Iwan A T Schaap

List of Publications by Year
in descending order

43 papers	3,845 citations	218677 26 h-index	265206 42 g-index
43 all docs	43 docs citations	43 times ranked	5571 citing authors

#	Article	IF	Citations
1	Rapid Chiral Assembly of Rigid DNA Building Blocks for Molecular Nanofabrication. Science, 2005, 310, 1661-1665.	12.6	1,013
2	Deformation and Collapse of Microtubules on the Nanometer Scale. Physical Review Letters, 2003, 91, 098101.	7.8	220
3	Photoluminescence of Carbon Nanodots: Dipole Emission Centers and Electronâ€“Phonon Coupling. Nano Letters, 2014, 14, 5656-5661.	9.1	187
4	DNA-mediated anisotropic mechanical reinforcement of a virus. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 13706-13711.	7.1	186
5	Actin Filament Turnover Drives Leading Edge Growth during Myelin Sheath Formation in the Central Nervous System. Developmental Cell, 2015, 34, 139-151.	7.0	183
6	Cell Visco-Elasticity Measured with AFM and Optical Trapping at Sub-Micrometer Deformations. PLoS ONE, 2012, 7, e45297.	2.5	178
7	Elastic Response, Buckling, and Instability of Microtubules under Radial Indentation. Biophysical Journal, 2006, 91, 1521-1531.	0.5	163
8	Persistence and transmission of natural type I feline coronavirus infection. Journal of General Virology, 2003, 84, 2735-2744.	2.9	156
9	Myelin Membrane Assembly Is Driven by a Phase Transition of Myelin Basic Proteins Into a Cohesive Protein Meshwork. PLoS Biology, 2013, 11, e1001577.	5.6	148
10	Super-Resolution Optical Fluctuation Bio-Imaging with Dual-Color Carbon Nanodots. Nano Letters, 2016, 16, 237-242.	9.1	122
11	Structural and Mechanical Study of a Self-Assembling Protein Nanotube. Nano Letters, 2006, 6, 616-621.	9.1	115
12	pH-Controlled Two-Step Uncoating of Influenza Virus. Biophysical Journal, 2014, 106, 1447-1456.	0.5	106
13	Bending and Puncturing the Influenza Lipid Envelope. Biophysical Journal, 2011, 100, 637-645.	0.5	101
14	The 2018 correlative microscopy techniques roadmap. Journal Physics D: Applied Physics, 2018, 51, 443001.	2.8	99
15	Built-In Mechanical Stress in Viral Shells. Biophysical Journal, 2011, 100, 1100-1108.	0.5	75
16	Direct Measurement of Phage phi29 Stiffness Provides Evidence of Internal Pressure. Small, 2012, 8, 2366-2370.	10.0	71
17	Fluorescence Tracking of Genome Release during Mechanical Unpacking of Single Viruses. ACS Nano, 2015, 9, 10571-10579.	14.6	67
18	Critical Time Window of Neuronal Cholesterol Synthesis during Neurite Outgrowth. Journal of Neuroscience, 2012, 32, 7632-7645.	3.6	65

#	ARTICLE	IF	CITATIONS
19	Effect of Envelope Proteins on the Mechanical Properties of Influenza Virus. Journal of Biological Chemistry, 2012, 287, 41078-41088.	3.4	63
20	Malaria Parasite Actin Polymerization and Filament Structure. Journal of Biological Chemistry, 2010, 285, 36577-36585.	3.4	54
21	Tau protein binding forms a 1nm thick layer along protofilaments without affecting the radial elasticity of microtubules. Journal of Structural Biology, 2007, 158, 282-292.	2.8	50
22	Resolving the molecular structure of microtubules under physiological conditions with scanning force microscopy. European Biophysics Journal, 2004, 33, 462-467.	2.2	47
23	Atomic Force Microscopy micro-rheology reveals large structural inhomogeneities in single cell-nuclei. Scientific Reports, 2017, 7, 8116.	3.3	44
24	Swelling and Softening of the Cowpea Chlorotic Mottle Virus in Response to pH Shifts. Biophysical Journal, 2015, 108, 2541-2549.	0.5	40
25	Effect of Clathrin Light Chains on the Stiffness of Clathrin Lattices and Membrane Budding. Traffic, 2015, 16, 519-533.	2.7	39
26	Kinesin Walks the Line: Single Motors Observed by Atomic Force Microscopy. Biophysical Journal, 2011, 100, 2450-2456.	0.5	36
27	Calcium Promotes the Formation of Syntaxin 1 Mesoscale Domains through Phosphatidylinositol 4,5-Bisphosphate. Journal of Biological Chemistry, 2016, 291, 7868-7876.	3.4	29
28	Atomic force microscopy of virus shells. Biochemical Society Transactions, 2017, 45, 499-511.	3.4	25
29	Imaging the position-dependent 3D force on microbeads subjected to acoustic radiation forces and streaming. Lab on A Chip, 2016, 16, 2682-2693.	6.0	24
30	Direct 2D measurement of time-averaged forces and pressure amplitudes in acoustophoretic devices using optical trapping. Lab on A Chip, 2015, 15, 290-300.	6.0	18
31	Atomic Force Microscopy of Viruses. Advances in Experimental Medicine and Biology, 2019, 1215, 159-179.	1.6	18
32	Drebrin-like protein DBN-1 is a sarcomere component that stabilizes actin filaments during muscle contraction. Nature Communications, 2015, 6, 7523.	12.8	16
33	The AP2 adaptor enhances clathrin coat stiffness. FEBS Journal, 2019, 286, 4074-4085.	4.7	16
34	Observation of microtubules with scanning force microscopy in liquid. Nanotechnology, 2003, 14, 143-146.	2.6	13
35	Label-Free Measurement of Amyloid Elongation by Suspended Microchannel Resonators. Analytical Chemistry, 2015, 87, 1821-1828.	6.5	12
36	Durable protein lattices of clathrin that can be functionalized with nanoparticles and active biomolecules. Nature Nanotechnology, 2015, 10, 954-957.	31.5	11

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37	A high-speed vertical optical trap for the mechanical testing of living cells at piconewton forces. Review of Scientific Instruments, 2013, 84, 113707.	1.3	10
38	Structural and Dynamic Characterization of Biochemical Processes by Atomic Force Microscopy. Methods in Molecular Biology, 2011, 778, 71-95.	0.9	8
39	Electromechanical Photophysics of GFP Packed Inside Viral Protein Cages Probed by Forceâ€Fluorescence Hybrid Singleâ€Molecule Microscopy. Small, 2022, 18, .	10.0	7
40	Swelling and Softening of the CCMV Plant Virus Capsid in Response toÂpH Shifts. Biophysical Journal, 2010, 98, 656a.	0.5	4
41	Propranolol Restricts the Mobility of Single EGF-Receptors on the Cell Surface before Their Internalization. PLoS ONE, 2013, 8, e83086.	2.5	3
42	Rotational speed measurements of small spherical particles driven by acoustic viscous torques utilizing an optical trap. Journal of Micromechanics and Microengineering, 2021, 31, 034004.	2.6	3
43	Manipulating and imaging molecular motors with optical traps, single-molecule fluorescence and atomic force microscopy. , 2008, , 217-218.		0