

# John P Richard

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/2605158/publications.pdf>

Version: 2024-02-01

232  
papers

9,404  
citations

31902

53  
h-index

56606

83  
g-index

247  
all docs

247  
docs citations

247  
times ranked

5179  
citing authors

#	ARTICLE	IF	CITATIONS
1	Formation and Stability of N-Heterocyclic Carbenes in Water: The Carbon Acid pKa of Imidazolium Cations in Aqueous Solution. <i>Journal of the American Chemical Society</i> , 2004, 126, 4366-4374.	6.6	476
2	Mechanism for the formation of methylglyoxal from triosephosphates. <i>Biochemical Society Transactions</i> , 1993, 21, 549-553.	1.6	233
3	Acid-base catalysis of the elimination and isomerization reactions of triose phosphates. <i>Journal of the American Chemical Society</i> , 1984, 106, 4926-4936.	6.6	224
4	Physical and Kinetic Analysis of the Cooperative Role of Metal Ions in Catalysis of Phosphodiester Cleavage by a Dinuclear Zn(II) Complex. <i>Journal of the American Chemical Society</i> , 2003, 125, 1988-1993.	6.6	224
5	Kinetic parameters for the elimination reaction catalyzed by triosephosphate isomerase and an estimation of the reaction's physiological significance. <i>Biochemistry</i> , 1991, 30, 4581-4585.	1.2	211
6	Determination of the pKa of Ethyl Acetate: A Brønsted Correlation for Deprotonation of a Simple Oxygen Ester in Aqueous Solution. <i>Journal of the American Chemical Society</i> , 1996, 118, 3129-3141.	6.6	179
7	A role for flexible loops in enzyme catalysis. <i>Current Opinion in Structural Biology</i> , 2010, 20, 702-710.	2.6	149
8	Formation and Stability of Carbocations and Carbanions in Water and Intrinsic Barriers to Their Reactions. <i>Accounts of Chemical Research</i> , 2001, 34, 981-988.	7.6	146
9	Cooperativity between Metal Ions in the Cleavage of Phosphate Diesters and RNA by Dinuclear Zn(II) Catalysts. <i>Inorganic Chemistry</i> , 2003, 42, 7737-7746.	1.9	143
10	Reactions of substituted 1-phenylethyl carbocations with alcohols and other nucleophilic reagents. <i>Journal of the American Chemical Society</i> , 1984, 106, 1373-1383.	6.6	136
11	Formation and stability of ring-substituted 1-phenylethyl carbocations. <i>Journal of the American Chemical Society</i> , 1984, 106, 1361-1372.	6.6	135
12	Concerted bimolecular substitution reactions of 1-phenylethyl derivatives. <i>Journal of the American Chemical Society</i> , 1984, 106, 1383-1396.	6.6	124
13	A consideration of the barrier for carbocation-nucleophile combination reactions. <i>Tetrahedron</i> , 1995, 51, 1535-1573.	1.0	122
14	Formation and Stability of Organic Zwitterions in Aqueous Solution: Enolates of the Amino Acid Glycine and Its Derivatives. <i>Journal of the American Chemical Society</i> , 2000, 122, 9373-9385.	6.6	114
15	The generation and reactions of quinone methides. <i>Advances in Physical Organic Chemistry</i> , 2011, 45, 39-91.	0.5	114
16	Experimental and Computational Determination of the Effect of the Cyano Group on Carbon Acidity in Water. <i>Journal of the American Chemical Society</i> , 1999, 121, 715-726.	6.6	110
17	Formation and Stability of Enolates of Acetamide and Acetate Anion: An Eigen Plot for Proton Transfer at the Carbonyl Carbon. <i>Journal of the American Chemical Society</i> , 2002, 124, 2957-2968.	6.6	108
18	Phosphate Binding Energy and Catalysis by Small and Large Molecules. <i>Accounts of Chemical Research</i> , 2008, 41, 539-548.	7.6	105

#	ARTICLE	IF	CITATIONS
19	Proton transfer at carbon. <i>Current Opinion in Chemical Biology</i> , 2001, 5, 626-633.	2.8	103
20	Generation and stability of a simple thiol ester enolate in aqueous solution. <i>Journal of the American Chemical Society</i> , 1992, 114, 10297-10302.	6.6	102
21	A simple relationship between carbocation lifetime and reactivity-selectivity relationships for the solvolysis of ring-substituted 1-phenylethyl derivatives. <i>Journal of the American Chemical Society</i> , 1982, 104, 4689-4691.	6.6	98
22	Enzymatic Catalysis of Proton Transfer at Carbon: Activation of Triosephosphate Isomerase by Phosphite Dianion. <i>Biochemistry</i> , 2007, 46, 5841-5854.	1.2	96
23	Specificity in Transition State Binding: The Pauling Model Revisited. <i>Biochemistry</i> , 2013, 52, 2021-2035.	1.2	96
24	Mechanistic Imperatives for Aldose~Ketose Isomerization in Water: A Specific, General Base- and Metal Ion-Catalyzed Isomerization of Glyceraldehyde with Proton and Hydride Transfer. <i>Journal of the American Chemical Society</i> , 2001, 123, 794-802.	6.6	94
25	Activation of Orotidine 5~Monophosphate Decarboxylase by Phosphite Dianion: The Whole Substrate is the Sum of Two Parts. <i>Journal of the American Chemical Society</i> , 2005, 127, 15708-15709.	6.6	92
26	Enzyme architecture: on the importance of being in a protein cage. <i>Current Opinion in Chemical Biology</i> , 2014, 21, 1-10.	2.8	91
27	Protein Flexibility and Stiffness Enable Efficient Enzymatic Catalysis. <i>Journal of the American Chemical Society</i> , 2019, 141, 3320-3331.	6.6	91
28	Experiments and calculations for determination of the stabilities of benzyl, benzhydryl, and fluorenyl carbocations: antiaromaticity revisited. <i>Journal of the American Chemical Society</i> , 1992, 114, 8032-8041.	6.6	86
29	Stereochemical courses of nucleotidyltransferase and phosphotransferase action. Uridine diphosphate glucose pyrophosphorylase, galactose-1-phosphate uridylyltransferase, adenylate kinase, and nucleoside diphosphate kinase. <i>Biochemistry</i> , 1979, 18, 5548-5556.	1.2	84
30	Solvent Deuterium Isotope Effects on Phosphodiester Cleavage Catalyzed by an Extraordinarily Active Zn(II) Complex. <i>Journal of the American Chemical Society</i> , 2005, 127, 1064-1065.	6.6	80
31	Formation and Stability of a Vinyl Carbanion at the Active Site of Orotidine 5~Monophosphate Decarboxylase: p <i>K</i> <sub>a</sub> of the C-6 Proton of Enzyme-Bound UMP. <i>Journal of the American Chemical Society</i> , 2008, 130, 1574-1575.	6.6	79
32	On the importance of being zwitterionic: enzymatic catalysis of decarboxylation and deprotonation of cationic carbon. <i>Bioorganic Chemistry</i> , 2004, 32, 354-366.	2.0	77
33	Effect of .beta.-fluorine substituents on the rate and equilibrium constants for the reactions of .alpha.-substituted 4-methoxybenzyl carbocations and on the reactivity of a simple quinone methide. <i>Journal of the American Chemical Society</i> , 1990, 112, 9513-9519.	6.6	76
34	Substrate Specificity of an Active Dinuclear Zn(II) Catalyst for Cleavage of RNA Analogues and a Dinucleoside. <i>Journal of the American Chemical Society</i> , 2006, 128, 1615-1621.	6.6	76
35	Mechanism for Nucleophilic Substitution and Elimination Reactions at Tertiary Carbon in Largely Aqueous Solutions: Lifetime of a Simple Tertiary Carbocation. <i>Journal of the American Chemical Society</i> , 1996, 118, 11434-11445.	6.6	75
36	The Enhancement of Enzymatic Rate Accelerations by Brønsted Acid~Base Catalysis. <i>Biochemistry</i> , 1998, 37, 4305-4309.	1.2	75

#	ARTICLE	IF	CITATIONS
37	Contribution of Phosphate Intrinsic Binding Energy to the Enzymatic Rate Acceleration for Triosephosphate Isomerase. <i>Journal of the American Chemical Society</i> , 2001, 123, 11325-11326.	6.6	73
38	Stereochemical course of thiophosphoryl group transfer catalyzed by adenylate kinase. <i>Journal of the American Chemical Society</i> , 1978, 100, 7757-7758.	6.6	69
39	A Paradigm for Enzyme-Catalyzed Proton Transfer at Carbon: Triosephosphate Isomerase. <i>Biochemistry</i> , 2012, 51, 2652-2661.	1.2	69
40	Structure-Activity Relationships and Intrinsic Reaction Barriers for Nucleophile Additions to a Quinone Methide: A Strongly Resonance-Stabilized Carbocation. <i>Journal of the American Chemical Society</i> , 2000, 122, 1664-1674.	6.6	68
41	Structure-Activity Studies on the Cleavage of an RNA Analogue by a Potent Dinuclear Metal Ion Catalyst: A Effect of Changing the Metal Ion. <i>Inorganic Chemistry</i> , 2004, 43, 1743-1750.	1.9	68
42	Concurrent stepwise and concerted substitution reactions of 4-methoxybenzyl derivatives and the lifetime of the 4-methoxybenzyl carbocation. <i>Journal of the American Chemical Society</i> , 1990, 112, 9507-9512.	6.6	66
43	A Substrate in Pieces: Allosteric Activation of Glycerol 3-Phosphate Dehydrogenase (NAD <sup>+</sup> ) by Phosphite Dianion. <i>Biochemistry</i> , 2008, 47, 4575-4582.	1.2	65
44	Pyridoxal 5-phosphate: electrophilic catalyst extraordinaire. <i>Current Opinion in Chemical Biology</i> , 2009, 13, 475-483.	2.8	61
45	Altered Transition State for the Reaction of an RNA Model Catalyzed by a Dinuclear Zinc(II) Catalyst. <i>Journal of the American Chemical Society</i> , 2008, 130, 17858-17866.	6.6	59
46	Mechanism of the Orotidine 5-Monophosphate Decarboxylase-Catalyzed Reaction: Evidence for Substrate Destabilization. <i>Biochemistry</i> , 2009, 48, 5518-5531.	1.2	58
47	Substituent Effects on the Thermodynamic Stability of Imines Formed from Glycine and Aromatic Aldehydes: Implications for the Catalytic Activity of Pyridoxal-5-phosphate. <i>Journal of the American Chemical Society</i> , 2009, 131, 15815-15824.	6.6	58
48	Biological Enolates: Generation and Stability of the Enolate of N-Protonated Glycine Methyl Ester in Water. <i>Journal of the American Chemical Society</i> , 1997, 119, 8375-8376.	6.6	57
49	Glycine Enolates: The Large Effect of Iminium Ion Formation on $\alpha$ -Amino Carbon Acidity. <i>Journal of the American Chemical Society</i> , 2001, 123, 7949-7950.	6.6	57
50	Role of Lys-12 in Catalysis by Triosephosphate Isomerase: A Two-Part Substrate Approach. <i>Biochemistry</i> , 2010, 49, 5377-5389.	1.2	57
51	What Is the Stabilizing Interaction with Nucleophilic Solvents in the Transition State for Solvolysis of Tertiary Derivatives: Nucleophilic Solvent Participation or Nucleophilic Solvation?. <i>Organic Letters</i> , 2001, 3, 2225-2228.	2.4	56
52	General base catalysis of the addition of hydroxylic reagents to unstable carbocations and its disappearance. <i>Journal of the American Chemical Society</i> , 1984, 106, 1396-1401.	6.6	55
53	The extraordinarily long lifetimes and other properties of highly destabilized ring-substituted 1-phenyl-2,2,2-trifluoroethyl carbocations. <i>Journal of the American Chemical Society</i> , 1989, 111, 1455-1465.	6.6	55
54	Hydron Transfer Catalyzed by Triosephosphate Isomerase. Products of Isomerization of (R)-Glyceraldehyde 3-Phosphate in D <sub>2</sub> O. <i>Biochemistry</i> , 2005, 44, 2610-2621.	1.2	55

#	ARTICLE	IF	CITATIONS
55	Hydron Transfer Catalyzed by Triosephosphate Isomerase. Products of the Direct and Phosphite-Activated Isomerization of [ <sup>13</sup> C]-Glycolaldehyde in D <sub>2</sub> O. <i>Biochemistry</i> , 2009, 48, 5769-5778.	1.2	54
56	Structure-Reactivity Relationships for Î²-Galactosidase ( <i>Escherichia coli</i> , lac Z). 4. Mechanism for Reaction of Nucleophiles with the Galactosyl-Enzyme Intermediates of E461G and E461Q Î²-Galactosidases. <i>Biochemistry</i> , 1996, 35, 12387-12401.	1.2	53
57	Formation and Stability of Peptide Enolates in Aqueous Solution. <i>Journal of the American Chemical Society</i> , 2002, 124, 8251-8259.	6.6	53
58	Covalent Catalysis by Pyridoxal: Evaluation of the Effect of the Cofactor on the Carbon Acidity of Glycine. <i>Journal of the American Chemical Society</i> , 2007, 129, 3013-3021.	6.6	51
59	Synthesis of nucleoside [18O]pyrophosphorothioates with chiral [18O]phosphorothioate groups of known configuration. Stereochemical orientations of enzymic phosphorylations of chiral [18O]phosphorothioates. <i>Journal of the American Chemical Society</i> , 1978, 100, 7756-7757.	6.6	50
60	Structure-Reactivity Relationships for Î²-Galactosidase ( <i>Escherichia coli</i> , lac Z). 3. Evidence that Glu-461 Participates in Brønsted Acid-Base Catalysis of Î²-d-Galactopyranosyl Group Transfer. <i>Biochemistry</i> , 1996, 35, 12377-12386.	1.2	49
61	Substituent Effects on Carbocation Stability: The pK <sub>R</sub> for p-Quinone Methide. <i>Journal of the American Chemical Society</i> , 2003, 125, 8814-8819.	6.6	49
62	Glycine Enolates: The Effect of Formation of Iminium Ions to Simple Ketones on Î±-Amino Carbon Acidity and a Comparison with Pyridoxal Iminium Ions. <i>Journal of the American Chemical Society</i> , 2008, 130, 2041-2050.	6.6	46
63	The effects of .alpha.-substituents on the kinetic and thermodynamic stability of 4-methoxybenzyl carbocations: carbocation lifetimes that are independent of their thermodynamic stability. <i>Journal of Organic Chemistry</i> , 1993, 58, 6057-6066.	1.7	45
64	Structure-reactivity relationships for .beta.-galactosidase ( <i>Escherichia coli</i> , lac Z). 2. Reactions of the galactosyl-enzyme intermediate with alcohols and azide ion. <i>Biochemistry</i> , 1995, 34, 11713-11724.	1.2	45
65	The Activating Oxydianion Binding Domain for Enzyme-Catalyzed Proton Transfer, Hydride Transfer, and Decarboxylation: Specificity and Enzyme Architecture. <i>Journal of the American Chemical Society</i> , 2015, 137, 1372-1382.	6.6	45
66	Concerted S <sub>N</sub> 2 displacement reactions of 1-phenylethyl chlorides. <i>Journal of the American Chemical Society</i> , 1982, 104, 4691-4692.	6.6	44
67	Spontaneous Cleavage of gem-Diazides: A Comparison of the Effects of .alpha.-Azido and Other Electron-Donating Groups on the Kinetic and Thermodynamic Stability of Benzyl and Alkyl Carbocations in Aqueous Solution. <i>Journal of the American Chemical Society</i> , 1995, 117, 5198-5205.	6.6	44
68	Hydron Transfer Catalyzed by Triosephosphate Isomerase. Products of Isomerization of Dihydroxyacetone Phosphate in D <sub>2</sub> O. <i>Biochemistry</i> , 2005, 44, 2622-2631.	1.2	44
69	Formation and Stability of Mononuclear and Dinuclear Eu(III) Complexes and Their Catalytic Reactivity Toward Cleavage of an RNA Analog. <i>Inorganic Chemistry</i> , 2007, 46, 7169-7177.	1.9	44
70	Product Deuterium Isotope Effect for Orotidine 5'-Monophosphate Decarboxylase: Evidence for the Existence of a Short-Lived Carbanion Intermediate. <i>Journal of the American Chemical Society</i> , 2007, 129, 12946-12947.	6.6	44
71	Substrate specificity for catalysis of phosphodiester cleavage by a dinuclear Zn(ii) complex. <i>Chemical Communications</i> , 2003, , 2832.	2.2	43
72	Activation of R235A Mutant Orotidine 5'-Monophosphate Decarboxylase by the Guanidinium Cation: Effective Molarity of the Cationic Side Chain of Arg-235. <i>Biochemistry</i> , 2010, 49, 824-826.	1.2	41

#	ARTICLE	IF	CITATIONS
73	OMP Decarboxylase: Phosphodianion Binding Energy Is Used To Stabilize a Vinyl Carbanion Intermediate. <i>Journal of the American Chemical Society</i> , 2011, 133, 6545-6548.	6.6	41
74	Magnitude and Origin of the Enhanced Basicity of the Catalytic Glutamate of Triosephosphate Isomerase. <i>Journal of the American Chemical Society</i> , 2013, 135, 5978-5981.	6.6	41
75	Stereochemical course of a phosphokinase using a chiral [18O]phosphorothioate. Comparison with the transfer of a chiral [16O,17O,18O] phosphoryl group. <i>Biochemistry</i> , 1980, 19, 325-329.	1.2	40
76	Absence of nucleophilic assistance by solvent and azide ion to the reaction of cumyl derivatives: mechanism of nucleophilic substitution at tertiary carbon. <i>Journal of the American Chemical Society</i> , 1991, 113, 5871-5873.	6.6	40
77	Intrinsic Barriers for the Reactions of an Oxocarbenium Ion in Water. <i>Journal of the American Chemical Society</i> , 1999, 121, 8403-8404.	6.6	40
78	Substituent Effects on Electrophilic Catalysis by the Carbonyl Group: Anatomy of the Rate Acceleration for PLP-Catalyzed Deprotonation of Glycine. <i>Journal of the American Chemical Society</i> , 2011, 133, 3173-3183.	6.6	40
79	Dissecting the Total Transition State Stabilization Provided by Amino Acid Side Chains at Orotidine 5'-Monophosphate Decarboxylase: A Two-Part Substrate Approach. <i>Biochemistry</i> , 2008, 47, 7785-7787.	1.2	39
80	Mechanism for Activation of Triosephosphate Isomerase by Phosphite Dianion: The Role of a Ligand-Driven Conformational Change. <i>Journal of the American Chemical Society</i> , 2011, 133, 16428-16431.	6.6	39
81	Orotidine 5'-Monophosphate Decarboxylase: Transition State Stabilization from Remote Protein-Protein Interactions. <i>Biochemistry</i> , 2012, 51, 4630-4632.	1.2	39
82	Direct observation of $\text{F}^{2-}$ -fluoro-substituted 4-methoxyphenethyl cations by laser flash photolysis. <i>Journal of the Chemical Society Perkin Transactions II</i> , 1993, , 1717-1722.	0.9	38
83	Role of Loop-Clamping Side Chains in Catalysis by Triosephosphate Isomerase. <i>Journal of the American Chemical Society</i> , 2015, 137, 15185-15197.	6.6	38
84	Enzyme Architecture: Modeling the Operation of a Hydrophobic Clamp in Catalysis by Triosephosphate Isomerase. <i>Journal of the American Chemical Society</i> , 2017, 139, 10514-10525.	6.6	38
85	Structure-reactivity relationships for .beta.-galactosidase ( <i>Escherichia coli</i> , lac Z). 1. Brønsted parameters for cleavage of alkyl .beta.-D-galactopyranosides. <i>Biochemistry</i> , 1995, 34, 11703-11712.	1.2	37
86	Formation and Stability of the Enolates of N-Protonated Proline Methyl Ester and Proline Zwitterion in Aqueous Solution: A Nonenzymatic Model for the First Step in the Racemization of Proline Catalyzed by Proline Racemase. <i>Biochemistry</i> , 2003, 42, 8354-8361.	1.2	37
87	A Marcus Treatment of Rate Constants for Protonation of Ring-Substituted $\text{F}^{\pm}$ -Methoxystyrenes: Intrinsic Reaction Barriers and the Shape of the Reaction Coordinate. <i>Journal of the American Chemical Society</i> , 2007, 129, 6952-6961.	6.6	37
88	Proton Transfer from C-6 of Uridine 5'-Monophosphate Catalyzed by Orotidine 5'-Monophosphate Decarboxylase: Formation and Stability of a Vinyl Carbanion Intermediate and the Effect of a 5-Fluoro Substituent. <i>Journal of the American Chemical Society</i> , 2012, 134, 14580-14594.	6.6	37
89	Rescue of K12G Triosephosphate Isomerase by Ammonium Cations: The Reaction of an Enzyme in Pieces. <i>Journal of the American Chemical Society</i> , 2010, 132, 13525-13532.	6.6	36
90	A minimalist approach to understanding the efficiency of mononuclear Zn(II) complexes as catalysts of cleavage of an RNA analog. <i>Dalton Transactions</i> , 2007, , 3804.	1.6	35

#	ARTICLE	IF	CITATIONS
91	Mechanism for Activation of Triosephosphate Isomerase by Phosphite Dianion: The Role of a Hydrophobic Clamp. <i>Journal of the American Chemical Society</i> , 2012, 134, 10286-10298.	6.6	35
92	Reflections on the catalytic power of a TIM-barrel. <i>Bioorganic Chemistry</i> , 2014, 57, 206-212.	2.0	35
93	Reactions of ring-substituted 1-phenyl-2,2,2-trifluoroethyl carbocations with nucleophilic reagents: a bridge between carbocations which follow the reactivity-selectivity principle and the N+ scale. <i>Journal of the American Chemical Society</i> , 1992, 114, 5626-5634.	6.6	34
94	Kinetic and thermodynamic stabilities of .alpha.-oxygen- and .alpha.-sulfur-stabilized carbocations in solution. <i>Journal of the American Chemical Society</i> , 1993, 115, 8465-8466.	6.6	34
95	Mechanism of the Orotidine 5â€²-Monophosphate Decarboxylase-Catalyzed Reaction: Effect of Solvent Viscosity on Kinetic Constants. <i>Biochemistry</i> , 2009, 48, 5510-5517.	1.2	34
96	[14] Stereochemistry of selected phosphotransferases and nucleotidyltransferases. <i>Methods in Enzymology</i> , 1982, 87, 213-235.	0.4	33
97	Enzyme Architecture: Remarkably Similar Transition States for Triosephosphate Isomerase-Catalyzed Reactions of the Whole Substrate and the Substrate in Pieces. <i>Journal of the American Chemical Society</i> , 2014, 136, 4145-4148.	6.6	33
98	An Examination of the Relationship between Active Site Loop Size and Thermodynamic Activation Parameters for Orotidine 5â€²-Monophosphate Decarboxylase from Mesophilic and Thermophilic Organisms. <i>Biochemistry</i> , 2009, 48, 8006-8013.	1.2	32
99	Stereochemical course of thiophosphoryl group transfer catalyzed by mitochondrial phosphoenolpyruvate carboxykinase. <i>Biochemistry</i> , 1984, 23, 1779-1783.	1.2	31
100	Demonstration of the Chemical Competence of an Iminodiazonium Ion to Serve as the Reactive Intermediate of a Schmidt Reaction. <i>Journal of the American Chemical Society</i> , 1994, 116, 10833-10834.	6.6	31
101	A Comparison of Substituent Effects on the Stability of .alpha.,.alpha.-Dimethylbenzyl Carbocations in Aqueous Solution and in the Gas Phase: How Significant is Nucleophilic Solvation?. <i>Journal of the American Chemical Society</i> , 1994, 116, 6706-6712.	6.6	31
102	Intrinsic barriers to the formation and reaction of carbocations. <i>Pure and Applied Chemistry</i> , 1998, 70, 2007-2014.	0.9	31
103	Dynamics for Reaction of an Ion Pair in Aqueous Solution:Â The Rate Constant for Ion Pair Reorganization. <i>Journal of the American Chemical Society</i> , 2000, 122, 3963-3964.	6.6	31
104	Enzyme Architecture: Deconstruction of the Enzyme-Activating Phosphodianion Interactions of Orotidine 5â€²-Monophosphate Decarboxylase. <i>Journal of the American Chemical Society</i> , 2014, 136, 10156-10165.	6.6	31
105	Orotidine 5â€²-Monophosphate Decarboxylase: Probing the Limits of the <i>Possible</i> for Enzyme Catalysis. <i>Accounts of Chemical Research</i> , 2018, 51, 960-969.	7.6	31
106	Theoretical Analysis of Kinetic Isotope Effects on Proton Transfer Reactions between Substituted Î±-Methoxystyrenes and Substituted Acetic Acids. <i>Journal of the American Chemical Society</i> , 2009, 131, 13963-13971.	6.6	30
107	Structural Mutations That Probe the Interactions between the Catalytic and Dianion Activation Sites of Triosephosphate Isomerase. <i>Biochemistry</i> , 2013, 52, 5928-5940.	1.2	29
108	Enzyme Architecture: Optimization of Transition State Stabilization from a Cationâ€“Phosphodianion Pair. <i>Journal of the American Chemical Society</i> , 2015, 137, 5312-5315.	6.6	29

#	ARTICLE	IF	CITATIONS
109	Structure-Reactivity Relationships for Addition of Sulfur Nucleophiles to Electrophilic Carbon: Resonance, Polarization, and Steric/Electrostatic Effects. <i>Journal of the American Chemical Society</i> , 2000, 122, 11073-11083.	6.6	27
110	Direct excitation luminescence spectroscopy of Eu(III) complexes of 1,4,7-tris(carbamoylmethyl)-1,4,7,10-tetraazacyclododecane derivatives and kinetic studies of their catalytic cleavage of an RNA analog. <i>Dalton Transactions</i> , 2007, , 5171.	1.6	27
111	Enzymatic Rate Enhancements: A Review and Perspective. <i>Biochemistry</i> , 2013, 52, 2009-2011.	1.2	27
112	Role of Ligand-Driven Conformational Changes in Enzyme Catalysis: Modeling the Reactivity of the Catalytic Cage of Triosephosphate Isomerase. <i>Journal of the American Chemical Society</i> , 2018, 140, 3854-3857.	6.6	27
113	Surprisingly small effect of an $\alpha$ -trifluoromethyl-for- $\alpha$ -methyl substitution on 1-(4-methoxyphenyl)ethyl cation reactivity. <i>Journal of the American Chemical Society</i> , 1986, 108, 6819-6820.	6.6	26
114	Effects of electronic geminal interactions on the solvolytic reactivity of methoxymethyl derivatives. <i>Journal of the American Chemical Society</i> , 1993, 115, 2523-2524.	6.6	26
115	The stereochemical course of thiophosphoryl group transfer catalyzed by adenosine kinase. <i>Biochemical and Biophysical Research Communications</i> , 1980, 94, 1052-1056.	1.0	25
116	Mechanisms for the uncatalyzed and hydrogen ion catalyzed reactions of a simple quinone methide with solvent and halide ions. <i>Journal of the American Chemical Society</i> , 1991, 113, 4588-4595.	6.6	25
117	A transition state analog for phosphate diester cleavage catalyzed by a small enzyme-like metal ion complex. <i>Bioorganic Chemistry</i> , 2007, 35, 366-374.	2.0	25
118	Wildtype and Engineered Monomeric Triosephosphate Isomerase from <i>Trypanosoma brucei</i> : Partitioning of Reaction Intermediates in D <sub>2</sub> O and Activation by Phosphite Dianion. <i>Biochemistry</i> , 2011, 50, 5767-5779.	1.2	25
119	Enzyme Architecture: Amino Acid Side-Chains That Function To Optimize the Basicity of the Active Site Glutamate of Triosephosphate Isomerase. <i>Journal of the American Chemical Society</i> , 2018, 140, 8277-8286.	6.6	25
120	Dynamics for the reactions of ion pair intermediates of solvolysis. <i>Advances in Physical Organic Chemistry</i> , 2004, 39, 1-26.	0.5	24
121	Product Deuterium Isotope Effects for Orotidine 5'-Monophosphate Decarboxylase: Effect of Changing Substrate and Enzyme Structure on the Partitioning of the Vinyl Carbanion Reaction Intermediate. <i>Journal of the American Chemical Society</i> , 2010, 132, 7018-7024.	6.6	24
122	Catalysis by Orotidine 5'-Monophosphate Decarboxylase: Effect of 5-Fluoro and 4'-Substituents on the Decarboxylation of Two-Part Substrates. <i>Biochemistry</i> , 2013, 52, 537-546.	1.2	24
123	Reaction of triose phosphate isomerase with L-glyceraldehyde 3-phosphate and triose 1,2-enediol 3-phosphate. <i>Biochemistry</i> , 1985, 24, 949-953.	1.2	23
124	Desolvation-limited reactions of amines with the 1-(4-methylthiophenyl)-2,2,2-trifluoroethyl carbocation. <i>Journal of the Chemical Society Chemical Communications</i> , 1987, , 1768.	2.0	23
125	Mechanistic Imperatives for Catalysis of Aldol Addition Reactions: Partitioning of the Enolate Intermediate between Reaction with Brønsted Acids and the Carbonyl Group. <i>Journal of the American Chemical Society</i> , 1999, 121, 4763-4770.	6.6	23
126	Hydrogen Bonding and Catalysis of Solvolysis of 4-Methoxybenzyl Fluoride. <i>Journal of the American Chemical Society</i> , 2002, 124, 9798-9805.	6.6	23



#	ARTICLE	IF	CITATIONS
127	Enzyme Architecture: The Effect of Replacement and Deletion Mutations of Loop 6 on Catalysis by Triosephosphate Isomerase. <i>Biochemistry</i> , 2014, 53, 3486-3501.	1.2	23
128	Kinetic and thermodynamic stability of .alpha.-azidobenzyl carbocations: putative intermediates in the Schmidt reaction. <i>Journal of the American Chemical Society</i> , 1991, 113, 1867-1869.	6.6	22
129	Effect of electron-withdrawing .alpha.-substituents on nucleophile selectivity toward 4-methoxybenzyl carbocations: selectivities that are independent of carbocation stability. <i>Journal of Organic Chemistry</i> , 1994, 59, 25-29.	1.7	22
130	Absolute and Relative Electrophilicities of a Carbonyl Group and Tertiary Ammonium Ions toward a Simple Enolate Ion. <i>Journal of the American Chemical Society</i> , 1995, 117, 4718-4719.	6.6	22
131	How Does Organic Structure Determine Organic Reactivity? Nucleophilic Substitution and Alkene-Forming Elimination Reactions of I±-Carbonyl and I±-Thiocarbonyl Substituted Benzyl Derivatives. <i>Journal of the American Chemical Society</i> , 1996, 118, 12603-12613.	6.6	22
132	Role of a Guanidinium Cation-Phosphodianion Pair in Stabilizing the Vinyl Carbanion Intermediate of Orotidine 5-Phosphate Decarboxylase-Catalyzed Reactions. <i>Biochemistry</i> , 2013, 52, 7500-7511.	1.2	22
133	Mechanistic Imperatives for Enzymatic Catalysis of Aldose-Ketose Isomerization: Isomerization of Glyceraldehyde in Weakly Alkaline Aqueous Solution Occurs with Intramolecular Transfer of a Hydride Ion. <i>Journal of the American Chemical Society</i> , 1996, 118, 7432-7433.	6.6	21
134	Structure-Function Studies of Hydrophobic Residues That Clamp a Basic Glutamate Side Chain during Catalysis by Triosephosphate Isomerase. <i>Biochemistry</i> , 2016, 55, 3036-3047.	1.2	21
135	Enzyme Architecture: The Role of a Flexible Loop in Activation of Glycerol-3-phosphate Dehydrogenase for Catalysis of Hydride Transfer. <i>Biochemistry</i> , 2018, 57, 3227-3236.	1.2	21
136	Enabling Role of Ligand-Driven Conformational Changes in Enzyme Evolution. <i>Biochemistry</i> , 2022, 61, 1533-1542.	1.2	21
137	Kinetic and Thermodynamic Barriers to Carbon and Oxygen Alkylation of Phenol and Phenoxide Ion by the 1-(4-Methoxyphenyl)ethyl Carbocation. <i>Journal of the American Chemical Society</i> , 2003, 125, 15455-15465.	6.6	19
138	Claisen-Type Addition of Glycine to Pyridoxal in Water. <i>Journal of the American Chemical Society</i> , 2004, 126, 10538-10539.	6.6	19
139	Enzyme Architecture: Self-Assembly of Enzyme and Substrate Pieces of Glycerol-3-Phosphate Dehydrogenase into a Robust Catalyst of Hydride Transfer. <i>Journal of the American Chemical Society</i> , 2016, 138, 15251-15259.	6.6	19
140	Rate and Equilibrium Constants for an Enzyme Conformational Change during Catalysis by Orotidine 5-Monophosphate Decarboxylase. <i>Biochemistry</i> , 2015, 54, 4555-4564.	1.2	18
141	Aromatic substitution reactions of amines with ring-substituted 1-phenyl-2,2,2-trifluoroethyl carbocations. <i>Journal of the American Chemical Society</i> , 1989, 111, 6735-6744.	6.6	17
142	On the importance of reactions of carbocation ion pairs in water: common ion inhibition of solvolysis of 1-(4-methoxyphenyl)-2,2,2-trifluoroethyl bromide and trapping of an ion-pair intermediate by solvent. <i>Journal of Organic Chemistry</i> , 1992, 57, 625-629.	1.7	17
143	A Simple Method To Determine Kinetic Deuterium Isotope Effects Provides Evidence that Proton Transfer to Carbon Proceeds over and Not through the Reaction Barrier. <i>Journal of the American Chemical Society</i> , 2007, 129, 10330-10331.	6.6	17
144	Structure-Reactivity Effects on Primary Deuterium Isotope Effects on Protonation of Ring-Substituted I±-Methoxystyrenes. <i>Journal of the American Chemical Society</i> , 2009, 131, 13952-13962.	6.6	17

#	ARTICLE	IF	CITATIONS
145	Conformational Changes in Orotidine 5'-Monophosphate Decarboxylase: Remote Residues That Stabilize the Active Conformation. <i>Biochemistry</i> , 2010, 49, 3514-3516.	1.2	17
146	Isopentenyl Diphosphate Isomerase Catalyzed Reactions in D <sub>2</sub> O: Product Release Limits the Rate of This Sluggish Enzyme-Catalyzed Reaction. <i>Journal of the American Chemical Society</i> , 2012, 134, 6568-6570.	6.6	17
147	Stereochemical course of phosphoanhydride synthesis. <i>Journal of the American Chemical Society</i> , 1983, 105, 6605-6609.	6.6	16
148	Generation and determination of the lifetime of an $\alpha$ -carbonyl substituted carbocation. <i>Tetrahedron Letters</i> , 1991, 32, 4255-4258.	0.7	16
149	Carbon acidity of the $\alpha$ -pyridinium carbon of a pyridoxamine analog. <i>Organic and Biomolecular Chemistry</i> , 2005, 3, 2145.	1.5	16
150	Origin of Free Energy Barriers of Decarboxylation and the Reverse Process of CO <sub>2</sub> Capture in Dimethylformamide and in Water. <i>Journal of the American Chemical Society</i> , 2021, 143, 137-141.	6.6	16
151	How do reaction mechanisms change? Appearance of concerted pericyclic elimination for the reaction of cumyl derivatives. <i>Journal of the American Chemical Society</i> , 1991, 113, 8960-8961.	6.6	15
152	A Comparison of the Electrophilic Reactivities of Zn <sup>2+</sup> and Acetic Acid as Catalysts of Enolization: Imperatives for Enzymatic Catalysis of Proton Transfer at Carbon. <i>Journal of the American Chemical Society</i> , 2004, 126, 5164-5173.	6.6	15
153	Reactions of ion-pair intermediates of solvolysis. <i>Chemical Record</i> , 2005, 5, 94-106.	2.9	15
154	Binding Energy and Catalysis by Xylose Isomerase: Kinetic, Product, and X-ray Crystallographic Analysis of Enzyme-Catalyzed Isomerization of D-Glyceraldehyde. <i>Biochemistry</i> , 2011, 50, 10170-10181.	1.2	15
155	Enzyme Architecture: The Activating Oxyanion Binding Domain for Orotidine 5'-Monophosphate Decarboxylase. <i>Journal of the American Chemical Society</i> , 2013, 135, 18343-18346.	6.6	15
156	Uncovering the Role of Key Active-Site Side Chains in Catalysis: An Extended Brønsted Relationship for Substrate Deprotonation Catalyzed by Wild-Type and Variants of Triosephosphate Isomerase. <i>Journal of the American Chemical Society</i> , 2019, 141, 16139-16150.	6.6	15
157	Human Glycerol 3-Phosphate Dehydrogenase: X-ray Crystal Structures That Guide the Interpretation of Mutagenesis Studies. <i>Biochemistry</i> , 2019, 58, 1061-1073.	1.2	15
158	Equilibrium constants for the interconversion of substituted 1-phenylethyl alcohols and ethers. A measurement of intramolecular electrostatic interactions. <i>Journal of the American Chemical Society</i> , 1985, 107, 1340-1346.	6.6	14
159	Keto-Enol/Enolate Equilibria in the N-Acetylamino-p-methylacetophenone System. Effect of a $\beta$ -Nitrogen Substituent. <i>Journal of the American Chemical Society</i> , 2001, 123, 8979-8984.	6.6	14
160	The Mandelamide Keto-Enol System in Aqueous Solution. Generation of the Enol by Hydration of Phenylcarbamoylcarbene. <i>Journal of the American Chemical Society</i> , 2003, 125, 187-194.	6.6	14
161	When Does an Intermediate Become a Transition State? Degenerate Isomerization without Competing Racemization during Solvolysis of (S)-1-(3-Nitrophenyl)ethyl Tosylate. <i>Journal of the American Chemical Society</i> , 2006, 128, 17139-17145.	6.6	14
162	The PLP cofactor: Lessons from studies on model reactions. <i>Biochimica Et Biophysica Acta - Proteins and Proteomics</i> , 2011, 1814, 1419-1425.	1.1	14

#	ARTICLE	IF	CITATIONS
163	Formation and mechanism for reactions of ring-substituted phenonium ions in aqueous solution. <i>Journal of Physical Organic Chemistry</i> , 2016, 29, 557-564.	0.9	14
164	Enzyme Architecture: Erection of Active Orotidine 5'-Monophosphate Decarboxylase by Substrate-Induced Conformational Changes. <i>Journal of the American Chemical Society</i> , 2017, 139, 16048-16051.	6.6	14
165	Modeling the Role of a Flexible Loop and Active Site Side Chains in Hydride Transfer Catalyzed by Glycerol-3-phosphate Dehydrogenase. <i>ACS Catalysis</i> , 2020, 10, 11253-11267.	5.5	14
166	On the importance of carbocation intermediates in bimolecular nucleophilic substitution reactions in aqueous solution. <i>Journal of the American Chemical Society</i> , 1993, 115, 1739-1744.	6.6	13
167	Dynamics for Reaction of an Ion Pair in Aqueous Solution: Reactivity of Carboxylate Anions in Bimolecular Carbocation Nucleophile Addition and Unimolecular Ion Pair Collapse. <i>Organic Letters</i> , 2001, 3, 1237-1240.	2.4	13
168	Dynamics of reaction of ion pairs in aqueous solution: racemization of the chiral ion pair intermediate of solvolysis of (S)-1-(4-methylphenyl)ethylpentafluorobenzoate. <i>Journal of Physical Organic Chemistry</i> , 2003, 16, 484-490.	0.9	13
169	Conformational Changes in Orotidine 5'-Monophosphate Decarboxylase: A Structure-Based Explanation for How the 5'-Phosphate Group Activates the Enzyme. <i>Biochemistry</i> , 2012, 51, 8665-8678.	1.2	13
170	Solvent Effects on Carbocation Nucleophile Combination Reactions: A Comparison of Nucleophilicity in Aqueous and Organic Solvents. <i>Journal of the American Chemical Society</i> , 1998, 120, 10372-10378.	6.6	12
171	Scrambling of Oxygen-18 during the Solvolysis of 1-(3-Nitrophenyl)ethyl Tosylate. <i>Organic Letters</i> , 2004, 6, 3633-3636.	2.4	12
172	Slow proton transfer from the hydrogen-labelled carboxylic acid side chain (Glu-165) of triosephosphate isomerase to imidazole buffer in D <sub>2</sub> O. <i>Organic and Biomolecular Chemistry</i> , 2008, 6, 391-396.	1.5	12
173	Enzyme Architecture: A Startling Role for Asn270 in Glycerol 3-Phosphate Dehydrogenase-Catalyzed Hydride Transfer. <i>Biochemistry</i> , 2016, 55, 1429-1432.	1.2	12
174	Phosphodianion Activation of Enzymes for Catalysis of Central Metabolic Reactions. <i>Journal of the American Chemical Society</i> , 2021, 143, 2694-2698.	6.6	12
175	The role of ligand-gated conformational changes in enzyme catalysis. <i>Biochemical Society Transactions</i> , 2019, 47, 1449-1460.	1.6	12
176	Enhancement of a Lewis Acid-Base Interaction via Solvation: Ammonia Molecules and the Benzene Radical Cation. <i>Journal of Physical Chemistry A</i> , 2007, 111, 6068-6076.	1.1	11
177	Enzyme Architecture: Breaking Down the Catalytic Cage that Activates Orotidine 5'-Monophosphate Decarboxylase for Catalysis. <i>Journal of the American Chemical Society</i> , 2018, 140, 17580-17590.	6.6	11
178	Primary Deuterium Kinetic Isotope Effects: A Probe for the Origin of the Rate Acceleration for Hydride Transfer Catalyzed by Glycerol-3-Phosphate Dehydrogenase. <i>Biochemistry</i> , 2018, 57, 4338-4348.	1.2	11
179	Carbocation lifetimes that are independent of carbocation stability: the reaction of $\beta$ -substituted 4-methoxybenzyl carbocations. <i>Journal of the Chemical Society Chemical Communications</i> , 1991, , 200-202.	2.0	10
180	Nucleofugality of the benzotriazole group in solvolysis. <i>Journal of Organic Chemistry</i> , 1995, 60, 5989-5991.	1.7	10

#	ARTICLE	IF	CITATIONS
181	Mechanistic Imperatives for the Reaction Catalyzed by Isopentenyl Pyrophosphate Isomerase: Free Energy Profile for Stepwise Isomerization in Water through a Tertiary Carbocation Intermediate. <i>Bioorganic Chemistry</i> , 1997, 25, 239-245.	2.0	10
182	Claisen-Type Addition of Glycine to a Pyridoxal Iminium Ion in Water. <i>Journal of Organic Chemistry</i> , 2006, 71, 7094-7096.	1.7	10
183	Rational Design of Transition-State Analogues as Potent Enzyme Inhibitors with Therapeutic Applications. <i>ACS Chemical Biology</i> , 2007, 2, 711-714.	1.6	10
184	Bovine Serum Albumin-Catalyzed Deprotonation of [ <sup>13</sup> C]Glycolaldehyde: Protein Reactivity toward Deprotonation of the $\alpha$ -Hydroxy $\alpha$ -Carbonyl Carbon. <i>Biochemistry</i> , 2010, 49, 7704-7708.	1.2	10
185	Mechanistic imperatives for deprotonation of carbon catalyzed by triosephosphate isomerase: enzyme activation by phosphite dianion,. <i>Journal of Physical Organic Chemistry</i> , 2014, 27, 269-276.	0.9	10
186	Structure-Reactivity Effects on Intrinsic Primary Kinetic Isotope Effects for Hydride Transfer Catalyzed by Glycerol-3-phosphate Dehydrogenase. <i>Journal of the American Chemical Society</i> , 2016, 138, 14526-14529.	6.6	10
187	Reduction of the 1-(4-thiomethylphenyl)-2,2,2-trifluoroethyl carbocation by sodium sulfite. <i>Tetrahedron Letters</i> , 1989, 30, 23-26.	0.7	9
188	How does structure determine organic reactivity? Partitioning of carbocations between addition of nucleophiles and deprotonation. <i>Advances in Physical Organic Chemistry</i> , 2000, 35, 67-115.	0.5	9
189	Formation and stability of organic zwitterions $\hat{A}^-$ — The carbon acid pK <sub>a</sub> s of the trimethylsulfonium and tetramethylphosphonium cations in water. <i>Canadian Journal of Chemistry</i> , 2005, 83, 1536-1542.	0.6	9
190	Dynamics for reactions of ion pairs in aqueous solution: reactivity of tosylate anion ion paired with the highly destabilized 1-(4-methylphenyl)-2,2,2-trifluoroethyl carbocation. <i>Journal of Physical Organic Chemistry</i> , 2010, 23, 730-734.	0.9	9
191	Role of the Carboxylate in Enzyme-Catalyzed Decarboxylation of Orotidine 5'-Monophosphate: Transition State Stabilization Dominates Over Ground State Destabilization. <i>Journal of the American Chemical Society</i> , 2019, 141, 13468-13478.	6.6	9
192	The Organization of Active Site Side Chains of Glycerol-3-phosphate Dehydrogenase Promotes Efficient Enzyme Catalysis and Rescue of Variant Enzymes. <i>Biochemistry</i> , 2020, 59, 1582-1591.	1.2	9
193	Relative Reactivities of a Strongly Nucleophilic Alkene and Azide Ion in Aqueous Methanol. <i>Journal of Organic Chemistry</i> , 1996, 61, 9033-9034.	1.7	8
194	Solvent Deuterium Isotope Effect on the Binding of $\beta$ -d-Galactopyranosyl Derivatives to $\beta$ -Galactosidase ( <i>Escherichia coli</i> , lac Z). <i>Bioorganic Chemistry</i> , 2000, 28, 49-56.	2.0	8
195	Ground-State, Transition-State, and Metal-Cation Effects of the 2-Hydroxyl Group on $\beta$ -d-Galactopyranosyl Transfer Catalyzed by $\beta$ -Galactosidase ( <i>Escherichia coli</i> , lac Z). <i>Biochemistry</i> , 2005, 44, 11872-11881.	1.2	8
196	Restoring a Metabolic Pathway. <i>ACS Chemical Biology</i> , 2008, 3, 605-607.	1.6	8
197	Formation and Stability of the 4-Methoxyphenonium Ion in Aqueous Solution. <i>Journal of Organic Chemistry</i> , 2011, 76, 9568-9571.	1.7	8
198	Substituent effects on the formation and nucleophile selectivity of ring-substituted phenonium ions in aqueous solution. <i>Journal of Physical Organic Chemistry</i> , 2013, 26, 970-976.	0.9	8

#	ARTICLE	IF	CITATIONS
199	Kinetic mechanism for dimerization of an $\hat{\text{I}}^{\pm}$ -thioamide substituted benzyl carbocation in aqueous solution. <i>Journal of Physical Organic Chemistry</i> , 1998, 11, 701-706.	0.9	6
200	Enzymatic catalysis of proton transfer and decarboxylation reactions. <i>Pure and Applied Chemistry</i> , 2011, 83, 1555-1565.	0.9	6
201	Substituent Effects on Carbon Acidity in Aqueous Solution and at Enzyme Active Sites. <i>Synlett</i> , 2017, 28, 1407-1421.	1.0	6
202	Hydride Transfer Catalyzed by Glycerol Phosphate Dehydrogenase: Recruitment of an Acidic Amino Acid Side Chain to Rescue a Damaged Enzyme. <i>Biochemistry</i> , 2020, 59, 4856-4863.	1.2	6
203	Linear Free Energy Relationships for Enzymatic Reactions: Fresh Insight from a Venerable Probe. <i>Accounts of Chemical Research</i> , 2021, 54, 2532-2542.	7.6	6
204	Adenylate Kinase-Catalyzed Reaction of AMP in Pieces: Enzyme Activation for Phosphoryl Transfer to Phosphite Dianion. <i>Biochemistry</i> , 2021, 60, 2672-2676.	1.2	6
205	Orotidine 5'-Monophosphate Decarboxylase: The Operation of Active Site Chains Within and Across Protein Subunits. <i>Biochemistry</i> , 2020, 59, 2032-2040.	1.2	6
206	Ketonization of the remarkably strongly acidic elongated enol generated by flash photolytic decarboxylation of p-benzoylphenylacetic acid in aqueous solution. <i>Chemical Communications</i> , 2005, , 4231.	2.2	5
207	Structure-reactivity relationships for $\hat{\text{I}}^{\pm}$ -galactosidase ( <i>Escherichia coli</i> , lac Z): a second derivative effect on $\text{nu}^{\text{C}}$ for addition of alkyl alcohols to an oxocarbenium ion reaction intermediate. <i>Journal of Physical Organic Chemistry</i> , 2008, 21, 531-537.	0.9	5
208	Alanine-dependent reactions of 5'-deoxyripyridoxal in water. <i>Bioorganic Chemistry</i> , 2008, 36, 295-298.	2.0	5
209	Protein-Ribofuranosyl Interactions Activate Orotidine 5'-Monophosphate Decarboxylase for Catalysis. <i>Biochemistry</i> , 2021, 60, 3362-3373.	1.2	5
210	How does organic structure determine organic reactivity? The effect of ortho-dimethyl groups on the nucleophilic substitution and alkene-forming elimination reactions of ring-substituted cumyl derivatives. <i>Canadian Journal of Chemistry</i> , 1999, 77, 922-933.	0.6	4
211	A reevaluation of the origin of the rate acceleration for enzyme-catalyzed hydride transfer. <i>Organic and Biomolecular Chemistry</i> , 2017, 15, 8856-8866.	1.5	4
212	How delocalised are resonance-stabilised 1-[4-(N-methyl-N-alkylamino)phenyl]-2,2,2-trifluoroethyl carbocations?. <i>Journal of the Chemical Society Perkin Transactions II</i> , 1993, , 171.	0.9	3
213	Imperatives for enzymatic catalysis of isomerization of sugars and sugar phosphates. <i>Journal of Physical Organic Chemistry</i> , 1998, 11, 512-518.	0.9	3
214	Crossing the Borderline between SN1 and SN2 Nucleophilic Substitution at Aliphatic Carbon. , 2005, , 41-68.		3
215	Enzyme and coenzyme reaction mechanisms: Editorial overview. <i>Bioorganic Chemistry</i> , 2014, 57, 169-170.	2.0	3
216	Primary Deuterium Kinetic Isotope Effects From Product Yields: Rationale, Implementation, and Interpretation. <i>Methods in Enzymology</i> , 2017, 596, 163-177.	0.4	3

#	ARTICLE	IF	CITATIONS
217	Kinetic Studies of RNA Cleavage by Lanthanide(III) Macrocyclic Complexes. <i>Bulletin of the Korean Chemical Society</i> , 2004, 25, 403-406.	1.0	3
218	The role of remote flavin adenine dinucleotide pieces in the oxidative decarboxylation catalyzed by salicylate hydroxylase. <i>Bioorganic Chemistry</i> , 2022, 119, 105561.	2.0	3
219	Glycerol-3-Phosphate Dehydrogenase: The K120 and K204 Side Chains Define an Oxyanion Hole at the Enzyme Active Site. <i>Biochemistry</i> , 2022, 61, 856-867.	1.2	3
220	Swainâ€“Scott relationships for nucleophile addition to ring-substituted phenonium ions. <i>Canadian Journal of Chemistry</i> , 2015, 93, 428-434.	0.6	2
221	1â€“fIntroduction. <i>Annual Reports on the Progress of Chemistry Section B</i> , 2000, 96, 1-2.	0.8	1
222	Deprotonation of the 1â€“(N,N-dimethylcarbamoyl)-1â€“-methyl-4-methoxybenzyl carbocation by alkanecarboxylate and halide ionsâ€“. <i>Perkin Transactions II RSC</i> , 2001, , 1167-1173.	1.1	1
223	Effect of an E461G Mutation of 1â€“Galactosidase ( <i>Escherichia coli</i> , lac Z) on pL Rate Profiles and Solvent Deuterium Isotope Effects. <i>Bioorganic Chemistry</i> , 2001, 29, 146-155.	2.0	1
224	Mechanisms Complex biological processes and their central chemical events. <i>Current Opinion in Chemical Biology</i> , 2003, 7, 525-527.	2.8	1
225	1â€“fâ€“fIntroduction. <i>Annual Reports on the Progress of Chemistry Section B</i> , 2002, 98, 1-2.	0.8	0
226	Editorial: Biological applications of physical organic chemistry. <i>Journal of Physical Organic Chemistry</i> , 2004, 17, 459-460.	0.9	0
227	Reactions of Ion-Pair Intermediates of Solvolysis. <i>ChemInform</i> , 2005, 36, no.	0.1	0
228	Proton Transfer to and from Carbon in Model Reactions. , 0, , 949-973.		0
229	The ACS division of Biological Chemistry. <i>IUBMB Life</i> , 2007, 59, 224-225.	1.5	0
230	Punching Holes in an Enzyme. <i>Chemistry and Biology</i> , 2009, 16, 915-917.	6.2	0
231	Biographical Essay: A. Jerry Kresge. <i>Advances in Physical Organic Chemistry</i> , 2010, 44, xiii-xxiii.	0.5	0
232	William Platt Jencks. 15 August 1927 â€“ 3 January 2007. <i>Biographical Memoirs of Fellows of the Royal Society</i> , 2011, 57, 179-188.	0.1	0