Hoi Sung Chung

List of Publications by Year
in descending order

50 papers	3,746 citations	159585 30 h-index	254184 43 g-index
52 all docs	52 docs citations	52 times ranked	3216 citing authors

#	Article	IF	Citations
1	Theory and Analysis of Single-Molecule FRET Experiments. Methods in Molecular Biology, 2022, 2376, 247-282.	0.9	0
2	Single-molecule fluorescence imaging and deep learning reveal highly heterogeneous aggregation of amyloid-Î² 42. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, e2116736119.	7.1	12
3	Kinetics of amyloid Î² from deep learning. Nature Computational Science, 2021, 1, 20-21.	8.0	2
4	FRET-based dynamic structural biology: Challenges, perspectives and an appeal for open-science practices. ELife, 2021, 10, .	6.0	152
5	Atomic view of cosolute-induced protein denaturation probed by NMR solvent paramagnetic relaxation enhancement. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	13
6	Disordered proteins follow diverse transition paths as they fold and bind to a partner. Science, 2020, 368, 1253-1257.	12.6	40
7	Fast three-color single-molecule FRET using statistical inference. Nature Communications, 2020, 11, 3336.	12.8	27
8	Amyloid Beta Oligomerization Probed by Single-Molecule FRET. Biophysical Journal, 2020, 118, 38a.	0.5	0
9	Single-molecule fluorescence studies of IDPs and IDRs. , 2019, , 93-136.		0
10	Diverse Folding Pathways of HIV-1 Protease Monomer on a Rugged Energy Landscape. Biophysical Journal, 2019, 117, 1456-1466.	0.5	5
11	Highly Disordered Amyloid-Î² Monomer Probed by Single-Molecule FRET and MD Simulation. Biophysical Journal, 2018, 114, 870-884.	0.5	88
12	Transition Path Times Measured by Single-Molecule Spectroscopy. Journal of Molecular Biology, 2018, 430, 409-423.	4.2	16
13	Protein folding transition path times from single molecule FRET. Current Opinion in Structural Biology, 2018, 48, 30-39.	5.7	97
14	Diffusion-limited association of disordered protein by non-native electrostatic interactions. Nature Communications, 2018, 9, 4707.	12.8	45
15	Probing the mechanism of inhibition of amyloid-Î²(1â€"42)â€"induced neurotoxicity by the chaperonin GroEL. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E11924-E11932.	7.1	29
16	Three-Color Single-Molecule FRET and Fluorescence Lifetime Analysis of Fast Protein Folding. Journal of Physical Chemistry B, 2018, 122, 11702-11720.	2.6	33
17	Oligomerization of the tetramerization domain of p53 probed by two- and three-color single-molecule FRET. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E6812-E6821.	7.1	45
18	Multi-Color Single Molecule FRET Study of Intrinsically Disordered Protein Binding. Biophysical Journal, 2016, 110, 555a-556a.	0.5	1

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19	Analysis of Fluorescence Lifetime and Energy Transfer Efficiency in Single-Molecule Photon Trajectories of Fast-Folding Proteins. Journal of Physical Chemistry B, 2016, 120, 680-699.	2.6	34
20	Testing Landscape Theory for Biomolecular Processes with Single Molecule Fluorescence Spectroscopy. Physical Review Letters, 2015, 115, 018101.	7.8	57
21	Structural origin of slow diffusion in protein folding. Science, 2015, 349, 1504-1510.	12.6	175
22	Fast single-molecule FRET spectroscopy: theory and experiment. Physical Chemistry Chemical Physics, 2014, 16, 18644.	2.8	83
23	Single-molecule fluorescence probes dynamics of barrier crossing. Nature, 2013, 502, 685-688.	27.8	193
24	Single-Molecule FRET Shows Folding Transition Path Time for All-Alpha Protein Slowed by Internal Friction. Biophysical Journal, 2013, 104, 188a.	0.5	1
25	Measuring ultrafast protein folding rates from photon-by-photon analysis of single molecule fluorescence trajectories. Chemical Physics, 2013, 422, 229-237.	1.9	43
26	Single-Molecule Fluorescence Experiments Determine Protein Folding Transition Path Times. Science, 2012, 335, 981-984.	12.6	360
27	Solution Structure of the ESCRT-I and -II Supercomplex: Implications for Membrane Budding and Scission. Structure, 2012, 20, 874-886.	3.3	85
28	Extracting Rate Coefficients from Single-Molecule Photon Trajectories and FRET Efficiency Histograms for a Fast-Folding Protein. Journal of Physical Chemistry A, 2011, 115, 3642-3656.	2.5	95
29	Photon-By-Photon Analysis of Single Molecule Fluorescence Trajectories Determines an Upper Bound for the Transition Path Time in Protein Folding. Biophysical Journal, 2011, 100, 349a.	0.5	0
30	Solution structure of the ESCRT-I complex by small-angle X-ray scattering, EPR, and FRET spectroscopy. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 9437-9442.	7.1	102
31	Photon-By-Photon Analysis of Single Molecule Fluorescence Trajectories of a Fast Folding Protein. Biophysical Journal, 2010, 98, 29a-30a.	0.5	0
32	Distinguishing between Protein Dynamics and Dye Photophysics inÂSingle-Molecule FRET Experiments. Biophysical Journal, 2010, 98, 696-706.	0.5	55
33	Single Molecule Photon Trajectories and Transition Paths in Protein Folding. , 2010, , .		0
34	Experimental determination of upper bound for transition path times in protein folding from single-molecule photon-by-photon trajectories. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 11837-11844.	7.1	262
35	Temperatureâ€dependent downhill unfolding of ubiquitin. II. Modeling the free energy surface. Proteins: Structure, Function and Bioinformatics, 2008, 72, 488-497.	2.6	18
36	Temperatureâ€dependent downhill unfolding of ubiquitin. I. Nanosecondâ€toâ€millisecond resolved nonlinear infrared spectroscopy. Proteins: Structure, Function and Bioinformatics, 2008, 72, 474-487.	2.6	32

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37	Amide I Two-Dimensional Infrared Spectroscopy of Proteins. Accounts of Chemical Research, 2008, 41, 432-441.	15.6	427
38	Probing the Folding Transition State of Ubiquitin Mutants by Temperature-Jump-Induced Downhill Unfolding. Biochemistry, 2008, 47, 13870-13877.	2.5	22
39	Transient 2D IR spectroscopy of ubiquitin unfolding dynamics. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 14237-14242.	7.1	164
40	Transient two-dimensional IR spectrometer for probing nanosecond temperature-jump kinetics. Review of Scientific Instruments, 2007, 78, 063101.	1.3	66
41	Multidimensional IR Spectroscopy of Site-Specific Hairpin Folding. Springer Series in Chemical Physics, 2007, , 350-352.	0.2	0
42	Visualization and Characterization of the Infrared Active Amide I Vibrations of Proteins. Journal of Physical Chemistry B, 2006, 110, 2888-2898.	2.6	49
43	The Anharmonic Vibrational Potential and Relaxation Pathways of the Amide I and II Modes ofN-Methylacetamideâ€. Journal of Physical Chemistry B, 2006, 110, 18973-18980.	2.6	123
44	From The Cover: Conformational changes during the nanosecond-to-millisecond unfolding of ubiquitin. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 612-617.	7.1	150
45	Residual Native Structure in a Thermally Denatured Î²-Hairpin. Journal of Physical Chemistry B, 2005, 109, 17025-17027.	2.6	60
46	Nonlinear Infrared Spectroscopy of Protein Conformational Change during Thermal Unfolding. Journal of Physical Chemistry B, 2004, 108, 15332-15342.	2.6	83
47	Two-Dimensional Infrared Spectroscopy of Antiparallel Î²-Sheet Secondary Structure. Journal of the American Chemical Society, 2004, 126, 7981-7990.	13.7	267
48	Separation of a benzene and nitric oxide mixture by a molecule prism. Journal of Chemical Physics, 2003, 119, 8905-8909.	3.0	37
49	Molecular lens applied to benzene and carbon disulfide molecular beams. Journal of Chemical Physics, 2001, 114, 8293-8302.	3.0	39
50	Molecular Lens of the Nonresonant Dipole Force. Physical Review Letters, 2000, 85, 2705-2708.	7.8	55