

Ángels González-Lafont

List of Publications by Year in descending order

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140
papers

3,903
citations

147726

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times ranked

3072
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| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 1 | <i>N</i> -Substituted 5-(1 <i>H</i> -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 |
| 2 | The role of acetylated cyclooxygenase-2 in the biosynthesis of resolvins precursors derived from eicosapentaenoic acid. <i>Organic and Biomolecular Chemistry</i> , 2022, 20, 1260-1274. | 1.5 | 3 |
| 3 | Theoretical Characterization of the Step-by-Step Mechanism of Conversion of Leukotriene A4 to Leukotriene B4 Catalysed by the Enzyme Leukotriene A4 Hydrolase. <i>International Journal of Molecular Sciences</i> , 2022, 23, 3140. | 1.8 | 3 |
| 4 | Molecular Insights into the Regulation of 3-Phosphoinositide-Dependent Protein Kinase 1: Modeling the Interaction between the Kinase and the Pleckstrin Homology Domains. <i>ACS Omega</i> , 2022, 7, 25186-25199. | 1.6 | 4 |
| 5 | Conformational Heterogeneity and Cooperative Effects of Mammalian ALOX15. <i>International Journal of Molecular Sciences</i> , 2021, 22, 3285. | 1.8 | 5 |
| 6 | 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 |
| 7 | 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 |
| 8 | A protocol to obtain multidimensional quantum tunneling corrections derived from QM(DFT)/MM calculations for an enzyme reaction. <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 27385-27393. | 1.3 | 2 |
| 9 | Deciphering the Molecular Details of the Lipoxin Formation Mechanism in the 5 <i>S</i> ,15 <i>S</i> -DiHpETE Biosynthetic Pathway Catalyzed by Reticulocyte 15-Lipoxygenase-1. <i>Journal of Physical Chemistry B</i> , 2020, 124, 11406-11418. | 1.2 | 1 |
| 10 | 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 |
| 11 | 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 |
| 12 | 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 |
| 13 | Unraveling the Molecular Details of the Complete Mechanism That Governs the Synthesis of Prostaglandin G2 Catalyzed by Cyclooxygenase-2. <i>ACS Omega</i> , 2019, 4, 2063-2074. | 1.6 | 6 |
| 14 | Synthetic Photoswitchable Neurotransmitters Based on Bridged Azobenzenes. <i>Organic Letters</i> , 2019, 21, 3780-3784. | 2.4 | 42 |
| 15 | 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 |
| 16 | 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 |
| 17 | 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 δ -Lipoxygenase. <i>ACS Catalysis</i> , 2017, 7, 4854-4866. | 5.5 | 17 |
| 18 | Understanding how cAMP-dependent protein kinase can catalyze phosphoryl transfer in the presence of Ca ²⁺ and Sr ²⁺ : a QM/MM study. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 10377-10394. | 1.3 | 6 |

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|----|---|-----|-----------|
| 19 | 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 |
| 20 | 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 |
| 21 | 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 |
| 22 | 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 |
| 23 | 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 |
| 24 | 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 |
| 25 | 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 |
| 26 | 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 |
| 27 | 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 |
| 28 | 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 |
| 29 | 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 |
| 30 | 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 |
| 31 | 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 |
| 32 | 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 |
| 33 | 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} | 1.0 | 11 |
| 34 | 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 |
| 35 | Theoretical Analysis of the Catalytic Mechanism of <i>Helicobacter pylori</i> Glutamate Racemase. <i>Journal of Physical Chemistry B</i> , 2012, 116, 12406-12414. | 1.2 | 12 |
| 36 | Theoretical Study of the Mechanism of the Hydride Transfer between Ferredoxin-NADP ⁺ Reductase and NADP ⁺ : The Role of Tyr303. <i>Journal of the American Chemical Society</i> , 2012, 134, 20544-20553. | 6.6 | 40 |

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|----|--|-----|-----------|
| 37 | 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 |
| 38 | Influence of the enzyme phosphorylation state and the substrate on PKA enzyme dynamics. <i>Biophysical Chemistry</i> , 2012, 161, 17-28. | 1.5 | 9 |
| 39 | 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 |
| 40 | Substrate binding to mammalian 15-lipoxygenase. <i>Journal of Computer-Aided Molecular Design</i> , 2011, 25, 825-835. | 1.3 | 15 |
| 41 | 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 |
| 42 | Variational transition state theory study of the rate constant of the DMS-OH scavenging reaction by O ₂ . <i>Journal of Computational Chemistry</i> , 2011, 32, 2104-2118. | 1.5 | 2 |
| 43 | A theoretical study of the DMS-OH scavenging reaction by OH. Its relevance in DMSO formation. <i>Computational and Theoretical Chemistry</i> , 2011, 965, 249-258. | 1.1 | 5 |
| 44 | 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 |
| 45 | Mechanism of the Hydride Transfer between <i>Anabaena</i> Tyr303Ser FNR _{rd} /FNR _{ox} and NADP ⁺ /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 |
| 46 | Canonical Variational Transition-State Theory Study of the CF ₃ CHFCH ₂ F + OH Reaction. <i>Journal of Physical Chemistry A</i> , 2010, 114, 2768-2777. | 1.1 | 2 |
| 47 | Formation pathways of DMSO from DMS-OH in the presence of O ₂ and NO _x : A theoretical study. <i>Journal of Computational Chemistry</i> , 2009, 30, 173-182. | 1.5 | 9 |
| 48 | Formation pathways of DMSO ₂ 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 |
| 49 | Formation pathways of CH ₃ SOH from CH ₃ S(OH)CH ₃ in the presence of O ₂ : a theoretical study. <i>Theoretical Chemistry Accounts</i> , 2009, 123, 93-103. | 0.5 | 6 |
| 50 | 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 |
| 51 | The effect of electron-withdrawing groups in the fragmentation of the radical anions of benzyl phenyl ethers. <i>Computational and Theoretical Chemistry</i> , 2009, 913, 228-235. | 1.5 | 3 |
| 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 | Canonical Variational Transition-State Theory Study of the CF ₃ CH ₂ CH ₃ + OH Reaction. <i>Journal of Physical Chemistry B</i> , 2008, 112, 328-335. | 1.2 | 16 |
| 54 | 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 |

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|----|---|-----|-----------|
| 55 | 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 |
| 56 | Theoretical Modeling of Hydroxyl-Radical-Induced Lipid Peroxidation Reactions. <i>Journal of Physical Chemistry B</i> , 2007, 111, 5684-5693. | 1.2 | 46 |
| 57 | 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 |
| 58 | 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 |
| 59 | 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 |
| 60 | 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 |
| 61 | Comparative study of the prereactive protein kinase A Michaelis complex with Kempptide substrate. <i>Journal of Computer-Aided Molecular Design</i> , 2007, 21, 603-615. | 1.3 | 7 |
| 62 | 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 |
| 63 | 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 |
| 64 | 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 |
| 65 | 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 |
| 66 | 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 |
| 67 | Enthalpies of formation of isoprene's major oxidation byproducts. <i>Chemical Physics Letters</i> , 2005, 409, 255-259. | 1.2 | 1 |
| 68 | 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 |
| 69 | 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 |
| 70 | 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 |
| 71 | 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 |
| 72 | A Theoretical Study of the Competitive Homolytic/Heterolytic Anionolytic Cleavages of C-O Alkyl Ether Bonds. <i>Journal of Organic Chemistry</i> , 2005, 70, 540-548. | 1.7 | 10 |

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|----|---|-----|-----------|
| 73 | A Fast Radical Chain Mechanism in the Polyfluoroalkoxylation of Aromatics through NO ₂ Group Displacement. Mechanistic and Theoretical Studies. <i>Journal of Organic Chemistry</i> , 2005, 70, 1718-1727. | 1.7 | 29 |
| 74 | 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 |
| 75 | 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 |
| 76 | 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 |
| 77 | 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 |
| 78 | 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 |
| 79 | Photo-oxidation of lipids by singlet oxygen: a theoretical study. <i>Chemical Physics Letters</i> , 2004, 398, 336-342. | 1.2 | 23 |
| 80 | 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 |
| 81 | 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 |
| 82 | 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 |
| 83 | Dependence of the rate constants on the treatment of internal rotation modes: The reaction OH + CH ₃ SH \rightarrow CH ₃ S + H ₂ O as an example. <i>Journal of Computational Chemistry</i> , 2003, 24, 701-706. | 1.5 | 9 |
| 84 | 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 |
| 85 | Determination of enzymatic reaction pathways using QM/MM methods. <i>International Journal of Quantum Chemistry</i> , 2003, 93, 229-244. | 1.0 | 52 |
| 86 | Variational Transition-State Theory Rate Constant Calculations of the OH + CH ₃ SH Reaction and Several Isotopic Variants. <i>Journal of Physical Chemistry A</i> , 2003, 107, 4490-4496. | 1.1 | 30 |
| 87 | 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 |
| 88 | Thermodynamics, Kinetics, and Dynamics of the Two Alternative Anionomolytic Fragmentations of C α -O Bonds: An Electrochemical and Theoretical Study. <i>Journal of the American Chemical Society</i> , 2002, 124, 4708-4715. | 6.6 | 28 |
| 89 | 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 |
| 90 | 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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|-----|---|-----|-----------|
| 91 | Test of variational transition state theory with multidimensional tunneling contributions against experimental kinetic isotope effects for the CH _n D _{4-n} + OH reactions. Theoretical Chemistry Accounts, 2002, 108, 38-40. | 0.5 | 11 |
| 92 | On the evaluation of quasi-thermodynamic magnitudes from rate constant values. Influence of the variational and tunnelling contributions. Chemical Physics Letters, 2002, 353, 154-162. | 1.2 | 8 |
| 93 | Monte Carlo Simulations of Chemical Reactions in Solution. , 2002, , 125-177. | | 0 |
| 94 | The ¹ 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. Organic Letters, 2001, 3, 589-592. | 2.4 | 11 |
| 95 | A QM/MM Study of the Racemization of Vinylglycolate Catalyzed by Mandelate Racemase Enzyme. Journal of the American Chemical Society, 2001, 123, 709-721. | 6.6 | 38 |
| 96 | Variational Transition State Calculations of the CH ₂ F ₂ + OH Hydrogen Abstraction Reaction. Journal of Physical Chemistry A, 2001, 105, 10553-10561. | 1.1 | 21 |
| 97 | The reactions CH _n D _{4-n} + OH and CH ₄ + OD + CH ₃ + HOD as a test of current direct dynamics computational methods to determine variational transition-state rate constants. I. Journal of Chemical Physics, 2001, 114, 2154-2165. | 1.2 | 44 |
| 98 | The reactions CH _n D _{4-n} + OH and CH ₄ + OD + CH ₃ + HOD as a test of current direct dynamics multicoefficient methods to determine variational transition state rate constants. II. Journal of Chemical Physics, 2001, 115, 4515-4526. | 1.2 | 29 |
| 99 | Effective way of modeling chemical catalysis: Empirical valence bond picture of role of solvent and catalyst in alkylation reactions. Journal of Computational Chemistry, 2000, 21, 607-625. | 1.5 | 17 |
| 100 | Effect of a complex formation on the calculated low-pressure rate constant of a bimolecular gas-phase reaction governed by tunneling. Journal of Computational Chemistry, 1999, 20, 1685-1692. | 1.5 | 17 |
| 101 | Mechanism of the Gas-Phase HO + H ₂ O → H ₂ O + OH Reaction and Several Associated Isotope Exchange Reactions: A Canonical Variational Transition State Theory Plus Multidimensional Tunneling Calculation. Journal of Physical Chemistry A, 1999, 103, 1044-1053. | 1.1 | 34 |
| 102 | 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 ₂ H ₄ → C ₂ H ₅ . Journal of Physical Chemistry A, 1999, 103, 5061-5074. | 1.1 | 50 |
| 103 | Asymmetry of the Hydrogen Bond of Hydrogen Phthalate Anion in Solution. A QM/MM Study. Journal of the American Chemical Society, 1999, 121, 9198-9207. | 6.6 | 51 |
| 104 | Effect of the hydrogen bond network in carbonic anhydrase II zinc binding site. A theoretical study. Canadian Journal of Chemistry, 1998, 76, 1027-1032. | 0.6 | 3 |
| 105 | Theoretical study of the role of arginine 127 in the water-promoted mechanism of peptide cleavage by carboxypeptidase A. New Journal of Chemistry, 1998, 22, 319-326. | 1.4 | 21 |
| 106 | Temperature Dependence of Proton NMR Chemical Shift As a Criterion To Identify Low-Barrier Hydrogen Bonds. Journal of the American Chemical Society, 1998, 120, 10203-10209. | 6.6 | 53 |
| 107 | Explanation of Deuterium and Muonium Kinetic Isotope Effects for Hydrogen Atom Addition to an Olefin. Journal of the American Chemical Society, 1998, 120, 12141-12142. | 6.6 | 20 |
| 108 | Reaction-Path and Dual-Level Dynamics Calculations of the CH ₃ F + OH Reaction. Journal of Physical Chemistry A, 1998, 102, 10715-10722. | 1.1 | 23 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 109 | 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 |
| 110 | Entropic Effects on the Dynamical Bottleneck Location and Tunneling Contributions for $C_2H_4 + H^+$ and $C_2H_5^+$. Variable Scaling of External Correlation Energy for Association Reactions. <i>Journal of the American Chemical Society</i> , 1998, 120, 5559-5567. | 6.6 | 30 |
| 111 | Theoretical study of the unimolecular dissociation of the acetone cation radical. <i>Molecular Physics</i> , 1997, 92, 393-398. | 0.8 | 6 |
| 112 | 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 |
| 113 | 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 |
| 114 | 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 |
| 115 | Understanding the activation energy trends for the $C_2H_4 + OH^+ \rightarrow C_2H_4OH$ reaction by using canonical variational transition state theory. <i>Journal of Chemical Physics</i> , 1997, 107, 7266-7274. | 1.2 | 50 |
| 116 | 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 |
| 117 | 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 |
| 118 | Choice of the reaction coordinate in electron-transfer reactions in solution. <i>Journal of the Chemical Society, Faraday Transactions</i> , 1995, 91, 1451-1455. | 1.7 | 1 |
| 119 | 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 |
| 120 | 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 |
| 121 | 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 |
| 122 | The mechanism of exchange of intramolecularly hydrogen-bonded protons in a diamide. <i>Journal of the Chemical Society Perkin Transactions II</i> , 1992, , 1621-1624. | 0.9 | 1 |
| 123 | Variational Transition-State Theory with Multidimensional, Semiclassical, Ground-State Transmission Coefficients. <i>ACS Symposium Series</i> , 1992, , 16-36. | 0.5 | 18 |
| 124 | Temperature dependence of the kinetic isotope effect for a gas-phase S_N2 reaction: $Cl^- + CH_3Br$. <i>Journal of the American Chemical Society</i> , 1991, 113, 9404-9405. | 6.6 | 88 |
| 125 | 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 |
| 126 | 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 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 127 | A Monte Carlo simulation of free energy relationships for the electron transfer reaction between Fe ⁺ and Fe ²⁺ in water. <i>Journal of Computational Chemistry</i> , 1991, 12, 1165-1171. | 1.5 | 11 |
| 128 | Molecular modeling of solvation. Cl ⁻ (D ₂ O). <i>Journal of Chemical Physics</i> , 1991, 94, 5544-5558. | 1.2 | 42 |
| 129 | The role of many-body interactions in the stability of hydrated Cu ²⁺ clusters. <i>Chemical Physics</i> , 1990, 141, 379-392. | 0.9 | 23 |
| 130 | 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 |
| 131 | Effect of solvent fluctuations in the electron-transfer process between two Fe ⁺ ions. <i>Journal of the Chemical Society Faraday Transactions I</i> , 1989, 85, 1207. | 1.0 | 2 |
| 132 | On constraining solvent molecule displacements in electron-transfer reactions: a critical discussion. <i>The Journal of Physical Chemistry</i> , 1989, 93, 4677-4682. | 2.9 | 3 |
| 133 | Hydration of Fe ⁺ : A Monte Carlo simulation of water clusters and of a dilute aqueous solution. <i>Journal of Computational Chemistry</i> , 1988, 9, 819-826. | 1.5 | 3 |
| 134 | Analytical potential from ab initio calculations for the Fe ⁺ -H ₂ O and Fe ⁰ -H ₂ O systems. <i>International Journal of Quantum Chemistry</i> , 1988, 33, 77-85. | 1.0 | 4 |
| 135 | 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 |
| 136 | The Cu ⁺ -H ₂ O interaction potential and its application to the study of [Cu(H ₂ O) _n] ⁺ clusters at different temperatures. <i>Journal of the Chemical Society, Faraday Transactions 2</i> , 1988, 84, 693-704. | 1.1 | 9 |
| 137 | The nucleophilic aromatic photosubstitutions of 4,5-dinitroveratrole with amines. <i>Tetrahedron</i> , 1987, 43, 351-360. | 1.0 | 28 |
| 138 | A Monte Carlo simulation of Fe ²⁺ aqueous solvation. <i>Chemical Physics</i> , 1987, 111, 241-247. | 0.9 | 30 |
| 139 | Theoretical study of several Fe(H ₂ O) _n ²⁺ clusters at different temperatures. <i>International Journal of Quantum Chemistry</i> , 1986, 29, 1373-1382. | 1.0 | 14 |
| 140 | An intermolecular potential function for the Fe(II)-H ₂ O system from ab initio calculations. <i>International Journal of Quantum Chemistry</i> , 1986, 30, 663-670. | 1.0 | 9 |