

# Jens Bredenbeck

## List of Publications by Year in descending order

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Version: 2024-02-01

42  
papers

1,653  
citations

361413

20  
h-index

289244

40  
g-index

48  
all docs

48  
docs citations

48  
times ranked

1422  
citing authors

#	ARTICLE	IF	CITATIONS
1	High-precision background correction and artifact suppression for ultrafast spectroscopy by quasi-simultaneous measurements in a split-sample cell. <i>Review of Scientific Instruments</i> , 2022, 93, 033001.	1.3	7
2	Versatile Vibrational Energy Sensors for Proteins. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	13.8	7
3	Titelbild: Versatile Vibrational Energy Sensors for Proteins ( <i>Angew. Chem.</i> 21/2022). <i>Angewandte Chemie</i> , 2022, 134, .	2.0	0
4	Femtosecond-to-millisecond mid-IR spectroscopy of photoactive yellow protein uncovers structural micro-transitions of the chromophore's protonation mechanism. <i>Journal of Chemical Physics</i> , 2022, 156, .	3.0	6
5	Lessons from combined experimental and theoretical examination of the FTIR and 2D-IR spectroelectrochemistry of the amide I region of cytochrome <i>c</i> . <i>Journal of Chemical Physics</i> , 2021, 154, 124201.	3.0	8
6	Through bonds or contacts? Mapping protein vibrational energy transfer using non-canonical amino acids. <i>Nature Communications</i> , 2021, 12, 3284.	12.8	28
7	Temperature-Dependent Low-Frequency Modes in the Active Site of Bovine Carbonic Anhydrase II Probed by 2D-IR Spectroscopy. <i>Journal of Physical Chemistry Letters</i> , 2021, 12, 7777-7782.	4.6	3
8	Ultrafast Photoconversion Dynamics of the Knotless Phytochrome SynCph2. <i>International Journal of Molecular Sciences</i> , 2021, 22, 10690.	4.1	5
9	Vibrational Lifetime of the SCN Protein Label in H <sub>2</sub> O and D <sub>2</sub> O Reports Site-Specific Solvation and Structure Changes During PYP's Photocycle. <i>Analytical Chemistry</i> , 2020, 92, 1024-1032.	6.5	17
10	Local dynamics of the photo-switchable protein PYP in ground and signalling state probed by 2D-IR spectroscopy of <sup>15</sup> N labels. <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 22963-22972.	2.8	9
11	Vibrational Spectroscopic Map, Vibrational Spectroscopy, and Intermolecular Interaction. <i>Chemical Reviews</i> , 2020, 120, 7152-7218.	47.7	205
12	Exploring the 2D-IR repertoire of the <sup>15</sup> N label to study site-resolved dynamics and solvation in the calcium sensor protein calmodulin. <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 5463-5475.	2.8	21
13	Photochemical mechanism of DEACM uncaging: a combined time-resolved spectroscopic and computational study. <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 13418-13430.	2.8	13
14	Infrared pre-excitation grants isotopomer-specific photochemistry. <i>EPJ Web of Conferences</i> , 2019, 205, 03001.	0.3	0
15	Following local light-induced structure changes and dynamics of the photoreceptor PYP with the thiocyanate IR label. <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 6622-6634.	2.8	15
16	Ortsaufgelöste Beobachtung von Schwingungsenergietransfer durch ein genetisch codiertes ultraschnelles Heizelement ( <i>Angew. Chem.</i> 9/2019). <i>Angewandte Chemie</i> , 2019, 131, 2932-2932.	2.0	0
17	Ortsaufgelöste Beobachtung von Schwingungsenergietransfer durch ein genetisch codiertes ultraschnelles Heizelement. <i>Angewandte Chemie</i> , 2019, 131, 2925-2930.	2.0	10
18	Site-Resolved Observation of Vibrational Energy Transfer Using a Genetically Encoded Ultrafast Heater. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 2899-2903.	13.8	57

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19	Controlling Photochemistry via Isotopomers and IR Pre-excitation. <i>Journal of the American Chemical Society</i> , 2018, 140, 926-931.	13.7	11
20	Note: An automatic liquid nitrogen refilling system for small (detector) Dewar vessels. <i>Review of Scientific Instruments</i> , 2018, 89, 116101.	1.3	9
21	Cyano-tryptophans as dual infrared and fluorescence spectroscopic labels to assess structural dynamics in proteins. <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 19906-19915.	2.8	28
22	Ultrafast Light-Driven Substrate Expulsion from the Active Site of a Photoswitchable Catalyst. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 12092-12096.	13.8	8
23	Picosecond activation of the DEACM photocage unravelled by VIS-pump-IR-probe spectroscopy. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 6487-6496.	2.8	13
24	Impact of Azidohomoalanine Incorporation on Protein Structure and Ligand Binding. <i>ChemBioChem</i> , 2017, 18, 2340-2350.	2.6	21
25	Ultrafast Light-Driven Substrate Expulsion from the Active Site of a Photoswitchable Catalyst. <i>Angewandte Chemie</i> , 2017, 129, 12260-12264.	2.0	3
26	Vibrationally resolved electronic spectra including vibrational pre-excitation: Theory and application to VIPER spectroscopy. <i>Journal of Chemical Physics</i> , 2017, 147, 164116.	3.0	29
27	Exploring photochemistry of p-bromophenylsulfonyl, p-tolylsulfonyl and methylsulfonyl azides by ultrafast UV-pump-IR-probe spectroscopy and computations. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 8662-8672.	2.8	17
28	A spectroelectrochemical cell for ultrafast two-dimensional infrared spectroscopy. <i>Review of Scientific Instruments</i> , 2015, 86, 083102.	1.3	16
29	From Ultrafast Structure Determination to Steering Reactions: Mixed IR/Non-IR Multidimensional Vibrational Spectroscopies. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 11624-11640.	13.8	27
30	Ultrafast 2D-IR spectroelectrochemistry of flavin mononucleotide. <i>Journal of Chemical Physics</i> , 2015, 142, 212416.	3.0	26
31	Vibrational dynamics and solvatochromism of the label SCN in various solvents and hemoglobin by time dependent IR and 2D-IR spectroscopy. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 19643-19653.	2.8	93
32	A donor-acceptor pair for the real time study of vibrational energy transfer in proteins. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 3261.	2.8	52
33	Mixed IR/Vis Two-Dimensional Spectroscopy: Chemical Exchange beyond the Vibrational Lifetime and Sub-ensemble Selective Photochemistry. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 2667-2672.	13.8	37
34	Ultrafast Hopping from Band to Band: Assigning Infrared Spectra based on Vibrational Energy Transfer. <i>Angewandte Chemie - International Edition</i> , 2013, 52, 6214-6217.	13.8	44
35	Protein ligand migration mapped by nonequilibrium 2D-IR exchange spectroscopy. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2007, 104, 14243-14248.	7.1	91
36	$\alpha$ -Helix formation in a photoswitchable peptide tracked from picoseconds to microseconds by time-resolved IR spectroscopy. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2005, 102, 2379-2384.	7.1	186

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37	Continuous scanning from picoseconds to microseconds in time resolved linear and nonlinear spectroscopy. Review of Scientific Instruments, 2004, 75, 4462-4466.	1.3	74
38	Transient two-dimensional infrared spectroscopy: Exploring the polarization dependence. Journal of Chemical Physics, 2004, 121, 5943-5957.	3.0	55
39	Labeling Vibrations by Light: Ultrafast Transient 2D-IR Spectroscopy Tracks Vibrational Modes during Photoinduced Charge Transfer. Journal of the American Chemical Society, 2004, 126, 990-991.	13.7	137
40	Versatile small volume closed-cycle flow cell system for transient spectroscopy at high repetition rates. Review of Scientific Instruments, 2003, 74, 3188-3189.	1.3	68
41	Picosecond conformational transition and equilibration of a cyclic peptide. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 6452-6457.	7.1	156
42	Versatile Vibrational Energy Sensors for Proteins. Angewandte Chemie, 0, , .	2.0	5