

# Àngels González-Lafont

## List of Publications by Year in descending order

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140  
papers

3,903  
citations

147726

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155592

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143  
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143  
docs citations

143  
times ranked

3072  
citing authors

#	ARTICLE	IF	CITATIONS
1	Direct dynamics calculation of the kinetic isotope effect for an organic hydrogen-transfer reaction, including corner-cutting tunneling in 21 dimensions. <i>Journal of the American Chemical Society</i> , 1993, 115, 7806-7817.	6.6	348
2	Interpolated variational transition-state theory: Practical methods for estimating variational transition-state properties and tunneling contributions to chemical reaction rates from electronic structure calculations. <i>Journal of Chemical Physics</i> , 1991, 95, 8875-8894.	1.2	296
3	Direct dynamics calculations with NDDO (neglect of diatomic differential overlap) molecular orbital theory with specific reaction parameters. <i>The Journal of Physical Chemistry</i> , 1991, 95, 4618-4627.	2.9	285
4	Theoretical Study of the Low-Barrier Hydrogen Bond in the Hydrogen Maleate Anion in the Gas Phase. Comparison with Normal Hydrogen Bonds. <i>Journal of the American Chemical Society</i> , 1997, 119, 1081-1086.	6.6	151
5	MORATE: a program for direct dynamics calculations of chemical reaction rates by semiempirical molecular orbital theory. <i>Computer Physics Communications</i> , 1993, 75, 143-159.	3.0	107
6	Tunneling in Green Tea: Understanding the Antioxidant Activity of Catechol-Containing Compounds. A Variational Transition-State Theory Study. <i>Journal of the American Chemical Society</i> , 2007, 129, 5846-5854.	6.6	96
7	Temperature dependence of the kinetic isotope effect for a gas-phase SN2 reaction: Cl <sup>-</sup> + CH <sub>3</sub> Br. <i>Journal of the American Chemical Society</i> , 1991, 113, 9404-9405.	6.6	88
8	Is an Extremely Low-Field Proton Signal in the NMR Spectrum Conclusive Evidence for a Low-Barrier Hydrogen Bond?. <i>Journal of Physical Chemistry A</i> , 1997, 101, 8727-8733.	1.1	55
9	Evolutionary alteration of ALOX15 specificity optimizes the biosynthesis of antiinflammatory and proresolving lipoxins. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, E4266-75.	3.3	54
10	Temperature Dependence of Proton NMR Chemical Shift As a Criterion To Identify Low-Barrier Hydrogen Bonds. <i>Journal of the American Chemical Society</i> , 1998, 120, 10203-10209.	6.6	53
11	Determination of enzymatic reaction pathways using QM/MM methods. <i>International Journal of Quantum Chemistry</i> , 2003, 93, 229-244.	1.0	52
12	A Theoretical Analysis of Rate Constants and Kinetic Isotope Effects Corresponding to Different Reactant Valleys in Lactate Dehydrogenase. <i>Journal of the American Chemical Society</i> , 2006, 128, 16851-16863.	6.6	52
13	Asymmetry of the Hydrogen Bond of Hydrogen Phthalate Anion in Solution. A QM/MM Study. <i>Journal of the American Chemical Society</i> , 1999, 121, 9198-9207.	6.6	51
14	Enzyme Dynamics and Tunneling Enhanced by Compression in the Hydrogen Abstraction Catalyzed by Soybean Lipoxygenase-1. <i>Journal of Physical Chemistry B</i> , 2006, 110, 24708-24719.	1.2	51
15	Understanding the activation energy trends for the C <sub>2</sub> H <sub>4</sub> +OH <sup>+</sup> →C <sub>2</sub> H <sub>4</sub> OH reaction by using canonical variational transition state theory. <i>Journal of Chemical Physics</i> , 1997, 107, 7266-7274.	1.2	50
16	Variational Transition-State Theory with Optimized Orientation of the Dividing Surface and Semiclassical Tunneling Calculations for Deuterium and Muonium Kinetic Isotope Effects in the Free Radical Association Reaction H + C <sub>2</sub> H <sub>4</sub> → C <sub>2</sub> H <sub>5</sub> . <i>Journal of Physical Chemistry A</i> , 1999, 103, 5061-5074.	1.1	50
17	On pKa Matching as a Requirement To Form a Low-Barrier Hydrogen Bond. A Theoretical Study in Gas Phase. <i>Journal of Physical Chemistry A</i> , 1997, 101, 3880-3886.	1.1	48
18	Variational Transition State Theory and Tunneling Calculations with Reorientation of the Generalized Transition States for Methyl Cation Transfer. <i>Journal of Physical Chemistry A</i> , 1998, 102, 3420-3428.	1.1	48

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19	Theoretical Modeling of Hydroxyl-Radical-Induced Lipid Peroxidation Reactions. <i>Journal of Physical Chemistry B</i> , 2007, 111, 5684-5693.	1.2	46
20	The reactions $\text{CH}_3\text{D} + \text{OH} \rightarrow \text{CH}_3 + \text{H}_2\text{O}$ and $\text{CH}_4 + \text{OD} \rightarrow \text{CH}_3 + \text{HOD}$ as a test of current direct dynamics computational methods to determine variational transition-state rate constants. I. <i>Journal of Chemical Physics</i> , 2001, 114, 2154-2165.	1.2	44
21	Molecular modeling of solvation. $\text{Cl}^-$ ( $\text{D}_2\text{O}$ ). <i>Journal of Chemical Physics</i> , 1991, 94, 5544-5558.	1.2	42
22	Synthetic Photoswitchable Neurotransmitters Based on Bridged Azobenzenes. <i>Organic Letters</i> , 2019, 21, 3780-3784.	2.4	42
23	Variational Transition-State Theory Rate Constant Calculations with Multidimensional Tunneling Corrections of the Reaction of Acetone with OH. <i>Journal of Physical Chemistry A</i> , 2002, 106, 11760-11770.	1.1	40
24	Variational Transition State Theory as a Tool To Determine Kinetic Selectivity in Reactions Involving a Valley-Ridge Inflection Point. <i>Journal of the American Chemical Society</i> , 2004, 126, 13089-13094.	6.6	40
25	Theoretical Study of the Mechanism of the Hydride Transfer between Ferredoxin-NADP <sup>+</sup> Reductase and NADP <sup>+</sup> : The Role of Tyr303. <i>Journal of the American Chemical Society</i> , 2012, 134, 20544-20553.	6.6	40
26	Unraveling How Enzymes Can Use Bulky Residues To Drive Site-Selective C-H Activation: The Case of Mammalian Lipoxygenases Catalyzing Arachidonic Acid Oxidation. <i>ACS Catalysis</i> , 2014, 4, 4351-4363.	5.5	39
27	A QM/MM Study of the Racemization of Vinylglycolate Catalyzed by Mandelate Racemase Enzyme. <i>Journal of the American Chemical Society</i> , 2001, 123, 709-721.	6.6	38
28	Testing electronic structure methods for describing intermolecular H $\cdots$ H interactions in supramolecular chemistry. <i>Journal of Computational Chemistry</i> , 2004, 25, 99-105.	1.5	35
29	Mechanism of the Gas-Phase $\text{HO} + \text{H}_2\text{O} \rightarrow \text{H}_2\text{O} + \text{OH}$ Reaction and Several Associated Isotope Exchange Reactions: A Canonical Variational Transition State Theory Plus Multidimensional Tunneling Calculation. <i>Journal of Physical Chemistry A</i> , 1999, 103, 1044-1053.	1.1	34
30	The regioselectivity of 4-nitroanisole photosubstitution with primary amines. A mechanistic and theoretical study. <i>Journal of Organic Chemistry</i> , 1990, 55, 3303-3310.	1.7	33
31	On the Ionization State of the Substrate in the Active Site of Glutamate Racemase. A QM/MM Study about the Importance of Being Zwitterionic. <i>Journal of Physical Chemistry A</i> , 2006, 110, 717-725.	1.1	33
32	Searching for Saddle Points by Using the Nudged Elastic Band Method: An Implementation for Gas-Phase Systems. <i>Journal of Chemical Theory and Computation</i> , 2006, 2, 895-904.	2.3	33
33	Ligand-induced formation of transient dimers of mammalian 12/15-lipoxygenase: A key to allosteric behavior of this class of enzymes?. <i>Proteins: Structure, Function and Bioinformatics</i> , 2012, 80, 703-712.	1.5	33
34	Understanding the Mechanism of the Hydrogen Abstraction from Arachidonic Acid Catalyzed by the Human Enzyme 15-Lipoxygenase-2. A Quantum Mechanics/Molecular Mechanics Free Energy Simulation. <i>Journal of Chemical Theory and Computation</i> , 2016, 12, 2079-2090.	2.3	33
35	A Monte Carlo simulation of Fe <sup>2+</sup> aqueous solvation. <i>Chemical Physics</i> , 1987, 111, 241-247.	0.9	30
36	Entropic Effects on the Dynamical Bottleneck Location and Tunneling Contributions for $\text{C}_2\text{H}_4 + \text{H} \rightarrow \text{C}_2\text{H}_5$ : Variable Scaling of External Correlation Energy for Association Reactions. <i>Journal of the American Chemical Society</i> , 1998, 120, 5559-5567.	6.6	30

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37	Variational Transition-State Theory Rate Constant Calculations of the OH + CH <sub>3</sub> SH Reaction and Several Isotopic Variants. <i>Journal of Physical Chemistry A</i> , 2003, 107, 4490-4496.	1.1	30
38	Insights into the Mechanism of Binding of Arachidonic Acid to Mammalian 15-Lipoxygenases. <i>Journal of Physical Chemistry B</i> , 2010, 114, 7037-7046.	1.2	30
39	The reactions CH <sub>4</sub> +OH→P and CH <sub>4</sub> +OD→CH <sub>3</sub> +HOD as a test of current direct dynamics multicoefficient methods to determine variational transition state rate constants. II. <i>Journal of Chemical Physics</i> , 2001, 115, 4515-4526.	1.2	29
40	A Fast Radical Chain Mechanism in the Polyfluoroalkoxylation of Aromatics through NO <sub>2</sub> Group Displacement. <i>Mechanistic and Theoretical Studies. Journal of Organic Chemistry</i> , 2005, 70, 1718-1727.	1.7	29
41	The nucleophilic aromatic photosubstitutions of 4,5-dinitroveratrole with amines. <i>Tetrahedron</i> , 1987, 43, 351-360.	1.0	28
42	Thermodynamics, Kinetics, and Dynamics of the Two Alternative Aniomolytic Fragmentations of C=O Bonds: An Electrochemical and Theoretical Study. <i>Journal of the American Chemical Society</i> , 2002, 124, 4708-4715.	6.6	28
43	Electronic structure study of the initiation routes of the dimethyl sulfide oxidation by OH. <i>Journal of Computational Chemistry</i> , 2005, 26, 569-583.	1.5	27
44	Mechanism of the Hydride Transfer between <i>Anabaena</i> Tyr303Ser FNR <sub>ox</sub> and NADP <sup>+</sup> /H. A Combined Pre-Steady-State Kinetic/Ensemble-Averaged Transition-State Theory with Multidimensional Tunneling Study. <i>Journal of Physical Chemistry B</i> , 2010, 114, 3368-3379.	1.2	27
45	Geometry optimization and transition state search in enzymes: Different options in the microiterative method. <i>International Journal of Quantum Chemistry</i> , 2004, 98, 367-377.	1.0	26
46	The curvature of the Arrhenius plots predicted by conventional canonical transition-state theory in the absence of tunneling. <i>Theoretical Chemistry Accounts</i> , 2003, 110, 352-357.	0.5	25
47	A QM/MM study of the phosphoryl transfer to the Kemptide substrate catalyzed by protein kinase A. The effect of the phosphorylation state of the protein on the mechanism. <i>Physical Chemistry Chemical Physics</i> , 2011, 13, 530-539.	1.3	25
48	The role of many-body interactions in the stability of hydrated Cu <sup>2+</sup> clusters. <i>Chemical Physics</i> , 1990, 141, 379-392.	0.9	23
49	Reaction-Path and Dual-Level Dynamics Calculations of the CH <sub>3</sub> F + OH Reaction. <i>Journal of Physical Chemistry A</i> , 1998, 102, 10715-10722.	1.1	23
50	Photo-oxidation of lipids by singlet oxygen: a theoretical study. <i>Chemical Physics Letters</i> , 2004, 398, 336-342.	1.2	23
51	Variational Transition-State Theory Study of the Dimethyl Sulfoxide (DMSO) and OH Reaction. <i>Journal of Physical Chemistry A</i> , 2006, 110, 798-808.	1.1	23
52	How the Substrate d-Glutamate Drives the Catalytic Action of <i>Bacillus subtilis</i> Glutamate Racemase. <i>Journal of the American Chemical Society</i> , 2009, 131, 3509-3521.	6.6	23
53	A QM/MM Exploration of the Potential Energy Surface of Pyruvate to Lactate Transformation Catalyzed by LDH. Improving the Accuracy of Semiempirical Descriptions. <i>Journal of Chemical Theory and Computation</i> , 2005, 1, 750-761.	2.3	22
54	Computational insight into the catalytic implication of head/tail-first orientation of arachidonic acid in human 5-lipoxygenase: consequences for the positional specificity of oxygenation. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 23017-23035.	1.3	22

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55	Theoretical study of the role of arginine 127 in the water-promoted mechanism of peptide cleavage by carboxypeptidase A. <i>New Journal of Chemistry</i> , 1998, 22, 319-326.	1.4	21
56	Variational Transition State Calculations of the CH <sub>2</sub> F <sub>2</sub> + OH Hydrogen Abstraction Reaction. <i>Journal of Physical Chemistry A</i> , 2001, 105, 10553-10561.	1.1	21
57	Kinetic isotope effects in chemical and biochemical reactions: physical basis and theoretical methods of calculation. <i>Wiley Interdisciplinary Reviews: Computational Molecular Science</i> , 2016, 6, 584-603.	6.2	21
58	Explanation of Deuterium and Muonium Kinetic Isotope Effects for Hydrogen Atom Addition to an Olefin. <i>Journal of the American Chemical Society</i> , 1998, 120, 12141-12142.	6.6	20
59	Hydrogen Abstraction by Soybean Lipoxygenase-1. Density Functional Theory Study on Active Site Models in Terms of Gibbs Free Energies. <i>Journal of Physical Chemistry B</i> , 2004, 108, 13831-13838.	1.2	20
60	SP20 Phosphorylation Reaction Catalyzed by Protein Kinase A: QM/MM Calculations Based on Recently Determined Crystallographic Structures. <i>ACS Catalysis</i> , 2015, 5, 4897-4912.	5.5	19
61	Inhibition of Mammalian 15-Lipoxygenase by Three Ebselen-like Drugs. A QM/MM and MM/PBSA Comparative Study. <i>Journal of Physical Chemistry A</i> , 2017, 121, 9752-9763.	1.1	19
62	Variational Transition-State Theory with Multidimensional, Semiclassical, Ground-State Transmission Coefficients. <i>ACS Symposium Series</i> , 1992, , 16-36.	0.5	18
63	On the water-promoted mechanism of peptide cleavage by carboxypeptidase A. A theoretical study. <i>Canadian Journal of Chemistry</i> , 1994, 72, 2077-2083.	0.6	18
64	A QM/MM study of Kemptide phosphorylation catalyzed by protein kinase A. The role of Asp166 as a general acid/base catalyst. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 3497-3511.	1.3	18
65	How Can Linoleic Acid Be the Preferential Substrate of the Enzyme 15-Lipoxygenase-1? A QM/MM Approach. <i>Journal of Physical Chemistry B</i> , 2016, 120, 1950-1960.	1.2	18
66	Comparing Hydrolysis and Transglycosylation Reactions Catalyzed by <i>Thermus thermophilus</i> β-Glycosidase. A Combined MD and QM/MM Study. <i>Frontiers in Chemistry</i> , 2019, 7, 200.	1.8	18
67	Effect of a complex formation on the calculated low-pressure rate constant of a bimolecular gas-phase reaction governed by tunneling. <i>Journal of Computational Chemistry</i> , 1999, 20, 1685-1692.	1.5	17
68	Effective way of modeling chemical catalysis: Empirical valence bond picture of role of solvent and catalyst in alkylation reactions. <i>Journal of Computational Chemistry</i> , 2000, 21, 607-625.	1.5	17
69	An Insight into the Regiospecificity of Linoleic Acid Peroxidation Catalyzed by Mammalian 15-Lipoxygenases. <i>Journal of Physical Chemistry B</i> , 2013, 117, 3747-3754.	1.2	17
70	Role of Arg403 for thermostability and catalytic activity of rabbit 12/15-lipoxygenase. <i>Biochimica Et Biophysica Acta - Molecular and Cell Biology of Lipids</i> , 2013, 1831, 1079-1088.	1.2	17
71	Understanding the Molecular Mechanism of the Ala-versus-Gly Concept Controlling the Product Specificity in Reactions Catalyzed by Lipoxygenases: A Combined Molecular Dynamics and QM/MM Study of Coral β-Lipoxygenase. <i>ACS Catalysis</i> , 2017, 7, 4854-4866.	5.5	17
72	The search for stationary points on a quantum mechanical/molecular mechanical potential-energy surface. <i>Theoretical Chemistry Accounts</i> , 2002, 107, 147-153.	0.5	16

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73	Canonical Variational Transition-State Theory Study of the CF <sub>3</sub> CH <sub>2</sub> CH <sub>3</sub> + OH Reaction. <i>Journal of Physical Chemistry B</i> , 2008, 112, 328-335.	1.2	16
74	Excited states and electronic spectra of monosubstituted benzenes. An AM1 study. <i>Spectrochimica Acta Part A: Molecular Spectroscopy</i> , 1988, 44, 1427-1434.	0.1	15
75	A PM3/d specific reaction parameterization for iron atom in the hydrogen abstraction catalyzed by soybean lipoxygenase-1. <i>Journal of Computational Chemistry</i> , 2007, 28, 997-1005.	1.5	15
76	Substrate binding to mammalian 15-lipoxygenase. <i>Journal of Computer-Aided Molecular Design</i> , 2011, 25, 825-835.	1.3	15
77	Theoretical study of several Fe(H <sub>2</sub> O) <sub>n</sub> +clusters at different temperatures. <i>International Journal of Quantum Chemistry</i> , 1986, 29, 1373-1382.	1.0	14
78	How important is the refinement of transition state structures in enzymatic reactions?. <i>Computational and Theoretical Chemistry</i> , 2003, 632, 297-307.	1.5	14
79	New Insights into the Reaction Mechanism Catalyzed by the Glutamate Racemase Enzyme: A pH Titration Curves and Classical Molecular Dynamics Simulations. <i>Journal of Physical Chemistry B</i> , 2007, 111, 2385-2397.	1.2	13
80	Mutagenesis of Sequence Determinants of Truncated Porcine ALOX15 Induces Changes in the Reaction Specificity by Altering the Catalytic Mechanism of Initial Hydrogen Abstraction. <i>Chemistry - A European Journal</i> , 2018, 24, 962-973.	1.7	13
81	Mutations of Triad Determinants Changes the Substrate Alignment at the Catalytic Center of Human ALOX5. <i>ACS Chemical Biology</i> , 2019, 14, 2768-2782.	1.6	13
82	Rate constants of gas-phase hydrogen abstraction reactions: a balance between the association and the abstraction dynamical bottlenecks. <i>Computational and Theoretical Chemistry</i> , 2004, 709, 35-43.	1.5	12
83	Rate Constants for the Hydrogen Abstractions in the OH-Initiated Oxidation of Glycolaldehyde. A Variational Transition-state Theory Calculation. <i>Journal of Physical Chemistry A</i> , 2004, 108, 5117-5125.	1.1	12
84	Theoretical Analysis of the Catalytic Mechanism of Helicobacter pylori Glutamate Racemase. <i>Journal of Physical Chemistry B</i> , 2012, 116, 12406-12414.	1.2	12
85	A Monte Carlo simulation of free energy relationships for the electron transfer reaction between Fe <sup>+</sup> and Fe <sup>2+</sup> in water. <i>Journal of Computational Chemistry</i> , 1991, 12, 1165-1171.	1.5	11
86	The <sup>1</sup> H NMR Chemical Shift for the Hydroxy Proton of 4-(Dimethylamino)-2-hydroxychalcone in Chloroform: A Theoretical Approach to Its Inverse Dependence on the Temperature. <i>Organic Letters</i> , 2001, 3, 589-592.	2.4	11
87	Test of variational transition state theory with multidimensional tunneling contributions against experimental kinetic isotope effects for the CH <sub>n</sub> D <sub>4-n</sub> + OH <sup>†</sup> P (n=0, 4) reactions. <i>Theoretical Chemistry Accounts</i> , 2002, 108, 38-40.	0.5	11
88	Kinetic Study on the Reaction of OH Radical with Dimethyl Sulfide in the Absence of Oxygen. <i>ChemPhysChem</i> , 2007, 8, 255-263.	1.0	11
89	On the Regio- and Stereospecificity of Arachidonic Acid Peroxidation Catalyzed by Mammalian 15-Lipoxygenases: A Combined Molecular Dynamics and QM/MM Study. <i>ChemPhysChem</i> , 2013, 14, 3777-3787.	1.0	11
90	Regio- and Stereospecificity in the Oxygenation of Arachidonic Acid Catalyzed by Leu597 Mutants of Rabbit 15-Lipoxygenase: A QM/MM Study. <i>ChemPhysChem</i> , 2014, 15, 2303-2310.	1.0	11



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91	A QM/MM study of the associative mechanism for the phosphorylation reaction catalyzed by protein kinase A and its D166A mutant. <i>Journal of Computer-Aided Molecular Design</i> , 2014, 28, 1077-1091.	1.3	11
92	Kinetic Isotope Effects as Tools To Reveal Solvation Changes Accompanying a Proton Transfer. A Canonical Unified Statistical Theory Calculation. <i>The Journal of Physical Chemistry</i> , 1996, 100, 19389-19397.	2.9	10
93	Reaction Mechanism of the Mandelate Anion Racemization Catalyzed by Mandelate Racemase Enzyme: A QM/MM Molecular Dynamics Free Energy Study. <i>Journal of Physical Chemistry B</i> , 2005, 109, 21089-21101.	1.2	10
94	A Theoretical Study of the Competitive Homolytic/Heterolytic Anionolytic Cleavages of C <sup>+</sup> O Alkyl Ether Bonds. <i>Journal of Organic Chemistry</i> , 2005, 70, 540-548.	1.7	10
95	An intermolecular potential function for the Fe(II)-H <sub>2</sub> O system from ab initio calculations. <i>International Journal of Quantum Chemistry</i> , 1986, 30, 663-670.	1.0	9
96	The Cu+H <sub>2</sub> O interaction potential and its application to the study of [Cu(H <sub>2</sub> O) <sub>n</sub> ]+clusters at different temperatures. <i>Journal of the Chemical Society, Faraday Transactions 2</i> , 1988, 84, 693-704.	1.1	9
97	On the interpolation of the frequencies of vibrational modes in variational transition state calculations: an adiabatic or diabatic scheme?. <i>Molecular Physics</i> , 1996, 89, 633-644.	0.8	9
98	On the modulation of the substrate activity for the racemization catalyzed by mandelate racemase enzyme. A QM/MM study. <i>Physical Chemistry Chemical Physics</i> , 2002, 4, 5365-5371.	1.3	9
99	Dependence of the rate constants on the treatment of internal rotation modes: The reaction OH + CH <sub>3</sub> SH → CH <sub>3</sub> S + H <sub>2</sub> O as an example. <i>Journal of Computational Chemistry</i> , 2003, 24, 701-706.	1.5	9
100	A Molecular Dynamics Simulation of the Binding Modes of d-Glutamate and d-Glutamine to Glutamate Racemase. <i>Journal of Chemical Theory and Computation</i> , 2005, 1, 737-749.	2.3	9
101	Methanesulfinic Acid Reaction with OH: Mechanism, Rate Constants, and Atmospheric Implications. <i>Journal of Physical Chemistry A</i> , 2007, 111, 7825-7832.	1.1	9
102	Formation pathways of DMSO from DMS+OH in the presence of O <sub>2</sub> and NO <sub>x</sub> : A theoretical study. <i>Journal of Computational Chemistry</i> , 2009, 30, 173-182.	1.5	9
103	Influence of the enzyme phosphorylation state and the substrate on PKA enzyme dynamics. <i>Biophysical Chemistry</i> , 2012, 161, 17-28.	1.5	9
104	On the evaluation of quasi-thermodynamic magnitudes from rate constant values. Influence of the variational and tunnelling contributions. <i>Chemical Physics Letters</i> , 2002, 353, 154-162.	1.2	8
105	Methyl Vinyl Ketone+OH and Methacrolein+OH Oxidation Reactions: A Master Equation Analysis of the Pressure- and Temperature-Dependent Rate Constants. <i>Chemistry - A European Journal</i> , 2007, 13, 1180-1190.	1.7	8
106	Pressure Dependence in the Methyl Vinyl Ketone+OH and Methacrolein+OH Oxidation Reactions: An Electronic Structure Study. <i>ChemPhysChem</i> , 2005, 6, 1567-1573.	1.0	7
107	Comparative study of the preactive protein kinase A Michaelis complex with Kemptide substrate. <i>Journal of Computer-Aided Molecular Design</i> , 2007, 21, 603-615.	1.3	7
108	A variational transition state theory description of periselectivity effects on cycloadditions of ketenes with cyclopentadiene. <i>Theoretical Chemistry Accounts</i> , 2011, 128, 569-577.	0.5	7

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109	Introducing Mutations to Modify the C13/C9 Ratio in Linoleic Acid Oxygenations Catalyzed by Rabbit 15-Lipoxygenase: A QM/MM and MD Study. <i>ChemPhysChem</i> , 2014, 15, 4049-4054.	1.0	7
110	Theoretical study of the unimolecular dissociation of the acetone cation radical. <i>Molecular Physics</i> , 1997, 92, 393-398.	0.8	6
111	Formation pathways of CH <sub>3</sub> SOH from CH <sub>3</sub> S(OH)CH <sub>3</sub> in the presence of O <sub>2</sub> : a theoretical study. <i>Theoretical Chemistry Accounts</i> , 2009, 123, 93-103.	0.5	6
112	Understanding how cAMP-dependent protein kinase can catalyze phosphoryl transfer in the presence of Ca <sup>2+</sup> and Sr <sup>2+</sup> : a QM/MM study. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 10377-10394.	1.3	6
113	Unraveling the Molecular Details of the Complete Mechanism That Governs the Synthesis of Prostaglandin G <sub>2</sub> Catalyzed by Cyclooxygenase-2. <i>ACS Omega</i> , 2019, 4, 2063-2074.	1.6	6
114	Understanding the Molecular Details of the Mechanism That Governs the Oxidation of Arachidonic Acid Catalyzed by Aspirin-Acetylated Cyclooxygenase-2. <i>ACS Catalysis</i> , 2020, 10, 138-153.	5.5	6
115	A role of Gln596 in fine-tuning mammalian ALOX15 specificity, protein stability and allosteric properties. <i>Biochimica Et Biophysica Acta - Molecular and Cell Biology of Lipids</i> , 2020, 1865, 158680.	1.2	6
116	Formation pathways of DMSO <sub>2</sub> in the addition channel of the OH-initiated DMS oxidation: A theoretical study. <i>Journal of Computational Chemistry</i> , 2009, 30, 1477-1489.	1.5	5
117	A theoretical study of the DMSO·OH scavenging reaction by OH. Its relevance in DMSO formation. <i>Computational and Theoretical Chemistry</i> , 2011, 965, 249-258.	1.1	5
118	Conformational Heterogeneity and Cooperative Effects of Mammalian ALOX15. <i>International Journal of Molecular Sciences</i> , 2021, 22, 3285.	1.8	5
119	Accounting for the instantaneous disorder in the enzyme-substrate Michaelis complex to calculate the Gibbs free energy barrier of an enzyme reaction. <i>Physical Chemistry Chemical Physics</i> , 2021, 23, 13042-13054.	1.3	5
120	Analytical potential from ab initio calculations for the Fe <sup>+</sup> -H <sub>2</sub> O and Fe <sup>0</sup> -H <sub>2</sub> O systems. <i>International Journal of Quantum Chemistry</i> , 1988, 33, 77-85.	1.0	4
121	Benchmark calculations on models of the phosphoryl transfer reaction catalyzed by protein kinase A. <i>Theoretical Chemistry Accounts</i> , 2009, 124, 197-215.	0.5	4
122	Is Regioselectivity in the Enzyme-Catalyzed Hydroperoxidation of Arachidonic Acid Necessarily Determined by Hydrogen Abstraction? The Case of Rabbit Leu597Ala/Ile663Ala ALOX15 Mutant. <i>ChemPhysChem</i> , 2016, 17, 3321-3332.	1.0	4
123	Unraveling how the Gly526Ser mutation arrests prostaglandin formation from arachidonic acid catalyzed by cyclooxygenase-2: a combined molecular dynamics and QM/MM study. <i>RSC Advances</i> , 2020, 10, 986-997.	1.7	4
124	N-Substituted 5-(1-H-Indol-2-yl)-2-methoxyanilines Are Allosteric Inhibitors of the Linoleate Oxygenase Activity of Selected Mammalian ALOX15 Orthologs: Mechanism of Action. <i>Journal of Medicinal Chemistry</i> , 2022, 65, 1979-1995.	2.9	4
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