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List of Publications by Year
in descending order

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37 papers	983 citations	430874 18 h-index	434195 31 g-index
37 all docs	37 docs citations	37 times ranked	962 citing authors

#	Article	IF	Citations
1	Fast Enzyme Dynamics at the Active Site of Formate Dehydrogenase. Journal of the American Chemical Society, 2008, 130, 22-23.	13.7	80
2	Line shape analysis of two-dimensional infrared spectra. Journal of Chemical Physics, 2015, 142, 212427.	3.0	76
3	Structural and Kinetic Studies of Formate Dehydrogenase from Candida boidinii. Biochemistry, 2016, 55, 2760-2771.	2.5	76
4	Characterizing the dynamics of functionally relevant complexes of formate dehydrogenase. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 17974-17979.	7.1	72
5	Improved Parametrization for Extended Derjaguin, Landau, Verwey, and Overbeek Predictions of Functionalized Gold Nanosphere Stability. Journal of Physical Chemistry C, 2015, 119, 10064-10075.	3.1	59
6	2D IR Spectroscopy using Four-Wave Mixing, Pulse Shaping, and IR Upconversion: A Quantitative Comparison. Journal of Physical Chemistry A, 2013, 117, 6073-6083.	2.5	56
7	Hydrogen Donorâ€“Acceptor Fluctuations from Kinetic Isotope Effects: A Phenomenological Model. Biochemistry, 2012, 51, 6860-6870.	2.5	53
8	Two-dimensional infrared study of 3-azidopyridine as a potential spectroscopic reporter of protonation state. Journal of Chemical Physics, 2010, 133, 134506.	3.0	50
9	Examination of Enzymatic H-Tunneling through Kinetics and Dynamics. Journal of the American Chemical Society, 2009, 131, 10151-10155.	13.7	42
10	3-Picolyl Azide Adenine Dinucleotide as a Probe of Femtosecond to Picosecond Enzyme Dynamics. Journal of Physical Chemistry B, 2012, 116, 542-548.	2.6	36
11	Oscillatory Enzyme Dynamics Revealed by Two-Dimensional Infrared Spectroscopy. Journal of Physical Chemistry Letters, 2016, 7, 2507-2511.	4.6	33
12	Exploring the Molecular Origins of Protein Dynamics in the Active Site of Human Carbonic Anhydrase II. Journal of Physical Chemistry B, 2009, 113, 11505-11510.	2.6	30
13	Oscillatory Active-Site Motions Correlate with Kinetic Isotope Effects in Formate Dehydrogenase. ACS Catalysis, 2019, 9, 11199-11206.	11.2	29
14	Two-dimensional infrared spectroscopy of azido-nicotinamide adenine dinucleotide in water. Journal of Chemical Physics, 2011, 135, 055106.	3.0	27
15	Efforts toward Developing Probes of Protein Dynamics: Vibrational Dephasing and Relaxation of Carbonâ€“Deuterium Stretching Modes in Deuterated Leucine. Journal of Physical Chemistry B, 2009, 113, 7991-7994.	2.6	26
16	Relaxation and anharmonic couplings of the Oâ€“H stretching vibration of asymmetric strongly hydrogen-bonded complexes. Journal of Chemical Physics, 2007, 127, 044501.	3.0	23
17	Relationship of Femtosecondâ€“Picosecond Dynamics to Enzyme-Catalyzed H-Transfer. Topics in Current Chemistry, 2013, 337, 1-39.	4.0	20
18	Low-Frequency Protein Motions Coupled to Catalytic Sites. Annual Review of Physical Chemistry, 2020, 71, 267-288.	10.8	20

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19	Characterization of azido-NAD+ to assess its potential as a two-dimensional infrared probe of enzyme dynamics. Analytical Biochemistry, 2010, 407, 241-246.	2.4	19
20	2D IR Spectroscopy of the Câ€“D stretching vibration of the deuterated formic acid dimer. Physical Chemistry Chemical Physics, 2011, 13, 6098.	2.8	19
21	Edge-pixel referencing suppresses correlated baseline noise in heterodyned spectroscopies. Journal of Chemical Physics, 2020, 152, 094201.	3.0	18
22	Protein Mass Effects on Formate Dehydrogenase. Journal of the American Chemical Society, 2017, 139, 17405-17413.	13.7	17
23	Evolutionary Effects on Bound Substrate pK_a in Dihydrofolate Reductase. Journal of the American Chemical Society, 2018, 140, 16650-16660.	13.7	17
24	Vibrational relaxation of Câ€“D stretching vibrations in CDCl3, CDBr3, and CDI3. Journal of Chemical Physics, 2006, 125, 174503.	3.0	15
25	Isotopic Labeling of Formate Dehydrogenase Perturbs the Protein Dynamics. Journal of Physical Chemistry B, 2019, 123, 10403-10409.	2.6	14
26	Evolution of the Chemical Step in Enzyme Catalysis. ACS Catalysis, 2021, 11, 6726-6732.	11.2	14
27	Effect of Asp122 Mutation on the Hydride Transfer in E. coli DHFR Demonstrates the Goldilocks of Enzyme Flexibility. Journal of Physical Chemistry B, 2018, 122, 8006-8017.	2.6	11
28	Least-Squares Fitting of Multidimensional Spectra to Kubo Line-Shape Models. Journal of Physical Chemistry B, 2021, 125, 12876-12891.	2.6	7
29	Compressively Sampled Two-Dimensional Infrared Spectroscopy That Preserves Line Shape Information. Journal of Physical Chemistry A, 2017, 121, 3088-3093.	2.5	6
30	Accelerating two-dimensional infrared spectroscopy while preserving lineshapes using GIRAF. Optics Letters, 2017, 42, 4573.	3.3	5
31	Optimized reconstructions of compressively sampled two-dimensional infrared spectra. Journal of Chemical Physics, 2019, 150, 234202.	3.0	4
32	Two-dimensional infrared study of the C D and C O stretching vibrations in strongly hydrogen-bonded complexes. Chemical Physics, 2018, 512, 3-12.	1.9	3
33	Evolution Conserves the Network of Coupled Residues in Dihydrofolate Reductase. Biochemistry, 2019, 58, 3861-3868.	2.5	3
34	Evolution of Optimized Hydride Transfer Reaction and Overall Enzyme Turnover in Human Dihydrofolate Reductase. Biochemistry, 2021, 60, 3822-3828.	2.5	3
35	Characterization of Catalytically Relevant Fast Dynamics at the Active Site of Formate Dehydrogenase. FASEB Journal, 2015, 29, 891.1.	0.5	0
36	Effects of Isotopic Substitution in Enzyme and Coâ€factor on Enzyme Catalyzed Hydride Transfer. FASEB Journal, 2017, 31, 764.1.	0.5	0

#	Article	IF	Citations
37	Picosecond Activeâ€Site Dynamics Correlate with the Temperature Dependence of KIEs in Enzymeâ€Catalyzed Hydride Transfer. FASEB Journal, 2018, 32, .	0.5	0