Matthew J Tucker

List of Publications by Year in descending order

39 papers	1,325 citations	331670 21 h-index	345221 36 g-index
40 all docs	40 docs citations	40 times ranked	1100 citing authors

#	Article	IF	Citations
1	Carbazole-functionalized dipicolinato LnIII complexes show two-photon excitation and viscosity-sensitive metal-centered emission. Journal of Luminescence, 2022, 245, 118768.	3.1	1
2	Formaldehyde Analysis in Non-Aqueous Methanol Solutions by Infrared Spectroscopy and Electrospray Ionization. Frontiers in Chemistry, 2021, 9, 678112.	3.6	6
3	Nanostructured Niâ€“Cu electrocatalysts for the oxygen evolution reaction. Catalysis Science and Technology, 2020, 10, 4960-4967.	4.1	18
4	Extending the vibrational lifetime of azides with heavy atoms. Physical Chemistry Chemical Physics, 2020, 22, 18007-18013.	2.8	13
5	Photo-initiated rupture of azobenzene micelles to enable the spectroscopic analysis of antimicrobial peptide dynamics. RSC Advances, 2020, 10, 21464-21472.	3.6	4
6	2D-IR studies of cyanamides (NCN) as spectroscopic reporters of dynamics in biomolecules: Uncovering the origin of mysterious peaks. Journal of Chemical Physics, 2020, 152, 074201.	3.0	7
7	Luminescent Carbazole-Based Eu^{III} and Yb^{III} Complexes with a High Two-Photon Absorption Cross-Section Enable Viscosity Sensing in the Visible and Near IR with One- and Two-Photon Excitation. Inorganic Chemistry, 2020, 59, 3193-3199.	4.0	15
8	Unperturbed Detection of the Dynamic Structure in the Hydrophobic Core of Trp-Cage via Two-Dimensional Infrared Spectroscopy. Journal of Physical Chemistry Letters, 2020, 11, 832-837.	4.6	8
9	Genomic evidence of genetic variation with pleiotropic effects on caterpillar fitness and plant traits in a model legume. Molecular Ecology, 2019, 28, 2967-2985.	3.9	19
10	Interspecies Bombolitins Exhibit Structural Diversity upon Membrane Binding, Leading to Cell Specificity. Biophysical Journal, 2019, 116, 1064-1074.	0.5	3
11	Tuning Molecular Vibrational Energy Flow within an Aromatic Scaffold via Anharmonic Coupling. Journal of Physical Chemistry A, 2019, 123, 10571-10581.	2.5	17
12	Synthesis of 5â€Cyanoâ€Tryptophan as a Twoâ€Dimensional Infrared Spectroscopic Reporter of Structure. Angewandte Chemie - International Edition, 2018, 57, 7528-7532.	13.8	20
13	Synthesis of 5â€Cyanoâ€Tryptophan as a Twoâ€Dimensional Infrared Spectroscopic Reporter of Structure. Angewandte Chemie, 2018, 130, 7650-7654.	2.0	1
14	Equilibrium versus Nonequilibrium Peptide Dynamics: Insights into Transient 2D IR Spectroscopy. Journal of Physical Chemistry B, 2018, 122, 8783-8795.	2.6	13
15	Tyrosine as a Non-perturbing Site-Specific Vibrational Reporter for Protein Dynamics. Journal of Physical Chemistry B, 2017, 121, 6380-6389.	2.6	16
16	Selective Excitation of Cyanophenylalanine Fluorophores for Multi-Site Binding Studies. Journal of Physical Chemistry B, 2017, 121, 9566-9571.	2.6	2
17	Synthesis and evaluation of the sensitivity and vibrational lifetimes of thiocyanate and selenocyanate infrared reporters. RSC Advances, 2016, 6, 36231-36237.	3.6	36
18	Two-Dimensional Infrared Study of Vibrational Coupling between Azide and Nitrile Reporters in a RNA Nucleoside. Journal of Physical Chemistry B, 2016, 120, 9387-9394.	2.6	33

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19	Comparison of biological chromophores: photophysical properties of cyanophenylalanine derivatives. Physical Chemistry Chemical Physics, 2016, 18, 20750-20757.	2.8	12
20	Ester Carbonyl Vibration as a Sensitive Probe of Protein Local Electric Field. Angewandte Chemie - International Edition, 2014, 53, 6080-6084.	13.8	60
21	The Design and Synthesis of Alanine-Rich Î±-Helical Peptides Constrained by an S,S-Tetrazine Photochemical Trigger: A Fragment Union Approach. Journal of Organic Chemistry, 2014, 79, 759-768.	3.2	11
22	2D IR Spectroscopy of Histidine: Probing Side-Chain Structure and Dynamics via Backbone Amide Vibrations. Journal of Physical Chemistry B, 2014, 118, 7799-7805.	2.6	39
23	Nonequilibrium dynamics of helix reorganization observed by transient 2D IR spectroscopy. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 17314-17319.	7.1	43
24	Design, Synthesis, and Photochemical Validation of Peptide Linchpins Containing the S,S-Tetrazine Phototrigger. Organic Letters, 2012, 14, 3518-3521.	4.6	24
25	Di-cysteine S,S-tetrazine: A potential ultra-fast photochemical trigger to explore the early events of peptide/protein folding. Journal of Photochemistry and Photobiology A: Chemistry, 2012, 234, 156-163.	3.9	21
26	Direct Assessment of the Î±-Helix Nucleation Time. Journal of Physical Chemistry B, 2011, 115, 7472-7478.	2.6	31
27	2D IRphoton echo of azido-probes for biomolecular dynamics. Physical Chemistry Chemical Physics, 2011, 13, 2237-2241.	2.8	81
28	Identification of Arginine Residues in Peptides by 2D-IR Echo Spectroscopy. Journal of Physical Chemistry A, 2011, 115, 9731-9738.	2.5	42
29	Tetrazine Phototriggers: Probes for Peptide Dynamics. Angewandte Chemie - International Edition, 2010, 49, 3612-3616.	13.8	64
30	Photophysics of a fluorescent non-natural amino acid: p-Cyanophenylalanine. Chemical Physics Letters, 2010, 487, 303-306.	2.6	39
31	2D IR photon echo spectroscopy reveals hydrogen bond dynamics of aromatic nitriles. Chemical Physics Letters, 2009, 469, 325-330.	2.6	60
32	2D IR photon echo study of the anharmonic coupling in the OCN region of phenyl cyanate. Chemical Physics Letters, 2009, 470, 80-84.	2.6	30
33	5-Cyanotryptophan as an infrared probe of local hydration status of proteins. Chemical Physics Letters, 2009, 478, 249-253.	2.6	94
34	Using Two Fluorescent Probes to Dissect the Binding, Insertion, and Dimerization Kinetics of a Model Membrane Peptide. Journal of the American Chemical Society, 2009, 131, 3816-3817.	13.7	47
35	Understanding the Mechanism of Î²-Hairpin Folding via Ï†-Value Analysis. Biochemistry, 2006, 45, 2668-2678.	2.5	95
36	Probing the Kinetics of Membrane-Mediated Helix Folding. Journal of Physical Chemistry B, 2006, 110, 8105-8109.	2.6	49

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37	A novel fluorescent probe for protein binding and folding studies:p-cyano-phenylalanine. Biopolymers, 2006, 83, 571-576.	2.4	63
38	Conformational Distribution of a 14-Residue Peptide in Solution:Â A Fluorescence Resonance Energy Transfer Study. Journal of Physical Chemistry B, 2005, 109, 4788-4795.	2.6	87
39	A New Method for Determining the Local Environment and Orientation of Individual Side Chains of Membrane-Binding Peptides. Journal of the American Chemical Society, 2004, 126, 5078-5079.	13.7	101