

# Jeffrey R Reimers

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/75509/publications.pdf>

Version: 2024-02-01

202  
papers

8,764  
citations

34016

52  
h-index

54797

84  
g-index

217  
all docs

217  
docs citations

217  
times ranked

8268  
citing authors

#	ARTICLE	IF	CITATIONS
1	A practical method for the use of curvilinear coordinates in calculations of normal-mode-projected displacements and Duschinsky rotation matrices for large molecules. <i>Journal of Chemical Physics</i> , 2001, 115, 9103-9109.	1.2	546
2	Failure of density-functional theory and time-dependent density-functional theory for large extended $\pi$ systems. <i>Journal of Chemical Physics</i> , 2002, 117, 5543-5549.	1.2	317
3	Density Functional Theory for Charge Transfer: The Nature of the N-Bands of Porphyrins and Chlorophylls Revealed through CAM-B3LYP, CASPT2, and SAC-CI Calculations. <i>Journal of Physical Chemistry B</i> , 2006, 110, 15624-15632.	1.2	315
4	Formalism, analytical model, and a priori Green's-function-based calculations of the current-voltage characteristics of molecular wires. <i>Journal of Chemical Physics</i> , 2000, 112, 1510-1521.	1.2	274
5	The Solvation of Acetonitrile. <i>Journal of the American Chemical Society</i> , 1999, 121, 3730-3744.	6.6	235
6	Identifying carbon as the source of visible single-photon emission from hexagonal boron nitride. <i>Nature Materials</i> , 2021, 20, 321-328.	13.3	210
7	The structure, energetics, and nature of the chemical bonding of phenylthiol adsorbed on the Au(111) surface: Implications for density-functional calculations of molecular-electronic conduction. <i>Journal of Chemical Physics</i> , 2005, 122, 094708.	1.2	150
8	Adsorption of Benzene on Copper, Silver, and Gold Surfaces. <i>Journal of Chemical Theory and Computation</i> , 2006, 2, 1093-1105.	2.3	141
9	Molecular dynamics of the A+BC reaction in rare gas solution. <i>Journal of Chemical Physics</i> , 1986, 85, 5625-5643.	1.2	134
10	The Low-Lying Excited States of Pyridine. <i>Journal of Physical Chemistry A</i> , 2000, 104, 8389-8408.	1.1	125
11	Defect states in hexagonal boron nitride: Assignments of observed properties and prediction of properties relevant to quantum computation. <i>Physical Review B</i> , 2018, 97, .	1.1	125
12	Gold surfaces and nanoparticles are protected by Au(0) thiol species and are destroyed when Au(I) thiolates form. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, E1424-33.	3.3	116
13	Adsorption of Pyridine on the Gold(111) Surface: Implications for Alligator Clips for Molecular Wires. <i>Journal of Physical Chemistry B</i> , 2002, 106, 6740-6747.	1.2	113
14	Adsorption of ammonia on the gold (111) surface. <i>Journal of Chemical Physics</i> , 2002, 116, 8981-8987.	1.2	112
15	Demonstration and interpretation of significant asymmetry in the low-resolution and high-resolution Qy fluorescence and absorption spectra of bacteriochlorophyll a. <i>Journal of Chemical Physics</i> , 2011, 134, 024506.	1.2	112
16	Assignment of the Q-Bands of the Chlorophylls: Coherence Loss via Qx $\leftrightarrow$ Qy Mixing. <i>Scientific Reports</i> , 2013, 3, 2761.	1.6	110
17	The Appropriateness of Density-Functional Theory for the Calculation of Molecular Electronics Properties. <i>Annals of the New York Academy of Sciences</i> , 2003, 1006, 235-251.	1.8	107
18	Switchable Electronic Coupling in Model Oligoporphyrin Molecular Wires Examined through the Measurement and Assignment of Electronic Absorption Spectra. <i>Journal of the American Chemical Society</i> , 2002, 124, 9299-9309.	6.6	106

#	ARTICLE	IF	CITATIONS
19	Single-photon emitters in hexagonal boron nitride: a review of progress. Reports on Progress in Physics, 2020, 83, 044501.	8.1	104
20	Understanding the inelastic electron-tunneling spectra of alkanedithiols on gold. Journal of Chemical Physics, 2006, 124, 094704.	1.2	103
21	Solvent Effects on the Electronic Spectra of Transition Metal Complexes. Chemical Reviews, 2000, 100, 775-786.	23.0	96
22	Competition of van der Waals and chemical forces on gold-sulfur surfaces and nanoparticles. Nature Reviews Chemistry, 2017, 1, .	13.8	95
23	Weak, strong, and coherent regimes of Fröhlich condensation and their applications to terahertz medicine and quantum consciousness. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 4219-4224.	3.3	94
24	Electron and energy transfer through bridged systems. 6. Molecular switches: the critical field in electric field activated bistable molecules. Journal of the American Chemical Society, 1990, 112, 4192-4197.	6.6	89
25	Long-lived long-distance photochemically induced spin-polarized charge separation in $\hat{\text{I}}^2, \hat{\text{I}}^2$ -pyrrolic fused ferrocene-porphyrin-fullerene systems. Chemical Science, 2012, 3, 257-269.	3.7	88
26	Chemical Analysis of the Superatom Model for Sulfur-Stabilized Gold Nanoparticles. Journal of the American Chemical Society, 2010, 132, 8378-8384.	6.6	87
27	Rigid Fused Oligoporphyrins as Potential Versatile Molecular Wires. 2. B3LYP and SCF Calculated Geometric and Electronic Properties of 98 Oligoporphyrin and Related Molecules. Journal of Physical Chemistry A, 1999, 103, 4385-4397.	1.1	83
28	Simulation of the Au(111) $\sqrt{22\text{Å}} \times \sqrt{3}$ surface reconstruction. Physical Review B, 2007, 75, .	1.1	80
29	A priori method for propensity rules for inelastic electron tunneling spectroscopy of single-molecule conduction. Physical Review B, 2007, 75, .	1.1	80
30	Coexistence of Multiple Conformations in Cysteamine Monolayers on Au(111). Journal of Physical Chemistry B, 2005, 109, 15355-15367.	1.2	79
31	Photoinduced electron transfer in a $\hat{\text{I}}^2, \hat{\text{I}}^2$ -pyrrolic fused ferrocene-(zinc porphyrin)-fullerene. Physical Chemistry Chemical Physics, 2007, 9, 5260.	1.3	78
32	Efficient Methods for the Quantum Chemical Treatment of Protein Structures: The Effects of London-Dispersion and Basis-Set Incompleteness on Peptide and Water-Cluster Geometries. Journal of Chemical Theory and Computation, 2013, 9, 3240-3251.	2.3	75
33	Challenges facing an understanding of the nature of low-energy excited states in photosynthesis. Biochimica Et Biophysica Acta - Bioenergetics, 2016, 1857, 1627-1640.	0.5	74
34	Successful a Priori Modeling of CO Adsorption on Pt(111) Using Periodic Hybrid Density Functional Theory. Journal of the American Chemical Society, 2007, 129, 10402-10407.	6.6	73
35	A Unified Description of the Electrochemical, Charge Distribution, and Spectroscopic Properties of the Special-Pair Radical Cation in Bacterial Photosynthesis. Journal of the American Chemical Society, 2004, 126, 4132-4144.	6.6	72
36	Understanding and Improving Solid-State Polymer/C60-Fullerene Bulk-Heterojunction Solar Cells Using Ternary Porphyrin Blends. Journal of Physical Chemistry C, 2007, 111, 15415-15426.	1.5	72

#	ARTICLE	IF	CITATIONS
37	Understanding and Calibrating Density-Functional-Theory Calculations Describing the Energy and Spectroscopy of Defect Sites in Hexagonal Boron Nitride. <i>Journal of Chemical Theory and Computation</i> , 2018, 14, 1602-1613.	2.3	69
38	Complex time dependent wave packet technique for thermal equilibrium systems: Electronic spectra. <i>Journal of Chemical Physics</i> , 1983, 79, 4749-4757.	1.2	67
39	Challenges for the Accurate Simulation of Anisotropic Charge Mobilities through Organic Molecular Crystals: The $\Gamma^2$ Phase of <i>mer-Tris(8-hydroxyquinolino)aluminum(III)</i> (Alq3) Crystal. <i>Journal of Physical Chemistry C</i> , 2012, 116, 14826-14836.	1.5	66
40	Ab Initio and Density-Functional Calculations of the Vibrational Structure of the Singlet and Triplet Excited States of Pyrazine. <i>Journal of Physical Chemistry A</i> , 1999, 103, 9830-9841.	1.1	65
41	The First Singlet ( $n, \pi^*$ ) and ( $\pi, \pi^*$ ) Excited States of the Hydrogen-Bonded Complex between Water and Pyridine. <i>Journal of Physical Chemistry A</i> , 2002, 106, 8769-8778.	1.1	63
42	Density-functional geometry optimization of the 150,000-atom photosystem-I trimer. <i>Journal of Chemical Physics</i> , 2006, 124, 024301.	1.2	62
43	Photoluminescence, photophysics, and photochemistry of the $\sqrt{V}B$ defect in hexagonal boron nitride. <i>Physical Review B</i> , 2020, 102, 041401.	1.1	60
44	Time-dependent density-functional determination of arbitrary singlet and triplet excited-state potential energy surfaces: Application to the water molecule. <i>Journal of Chemical Physics</i> , 2000, 113, 7084-7096.	1.2	58
45	Macrocyclic ligand design. X-Ray, DFT and solution studies of the effect of N-methylation and N-benzylation of 1,4,10,13-tetraoxa-7,16-diazacyclooctadecane on its affinity for selected transition and post-transition metal ions. <i>Dalton Transactions RSC</i> , 2001, , 614-620.	2.3	58
46	Assignment of the Q <sub>y</sub> Absorption Spectrum of Photosystem-I from <i>Thermosynechococcus elongatus</i> Based on CAM-B3LYP Calculations at the PW91-Optimized Protein Structure. <i>Journal of Physical Chemistry B</i> , 2007, 111, 9923-9930.	1.2	58
47	Penrose-Hameroff orchestrated objective-reduction proposal for human consciousness is not biologically feasible. <i>Physical Review E</i> , 2009, 80, 021912.	0.8	57
48	Quantum entanglement between electronic and vibrational degrees of freedom in molecules. <i>Journal of Chemical Physics</i> , 2011, 135, 244110.	1.2	56
49	Dipole Order in Halide Perovskites: Polarization and Rashba Band Splittings. <i>Journal of Physical Chemistry C</i> , 2017, 121, 23045-23054.	1.5	56
50	Binding to gold(0): Accurate computational methods with application to AuNH <sub>3</sub> . <i>Journal of Chemical Physics</i> , 2002, 116, 10277-10286.	1.2	54
51	Quinoxalino[2,3- <i>b</i> ]porphyrins Behave as $\pi$ -Expanded Porphyrins upon One-Electron Reduction: Broad Control of the Degree of Delocalization through Substitution at the Macrocycle Periphery. <i>Journal of Physical Chemistry B</i> , 2007, 111, 8762-8774.	1.2	54
52	Modeling the Bacterial Photosynthetic Reaction Center. 4. The Structural, Electrochemical, and Hydrogen-Bonding Properties of 22 Mutants of <i>Rhodobacter sphaeroides</i> . <i>Journal of the American Chemical Society</i> , 2001, 123, 8550-8563.	6.6	53
53	Recommending Hartree-Fock Theory with London-Dispersion and Basis-Set-Superposition Corrections for the Optimization or Quantum Refinement of Protein Structures. <i>Journal of Physical Chemistry B</i> , 2014, 118, 14612-14626.	1.2	53
54	Modeling the Bacterial Photosynthetic Reaction Center. 1. Magnesium Parameters for the Semiempirical AM1 Method Developed Using a Genetic Algorithm. <i>Journal of Physical Chemistry B</i> , 1998, 102, 8080-8090.	1.2	52

#	ARTICLE	IF	CITATIONS
55	Modeling the Bacterial Photosynthetic Reaction Center. 2. A Combined Quantum Mechanical/Molecular Mechanical Study of the Structure of the Cofactors in the Reaction Centers of Purple Bacteria. <i>Journal of Physical Chemistry B</i> , 1999, 103, 4906-4915.	1.2	52
56	Ab Initio and Density Functional Calculations of the Energies of the Singlet and Triplet Valence Excited States of Pyrazine. <i>Journal of Physical Chemistry A</i> , 1999, 103, 9821-9829.	1.1	52
57	Application of time-dependent density-functional theory to the $3\hat{1}\hat{z}\hat{u}\hat{a}\hat{~}$ first excited state of H <sub>2</sub> . <i>Journal of Chemical Physics</i> , 2000, 112, 527-530.	1.2	52
58	Inter-porphyrin coupling: how strong should it be for molecular electronics applications?. <i>Journal of Porphyrins and Phthalocyanines</i> , 2002, 06, 795-805.	0.4	52
59	Optimization and Chemical Control of Porphyrin-Based Molecular Wires and Switches. <i>Annals of the New York Academy of Sciences</i> , 1998, 852, 1-21.	1.8	49
60	Reaction Force and Its Link to Diabatic Analysis: A Unifying Approach to Analyzing Chemical Reactions. <i>Journal of Physical Chemistry Letters</i> , 2010, 1, 2858-2862.	2.1	46
61	Singlet and Triplet Valence Excited States of Pyrimidine. <i>Journal of Physical Chemistry A</i> , 2003, 107, 3093-3106.	1.1	45
62	The Mechanism of Covalent Bonding. <i>Journal of Chemical Education</i> , 1997, 74, 1494.	1.1	44
63	Non-adiabatic effects in thermochemistry, spectroscopy and kinetics: the general importance of all three Born-Oppenheimer breakdown corrections. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 24641-24665.	1.3	43
64	Electronic Couplings and Energy Transfer Dynamics in the Oxidized Primary Electron Donor of the Bacterial Reaction Center. <i>Journal of Physical Chemistry B</i> , 2004, 108, 1753-1765.	1.2	42
65	Molecular Origins of Conduction Channels Observed in Shot-Noise Measurements. <i>Nano Letters</i> , 2006, 6, 2431-2437.	4.5	42
66	A priori calculations of the free energy of formation from solution of polymorphic self-assembled monolayers. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, E6101-10.	3.3	42
67	Synthesis and physical properties of biquinoxalinylyl bridged bis-porphyrins: models for aspects of Photosynthetic Reaction Centres. <i>Organic and Biomolecular Chemistry</i> , 2003, 1, 2777.	1.5	41
68	Charge Delocalization in the Special-Pair Radical Cation of Mutant Reaction Centers of Rhodospirillum rubrum from Stark Spectra and Nonadiabatic Spectral Simulations. <i>Journal of Physical Chemistry B</i> , 2006, 110, 18688-18702.	1.2	40
69	Modeling the bacterial photosynthetic reaction center. VII. Full simulation of the intervalence hole-transfer absorption spectrum of the special-pair radical cation. <i>Journal of Chemical Physics</i> , 2003, 119, 3262-3277.	1.2	39
70	Formation of Gold-Methanethiyl Self-Assembled Monolayers. <i>Journal of the American Chemical Society</i> , 2007, 129, 14532-14533.	6.6	39
71	Vibrational Stark Spectroscopy 3. Accurate Benchmark ab Initio and Density Functional Calculations for CO and CN-. <i>Journal of Physical Chemistry A</i> , 1999, 103, 10580-10587.	1.1	37
72	Successes and failures of time-dependent density functional theory for the low-lying excited states of chlorophylls. <i>Molecular Physics</i> , 2005, 103, 1057-1065.	0.8	37

#	ARTICLE	IF	CITATIONS
73	Gold Mining by Alkanethiol Radicals: Vacancies and Pits in the Self-Assembled Monolayers of 1-Propanethiol and 1-Butanethiol on Au(111). <i>Journal of Physical Chemistry C</i> , 2011, 115, 10630-10639.	1.5	36
74	Accurate prediction of the properties of materials using the CAM-B3LYP density functional. <i>Journal of Computational Chemistry</i> , 2021, 42, 1486-1497.	1.5	35
75	Hydrogen bonding and reactivity of water to azines in their S1 ( $n, \pi^*$ ) electronic excited states in the gas phase and in solution. <i>Physical Chemistry Chemical Physics</i> , 2012, 14, 8791.	1.3	34
76	The symmetry of single-molecule conduction. <i>Journal of Chemical Physics</i> , 2006, 125, 184702.	1.2	33
77	van der Waals forces control ferroelectric/antiferroelectric ordering in $\text{CuInP}_2\text{S}_6$ and $\text{CuBiP}_2\text{Se}_6$ laminar materials. <i>Chemical Science</i> , 2018, 9, 7620-7627.	3.7	33
78	A new fundamental type of conformational isomerism. <i>Nature Chemistry</i> , 2018, 10, 615-624.	6.6	33
79	The Green's Function Density Functional Tight-Binding (gDFTB) Method for Molecular Electronic Conduction. <i>Journal of Physical Chemistry A</i> , 2007, 111, 5692-5702.	1.1	32
80	Bioferroelectric Properties of Glycine Crystals. <i>Journal of Physical Chemistry Letters</i> , 2019, 10, 1319-1324.	2.1	32
81	Hamiltonian operators including both symmetric and antisymmetric vibrational modes for vibronic coupling and intervalence charge-transfer applications. <i>Chemical Physics</i> , 2004, 299, 79-82.	0.9	31
82	Control of the Orbital Delocalization and Implications for Molecular Rectification in the Radical Anions of Porphyrins with Coplanar $90^\circ$ and $180^\circ$ $\text{C}_2\text{H}_2$ -Fused Extensions. <i>Journal of Physical Chemistry A</i> , 2008, 112, 556-570.	1.1	31
83	Evanescent-Field Spectroscopy using Structured Optical Fibers: Detection of Charge-Transfer at the Porphyrin-Silica Interface. <i>Journal of the American Chemical Society</i> , 2009, 131, 2925-2933.	6.6	31
84	Controlling the Stereochemistry and Regularity of Butanethiol Self-Assembled Monolayers on Au(111). <i>Journal of the American Chemical Society</i> , 2014, 136, 17087-17094.	6.6	31
85	Sulfur ligand mediated electrochemistry of gold surfaces and nanoparticles: What, how, and why. <i>Current Opinion in Electrochemistry</i> , 2017, 1, 7-15.	2.5	31
86	Classical and semiclassical approximations for incoherent neutron scattering. <i>Physical Review A</i> , 1987, 36, 2613-2627.	1.0	30
87	The Effect of Alkylation of N- and O-Donor Atoms on Their Strength of Coordination to Silver(I). <i>Journal of Physical Chemistry A</i> , 2001, 105, 6567-6574.	1.1	30
88	Towards a comprehensive model for the electronic and vibrational structure of the Creutz-Taube ion. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2008, 366, 15-31.	1.6	30
89	Chain-Branching Control of the Atomic Structure of Alkanethiol-Based Gold-Sulfur Interfaces. <i>Journal of the American Chemical Society</i> , 2011, 133, 14856-14859.	6.6	30
90	Spontaneous Si-Si bonding of alkanethiols to Si(111)-H: towards Si-molecule-Si circuits. <i>Chemical Science</i> , 2020, 11, 5246-5256.	3.7	30

#	ARTICLE	IF	CITATIONS
91	Dynamics of the A + BC reaction in solution. <i>Chemical Physics Letters</i> , 1986, 123, 394-398.	1.2	29
92	Modeling the Bacterial Photosynthetic Reaction Center 3: Interpretation of Effects of Site-Directed Mutagenesis on the Special-Pair Midpoint Potential. <i>Biochemistry</i> , 2000, 39, 16185-16189.	1.2	29
93	Electron-vibration entanglement in the Born-Oppenheimer description of chemical reactions and spectroscopy. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 24666-24682.	1.3	29
94	CASSCF-wave packet ab initio prediction of electronic and vibrational spectra: Application to the A(2 $\Pi$ ) absorption of C <sub>2</sub> H at 3000 K. <i>Journal of Chemical Physics</i> , 1985, 82, 5064-5077.	1.2	28
95	Single molecule conductivity: The role of junction-orbital degeneracy in the artificially high currents predicted by ab initio approaches. <i>Journal of Chemical Physics</i> , 2004, 121, 6615-6627.	1.2	28
96	Edge effects on optically detected magnetic resonance of vacancy defects in hexagonal boron nitride. <i>Communications Physics</i> , 2020, 3, .	2.0	28
97	Examination of the Photophysical Processes of Chlorophyll d Leading to a Clarification of Proposed Uphill Energy Transfer Processes in Cells of <i>Acaryochloris marina</i> . <i>Photochemistry and Photobiology</i> , 2003, 77, 628.	1.3	26
98	Overcoming computational uncertainties to reveal chemical sensitivity in single molecule conduction calculations. <i>Journal of Chemical Physics</i> , 2005, 122, 224502.	1.2	26
99	Control of the site and potential of reduction and oxidation processes in $\pi$ -expanded quinoxalinoporphyrins. <i>Physical Chemistry Chemical Physics</i> , 2008, 10, 268-280.	1.3	26
100	Scanning Tunneling Microscopic Observation of Adatom-Mediated Motifs on Gold-Thiol Self-Assembled Monolayers at High Coverage. <i>Journal of Physical Chemistry C</i> , 2009, 113, 19601-19608.	1.5	26
101	Models for the Structure and Electronic Transmission of Carbon Nanotubes Covalently Linked by a Molecular Bridge via Amide Couplings. <i>Journal of Physical Chemistry C</i> , 2007, 111, 3700-3704.	1.5	25
102	Chemisorbed and Physisorbed Structures for 1,10-Phenanthroline and Dipyrido[3,2- <i>a</i> :1',2'- <i>b</i> ]phenazine on Au(111). <i>Journal of Physical Chemistry C</i> , 2007, 111, 17285-17296.	1.5	25
103	The Lowest Singlet ( $n, \pi^*$ ) and ( $\pi, \pi^*$ ) Excited States of the Hydrogen-Bonded Complex between Water and Pyrazine. <i>Journal of Physical Chemistry A</i> , 2007, 111, 954-962.	1.1	25
104	The Need for Quantum-Mechanical Treatment of Capacitance and Related Properties of Nanoelectrodes. <i>Journal of Physical Chemistry B</i> , 2001, 105, 8979-8988.	1.2	24
105	A priori evaluation of the solvent contribution to the reorganization energy accompanying intramolecular electron transfer: Predicting the nature of the Creutz-Taube ion. <i>Chemical Physics</i> , 2005, 319, 39-51.	0.9	24
106	Ultraviolet photodissociation action spectroscopy of the N-pyridinium cation. <i>Journal of Chemical Physics</i> , 2015, 142, 014301.	1.2	24
107	$\langle i \rangle_Q \langle i \rangle   \langle i \rangle_R \langle i \rangle$ : quantum-based refinement. <i>Acta Crystallographica Section D: Structural Biology</i> , 2017, 73, 45-52.	1.1	24
108	Electron and Energy Transfer through Bridged Systems. 9. Toward a Priori Evaluation of the Intermetallic Coupling in Bis-metal Complexes. <i>Journal of Physical Chemistry A</i> , 1999, 103, 3066-3072.	1.1	23

#	ARTICLE	IF	CITATIONS
109	Modelling the bacterial photosynthetic reaction center. V. Assignment of the electronic transition observed at 2200 cm <sup>-1</sup> in the special-pair radical-cation as a second-highest occupied molecular orbital to highest occupied molecular orbital transition. <i>Journal of Chemical Physics</i> , 2003, 119, 3240-3248.	1.2	23
110	Modelling the bacterial photosynthetic reaction center. VI. Use of density-functional theory to determine the nature of the vibronic coupling between the four lowest-energy electronic states of the special-pair radical cation. <i>Journal of Chemical Physics</i> , 2003, 119, 3249-3261.	1.2	23
111	Explanation of the Anomalous Complexation of Silver(I) with Ammonia in Terms of the Poor Affinity of the Ion for Water. <i>Journal of Physical Chemistry A</i> , 2004, 108, 8434-8438.	1.1	23
112	Bond angle variations in XH <sub>3</sub> [X = N, P, As, Sb, Bi]: the critical role of Rydberg orbitals exposed using a diabatic state model. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 24618-24640.	1.3	23
113	Nature of the special-pair radical cation in bacterial photosynthesis. <i>International Journal of Quantum Chemistry</i> , 2000, 80, 1224-1243.	1.0	22
114	An azanorbornadiene anchor for molecular-level construction on silicon(100). <i>Nanotechnology</i> , 2004, 15, 324-332.	1.3	22
115	Synthetically tuneable biomimetic artificial photosynthetic reaction centres that closely resemble the natural system in purple bacteria. <i>Chemical Science</i> , 2016, 7, 6534-6550.	3.7	22
116	Covalent Linkages of Molecules and Proteins to Si-H Surfaces Formed by Disulfide Reduction. <i>Langmuir</i> , 2020, 36, 14999-15009.	1.6	22
117	Atomic-Resolution Kinked Structure of an Alkylporphyrin on Highly Ordered Pyrolytic Graphite. <i>Journal of Physical Chemistry Letters</i> , 2011, 2, 62-66.	2.1	21
118	Polymorphism in porphyrin monolayers: the relation between adsorption configuration and molecular conformation. <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 12451.	1.3	21
119	van der Waals Forces Control the Internal Chemical Structure of Monolayers within the Lamellar Materials CuInP <sub>2</sub> S <sub>6</sub> and CuBiP <sub>2</sub> Se <sub>6</sub> . <i>Journal of Physical Chemistry C</i> , 2018, 122, 22675-22687.	1.5	21
120	Energy flow in the Photosystem I supercomplex: Comparison of approximative theories with DM-HEOM. <i>Chemical Physics</i> , 2018, 515, 262-271.	0.9	21
121	INDO/S parameters for gold. <i>International Journal of Quantum Chemistry</i> , 2002, 90, 424-438.	1.0	20
122	Peptide Ligations Accelerated by N-Terminal Aspartate and Glutamate Residues. <i>Organic Letters</i> , 2011, 13, 4770-4773.	2.4	20
123	A unified diabatic description for electron transfer reactions, isomerization reactions, proton transfer reactions, and aromaticity. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 24598-24617.	1.3	20
124	Solving the scalability issue in quantum-based refinement: Q R#1. <i>Acta Crystallographica Section D: Structural Biology</i> , 2017, 73, 1020-1028.	1.1	20
125	Multistate density functional theory applied with 3 unpaired electrons in 3 orbitals: The singdoublet and tripdoublet states of the ethylene cation. <i>Chemical Physics Letters</i> , 2019, 736, 136803.	1.2	19
126	Complexation, Computational, Magnetic, and Structural Studies of the Maillard Reaction Product Isomaltol Including Investigation of an Uncommon $\pi$ Interaction with Copper(II). <i>Inorganic Chemistry</i> , 2011, 50, 1498-1505.	1.9	18



#	ARTICLE	IF	CITATIONS
145	Formation of water-chlorophyll clusters in dilute samples of chlorophyll-a in ether at low temperature. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 2323-2330.	1.3	12
146	An analytical data inversion method for magnetic circular dichroism spectra dominated by the $\beta$ -term. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 2315-2322.	1.3	12
147	The revised Penrose-Hameroff orchestrated objective-reduction proposal for human consciousness is not scientifically justified. <i>Physics of Life Reviews</i> , 2014, 11, 101-103.	1.5	12
148	Faraday cage screening reveals intrinsic aspects of the van der Waals attraction. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, E10295-E10302.	3.3	12
149	Convergence of Defect Energetics Calculations. <i>Journal of Physical Chemistry C</i> , 2020, 124, 21178-21183.	1.5	12
150	Pressure-induced spectral changes for the special-pair radical cation of the bacterial photosynthetic reaction center. <i>Journal of Chemical Physics</i> , 2007, 126, 215102.	1.2	10
151	Polymeric di- and discrete trinuclear silver(I) assemblies incorporating $\hat{I}^3$ -carbon bonded, neutral acetylacetonimine motifs assembled from racemic and diastereopure N,N'-bis(acetylacetonimine)cyclohexanediimine units. <i>Dalton Transactions</i> , 2009, , 4896.	1.6	10
152	Comparison of Soliton Geometry and Charge-Density Wave Structure, and Band Gaps, Between Odd Polyene and Symmetrical Polymethine Cyanine (Brooker) Ions and T - Polyacetylene : Scf and Model Hamiltonian Approaches with Implications For Molecular Wires and Switches. <i>Molecular Crystals and Liquid Crystals</i> , 1993, 234, 51-57.	0.3	9
153	Chemical Control of Tautomerization-Based Molecular Electronic and Color Switches. <i>Annals of the New York Academy of Sciences</i> , 1998, 852, 38-53.	1.8	8
154	Accurate and computationally efficient third-nearest-neighbor tight-binding model for large graphene fragments. <i>Physical Review B</i> , 2010, 81, .	1.1	8
155	Decomposition of Ferrocene on Pt(111) and Its Effect on Molecular Electronic Junctions. <i>Journal of Physical Chemistry C</i> , 2019, 123, 15569-15574.	1.5	8
156	Tautomerization of Nucleobase Model Compounds: The 4-Pyridinol and 4(1H)-Pyridinone Monomers and Their Dimers. <i>Journal of Physical Chemistry A</i> , 2000, 104, 5087-5092.	1.1	7
157	FUNCTIONALIZATION OF SEMICONDUCTOR SURFACES BY ORGANIC LAYERS: CONCERTED CYCLOADDITION VERSUS STEPWISE FREE-RADICAL REACTION MECHANISMS. , 2006, , 333-360.		7
158	Toward ab initio refinement of protein X-ray crystal structures: interpreting and correlating structural fluctuations. <i>Theoretical Chemistry Accounts</i> , 2012, 131, 1.	0.5	7
159	The Importance of Motions that Accompany Those Occurring Along the Reaction Coordinate. <i>Australian Journal of Chemistry</i> , 2015, 68, 1202.	0.5	7
160	First Steps Towards Quantum Refinement of Protein X-Ray Structures. , 2012, , 87-120.		7
161	Silicon $\hat{\sim}$ single molecule $\hat{\sim}$ silicon circuits. <i>Chemical Science</i> , 2021, 12, 15870-15881.	3.7	7
162	Density functionals with asymptotic-potential corrections are required for the simulation of spectroscopic properties of materials. <i>Chemical Science</i> , 2022, 13, 1492-1503.	3.7	7

#	ARTICLE	IF	CITATIONS
163	The exact thermal rotational spectrum of a two-dimensional rigid rotor obtained using Gaussian wave packet dynamics. <i>Journal of Chemical Physics</i> , 1985, 83, 516-520.	1.2	6
164	Nature of Nonbonding Molecular Orbitals: Application to Two Symmetric Tetraazanaphthalenes. <i>Journal of Physical Chemistry A</i> , 1999, 103, 3089-3096.	1.1	6
165	Polarization effect within a protein crystal: A molecular dynamics simulation study. <i>Chemical Physics Letters</i> , 2018, 706, 303-307.	1.2	6
166	Flanged nanotube electrode junctions. <i>Nanotechnology</i> , 2004, 15, 1226-1232.	1.3	5
167	Physically based molecular device model in a transient circuit simulator. <i>Chemical Physics</i> , 2006, 326, 188-196.	0.9	5
168	Interference-induced electron- and hole-conduction asymmetry. <i>Theoretical Chemistry Accounts</i> , 2011, 130, 815-828.	0.5	5
169	Cyanine platelet single crystals: growth, crystal structure and optical spectra. <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 29166-29173.	1.3	5
170	Asymmetry in the Q <sub>y</sub> Fluorescence and Absorption Spectra of Chlorophyll a Pertaining to Exciton Dynamics. <i>Frontiers in Chemistry</i> , 2020, 8, 588289.	1.8	5
171	Reply to Comment on "Solvent Effects on the Electronic Spectrum of C60". <i>The Journal of Physical Chemistry</i> , 1996, 100, 5604-5604.	2.9	4
172	"The molecules and methods of chemical, biochemical, and nanoscale electron transfer". <i>Chemical Physics</i> , 2006, 326, 1-2.	0.9	4
173	Two-dimensional, phenanthroline-based, extended $\pi$ -conjugated molecules for single-molecule conduction. <i>Journal of Physics Condensed Matter</i> , 2008, 20, 295208.	0.7	4
174	Norbornadiene-Based Molecules for Functionalizing The Si(001) Surface. <i>Journal of Physical Chemistry C</i> , 2009, 113, 16094-16103.	1.5	4
175	Frequency-based Quantum Computers from a Chemist's Perspective. <i>Australian Journal of Chemistry</i> , 2012, 65, 512.	0.5	4
176	Surface Adsorption. , 2017, , 387-416.		4
177	The critical role of the transition-state cusp diameter in understanding adiabatic and non-adiabatic electron transfer. <i>Russian Journal of Electrochemistry</i> , 2017, 53, 1042-1053.	0.3	3
178	Understanding non-linear effects from Hill-type dynamics with application to decoding of p53 signaling. <i>Scientific Reports</i> , 2018, 8, 2147.	1.6	3
179	Wavepacket propagation using time-sliced semiclassical initial value methods. <i>Journal of Chemical Physics</i> , 2004, 121, 12208.	1.2	2
180	Examination of the Photophysical Processes of Chlorophyll d Leading to a Clarification of Proposed Uphill Energy Transfer Processes in Cells of <i>Acaryochloris marina</i> . <i>Photochemistry and Photobiology</i> , 2003, 77, 628-637.	1.3	2

#	ARTICLE	IF	CITATIONS
181	A multiscale simulation technique for molecular electronics: design of a directed self-assembled molecular-bit shift register memory device. <i>Nanotechnology</i> , 2013, 24, 505202.	1.3	2
182	Free energies for the coordination of ligands to the magnesium of chlorophyll-a in solvents. <i>Molecular Physics</i> , 2015, 113, 1648-1654.	0.8	2
183	Putting David Craig's Legacy to Work in Nanotechnology and Biotechnology. <i>Australian Journal of Chemistry</i> , 2016, 69, 1331.	0.5	2
184	How Equilibrium Gets Mimicked During Kinetic and Thermodynamic Control in Porphyrin and Phthalocyanine Self-Assembled Monolayers. <i>Langmuir</i> , 2018, 34, 18-22.	1.6	2
185	Competition between charge migration and charge transfer induced by nuclear motion following core ionization: Model systems and application to Li2+. <i>Journal of Chemical Physics</i> , 2019, 151, 124108.	1.2	2
186	Control of the site and potential of reduction and oxidation processes in pi-expanded quinoxalinoporphyrins. <i>Physical Chemistry Chemical Physics</i> , 2008, 10, 268-80.	1.3	2
187	The Basics of Covalent Bonding. <i>Journal of Chemical Education</i> , 1997, 74, 1503.	1.1	1
188	“The molecules and methods of chemical, biochemical, and nanoscale electron transfer” <i>Chemical Physics</i> , 2006, 324, 1-2.	0.9	1
189	N-Silylamine Junctions for Molecular Wires to Gold: The Effect of Binding Atom Hybridization on the Electronic Transmission. <i>Journal of Physical Chemistry C</i> , 2009, 113, 20458-20462.	1.5	1
190	The role of high-level calculations in the assignment of the Q-band spectra of chlorophyll. , 2014, , .		1
191	Relating transition-state spectroscopy to standard chemical spectroscopic processes. <i>Chemical Physics Letters</i> , 2017, 683, 467-477.	1.2	1
192	Diabatic models with transferrable parameters for generalized chemical reactions. <i>Journal of Physics: Conference Series</i> , 2017, 833, 012014.	0.3	1
193	Source code, input data, and sample output concerning the application of multistate density functional theory to the singdoublet and tripdoublet states of the ethylene cation. <i>Data in Brief</i> , 2020, 28, 104984.	0.5	1
194	Explanation of the Anomalous Complexation of Silver(I) with Ammonia in Terms of the Poor Affinity of the Ion for Water. <i>ChemInform</i> , 2004, 35, no.	0.1	0
195	The Nature of the Special-pair Radical Cation Produced by Primary Charge Separation During Photosynthesis. , 2006, , 109-126.		0
196	BIOPHYSICHEM2011: A Joint Meeting of the Australian Society for Biophysics and the RACI Physical Chemistry Division. <i>Australian Journal of Chemistry</i> , 2012, 65, 439.	0.5	0
197	Noel S. Hush. <i>Journal of Physical Chemistry A</i> , 2019, 123, 3935-3936.	1.1	0
198	Noel S. Hush. <i>Journal of Physical Chemistry B</i> , 2019, 123, 3885-3886.	1.2	0

#	ARTICLE	IF	CITATIONS
199	Molecular Design Principles for Linearly Scalable, Frequency-Based, Universal Quantum Computers. , 2011, , .		0
200	Toward ab initio refinement of protein X-ray crystal structures: interpreting and correlating structural fluctuations. , 2012, , 21-36.		0
201	Unified Understanding of Structure, Reactivity and Spectroscopy Within General Valence Bond Scenarios, Obtained by Transferring Techniques Developed Within Electron-Transfer Theory. , 2024, , 662-682.		0
202	Electron transport properties of molecular devices based on silicon-1, 6-hexanedithiol-silicon. Shenzhen Daxue Xuebao (Ligong Ban)/Journal of Shenzhen University Science and Engineering, 2021, 38, 636-642.	0.1	0