions. Chemical Physics Letters, 1998, 282, 71-78.	2.6	7
294	Comment on "Generalized Gradient Approximation Made Simple". Physical Review Letters, 1998, 80, 890-890.	7.8	2,323
295	Parallel implementation of divide-and-conquer semiempirical quantum chemistry calculations. Journal of Computational Chemistry, 1998, 19, 1101-1109.	3.3	21
296	Frozen density matrix approach for electronic structure calculations. International Journal of Quantum Chemistry, 1998, 69, 397-404.	2.0	19
297	Linear-scaling quantum mechanical calculations of biological molecules: The divide-and-conquer approach. Computational Materials Science, 1998, 12, 259-277.	3.0	45
298	Active Species for the Ground-State Complex of Cytidine Deaminase: A Linear-Scaling Quantum Mechanical Investigation. Journal of the American Chemical Society, 1998, 120, 5407-5410.	13.7	38
299	Generalized adiabatic connection in density functional theory. Journal of Chemical Physics, 1998, 109, 10107-10110.	3.0	77
300	A challenge for density functionals: Self-interaction error increases for systems with a noninteger number of electrons. Journal of Chemical Physics, 1998, 109, 2604-2608.	3.0	524
301	Quantum Mechanical Treatment of Biological Macromolecules in Solution Using Linear-Scaling Electronic Structure Methods. Physical Review Letters, 1998, 80, 5011-5014.	7.8	65
302	Fast evaluation of the Coulomb energy for electron densities. Journal of Chemical Physics, 1997, 107, 1218-1226.	3.0	48
303	First-principles study of the structural and electronic properties of ethylene adsorption on Si(100)-(2x1) surface. Journal of Chemical Physics, 1997, 107, 3981-3985.	3.0	77
304	Absolute-energy-minimum principles for linear-scaling electronic-structure calculations. Physical Review B, 1997, 56, 9294-9297.	3.2	114
305	Describing van der Waals Interaction in diatomic molecules with generalized gradient approximations: The role of the exchange functional. Journal of Chemical Physics, 1997, 107, 7921-7925.	3.0	282
306	Divide-and-conquer calculations for clean surfaces and surface adsorption. Theoretical Chemistry Accounts, 1997, 96, 2-6.	1.4	7

#	ARTICLE	IF	CITATIONS
307	Quantum Mechanical Study of Aqueous Polarization Effects on Biological Macromolecules. Journal of the American Chemical Society, 1996, 118, 10940-10941.	13.7	61
308	Density-Functional Study of the Geometries, Stabilities, and Bond Energies of Group III ⁺ V (13 ⁺ ~15) Four-Membered-Ring Compounds. Journal of the American Chemical Society, 1996, 118, 5732-5736.	13.7	17
309	Parameterization and efficient implementation of a solvent model for linear-scaling semiempirical quantum mechanical calculations of biological macromolecules. Chemical Physics Letters, 1996, 263, 297-304.	2.6	55
310	A concise redefinition of the solid spherical harmonics and its use in fast multipole methods. Journal of Chemical Physics, 1996, 104, 8003-8006.	3.0	44
311	A chemical potential equalization method for molecular simulations. Journal of Chemical Physics, 1996, 104, 159-172.	3.0	219
312	Linear-scaling semiempirical quantum calculations for macromolecules. Journal of Chemical Physics, 1996, 105, 2744-2750.	3.0	178
313	Structure of solid-state systems from embedded-cluster calculations: A divide-and-conquer approach. Physical Review B, 1996, 53, 12713-12724.	3.2	27
314	Electronic Structure of Solid-State Systems via the Divide-and-Conquer Method. , 1996, , 177-188.		0
315	An algorithm for 3D numerical integration that scales linearly with the size of the molecule. Chemical Physics Letters, 1995, 241, 469-476.	2.6	44
316	A simple O(N log N) algorithm for the rapid evaluation of particle-particle interactions. Chemical Physics Letters, 1995, 247, 484-490.	2.6	22
317	Density-Functional Theory of the Electronic Structure of Molecules. Annual Review of Physical Chemistry, 1995, 46, 701-728.	10.8	903
318	Structure and stability of molybdenum carbide clusters (MoC ₄) _n (n=1 to 4) and their anions. Physical Review B, 1995, 51, 7224-7230.	3.2	4
319	A density-matrix divide-and-conquer approach for electronic structure calculations of large molecules. Journal of Chemical Physics, 1995, 103, 5674-5678.	3.0	499
320	A new definition of atomic charges based on a variational principle for the electrostatic potential energy. Journal of Chemical Physics, 1995, 102, 7549-7556.	3.0	13
321	Toward the Accurate Modeling of DNA: The Importance of Long-Range Electrostatics. Journal of the American Chemical Society, 1995, 117, 5001-5002.	13.7	172
322	Analytical energy gradients and geometry optimization in the divide-and-conquer method for large molecules. Journal of Chemical Physics, 1995, 102, 9598-9603.	3.0	68
323	Density-functional calculations of the structure and stability of C ₂₄₀ . Physical Review B, 1994, 49, 8526-8528.	3.2	56
324	The fast Fourier Poisson method for calculating Ewald sums. Journal of Chemical Physics, 1994, 101, 3298-3300.	3.0	112

#	ARTICLE	IF	CITATIONS
325	Structure of the ammonia dimer studied by density functional theory. <i>International Journal of Quantum Chemistry</i> , 1994, 49, 613-623.	2.0	21
326	Shape of large single- and multiple-shell fullerenes. <i>Physical Review B</i> , 1994, 49, 11421-11424.	3.2	107
327	Examination of several exchange-correlation energy functionals by accurate self-consistent atomic calculations. <i>Journal of Chemical Physics</i> , 1993, 98, 4814-4821.	3.0	20
328	Nonlocal density functional calculations: Comparison of two implementation schemes. <i>Journal of Chemical Physics</i> , 1993, 98, 2971-2974.	3.0	20
329	The Ar-C ₂ H ₂ intermolecular potential from high resolution spectroscopy and ab initio theory: A case for multicenter interactions. <i>Journal of Chemical Physics</i> , 1993, 99, 8585-8598.	3.0	92
330	Density-Functional Theory of Large Systems: A Divide-and-Conquer Approach. , 1993, , 367-372.		0
331	The divide-and-conquer density-functional approach: Molecular internal rotation and density of states. <i>Journal of Chemical Physics</i> , 1992, 96, 2408-2411.	3.0	56
332	Electron density as the basic variable: a divide-and-conquer approach to the ab initio computation of large molecules. <i>Computational and Theoretical Chemistry</i> , 1992, 255, 461-479.	1.5	68
333	The Hartley basis functions and transform: alternatives to plane waves and the Fourier transform. <i>Chemical Physics Letters</i> , 1992, 192, 45-48.	2.6	3
334	Direct calculation of electron density in density-functional theory: Implementation for benzene and a tetrapeptide. <i>Physical Review A</i> , 1991, 44, 7823-7826.	2.5	140
335	Direct calculation of electron density in density-functional theory. <i>Physical Review Letters</i> , 1991, 66, 1438-1441.	7.8	943
336	A local projection method for the linear combination of atomic orbital implementation of density-functional theory. <i>Journal of Chemical Physics</i> , 1991, 94, 1208-1214.	3.0	41
337	Integral Formulation of Density-Functional Theory. <i>Advances in Quantum Chemistry</i> , 1990, 21, 293-302.	0.8	4
338	Approximate density matrices and wigner distribution functions from density, kinetic energy density, and idempotency constraints. <i>International Journal of Quantum Chemistry</i> , 1990, 38, 819-830.	2.0	10
339	A method for calculating vibrational bound states: Iterative solution of the collocation equations constructed from localized basis sets. <i>Journal of Chemical Physics</i> , 1990, 92, 522-526.	3.0	41
340	The collocation method for calculating vibrational bound states of molecular systems with application to Ar-HCl. <i>Journal of Chemical Physics</i> , 1989, 90, 1746-1751.	3.0	64
341	An adapted form of the collocation method for calculating energy levels of rotating atom-diatom complexes. <i>Journal of Chemical Physics</i> , 1989, 91, 6598-6603.	3.0	50
342	A collocation approach for quantum scattering based on the S-matrix version of the Kohn variational principle. <i>Journal of Chemical Physics</i> , 1989, 91, 7537-7542.	3.0	21

#	ARTICLE	IF	CITATIONS
343	Block Lanczos approach combined with matrix continued fraction for the matrix Kohn variational principle in quantum scattering. Journal of Chemical Physics, 1989, 91, 3504-3508.	3.0	18
344	The collocation method for bound solutions of the Schrödinger equation. Chemical Physics Letters, 1988, 153, 98-104.	2.6	124
345	Development of the Colle-Salvetti correlation-energy formula into a functional of the electron density. Physical Review B, 1988, 37, 785-789.	3.2	86,607
346	Local softness and chemical reactivity in the molecules CO, SCN ⁻ and H ₂ CO. Computational and Theoretical Chemistry, 1988, 163, 305-313.	1.5	233
347	Ab initio approach for many-electron systems without invoking orbitals: An integral formulation of density-functional theory. Physical Review A, 1988, 38, 5494-5503.	2.5	16
348	Thermal properties of many-electron systems: An integral formulation of density-functional theory. Physical Review A, 1988, 38, 5504-5511.	2.5	15
349	Dynamic linear response of many-electron systems: An integral formulation of density-functional theory. Physical Review A, 1988, 38, 5512-5519.	2.5	18
350	Ab initio approach for many-electron systems without invoking orbitals: An integral formulation of density-functional theory. Physical Review Letters, 1987, 59, 1569-1572.	7.8	30
351	New relation between hardness and compressibility of minerals. Physics and Chemistry of Minerals, 1987, 15, 191-195.	0.8	49
352	Some Remarks on Scaling Relations in Density Functional Theory. , 1987, , 499-506.		9
353	The use of global and local molecular parameters for the analysis of the gas-phase basicity of amines. Journal of the American Chemical Society, 1986, 108, 5708-5711.	13.7	1,598
354	Various functionals for the kinetic energy density of an atom or molecule. Physical Review A, 1986, 34, 4586-4590.	2.5	107
355	Gradient correction in Thomas-Fermi theory. Physical Review A, 1986, 34, 4575-4585.	2.5	132
356	Analysis of the kinetic energy functional in density functional theory. Journal of Chemical Physics, 1986, 84, 3320-3323.	3.0	8
357	Hardness, softness, and the Fukui function in the electronic theory of metals and catalysis.. Proceedings of the National Academy of Sciences of the United States of America, 1985, 82, 6723-6726.	7.1	1,436
358	A new functional with homogeneous coordinate scaling in density functional theory: F ₁ [ρ]. Journal of Chemical Physics, 1985, 83, 2334-2336.	3.0	46
359	Molecular softness as the average of atomic softnesses: companion principle to the geometric mean principle for electronegativity equalization. The Journal of Physical Chemistry, 1985, 89, 5412-5414.	2.9	118
360	Density functional approach to the frontier-electron theory of chemical reactivity. Journal of the American Chemical Society, 1984, 106, 4049-4050.	13.7	2,940

#	ARTICLE	IF	CITATIONS
361	Electron density, Kohn-Sham frontier orbitals, and Fukui functions. Journal of Chemical Physics, 1984, 81, 2862-2863.	3.0	441