Akihiko Ishijima

List of Publications by Year
in descending order

41 papers	3,593 citations	218592 26 h-index	289141 40 g-index
41 all docs	41 docs citations	41 times ranked	2371 citing authors

#	Article	IF	Citations
1	Simultaneous Observation of Individual ATPase and Mechanical Events by a Single Myosin Molecule during Interaction with Actin. Cell, 1998, 92, 161-171.	13.5	494
2	Direct measurement of stiffness of single actin filaments with and without tropomyosin by in vitro nanomanipulation.. Proceedings of the National Academy of Sciences of the United States of America, 1994, 91, 12962-12966.	3.3	451
3	Direct observation of steps in rotation of the bacterial flagellar motor. Nature, 2005, 437, 916-919.	13.7	309
4	Sub-piconewton force fluctuations of actomyosin in vitro. Nature, 1991, 352, 301-306.	13.7	277
5	Multiple- and single-molecule analysis of the actomyosin motor by nanometer-piconewton manipulation with a microneedle: unitary steps and forces. Biophysical Journal, 1996, 70, 383-400.	0.2	229
6	Single-Molecule Analysis of the Actomyosin Motor Using Nano-Manipulation. Biochemical and Biophysical Research Communications, 1994, 199, 1057-1063.	1.0	210
7	Single molecule nanobioscience. Trends in Biochemical Sciences, 2001, 26, 438-444.	3.7	180
8	Sodiumâ€dependent dynamic assembly of membrane complexes in sodiumâ€driven flagellar motors. Molecular Microbiology, 2009, 71, 825-835.	1.2	133
9	Torqueâ€"speed Relationship of the Na+-driven Flagellar Motor of Vibrio alginolyticus. Journal of Molecular Biology, 2003, 327, 1043-1051.	2.0	130
10	Force-Generating Domain of Myosin Motor. Biochemical and Biophysical Research Communications, 1993, 196, 1504-1510.	1.0	115
11	Orientation Dependence of Displacements by a Single One-Headed Myosin Relative to the Actin Filament. Biophysical Journal, 1998, 75, 1886-1894.	0.2	115
12	Charge-reversion mutagenesis of Dictyostelium actin to map the surface recognized by myosin during ATP-driven sliding motion.. Proceedings of the National Academy of Sciences of the United States of America, 1993, 90, 2127-2131.	3.3	83
13	Pico calorimeter for detection of heat produced in an individual brown fat cell. Applied Physics Letters, 2012, 100, .	1.5	78
14	Torqueâ€"Speed Relationships of Na+-driven Chimeric Flagellar Motors in Escherichia coli. Journal of Molecular Biology, 2008, 376, 1251-1259.	2.0	76
15	Single molecule nanomanipulation of biomolecules. Trends in Biotechnology, 2001, 19, 211-216.	4.9	63
16	The Systematic Substitutions Around the Conserved Charged Residues of the Cytoplasmic Loop of Na+-driven Flagellar Motor Component PomA. Journal of Molecular Biology, 2002, 320, 403-413.	2.0	60
17	Exchange of rotor components in functioning bacterial flagellar motor. Biochemical and Biophysical Research Communications, 2010, 394, 130-135.	1.0	55
18	Nano-manipulation of actomyosin molecular motors in vitro: a new working principle. Trends in Biochemical Sciences, 1993, 18, 319-324.	3.7	47

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19	A Kinetic Mechanism for the Fast Movement of Chara Myosin. Journal of Molecular Biology, 2003, 328, 939-950.	2.0	46
20	Coordinated Reversal of Flagellar Motors on a Single Escherichia coli Cell. Biophysical Journal, 2011, 100, 2193-2200.	0.2	43
21	Mechanical analyses of morphological and topological transformation of liposomes. BioSystems, 2003, 71, 93-100.	0.9	42
22	Formation and Maintenance of Tubular Membrane Projections Require Mechanical Force, but their Elongation and Shortening do not Require Additional Force. Journal of Molecular Biology, 2005, 348, 325-333.	2.0	42
23	High Hydrostatic Pressure Induces Counterclockwise to Clockwise Reversals of the Escherichia coli Flagellar Motor. Journal of Bacteriology, 2013, 195, 1809-1814.	1.0	39
24	Temperature Changes in Brown Adipocytes Detected with a Bimaterial Microcantilever. Biophysical Journal, 2014, 106, 2458-2464.	0.2	37
25	Visualization of Functional Rotor Proteins of the Bacterial Flagellar Motor in the Cell Membrane. Journal of Molecular Biology, 2007, 367, 692-701.	2.0	35
26	Direct Imaging of Intracellular Signaling Components That Regulate Bacterial Chemotaxis. Science Signaling, 2014, 7, ra32.	1.6	35
27	Hybrid-fuel bacterial flagellar motors in<i>Escherichia coli</i>. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 3436-3441.	3.3	28
28	Single-Cell E.Âcoli Response to an Instantaneously Applied Chemotactic Signal. Biophysical Journal, 2014, 107, 730-739.	0.2	28
29	Micrometer-Size Vesicle Formation Triggered by UV Light. Langmuir, 2014, 30, 7289-7295.	1.6	21
30	Two methods of temperature control for single-molecule measurements. European Biophysics Journal, 2011, 40, 651-660.	1.2	17
31	Thermosensing Function of the<i>Escherichia coli</i>Redox Sensor Aer. Journal of Bacteriology, 2010, 192, 1740-1743.	1.0	16
32	Modification of the bi-directional sliding movement of actin filaments along native thick filaments isolated from a clam. Journal of Muscle Research and Cell Motility, 1996, 17, 637-646.	0.9	10
33	Accumulated strain mechanism for length determination of thick filaments in skeletal muscle. I. Experimental bases. Journal of Muscle Research and Cell Motility, 1986, 7, 491-500.	0.9	9
34	Morphological and topological transformation of membrane vesicles. Journal of Biological Physics, 2002, 28, 225-235.	0.7	8
35	Velocity-Dependent Actomyosin ATPase Cycle Revealed by InÂVitro Motility Assay with Kinetic Analysis. Biophysical Journal, 2012, 103, 711-718.	0.2	7
36	Single Carbon Nanotube-Based Reversible Regulation of Biological Motor Activity. ACS Nano, 2015, 9, 3677-3684.	7.3	7

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37	The Neck Domain of Myosin II Primarily Regulates the Actomyosin Kinetics, not the Stepsize. Journal of Molecular Biology, 2005, 353, 213-221.	2.0	5
38	Formation and maintenance of tubular membrane projections: Experiments and numerical calculations. BioSystems, 2008, 93, 115-119.	0.9	5
39	Temperature Dependences of Torque Generation and Membrane Voltage in the Bacterial Flagellar Motor. Biophysical Journal, 2013, 105, 2801-2810.	0.2	5
40	Local heating of molecular motors using single carbon nanotubes. Biophysical Reviews, 2016, 8, 25-32.	1.5	2
41	Simultaneous Measurement of Individual ATPase and Mechanical Reactions by a Single Myosin Molecule at Work. Optical Review, 1999, 6, 16-23.	1.2	1