Jan T Liphardt

List of Publications by Citations

51 papers	8,424 citations	32 h-index	56 g-index
56 ext. papers	9,455 ext. citations	14.1 avg, IF	5.74 L-index

#	Paper	IF	Citations
51	A molecular ruler based on plasmon coupling of single gold and silver nanoparticles. *Nature Biotechnology*, **2005**, 23, 741-5	44.5	1300
50	Equilibrium information from nonequilibrium measurements in an experimental test of Jarzynski equality. *Science*, **2002**, 296, 1832-5	33.3	901
49	Single-molecule studies of DNA mechanics. *Current Opinion in Structural Biology*, **2000**, 10, 279-85	8.1	665
48	ZnO-Al2O3 and ZnO-TiO2 core-shell nanowire dye-sensitized solar cells. *Journal of Physical Chemistry B*, **2006**, 110, 22652-63	3.4	644
47	The Nonequilibrium Thermodynamics of Small Systems. *Physics Today*, **2005**, 58, 43-48	0.9	550
46	Calibration of dynamic molecular rulers based on plasmon coupling between gold nanoparticles. *Nano Letters*, **2005**, 5, 2246-52	11.5	498
45	Tunable nanowire nonlinear optical probe. *Nature*, **2007**, 447, 1098-101	50.4	448
44	Optical trapping and integration of semiconductor nanowire assemblies in water. *Nature Materials*, **2006**, 5, 97-101	27	323
43	Self-organization of the Escherichia coli chemotaxis network imaged with super-resolution light microscopy. *PLoS Biology*, **2009**, 7, e1000137	9.7	264
42	Molecular architecture and assembly principles of Vibrio cholerae biofilms. *Science*, **2012**, 337, 236-9	33.3	257
41	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, 2667-72	11.5	246
40	Identifying kinetic barriers to mechanical unfolding of the T. thermophila ribozyme. *Science*, **2003**, 299, 1892-5	33.3	210
39	Experimental test of Hatano and Sasa nonequilibrium steady-state equality. *Proceedings of the National Academy of Sciences of the United States of America*, **2004**, 101, 15038-41	11.5	192
38	Light-powering Escherichia coli with proteorhodopsin. *Proceedings of the National Academy of Sciences of the United States of America*, **2007**, 104, 2408-12	11.5	145
37	What does physics have to do with cancer?. *Nature Reviews Cancer*, **2011**, 11, 657-70	31.3	143
36	Selectivity mechanism of the nuclear pore complex characterized by single cargo tracking. *Nature*, **2010**, 467, 600-3	50.4	131
35	ATAC-see reveals the accessible genome by transposase-mediated imaging and sequencing. *Nature Methods*, **2016**, 13, 1013-1020	21.6	122

34	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, 18519-24	11.5	119
33	Controlling DNA capture and propagation through artificial nanopores. *Nano Letters*, **2007**, 7, 2824-30	11.5	108
32	Biocompatible force sensor with optical readout and dimensions of 6 nm3. *Nano Letters*, **2005**, 5, 1509-14	11.5	101
31	Rapid disorganization of mechanically interacting systems of mammary acini. *Proceedings of the National Academy of Sciences of the United States of America*, **2014**, 111, 658-63	11.5	98
30	mMaple: a photoconvertible fluorescent protein for use in multiple imaging modalities. *PLoS ONE*, **2012**, 7, e51314	3.7	98
29	Scanning angle interference microscopy reveals cell dynamics at the nanoscale. *Nature Methods*, **2012**, 9, 825-7	21.6	78
28	Single-molecule in vivo imaging of bacterial respiratory complexes indicates delocalized oxidative phosphorylation. *Biochimica Et Biophysica Acta - Bioenergetics*, **2014**, 1837, 811-24	4.6	73
27	The role of RNA pseudoknot stem 1 length in the promotion of efficient -1 ribosomal frameshifting. *Journal of Molecular Biology*, **1999**, 288, 305-20	6.5	69
26	Importin-modulates the permeability of the nuclear pore complex in a Ran-dependent manner. *ELife*, **2015**, 4,	8.9	69
25	Mechanisms of Plastic Deformation in Collagen Networks Induced by Cellular Forces. *Biophysical Journal*, **2018**, 114, 450-461	2.9	65
24	Evidence for an RNA pseudoknot loop-helix interaction essential for efficient -1 ribosomal frameshifting. *Journal of Molecular Biology*, **1999**, 288, 321-35	6.5	61
23	A single-molecule analysis reveals morphological targets for cellulase synergy. *Nature Chemical Biology*, **2013**, 9, 356-61	11.7	58
22	Scaffold nucleoporins Nup188 and Nup192 share structural and functional properties with nuclear transport receptors. *ELife*, **2013**, 2, e00745	8.9	54
21	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	11.5	41
20	Potential of light-harvesting proton pumps for bioenergy applications. *Current Opinion in Biotechnology*, **2010**, 21, 265-70	11.4	33
19	A Mutation in Histone H2B Represents a New Class of Oncogenic Driver. *Cancer Discovery*, **2019**, 9, 1438-1451	24.4	30
18	NuSeT: A deep learning tool for reliably separating and analyzing crowded cells. *PLoS Computational Biology*, **2020**, 16, e1008193	5	29
17	Fabrication of 10 nm diameter hydrocarbon nanopores. *Applied Physics Letters*, **2008**, 93, 183101	3.4	23

16	Origins of chemoreceptor curvature sorting in Escherichia coli. *Nature Communications*, **2017**, 8, 14838	17.4	22
15	Optical measurement of mechanical forces inside short DNA loops. *Biophysical Journal*, **2008**, 94, 2179-86	2.9	22
14	A fluorogenic array for temporally unlimited single-molecule tracking. *Nature Chemical Biology*, **2019**, 15, 401-409	11.7	21
13	Stiff stroma increases breast cancer risk by inducing the oncogene ZNF217. *Journal of Clinical Investigation*, **2020**, 130, 5721-5737	15.9	19
12	Satb1 integrates DNA binding site geometry and torsional stress to differentially target nucleosome-dense regions. *Nature Communications*, **2019**, 10, 3221	17.4	18
11	Q&A: Single-molecule localization microscopy for biological imaging. *BMC Biology*, **2010**, 8, 106	7.3	18
10	Plasmon rulers as dynamic molecular rulers in enzymology. *Methods in Enzymology*, **2010**, 475, 175-98	1.7	9
9	Physical confinement induces malignant transformation in mammary epithelial cells. *Biomaterials*, **2019**, 217, 119307	15.6	8
8	Concerted localization-resets precede YAP-dependent transcription. *Nature Communications*, **2020**, 11, 4581	17.4	8
7	Achieving Trustworthy Biomedical Data Solutions **2020**,		5
6	Concerted localization-resets precede YAP-dependent transcription		5
5	Optical control of fast and processive engineered myosins in vitro and in living cells. *Nature Chemical Biology*, **2021**, 17, 540-548	11.7	5
4	A fluorogenic nanobody array tag for prolonged single molecule imaging in live cells		3
3	The great hunt for extra compliance. *Biophysical Journal*, **2007**, 93, 4099	2.9	2
2	A Fluorogenic Array Tag for Temporally Unlimited Single Molecule Tracking		1
1	Unfolding Single RNA Molecules with Optical Tweezers. *Microscopy and Microanalysis*, **2001**, 7, 26-27	0.5	