

# Tore Brinck

## List of Publications by Year in descending order

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142  
papers

9,289  
citations

41344

49  
h-index

42399

92  
g-index

160  
all docs

160  
docs citations

160  
times ranked

7751  
citing authors

#	ARTICLE	IF	CITATIONS
1	Quantitative analysis of molecular surfaces: areas, volumes, electrostatic potentials and average local ionization energies. <i>Journal of Molecular Modeling</i> , 2010, 16, 1679-1691.	1.8	985
2	Tuning the HOMO and LUMO Energy Levels of Organic Chromophores for Dye Sensitized Solar Cells. <i>Journal of Organic Chemistry</i> , 2007, 72, 9550-9556.	3.2	576
3	Surface electrostatic potentials of halogenated methanes as indicators of directional intermolecular interactions. <i>International Journal of Quantum Chemistry</i> , 1992, 44, 57-64.	2.0	370
4	Average local ionization energies on the molecular surfaces of aromatic systems as guides to chemical reactivity. <i>Canadian Journal of Chemistry</i> , 1990, 68, 1440-1443.	1.1	363
5	Carbon-Carbon Bonds by Hydrolytic Enzymes. <i>Journal of the American Chemical Society</i> , 2003, 125, 874-875.	13.7	249
6	Mechanism of H <sub>2</sub> O <sub>2</sub> Decomposition on Transition Metal Oxide Surfaces. <i>Journal of Physical Chemistry C</i> , 2012, 116, 9533-9543.	3.1	223
7	Polarizability and volume. <i>Journal of Chemical Physics</i> , 1993, 98, 4305-4306.	3.0	216
8	HCCI experiments with toluene reference fuels modeled by a semidetained chemical kinetic model. <i>Combustion and Flame</i> , 2008, 155, 696-712.	5.2	195
9	Statistically-based interaction indices derived from molecular surface electrostatic potentials: a general interaction properties function (GIPF). <i>Computational and Theoretical Chemistry</i> , 1994, 307, 55-64.	1.5	183
10	Rhodaninedyes for dye-sensitized solar cells: spectroscopy, energy levels and photovoltaic performance. <i>Physical Chemistry Chemical Physics</i> , 2009, 11, 133-141.	2.8	178
11	Symmetric and unsymmetric donor functionalization. comparing structural and spectral benefits of chromophores for dye-sensitized solar cells. <i>Journal of Materials Chemistry</i> , 2009, 19, 7232.	6.7	177
12	Synthesis and Mechanistic Studies of Organic Chromophores with Different Energy Levels for p-Type Dye-Sensitized Solar Cells. <i>Journal of Physical Chemistry C</i> , 2010, 114, 4738-4748.	3.1	174
13	High Incident Photon-to-Current Conversion Efficiency of p-Type Dye-Sensitized Solar Cells Based on NiO and Organic Chromophores. <i>Advanced Materials</i> , 2009, 21, 2993-2996.	21.0	173
14	A Computational Analysis of Substituent Effects on the O-H Bond Dissociation Energy in Phenols: Polar Versus Radical Effects. <i>Journal of the American Chemical Society</i> , 1997, 119, 4239-4244.	13.7	170
15	Family-independent relationships between computed molecular surface quantities and solute hydrogen bond acidity/basicity and solute-induced methanol O-H infrared frequency shifts. <i>Canadian Journal of Chemistry</i> , 1995, 73, 483-488.	1.1	164
16	Molecular surface electrostatic potentials and local ionization energies of Group V-VII hydrides and their anions: Relationships for aqueous and gas-phase acidities. <i>International Journal of Quantum Chemistry</i> , 1993, 48, 73-88.	2.0	146
17	Extending the <i>f</i> -Hole Concept to Metals: An Electrostatic Interpretation of the Effects of Nanostructure in Gold and Platinum Catalysis. <i>Journal of the American Chemical Society</i> , 2017, 139, 11012-11015.	13.7	136
18	Exploring the Active-Site of a Rationally Redesigned Lipase for Catalysis of Michael-Type Additions. <i>ChemBioChem</i> , 2005, 6, 331-336.	2.6	135

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19	Quantitative determination of the total local polarity (charge separation) in molecules. <i>Molecular Physics</i> , 1992, 76, 609-617.	1.7	118
20	Correlations between molecular electrostatic potentials and some experimentally-based indices of reactivity. <i>Computational and Theoretical Chemistry</i> , 1992, 256, 29-45.	1.5	114
21	Detection of pentazolate anion (cyclo-N5 <sup>-</sup> ) from laser ionization and decomposition of solid p-dimethylaminophenylpentazole. <i>Chemical Physics Letters</i> , 2003, 379, 539-546.	2.6	114
22	Machine learning meets mechanistic modelling for accurate prediction of experimental activation energies. <i>Chemical Science</i> , 2021, 12, 1163-1175.	7.4	102
23	Theoretical Studies of the Hydrolysis of the Methyl Phosphate Anion. <i>Journal of Physical Chemistry A</i> , 1999, 103, 5379-5386.	2.5	100
24	σ-Holes and σ-lumps direct the Lewis basic and acidic interactions of noble metal nanoparticles: introducing regium bonds. <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 2676-2692.	2.8	99
25	Prediction of Solubility of Solid Organic Compounds in Solvents by UNIFAC. <i>Industrial &amp; Engineering Chemistry Research</i> , 2002, 41, 5114-5124.	3.7	98
26	A computational analysis of the bonding in boron trifluoride and boron trichloride and their complexes with ammonia. <i>Inorganic Chemistry</i> , 1993, 32, 2622-2625.	4.0	94
27	Radial behavior of the average local ionization energies of atoms. <i>Journal of Chemical Physics</i> , 1991, 95, 6699-6704.	3.0	88
28	Relationships of molecular surface electrostatic potentials to some macroscopic properties. <i>Chemical Physics</i> , 1996, 204, 289-299.	1.9	85
29	Phosphine-catalyzed disulfide metathesis. <i>Chemical Communications</i> , 2008, , 6603.	4.1	85
30	Relationships of critical constants and boiling points to computed molecular surface properties. <i>The Journal of Physical Chemistry</i> , 1993, 97, 9369-9373.	2.9	81
31	Direct Epoxidation in <i>Candida antarctica</i> Lipase B Studied by Experiment and Theory. <i>ChemBioChem</i> , 2008, 9, 2443-2451.	2.6	78
32	On the method-dependence of transition state asynchronicity in Diels-Alder reactions. <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 5108.	2.8	76
33	Relationships between the aqueous acidities of some carbon, oxygen, and nitrogen acids and the calculated surface local ionization energies of their conjugate bases. <i>Journal of Organic Chemistry</i> , 1991, 56, 5012-5015.	3.2	74
34	Thiol-ene coupling reaction of fatty acid monomers. <i>Journal of Polymer Science Part A</i> , 2004, 42, 6346-6352.	2.3	74
35	Reactivity of metal oxide clusters with hydrogen peroxide and water – a DFT study evaluating the performance of different exchange-correlation functionals. <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 5539.	2.8	73
36	Octanol/water partition coefficients expressed in terms of solute molecular surface areas and electrostatic potentials. <i>Journal of Organic Chemistry</i> , 1993, 58, 7070-7073.	3.2	69

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37	Kinetic Stability and Propellant Performance of Green Energetic Materials. Chemistry - A European Journal, 2010, 16, 6590-6600.	3.3	69
38	A relationship between experimentally determined pK <sub>a</sub> s and molecular surface ionization energies for some azines and azoles. Journal of Organic Chemistry, 1991, 56, 2934-2936.	3.2	68
39	Calculated electrostatic potentials and local surface ionization energies of para-substituted anilines as measures of substituent effects. Canadian Journal of Chemistry, 1992, 70, 2209-2214.	1.1	66
40	Quantum Chemical Studies on the Thermochemistry of Alkyl and Peroxyl Radicals. Journal of Physical Chemistry A, 1999, 103, 7094-7104.	2.5	65
41	Aldol additions with mutant lipase: analysis by experiments and theoretical calculations. Journal of Molecular Catalysis B: Enzymatic, 2004, 31, 123-128.	1.8	65
42	Investigation of relationships between solute molecule surface electrostatic potentials and solubilities in supercritical fluids. The Journal of Physical Chemistry, 1992, 96, 7938-7943.	2.9	62
43	Applications of calculated local surface ionization energies to chemical reactivity. Computational and Theoretical Chemistry, 1992, 255, 271-281.	1.5	62
44	The Stability of Arylpentazoles. Journal of Physical Chemistry A, 2004, 108, 7463-7467.	2.5	58
45	Ab initio and density functional theory studies of the catalytic mechanism for ester hydrolysis in serine hydrolases. International Journal of Quantum Chemistry, 1998, 69, 89-103.	2.0	54
46	Molecular dynamics study of zinc binding to cysteines in a peptide mimic of the alcohol dehydrogenase structural zinc site. Physical Chemistry Chemical Physics, 2009, 11, 975-983.	2.8	54
47	A Theoretical Study of the Uncatalyzed and BF <sub>3</sub> -Assisted Baeyer-Villiger Reactions. Journal of Organic Chemistry, 2001, 66, 1193-1199.	3.2	53
48	Stepwise Diels-Alder: More than Just an Oddity? A Computational Mechanistic Study. Journal of Organic Chemistry, 2012, 77, 6563-6573.	3.2	52
49	A theoretical study of the azide (N <sub>3</sub> ) doublet states. A new route to tetraazatetrahedrane (N <sub>4</sub> ): N <sub>3</sub> <sup>+</sup> N <sub>4</sub> . Journal of Chemical Physics, 2002, 116, 9740-9748.	3.0	50
50	Electrostatic potentials on the molecular surfaces of cyclic ureides. The Journal of Physical Chemistry, 1991, 95, 844-848.	2.9	49
51	Relationships between solute molecular properties and solubility in supercritical carbon dioxide. The Journal of Physical Chemistry, 1993, 97, 729-732.	2.9	48
52	The Surface Structure of Cu <sub>2</sub> O(100). Journal of Physical Chemistry C, 2016, 120, 4373-4381.	3.1	46
53	Theoretical Study of the Triplet N <sub>4</sub> Potential Energy Surface. Journal of Physical Chemistry A, 2000, 104, 11999-12005.	2.5	45
54	Prediction of water-octanol partition coefficients using theoretical descriptors derived from the molecular surface area and the electrostatic potential. Journal of the Chemical Society Perkin Transactions II, 1997, , 289-294.	0.9	42

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55	Validation of a Computational Model for Predicting the Site for Electrophilic Substitution in Aromatic Systems. <i>Journal of Organic Chemistry</i> , 2010, 75, 4696-4705.	3.2	42
56	Electrostatics and polarization determine the strength of the halogen bond: a red card for charge transfer. <i>Journal of Molecular Modeling</i> , 2019, 25, 125.	1.8	42
57	Relationships between computed molecular properties and solute-solvent interactions in supercritical solutions. <i>The Journal of Physical Chemistry</i> , 1993, 97, 5144-5148.	2.9	38
58	Diastereoselective One-Pot Tandem Synthesis of 3-Substituted Isoindolinones: A Mechanistic Investigation. <i>Journal of Organic Chemistry</i> , 2010, 75, 5882-5887.	3.2	38
59	Experimental Detection of Trinitramide, N(NO <sub>2</sub> ) <sub>3</sub> . <i>Angewandte Chemie - International Edition</i> , 2011, 50, 1145-1148.	13.8	38
60	Nucleophilic Aromatic Substitution Reactions Described by the Local Electron Attachment Energy. <i>Journal of Organic Chemistry</i> , 2017, 82, 3072-3083.	3.2	38
61	The use of the electrostatic potential at the molecular surface in recognition interactions: Dibenzo-p-dioxins and related systems. <i>Journal of Molecular Graphics</i> , 1990, 8, 81-85.	1.1	37
62	Racemase Activity of <i>B. cepacia</i> Lipase Leads to Dual-Function Asymmetric Dynamic Kinetic Resolution of $\pm$ -Aminonitriles. <i>Angewandte Chemie - International Edition</i> , 2011, 50, 6592-6595.	13.8	37
63	Predicting Regioselectivity in Nucleophilic Aromatic Substitution. <i>Journal of Organic Chemistry</i> , 2012, 77, 3262-3269.	3.2	37
64	On the Anomalous Decomposition and Reactivity of Ammonium and Potassium Dinitramide. <i>Journal of Physical Chemistry A</i> , 2010, 114, 2845-2854.	2.5	36
65	The Molecular Surface Property Approach: A Guide to Chemical Interactions in Chemistry, Medicine, and Material Science. <i>Advanced Theory and Simulations</i> , 2019, 2, 1800149.	2.8	36
66	The catalytic effect of water in basic hydrolysis of methyl acetate: a theoretical study. <i>Computational and Theoretical Chemistry</i> , 1999, 459, 85-93.	1.5	34
67	Rational design of a lipase to accommodate catalysis of Baeyer-Villiger oxidation with hydrogen peroxide. <i>Journal of Molecular Modeling</i> , 2003, 9, 164-171.	1.8	34
68	Polymer-assisted laser desorption/ionization analysis of small molecular weight compounds. <i>Rapid Communications in Mass Spectrometry</i> , 2004, 18, 841-852.	1.5	34
69	Control of the ambident reactivity of the nitrite ion. <i>Organic and Biomolecular Chemistry</i> , 2013, 11, 648-653.	2.8	33
70	Partition coefficients of nitroaromatics expressed in terms of their molecular surface areas and electrostatic potentials. <i>The Journal of Physical Chemistry</i> , 1993, 97, 13807-13809.	2.9	31
71	In situ confocal Raman micro-spectroscopy and electrochemical studies of mussel adhesive protein and ceria composite film on carbon steel in salt solutions. <i>Electrochimica Acta</i> , 2013, 107, 276-291.	5.2	31
72	Computational Analysis of Substituent Effects in Para-Substituted Phenoxide Ions. <i>The Journal of Physical Chemistry</i> , 1996, 100, 10116-10120.	2.9	30

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73	Mechanism and regioselectivity of electrophilic aromatic nitration in solution: the validity of the transition state approach. <i>Journal of Molecular Modeling</i> , 2018, 24, 15.	1.8	29
74	In situ investigations of Fe <sup>3+</sup> induced complexation of adsorbed Mefp-1 protein film on iron substrate. <i>Journal of Colloid and Interface Science</i> , 2013, 404, 62-71.	9.4	28
75	Thermochemistry of Arylselanyl Radicals and the Pertinent Ions in Acetonitrile. <i>Journal of the American Chemical Society</i> , 2003, 125, 2148-2157.	13.7	27
76	pH-Dependent Mutarotation of 1-Thioaldoses in Water. Unexpected Behavior of (2S)-d-Aldopyranoses. <i>Journal of Organic Chemistry</i> , 2010, 75, 6115-6121.	3.2	27
77	Local Electron Attachment Energy and Its Use for Predicting Nucleophilic Reactions and Halogen Bonding. <i>Journal of Physical Chemistry A</i> , 2016, 120, 10023-10032.	2.5	27
78	Ab initio study of the ground state and the first excited state of the rectangular (D <sub>2h</sub> )N <sub>4</sub> molecule. <i>Chemical Physics Letters</i> , 2001, 347, 220-228.	2.6	26
79	Supramolecular Control in Carbohydrate Epimerization: Discovery of a New Anion Host-Guest System. <i>Journal of the American Chemical Society</i> , 2008, 130, 15270-15271.	13.7	26
80	Mechanistic Insights into the Stepwise Diels-Alder Reaction of 4,6-Dinitrobenzofuroxan. <i>Organic Letters</i> , 2012, 14, 118-121.	4.6	26
81	Surface local ionization energies and electrostatic potentials of the conjugate bases of a series of cyclic hydrocarbons in relation to their aqueous acidities. <i>International Journal of Quantum Chemistry</i> , 1991, 40, 91-98.	2.0	25
82	Reaction of Peroxyl Radicals with Ozone in Water. <i>Journal of Physical Chemistry A</i> , 2003, 107, 676-681.	2.5	25
83	Solvation of Carbanions in Organic Solvents: A Test of the Polarizable Continuum Model. <i>Journal of Physical Chemistry B</i> , 2000, 104, 9887-9893.	2.6	24
84	On the formation of hydrogen gas on copper in anoxic water. <i>Journal of Chemical Physics</i> , 2011, 135, 084709.	3.0	24
85	Searching for the thermodynamic limit – a DFT study of the step-wise water oxidation of the bipyramidal Cu <sub>7</sub> cluster. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 2452-2464.	2.8	24
86	Theoretical study of the singlet electronically excited states of N <sub>4</sub> . <i>Chemical Physics Letters</i> , 2001, 340, 597-603.	2.6	23
87	Solvation of Sulfur-Centered Cations and Anions in Acetonitrile. <i>Journal of Physical Chemistry A</i> , 2002, 106, 8827-8833.	2.5	23
88	Dehydrogenation of methanol on Cu <sub>2</sub> O(100) and (111). <i>Journal of Chemical Physics</i> , 2017, 146, 244702.	3.0	23
89	Elucidation of the Thermochemical Properties of Triphenyl- or Tributyl-Substituted Si-, Ge-, and Sn-Centered Radicals by Means of Electrochemical Approaches and Computations. <i>Journal of the American Chemical Society</i> , 2005, 127, 2677-2685.	13.7	22
90	Theoretical Investigation into Rate-Determining Factors in Electrophilic Aromatic Halogenation. <i>Journal of Physical Chemistry A</i> , 2018, 122, 3270-3279.	2.5	22

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91	The use of the electrostatic potential for analysis and prediction of intermolecular interactions. <i>Theoretical and Computational Chemistry</i> , 1998, , 51-93.	0.4	21
92	Reactivity at the Cu <sub>2</sub> O(100):Cuâ€“H <sub>2</sub> O interface: a combined DFT and PES study. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 30570-30584.	2.8	21
93	Segmental analysis of molecular surface electrostatic potentials: application to enzyme inhibition. <i>Journal of Molecular Modeling</i> , 2003, 9, 77-83.	1.8	20
94	Some Perspectives on Sensitivity to Initiation of Detonation. , 2014, , 45-62.		20
95	Force field parameterization of copper(I)-olefin systems from density functional calculations. <i>Computational and Theoretical Chemistry</i> , 1997, 397, 39-50.	1.5	19
96	Computational prediction of relative group polarizabilities. <i>International Journal of Quantum Chemistry</i> , 2003, 95, 632-637.	2.0	19
97	Utilizing the ĩf-complex stability for quantifying reactivity in nucleophilic substitution of aromatic fluorides. <i>Beilstein Journal of Organic Chemistry</i> , 2013, 9, 791-799.	2.2	19
98	Modified Interaction Properties Function for the Analysis and Prediction of Lewis Basicities. <i>Journal of Physical Chemistry A</i> , 1997, 101, 3408-3415.	2.5	18
99	A combined molecular dynamics simulation and quantum chemical study on the mechanism for activation of the OxyR transcription factor by hydrogen peroxide. <i>Organic and Biomolecular Chemistry</i> , 2006, 4, 3468-3478.	2.8	18
100	Synergistic activation of the Dielsâ€“Alder reaction by an organic catalyst and substituents: a computational study. <i>Organic and Biomolecular Chemistry</i> , 2009, 7, 1304.	2.8	18
101	A pragmatic procedure for predicting regioselectivity in nucleophilic substitution of aromatic fluorides. <i>Tetrahedron Letters</i> , 2011, 52, 3150-3153.	1.4	18
102	Electrochemical, atomic force microscopy and infrared reflection absorption spectroscopy studies of pre-formed mussel adhesive protein films on carbon steel for corrosion protection. <i>Thin Solid Films</i> , 2012, 520, 7136-7143.	1.8	18
103	Application of reactivity descriptors to the catalytic decomposition of hydrogen peroxide at oxide surfaces. <i>Computational and Theoretical Chemistry</i> , 2015, 1070, 108-116.	2.5	18
104	Dinitraminic acid (HDN) isomerization and self-decomposition revisited. <i>Chemical Physics</i> , 2008, 348, 53-60.	1.9	17
105	Novel 1,3-Dipolar Cycloadditions of Dinitraminic Acid:â€“ Implications for the Chemical Stability of Ammonium Dinitramide. <i>Journal of Physical Chemistry A</i> , 2008, 112, 2456-2463.	2.5	17
106	Surface Reactions of H <sub>2</sub> O <sub>2</sub> , H <sub>2</sub> , and O <sub>2</sub> in Aqueous Systems Containing ZrO <sub>2</sub> . <i>Journal of Physical Chemistry C</i> , 2016, 120, 1609-1614.	3.1	16
107	ĩf-Holes on Transition Metal Nanoclusters and Their Influence on the Local Lewis Acidity. <i>Crystals</i> , 2017, 7, 222.	2.2	16
108	Electrostatic potential as a measure of gas phase carbocation stability. <i>International Journal of Quantum Chemistry</i> , 2006, 106, 2904-2909.	2.0	15

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109	Asymmetric Synthesis of Adjacent Tri- and Tetrasubstituted Carbon Stereocenters: Organocatalytic Aldol Reaction of an Hydantoin Surrogate with Azaarene $\alpha$ -Carbaldehydes. <i>Chemistry - A European Journal</i> , 2019, 25, 12431-12438.	3.3	15
110	Computational Study of the Amination of Halobenzenes and Phenylpentazole. A Viable Route to Isolate the Pentazolate Anion?. <i>Journal of Organic Chemistry</i> , 2004, 69, 3222-3225.	3.2	14
111	The anomalous solid state decomposition of ammonium dinitramide: a matter of surface polarization. <i>Chemical Communications</i> , 2009, , 2896.	4.1	14
112	Novel Approach for Identifying Key Residues in Enzymatic Reactions: Proton Abstraction in Ketosteroid Isomerase. <i>Journal of Physical Chemistry B</i> , 2014, 118, 13050-13058.	2.6	14
113	Local Lewis Acidity of (TiO <sub>2</sub> ) <sub>n</sub> (n = 7–10) Nanoparticles Characterized by DFT-Based Descriptors: Tools for Catalyst Design. <i>Journal of Physical Chemistry C</i> , 2017, 121, 27483-27492.	3.1	14
114	Computational analysis of the early stage of cuprous oxide sulphidation: a top-down process. <i>Corrosion Engineering Science and Technology</i> , 2017, 52, 50-53.	1.4	13
115	The Surface Structure of Cu <sub>2</sub> O(100): Nature of Defects. <i>Journal of Physical Chemistry C</i> , 2019, 123, 7696-7704.	3.1	13
116	Interaction of Atomic Hydrogen with the Cu <sub>2</sub> O(100) and (111) Surfaces. <i>Journal of Physical Chemistry C</i> , 2019, 123, 22172-22180.	3.1	13
117	Utilizing the Surface Electrostatic Potential to Predict the Interactions of Pt and Ni Nanoparticles with Lewis Acids and Bases—If-Lumps and If-Holes Govern the Catalytic Activities. <i>Journal of Physical Chemistry C</i> , 2020, 124, 14696-14705.	3.1	13
118	Some proposed criteria for simulants in supercritical systems. <i>Computational and Theoretical Chemistry</i> , 1993, 281, 107-111.	1.5	12
119	Computational design of a lipase for catalysis of the Diels-Alder reaction. <i>Journal of Molecular Modeling</i> , 2011, 17, 833-849.	1.8	12
120	Envisioning an enzymatic Diels-Alder reaction by in situ acid-base catalyzed diene generation. <i>Chemical Communications</i> , 2012, 48, 5665.	4.1	12
121	Computational design of a Diels-Alderase from a thermophilic esterase: the importance of dynamics. <i>Journal of Computer-Aided Molecular Design</i> , 2012, 26, 1079-1095.	2.9	12
122	Aqueous Solvation and Surface Oxidation of the Cu <sub>7</sub> Nanoparticle: Insights from Theoretical Modeling. <i>Journal of Physical Chemistry C</i> , 2016, 120, 1977-1988.	3.1	12
123	On the Kinetic and Thermodynamic Properties of Aryl Radicals Using Electrochemical and Theoretical Approaches. <i>ChemElectroChem</i> , 2017, 4, 3212-3221.	3.4	12
124	Designing a New Diels-Alderase: A Combinatorial, Semirational Approach Including Dynamic Optimization.. <i>Journal of Chemical Information and Modeling</i> , 2011, 51, 1906-1917.	5.4	11
125	Interaction of Sulfur Dioxide and Near-Ambient Pressures of Water Vapor with Cuprous Oxide Surfaces. <i>Journal of Physical Chemistry C</i> , 2017, 121, 24011-24024.	3.1	11
126	How Does Methylithium Invert? A Density Functional Study. <i>Organometallics</i> , 2001, 20, 5134-5138.	2.3	10



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127	The local electron attachment energy and the electrostatic potential as descriptors of surface-adsorbate interactions. <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 17001-17009.	2.8	10
128	Ionization of ammonium dinitramide: decomposition pathways and ionization products. <i>Theoretical Chemistry Accounts</i> , 2013, 132, 1.	1.4	9
129	Dual Lewis Acid/Lewis Base Catalyzed Acylcyanation of Aldehydes: A Mechanistic Study. <i>Chemistry - A European Journal</i> , 2016, 22, 3821-3829.	3.3	9
130	The Molecular Surface Structure of Ammonium and Potassium Dinitramide: A Vibrational Sum Frequency Spectroscopy and Quantum Chemical Study. <i>Journal of Physical Chemistry C</i> , 2011, 115, 10588-10596.	3.1	7
131	Analytical Representation and Prediction of Macroscopic Properties. <i>ACS Symposium Series</i> , 1995, , 109-118.	0.5	6
132	Electronic structure calculations as a tool in the quest for experimental verification of N <sub>4</sub> . <i>Theoretical and Computational Chemistry</i> , 2003, , 421-439.	0.4	6
133	Computation of Franck-Condon factors for many-atom systems: simulated photoelectron spectra of formic acid isotopologues. <i>Chemical Physics</i> , 2004, 302, 217-228.	1.9	6
134	MD Simulations Reveal Complex Water Paths in Squalene-Hopene Cyclase: Tunnel-Obstructing Mutations Increase the Flow of Water in the Active Site. <i>ACS Omega</i> , 2017, 2, 8495-8506.	3.5	6
135	Generation of soluble oligomeric $\beta$ -amyloid species via copper catalyzed oxidation with implications for Alzheimer's disease: A DFT study. <i>Journal of Molecular Modeling</i> , 2010, 16, 1103-1108.	1.8	5
136	Adapted Linear Interaction Energy: A Structure-Based LIE Parametrization for Fast Prediction of Protein-Ligand Affinities. <i>Journal of Chemical Theory and Computation</i> , 2013, 9, 1230-1239.	5.3	5
137	Fragment molecular orbital study of the cAMP-dependent protein kinase catalyzed phosphoryl transfer: a comparison with the differential transition state stabilization method. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 15153-15161.	2.8	5
138	Improving the Stability of Trinitramide by Chemical Substitution: N(NF <sub>2</sub> ) <sub>3</sub> has Higher Stability and Excellent Propulsion Performance. <i>Propellants, Explosives, Pyrotechnics</i> , 2021, 46, 245-252.	1.6	4
139	Binder Materials for Green Propellants. , 2014, , 205-234.		3
140	Acetic acid conversion to ketene on Cu <sub>2</sub> O(1 0 0): Reaction mechanism deduced from experimental observations and theoretical computations. <i>Journal of Catalysis</i> , 2021, 402, 154-165.	6.2	3
141	Two potential energetic compounds: Ammonium superoxide and ammonium ozonide. <i>Journal of Energetic Materials</i> , 2000, 18, 89-95.	2.0	1
142	Chemical Reactivity: The Molecular Surface Property Approach: A Guide to Chemical Interactions in Chemistry, Medicine, and Material Science (Adv. Theory Simul. 1/2019). <i>Advanced Theory and Simulations</i> , 2019, 2, 1970003.	2.8	1