Jan T Liphardt

List of Publications by Year
in descending order

49 papers	10,030 citations	117625 34 h-index	214800 47 g-index
56 all docs	56 docs citations	56 times ranked	13320 citing authors

#	Article	IF	Citations
1	A molecular ruler based on plasmon coupling of single gold and silver nanoparticles. Nature Biotechnology, 2005, 23, 741-745.	17.5	1,431
2	Equilibrium Information from Nonequilibrium Measurements in an Experimental Test of Jarzynski's Equality. Science, 2002, 296, 1832-1835.	12.6	1,049
3	Single-molecule studies of DNA mechanics. Current Opinion in Structural Biology, 2000, 10, 279-285.	5.7	755
4	ZnOâ^'Al2O3and ZnOâ^'TiO2Coreâ^'Shell Nanowire Dye-Sensitized Solar Cells. Journal of Physical Chemistry B, 2006, 110, 22652-22663.	2.6	686
5	The Nonequilibrium Thermodynamics of Small Systems. Physics Today, 2005, 58, 43-48.	0.3	621
6	Tunable nanowire nonlinear optical probe. Nature, 2007, 447, 1098-1101.	27.8	544
7	Calibration of Dynamic Molecular Rulers Based on Plasmon Coupling between Gold Nanoparticles. Nano Letters, 2005, 5, 2246-2252.	9.1	539
8	Optical trapping and integration of semiconductor nanowire assemblies in water. Nature Materials, 2006, 5, 97-101.	27.5	399
9	Molecular Architecture and Assembly Principles of Vibrio cholerae Biofilms. Science, 2012, 337, 236-239.	12.6	340
10	Self-Organization of the Escherichia coli Chemotaxis Network Imaged with Super-Resolution Light Microscopy. PLoS Biology, 2009, 7, e1000137.	5.6	310
11	Use of plasmon coupling to reveal the dynamics of DNA bending and cleavage by single EcoRV restriction enzymes. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 2667-2672.	7.1	268
12	Identifying Kinetic Barriers to Mechanical Unfolding of the T. thermophila Ribozyme. Science, 2003, 299, 1892-1895.	12.6	226
13	Experimental test of Hatano and Sasa's nonequilibrium steady-state equality. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 15038-15041.	7.1	210
14	ATAC-see reveals the accessible genome by transposase-mediated imaging and sequencing. Nature Methods, 2016, 13, 1013-1020.	19.0	199
15	Light-powering Escherichia coli with proteorhodopsin. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 2408-2412.	7.1	176
16	What does physics have to do with cancer?. Nature Reviews Cancer, 2011, 11, 657-670.	28.4	168
17	Single-molecule superresolution imaging allows quantitative analysis of RAF multimer formation and signaling. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 18519-18524.	7.1	153
18	Selectivity mechanism of the nuclear pore complex characterized by single cargo tracking. Nature, 2010, 467, 600-603.	27.8	140

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19	Rapid disorganization of mechanically interacting systems of mammary acini. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 658-663.	7.1	139
20	Controlling DNA Capture and Propagation through Artificial Nanopores. Nano Letters, 2007, 7, 2824-2830.	9.1	132
21	mMaple: A Photoconvertible Fluorescent Protein for Use in Multiple Imaging Modalities. PLoS ONE, 2012, 7, e51314.	2.5	125
22	Biocompatible Force Sensor with Optical Readout and Dimensions of 6 nm3. Nano Letters, 2005, 5, 1509-1514.	9.1	112
23	Single-molecule in vivo imaging of bacterial respiratory complexes indicates delocalized oxidative phosphorylation. Biochimica Et Biophysica Acta - Bioenergetics, 2014, 1837, 811-824.	1.0	111
24	Mechanisms of Plastic Deformation in Collagen Networks Induced by Cellular Forces. Biophysical Journal, 2018, 114, 450-461.	0.5	108
25	Scanning angle interference microscopy reveals cell dynamics at the nanoscale. Nature Methods, 2012, 9, 825-827.	19.0	102
26	Importin-Î² modulates the permeability of the nuclear pore complex in a Ran-dependent manner. ELife, 2015, 4, .	6.0	102
27	The role of RNA pseudoknot stem 1 length in the promotion of efficient â^'1 ribosomal frameshifting. Journal of Molecular Biology, 1999, 288, 305-320.	4.2	77
28	Stiff stroma increases breast cancer risk by inducing the oncogene ZNF217. Journal of Clinical Investigation, 2020, 130, 5721-5737.	8.2	73
29	Strong triaxial coupling and anomalous Poisson effect in collagen networks. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 6790-6799.	7.1	72
30	Scaffold nucleoporins Nup188 and Nup192 share structural and functional properties with nuclear transport receptors. ELife, 2013, 2, e00745.	6.0	70
31	A single-molecule analysis reveals morphological targets for cellulase synergy. Nature Chemical Biology, 2013, 9, 356-361.	8.0	69
32	Evidence for an RNA pseudoknot loop-helix interaction essential for efficient â^'1 ribosomal frameshifting. Journal of Molecular Biology, 1999, 288, 321-335.	4.2	67
33	A Mutation in Histone H2B Represents a New Class of Oncogenic Driver. Cancer Discovery, 2019, 9, 1438-1451.	9.4	65
34	NuSeT: A deep learning tool for reliably separating and analyzing crowded cells. PLoS Computational Biology, 2020, 16, e1008193.	3.2	64
35	Concerted localization-resets precede YAP-dependent transcription. Nature Communications, 2020, 11, 4581.	12.8	40
36	Potential of light-harvesting proton pumps for bioenergy applications. Current Opinion in Biotechnology, 2010, 21, 265-270.	6.6	38

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37	A fluorogenic array for temporally unlimited single-molecule tracking. Nature Chemical Biology, 2019, 15, 401-409.	8.0	36
38	Satb1 integrates DNA binding site geometry and torsional stress to differentially target nucleosome-dense regions. Nature Communications, 2019, 10, 3221.	12.8	33
39	Fabrication of 10 nm diameter hydrocarbon nanopores. Applied Physics Letters, 2008, 93, 183101.	3.3	27
40	Origins of chemoreceptor curvature sorting in Escherichia coli. Nature Communications, 2017, 8, 14838.	12.8	27
41	Optical Measurement of Mechanical Forces Inside Short DNA Loops. Biophysical Journal, 2008, 94, 2179-2186.	0.5	25
42	Q&A: Single-molecule localization microscopy for biological imaging. BMC Biology, 2010, 8, 106.	3.8	22
43	Optical control of fast and processive engineered myosins in vitro and in living cells. Nature Chemical Biology, 2021, 17, 540-548.	8.0	17
44	Thermodynamic limits. Nature Physics, 2012, 8, 638-639.	16.7	13
45	Physical confinement induces malignant transformation in mammary epithelial cells. Biomaterials, 2019, 217, 119307.	11.4	13
46	Plasmon Rulers as Dynamic Molecular Rulers in Enzymology. Methods in Enzymology, 2010, 475, 175-198.	1.0	10
47	Achieving Trustworthy Biomedical Data Solutions. , 2020, , .		10
48	The Great Hunt For Extra Compliance. Biophysical Journal, 2007, 93, 4099.	0.5	2
49	Unfolding Single RNA Molecules with Optical Tweezers. Microscopy and Microanalysis, 2001, 7, 26-27.	0.4	0