Sayan Bagchi

List of Publications by Year in descending order

30 papers	1,322 citations	516710 16 h-index	477307 29 g-index
30 all docs	30 docs citations	30 times ranked	1436 citing authors

#	Article	IF	Citations
1	Extreme electric fields power catalysis in the active site of ketosteroid isomerase. Science, 2014, 346, 1510-1514.	12.6	392
2	Measuring Electrostatic Fields in Both Hydrogen-Bonding and Non-Hydrogen-Bonding Environments Using Carbonyl Vibrational Probes. Journal of the American Chemical Society, 2013, 135, 11181-11192.	13.7	176
3	A Solvatochromic Model Calibrates Nitrilesâ€™ Vibrational Frequencies to Electrostatic Fields. Journal of the American Chemical Society, 2012, 134, 10373-10376.	13.7	107
4	Ribonuclease S Dynamics Measured Using a Nitrile Label with 2D IR Vibrational Echo Spectroscopy. Journal of Physical Chemistry B, 2012, 116, 4034-4042.	2.6	100
5	Correlating Nitrile IR Frequencies to Local Electrostatics Quantifies Noncovalent Interactions of Peptides and Proteins. Journal of Physical Chemistry B, 2016, 120, 4034-4046.	2.6	75
6	2D-IR Experiments and Simulations of the Coupling between Amide-I and Ionizable Side Chains in Proteins: Application to the Villin Headpiece. Journal of Physical Chemistry B, 2009, 113, 11260-11273.	2.6	72
7	Dynamics of a Myoglobin Mutant Enzyme: 2D IR Vibrational Echo Experiments and Simulations. Journal of the American Chemical Society, 2010, 132, 18367-18376.	13.7	64
8	Conformational Switching between Protein Substates Studied with 2D IR Vibrational Echo Spectroscopy and Molecular Dynamics Simulations. Journal of Physical Chemistry B, 2010, 114, 17187-17193.	2.6	33
9	Experimental Determination of the Electrostatic Nature of Carbonyl Hydrogen-Bonding Interactions Using IR-NMR Correlations. Journal of Physical Chemistry Letters, 2014, 5, 3211-3215.	4.6	32
10	Two-Dimensional Infrared Spectroscopy Reveals Cosolvent-Composition-Dependent Crossover in Intermolecular Hydrogen-Bond Dynamics. Journal of Physical Chemistry Letters, 2017, 8, 1604-1609.	4.6	32
11	Cosolvent Effects on Soluteâ€“Solvent Hydrogen-Bond Dynamics: Ultrafast 2D IR Investigations. Journal of Physical Chemistry B, 2015, 119, 15334-15343.	2.6	31
12	Two-Dimensional Infrared Investigation ofN-Acetyl Tryptophan Methyl Amide in Solution. Journal of Physical Chemistry B, 2007, 111, 3010-3018.	2.6	29
13	Equilibrium Exchange Processes of the Aqueous Tryptophan Dipeptide. Journal of Physical Chemistry B, 2009, 113, 8412-8417.	2.6	20
14	The non-uniform early structural response of globular proteins to cold denaturing conditions: A case study with Yfh1. Journal of Chemical Physics, 2014, 141, 205103.	3.0	20
15	Hydrocarbon Chain-Length Dependence of Solvation Dynamics in Alcohol-Based Deep Eutectic Solvents: A Two-Dimensional Infrared Spectroscopic Investigation. Journal of Physical Chemistry B, 2019, 123, 9355-9363.	2.6	20
16	Interconverting Hydrogen-Bonding and Weak n â†' Ï€* Interactions in Aqueous Solution: A Direct Spectroscopic Evidence. Journal of Physical Chemistry Letters, 2018, 9, 5425-5429.	4.6	17
17	Transition of a Deep Eutectic Solution to Aqueous Solution: A Dynamical Perspective of the Dissolved Solute. Journal of Physical Chemistry Letters, 2021, 12, 8784-8789.	4.6	17
18	Electrostatic Interactions Are Key to Câ•O n-Ï€* Shifts: An Experimental Proof. Journal of Physical Chemistry Letters, 2016, 7, 2270-2275.	4.6	14

#	Article	IF	Citations
19	Arresting an Unusual Amide Tautomer Using Divalent Cations. Journal of Physical Chemistry B, 2019, 123, 8419-8424.	2.6	11
20	Electrostatic Manifestation of Micro-Heterogeneous Solvation Structures in Deep-Eutectic Solvents: A Spectroscopic Approach. Journal of Physical Chemistry B, 2020, 124, 3709-3715.	2.6	10
21	Pick and Choose the Spectroscopic Method to Calibrate the Local Electric Field inside Proteins. Journal of Physical Chemistry Letters, 2016, 7, 2456-2460.	4.6	9
22	Stabilization of Azapeptides by N_{amide}Â·Â·Â·Hâ€“N_{amide} Hydrogen Bonds. Organic Letters, 2021, 23, 4949-4954.	4.6	9
23	Evidence of an nN(amide) â†' Ï€*Ar Interaction in N-Alkyl-N,Nâ€²-diacylhydrazines. Organic Letters, 2021, 23, 7003-7007.	4.6	7
24	Predicting the Redox Potentials of Phenazine Derivatives Using DFT-Assisted Machine Learning. ACS Omega, 2022, 7, 11742-11755.	3.5	7
25	Ligand Dynamics Time Scales Identify the Surfaceâ€“Ligand Interactions in Thiocyanate-Capped Cadmium Sulfide Nanocrystals. Journal of Physical Chemistry Letters, 2022, 13, 3059-3065.	4.6	6
26	The Curious Case of Aqueous Warfarin: Structural Isomers or Distinct Excited States?. Journal of Physical Chemistry B, 2021, 125, 2871-2878.	2.6	4
27	Onâ€“Off Infrared Absorption of the Sâ•O Vibrational Probe of Dimethyl Sulfoxide. Journal of Physical Chemistry B, 2022, 126, 4501-4508.	2.6	4
28	Associationâ€“Dissociation Dynamics of Ionic Electrolytes in Low Dielectric Medium. Journal of Physical Chemistry B, 2022, 126, 239-248.	2.6	3
29	Reply to â€œComment on â€˜Arresting an Unusual Amide Tautomer Using Divalent Cationsâ€™â€•. Journal of Physical Chemistry B, 2021, 125, 479-483.	2.6	1
30	Two Dimensional Infrared Spectroscopy: A Structure Sensitive Technique with Ultrafast Time Resolution. Progress in Optical Science and Photonics, 2021, , 39-56.	0.5	0