

Erik Schffer

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

67
papers

4,991
citations

33
h-index

70
g-index

81
ext. papers

5,705
ext. citations

7.6
avg, IF

5.43
L-index

#	Paper	IF	Citations
67	Anisotropic and Amphiphilic Mesoporous Core-Shell Silica Microparticles Provide Chemically Selective Environments for Simultaneous Delivery of Curcumin and Quercetin. <i>Langmuir</i> , 2021 , 37, 13460-13470	4.4	0
66	Fast 3D imaging of giant unilamellar vesicles using reflected light-sheet microscopy with single molecule sensitivity. <i>Journal of Microscopy</i> , 2021 , 285, 40	1.9	0
65	Single depolymerizing and transport kinesins stabilize microtubule ends. <i>Cytoskeleton</i> , 2021 , 78, 177-184	4.4	0
64	Germanium nanospheres for ultraresolution picotensiometry of kinesin motors. <i>Science</i> , 2021 , 371,	33.3	28
63	Reconstitution and Imaging of Microtubule Dynamics by Fluorescence and Label-free Microscopy. <i>STAR Protocols</i> , 2020 , 1, 100177	1.4	3
62	The Kinesin-8 Kip3 Depolymerizes Microtubules with a Collective Force-Dependent Mechanism. <i>Biophysical Journal</i> , 2020 , 118, 1958-1967	2.9	4
61	Polycationic gold nanorods as multipurpose in vitro microtubule markers. <i>Nanoscale Advances</i> , 2020 , 2, 4003-4010	5.1	0
60	Self-Sensing Enzyme-Powered Micromotors Equipped with pH-Responsive DNA Nanoswitches. <i>Nano Letters</i> , 2019 , 19, 3440-3447	11.5	80
59	High performance passive vibration isolation system for optical tables using six-degree-of-freedom viscous damping combined with steel springs. <i>Review of Scientific Instruments</i> , 2019 , 90, 015113	1.7	5
58	Supported Solid Lipid Bilayers as a Platform for Single-Molecule Force Measurements. <i>Nano Letters</i> , 2019 , 19, 8877-8886	11.5	7
57	Determination of pitch rotation in a spherical birefringent microparticle. <i>Journal of Optics (United Kingdom)</i> , 2018 , 20, 035603	1.7	9
56	Measuring Microtubule Supertwist and Defects by Three-Dimensional-Force-Clamp Tracking of Single Kinesin-1 Motors. <i>Nano Letters</i> , 2018 , 18, 1290-1295	11.5	13
55	LED-based interference-reflection microscopy combined with optical tweezers for quantitative three-dimensional microtubule imaging. <i>Optics Express</i> , 2018 , 26, 14499-14513	3.3	19
54	Label-free high-speed wide-field imaging of single microtubules using interference reflection microscopy. <i>Journal of Microscopy</i> , 2018 , 272, 60-66	1.9	36
53	Phragmoplast Orienting Kinesin 2 Is a Weak Motor Switching between Processive and Diffusive Modes. <i>Biophysical Journal</i> , 2018 , 115, 375-385	2.9	15
52	Three-Dimensional Optical Tweezers Tracking Resolves Random Sideward Steps of the Kinesin-8 Kip3. <i>Biophysical Journal</i> , 2018 , 115, 1993-2002	2.9	7
51	Influence of Enzyme Quantity and Distribution on the Self-Propulsion of Non-Janus Urease-Powered Micromotors. <i>Journal of the American Chemical Society</i> , 2018 , 140, 7896-7903	16.4	105

50	Kinesin rotates unidirectionally and generates torque while walking on microtubules. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017 , 114, 10894-10899	11.5	52
49	Developmentally Regulated GTP binding protein 1 (DRG1) controls microtubule dynamics. <i>Scientific Reports</i> , 2017 , 7, 9996	4.9	21
48	Implementation and Tuning of an Optical Tweezers Force-Clamp Feedback System. <i>Methods in Molecular Biology</i> , 2017 , 1486, 109-136	1.4	7
47	Custom-Made Microspheres for Optical Tweezers. <i>Methods in Molecular Biology</i> , 2017 , 1486, 137-155	1.4	4
46	Directed Rotational Motion of Birefringent Particles by Randomly Changing the Barrier Height at the Threshold in a Washboard Potential. <i>Current Science</i> , 2016 , 111, 2005	2.2	3
45	The Kinesin-8 Kip3 switches protofilaments in a sideward random walk asymmetrically biased by force. <i>Biophysical Journal</i> , 2015 , 108, 2019-27	2.9	25
44	Enzyme-Powered Hollow Mesoporous Janus Nanomotors. <i>Nano Letters</i> , 2015 , 15, 7043-50	11.5	282
43	A Single-Strand Annealing Protein Clamps DNA to Detect and Secure Homology. <i>PLoS Biology</i> , 2015 , 13, e1002213	9.7	15
42	Versatile microsphere attachment of GFP-labeled motors and other tagged proteins with preserved functionality. <i>Journal of Biological Methods</i> , 2015 , 2, e30	1.4	15
41	Kinesin Kip2 enhances microtubule growth in vitro through length-dependent feedback on polymerization and catastrophe. <i>ELife</i> , 2015 , 4,	8.9	24
40	Kinesin-8 is a low-force motor protein with a weakly bound slip state. <i>Biophysical Journal</i> , 2013 , 104, 2456-64	2.9	41
39	The growth speed of microtubules with XMAP215-coated beads coupled to their ends is increased by tensile force. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013 , 110, 14670-5	11.5	27
38	Nanonewton optical force trap employing anti-reflection coated, high-refractive-index titania microspheres. <i>Nature Photonics</i> , 2012 , 6, 469-473	33.9	84
37	Under-filling trapping objectives optimizes the use of the available laser power in optical tweezers. <i>Optics Express</i> , 2011 , 19, 11759-68	3.3	47
36	Measuring the complete force field of an optical trap. <i>Optics Letters</i> , 2011 , 36, 1260-2	3	55
35	Seeded growth of titania colloids with refractive index tunability and fluorophore-free luminescence. <i>Langmuir</i> , 2011 , 27, 1626-34	4	18
34	Inertial effects of a small Brownian particle cause a colored power spectral density of thermal noise. <i>Physical Review Letters</i> , 2011 , 107, 228301	7.4	48
33	Functional surface attachment in a sandwich geometry of GFP-labeled motor proteins. <i>Methods in Molecular Biology</i> , 2011 , 778, 11-8	1.4	

32	Breaking of bonds between a kinesin motor and microtubules causes protein friction 2010 ,		1
31	Microtubule dynamics reconstituted in vitro and imaged by single-molecule fluorescence microscopy. <i>Methods in Cell Biology</i> , 2010 , 95, 221-45	1.8	164
30	Protein friction limits diffusive and directed movements of kinesin motors on microtubules. <i>Science</i> , 2009 , 325, 870-3	33.3	159
29	Optical tweezers with millikelvin precision of temperature-controlled objectives and base-pair resolution. <i>Optics Express</i> , 2009 , 17, 17190-9	3.3	53
28	Optical trapping of coated microspheres. <i>Optics Express</i> , 2008 , 16, 13831-44	3.3	68
27	Coated microspheres as enhanced probes for optical trapping 2008 ,		5
26	LED illumination for video-enhanced DIC imaging of single microtubules. <i>Journal of Microscopy</i> , 2007 , 226, 1-5	1.9	40
25	Surface forces and drag coefficients of microspheres near a plane surface measured with optical tweezers. <i>Langmuir</i> , 2007 , 23, 3654-65	4	176
24	Calibration of optical tweezers with positional detection in the back focal plane. <i>Review of Scientific Instruments</i> , 2006 , 77, 103101	1.7	234
23	Molecular forces caused by the confinement of thermal noise. <i>Physical Review Letters</i> , 2004 , 92, 156102	7.4	38
22	Dynamic domain formation in membranes: thickness-modulation-induced phase separation. <i>European Physical Journal E</i> , 2004 , 14, 169-75	1.5	15
21	Self-organized organic nanostructures: structure formation in thin polymer blend films. <i>Surface and Interface Analysis</i> , 2004 , 36, 195-196	1.5	2
20	Capillary instabilities by fluctuation induced forces. <i>European Physical Journal E</i> , 2003 , 12, 375-9; discussion 380-1	1.5	22
19	The distribution of active force generators controls mitotic spindle position. <i>Science</i> , 2003 , 301, 518-21	33.3	292
18	Aspects of electrohydrodynamic instabilities at polymer interfaces. <i>Fibers and Polymers</i> , 2003 , 4, 1-7	2	13
17	Thermomechanical Lithography: Pattern Replication Using a Temperature Gradient Driven Instability. <i>Advanced Materials</i> , 2003 , 15, 514-517	24	77
16	Hierarchical structure formation and pattern replication induced by an electric field. <i>Nature Materials</i> , 2003 , 2, 48-52	27	244
15	Morphological Instability of a Confined Polymer Film in a Thermal Gradient. <i>Macromolecules</i> , 2003 , 36, 1645-1655	5.5	70

14	Pattern Replication by Confined Dewetting. <i>Langmuir</i> , 2003 , 19, 9714-9718	4	52
13	Acoustic instabilities in thin polymer films. <i>European Physical Journal E</i> , 2002 , 8, 347-51	1.5	27
12	Temperature-gradient-induced instability in polymer films. <i>Europhysics Letters</i> , 2002 , 60, 255-261	1.6	54
11	Electric Field Induced Dewetting at Polymer/Polymer Interfaces. <i>Macromolecules</i> , 2002 , 35, 6255-6262	5.5	89
10	Structure Formation at the Interface of Liquid/Liquid Bilayer in Electric Field. <i>Macromolecules</i> , 2002 , 35, 3971-3976	5.5	146
9	Spreading Dynamics of Polydimethylsiloxane Drops: Crossover from Laplace to Van der Waals Spreading. <i>Journal of Colloid and Interface Science</i> , 2001 , 234, 178-193	9.3	38
8	Electrohydrodynamic instabilities in polymer films. <i>Europhysics Letters</i> , 2001 , 53, 518-524	1.6	251
7	Electric field induced instabilities at liquid/liquid interfaces. <i>Journal of Chemical Physics</i> , 2001 , 114, 2377-2381	3.9	171
6	Electrically induced structure formation and pattern transfer. <i>Nature</i> , 2000 , 403, 874-7	50.4	677
5	Contact line dynamics near the pinning threshold: a capillary rise and fall experiment. <i>Physical Review E</i> , 2000 , 61, 5257-77	2.4	79
4	Nanophase-separated polymer films as high-performance antireflection coatings. <i>Science</i> , 1999 , 283, 520-2	33.3	574
3	Dynamics of Contact Line Pinning in Capillary Rise and Fall. <i>Physical Review Letters</i> , 1998 , 80, 3069-3072	7.4	57
2	Dynamics of Air-Water Contact Lines and Interfaces Near the Pinning Threshold. <i>Materials Research Society Symposia Proceedings</i> , 1996 , 464, 351		
1	Germanium nanospheres for ultraresolution picotensiometry of kinesin motors		2