Hiroyuki Noji

List of Publications by Year
in descending order

213 papers	14,624 citations	34076 52 h-index	20343 116 g-index
219 all docs	219 docs citations	219 times ranked	10436 citing authors

#	Article	IF	Citations
1	Direct observation of the rotation of F1-ATPase. Nature, 1997, 386, 299-302.	13.7	2,244
2	Visualization of ATP levels inside single living cells with fluorescence resonance energy transfer-based genetically encoded indicators. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 15651-15656.	3.3	884
3	Resolution of distinct rotational substeps by submillisecond kinetic analysis of F1-ATPase. Nature, 2001, 410, 898-904.	13.7	810
4	F1-ATPase Is a Highly Efficient Molecular Motor that Rotates with Discrete 120Â° Steps. Cell, 1998, 93, 1117-1124.	13.5	806
5	Mechanically driven ATP synthesis by F1-ATPase. Nature, 2004, 427, 465-468.	13.7	508
6	High-Speed Atomic Force Microscopy Reveals Rotary Catalysis of Rotorless F ₁ -ATPase. Science, 2011, 333, 755-758.	6.0	420
7	Highly coupled ATP synthesis by F1-ATPase single molecules. Nature, 2005, 433, 773-777.	13.7	380
8	Coupling of Rotation and Catalysis in F1-ATPase Revealed by Single-Molecule Imaging and Manipulation. Cell, 2007, 130, 309-321.	13.5	377
9	Microfabricated arrays of femtoliter chambers allow single molecule enzymology. Nature Biotechnology, 2005, 23, 361-365.	9.4	332
10	Diversity in ATP concentrations in a single bacterial cell population revealed by quantitative single-cell imaging. Scientific Reports, 2014, 4, 6522.	1.6	293
11	Chemomechanical coupling in F1-ATPase revealed by simultaneous observation of nucleotide kinetics and rotation. Nature Structural and Molecular Biology, 2004, 11, 142-148.	3.6	269
12	Photo Gelâ€“Sol/Solâ€“Gel Transition and Its Patterning of a Supramolecular Hydrogel as Stimuliâ€Responsive Biomaterials. Chemistry - A European Journal, 2008, 14, 3977-3986.	1.7	208
13	A single-molecule enzymatic assay in a directly accessible femtoliter droplet array. Lab on A Chip, 2010, 10, 3355.	3.1	186
14	Evidence for rotation of V1-ATPase. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 2312-2315.	3.3	185
15	Large-scale femtoliter droplet array for digital counting of single biomolecules. Lab on A Chip, 2012, 12, 4986.	3.1	185
16	Rotation and structure of FoF1-ATP synthase. Journal of Biochemistry, 2011, 149, 655-664.	0.9	184
17	F1-ATPase: A Rotary Motor Made of a Single Molecule. Cell, 1998, 93, 21-24.	13.5	175
18	Direct Observation of the Rotation of Îµ Subunit in F1-ATPase. Journal of Biological Chemistry, 1998, 273, 19375-19377.	1.6	173

#	Article	IF	Citations
19	Ghost cytometry. Science, 2018, 360, 1246-1251.	6.0	165
20	The Rotary Machine in the Cell, ATP Synthase. Journal of Biological Chemistry, 2001, 276, 1665-1668.	1.6	154
21	Simple Dark-Field Microscopy with Nanometer Spatial Precision and Microsecond Temporal Resolution. Biophysical Journal, 2010, 98, 2014-2023.	0.2	150
22	Phosphate release in F1-ATPase catalytic cycle follows ADP release. Nature Chemical Biology, 2010, 6, 814-820.	3.9	146
23	Fluctuation Theorem Applied to<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mi mathvariant="bold">F</mml:mi><mml:mn>1</mml:mn></mml:msub></mml:math>-ATPase. Physical Review Letters, 2010, 104, 218103.	2.9	146
24	Ca²⁺ Regulation of Mitochondrial ATP Synthesis Visualized at the Single Cell Level. ACS Chemical Biology, 2011, 6, 709-715.	1.6	140
25	Direct observation of intermediate states during the stepping motion of kinesin-1. Nature Chemical Biology, 2016, 12, 290-297.	3.9	119
26	A Transient Rise in Free Mg2+ Ions Released from ATP-Mg Hydrolysis Contributes to Mitotic Chromosome Condensation. Current Biology, 2018, 28, 444-451.e6.	1.8	116
27	Activation of pausing F1 motor by external force. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 4288-4293.	3.3	104
28	In Vivo Fluorescent Adenosine 5â€²-Triphosphate (ATP) Imaging of <i>Drosophila melanogaster</i> and <i>Caenorhabditis elegans</i> by Using a Genetically Encoded Fluorescent ATP Biosensor Optimized for Low Temperatures. Analytical Chemistry, 2013, 85, 7889-7896.	3.2	103
29	Lipid Bilayer Microarray for Parallel Recording of Transmembrane Ion Currents. Analytical Chemistry, 2008, 80, 328-332.	3.2	101
30	Arrayed lipid bilayer chambers allow single-molecule analysis of membrane transporter activity. Nature Communications, 2014, 5, 4519.	5.8	101
31	Evaluation of intramitochondrial ATP levels identifies G0/G1 switch gene 2 as a positive regulator of oxidative phosphorylation. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 273-278.	3.3	101
32	Digital Bioassays: Theory, Applications, and Perspectives. Analytical Chemistry, 2017, 89, 92-101.	3.2	100
33	Reversible Dimerization of <i>Aequorea victoria</i> Fluorescent Proteins Increases the Dynamic Range of FRET-Based Indicators. ACS Chemical Biology, 2010, 5, 215-222.	1.6	99
34	Rotation of Escherichia coli F1-ATPase. Biochemical and Biophysical Research Communications, 1999, 260, 597-599.	1.0	97
35	The ATP-waiting conformation of rotating F1-ATPase revealed by single-pair fluorescence resonance energy transfer. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 9314-9318.	3.3	95
36	Evaluation of Multidrug Efflux Pump Inhibitors by a New Method Using Microfluidic Channels. PLoS ONE, 2011, 6, e18547.	1.1	95

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37	Molecular Mechanism of ATP Hydrolysis in F₁-ATPase Revealed by Molecular Simulations and Single-Molecule Observations. Journal of the American Chemical Society, 2012, 134, 8447-8454.	6.6	95
38	Highly Reproducible Method of Planar Lipid Bilayer Reconstitution in Polymethyl Methacrylate Microfluidic Chip. Langmuir, 2006, 22, 1937-1942.	1.6	94
39	Mechanical modulation of catalytic power on F1-ATPase. Nature Chemical Biology, 2012, 8, 86-92.	3.9	94
40	Planar lipid bilayer reconstitution with a micro-fluidic system. Lab on A Chip, 2004, 4, 502.	3.1	85
41	Ultrafast water permeation through nanochannels with a densely fluorous interior surface. Science, 2022, 376, 738-743.	6.0	82
42	Visualization of cargo concentration by COPII minimal machinery in a planar lipid membrane. EMBO Journal, 2009, 28, 3279-3289.	3.5	80
43	Mechanism of Inhibition by C-terminal Î±-Helices of the Ïµ Subunit of Escherichia coli FoF1-ATP Synthase. Journal of Biological Chemistry, 2009, 284, 17457-17464.	1.6	77
44	Observations of rotation within the FoF1-ATP synthase: deciding between rotation of the Focsubunit ring and artifact. FEBS Letters, 2000, 470, 244-248.	1.3	73
45	Correlation between the conformational states of F ₁ -ATPase as determined from its crystal structure and single-molecule rotation. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 20722-20727.	3.3	71
46	Single-molecule analysis of phospholipid scrambling by TMEM16F. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 3066-3071.	3.3	68
47	Reversible Ion Transportation Switch by a Ligand-Gated Synthetic Supramolecular Ion Channel. Journal of the American Chemical Society, 2014, 136, 15584-15595.	6.6	65
48	Mechano-Sensitive Synthetic Ion Channels. Journal of the American Chemical Society, 2017, 139, 18016-18023.	6.6	65
49	Redox Regulation of the Rotation of F1-ATP Synthase. Journal of Biological Chemistry, 2001, 276, 39505-39507.	1.6	63
50	The Role of the DELSEED Motif of the Î² Subunit in Rotation of F1-ATPase. Journal of Biological Chemistry, 2000, 275, 14260-14263.	1.6	61
51	Electrophysiological recordings of single ion channels in planar lipid bilayers using a polymethyl methacrylate microfluidic chip. Biosensors and Bioelectronics, 2007, 22, 1111-1115.	5.3	60
52	Resolving stepping rotation in Thermus thermophilus H+-ATPase/synthase with an essentially drag-free probe. Nature Communications, 2011, 2, 233.	5.8	57
53	Temperature Alternation by an On-Chip Microheater To Reveal Enzymatic Activity of Î²-Galactosidase at High Temperatures. Analytical Chemistry, 2005, 77, 4810-4814.	3.2	54
54	Ion Permeation by a Folded Multiblock Amphiphilic Oligomer Achieved by Hierarchical Construction of Self-Assembled Nanopores. Journal of the American Chemical Society, 2012, 134, 19788-19794.	6.6	54

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55	A Microfluidic Channel Method for Rapid Drug-Susceptibility Testing of Pseudomonas aeruginosa. PLoS ONE, 2016, 11, e0148797.	1.1	54
56	Temperature distribution measurement on microfabricated thermodevice for single biomolecular observation using fluorescent dye. Sensors and Actuators B: Chemical, 2006, 117, 339-345.	4.0	51
57	Basic Properties of Rotary Dynamics of the Molecular Motor Enterococcus hirae V1-ATPase. Journal of Biological Chemistry, 2013, 288, 32700-32707.	1.6	51
58	Purine but Not Pyrimidine Nucleotides Support Rotation of F1-ATPase. Journal of Biological Chemistry, 2001, 276, 25480-25486.	1.6	50
59	Single-molecule Imaging Analysis of Elementary Reaction Steps of Trichoderma reesei Cellobiohydrolase I (Cel7A) Hydrolyzing Crystalline Cellulose IÎ± and IIII. Journal of Biological Chemistry, 2014, 289, 14056-14065.	1.6	50
60	The six steps of the complete F1-ATPase rotary catalytic cycle. Nature Communications, 2021, 12, 4690.	5.8	50
61	A single-cell drug efflux assay in bacteria by using a directly accessible femtoliter droplet array. Lab on A Chip, 2012, 12, 3923.	3.1	48
62	Catalytic robustness and torque generation of the F1-ATPase. Biophysical Reviews, 2017, 9, 103-118.	1.5	48
63	Accurate high-throughput screening based on digital protein synthesis in a massively parallel femtoliter droplet array. Science Advances, 2019, 5, eaav8185.	4.7	48
64	Role of the DELSEED Loop in Torque Transmission of F1-ATPase. Biophysical Journal, 2012, 103, 970-978.	0.2	47
65	Timing of inorganic phosphate release modulates the catalytic activity of ATP-driven rotary motor protein. Nature Communications, 2014, 5, 3486.	5.8	47
66	Biological Nanomotors with a Revolution, Linear, or Rotation Motion Mechanism. Microbiology and Molecular Biology Reviews, 2016, 80, 161-186.	2.9	47
67	Temperatureâ€sensitive reaction intermediate of F₁â€ATPase. EMBO Reports, 2008, 9, 84-90.	2.0	46
68	Loop-mediated isothermal amplification of a single DNA molecule in polyacrylamide gel-based microchamber. Biomedical Microdevices, 2008, 10, 539-546.	1.4	45
69	A single-molecule digital enzyme assay using alkaline phosphatase with a cumarin-based fluorogenic substrate. Analyst, The, 2015, 140, 5065-5073.	1.7	45
70	Single-molecule Imaging Analysis of Binding, Processive Movement, and Dissociation of Cellobiohydrolase Trichoderma reesei Cel6A and Its Domains on Crystalline Cellulose. Journal of Biological Chemistry, 2016, 291, 22404-22413.	1.6	45
71	Wash- and Amplification-Free Digital Immunoassay Based on Single-Particle Motion Analysis. ACS Nano, 2019, 13, 13116-13126.	7.3	45
72	Multiplexed single-molecule enzyme activity analysis for counting disease-related proteins in biological samples. Science Advances, 2020, 6, eaay0888.	4.7	44

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73	Glucose-stimulated Single Pancreatic Islets Sustain Increased Cytosolic ATP Levels during Initial Ca2+ Influx and Subsequent Ca2+ Oscillations. Journal of Biological Chemistry, 2014, 289, 2205-2216.	1.6	43
74	Cross-linking of Two Î² Subunits in the Closed Conformation in F1-ATPase. Journal of Biological Chemistry, 1999, 274, 5701-5706.	1.6	41
75	Micro patterning of active proteins with perforated PDMS sheets (PDMS sieve). Lab on A Chip, 2004, 4, 333.	3.1	40
76	Direct real-time detection of single proteins using silicon nanowire-based electrical circuits. Nanoscale, 2016, 8, 16172-16176.	2.8	40
77	F1-ATPase: a highly efficient rotary ATP machine. Essays in Biochemistry, 2000, 35, 3-18.	2.1	40
78	Stiffness of Î³ subunit of F1-ATPase. European Biophysics Journal, 2010, 39, 1589-1596.	1.2	38
79	Label-Free Single-Particle Imaging of the Influenza Virus by Objective-Type Total Internal Reflection Dark-Field Microscopy. PLoS ONE, 2012, 7, e49208.	1.1	38
80	Design of a large-scale femtoliter droplet array for single-cell analysis of drug-tolerant and drug-resistant bacteria. Frontiers in Microbiology, 2013, 4, 300.	1.5	38
81	Principal Role of the Arginine Finger in Rotary Catalysis of F1-ATPase. Journal of Biological Chemistry, 2012, 287, 15134-15142.	1.6	37
82	Chemomechanical coupling mechanism of <i>F</i>₁â€ATPase: Catalysis and torque generation. FEBS Letters, 2013, 587, 1030-1035.	1.3	37
83	A synthetic ion channel with anisotropic ligand response. Nature Communications, 2020, 11, 2924.	5.8	36
84	F1-ATPase Changes Its Conformations upon Phosphate Release. Journal of Biological Chemistry, 2002, 277, 21643-21649.	1.6	34
85	Mobile imaging platform for digital influenza virus counting. Lab on A Chip, 2019, 19, 2678-2687.	3.1	34
86	Giant Acceleration of Diffusion Observed in a Single-Molecule Experiment on<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mi mathvariant="normal">F</mml:mi></mml:mrow><mml:mrow><mml:mn>1</mml:mn></mml:mrow></mml:msub><mml:mtext>â^'</mm Physical Review Letters, 2015, 114, 248101.	2.9	32
87	Single-molecule Analysis of F0F1-ATP Synthase Inhibited by N,N-Dicyclohexylcarbodiimide. Journal of Biological Chemistry, 2013, 288, 25717-25726.	1.6	31
88	Rotation of the gamma subunit in F1-ATPase; evidence that ATP synthase is a rotary motor enzyme. Journal of Bioenergetics and Biomembranes, 1997, 29, 207-209.	1.0	30
89	Thermally Responsive Supramolecular Nanomeshes for On/Off Switching of the Rotary Motion of F₁â€ATPase at the Singleâ€Molecule Level. Chemistry - A European Journal, 2008, 14, 1891-1896.	1.7	30
90	High-throughput formation of lipid bilayer membrane arrays with an asymmetric lipid composition. Scientific Reports, 2014, 4, 7076.	1.6	30

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91	Attolitre-sized lipid bilayer chamber array for rapid detection of single transporters. Scientific Reports, 2015, 5, 11025.	1.6	30
92	Changes in Cytosolic ATP Levels and Intracellular Morphology during Bacteria-Induced Hypersensitive Cell Death as Revealed by Real-Time Fluorescence Microscopy Imaging. Plant and Cell Physiology, 2012, 53, 1768-1775.	1.5	29
93	High-Speed Angle-Resolved Imaging of a Single Gold Nanorod with Microsecond Temporal Resolution and One-Degree Angle Precision. Analytical Chemistry, 2015, 87, 2079-2086.	3.2	29
94	ATPase Activity of a Highly Stable Î±3Î²3Î³ Subcomplex of Thermophilic F1 Can Be Regulated by the Introduced Regulatory Region of Î³ Subunit of Chloroplast F1. Journal of Biological Chemistry, 2000, 275, 12757-12762.	1.6	28
95	Torque Generation of Enterococcus hirae V-ATPase. Journal of Biological Chemistry, 2014, 289, 31212-31223.	1.6	27
96	Digital enzyme assay using attoliter droplet array. Analyst, The, 2018, 143, 4923-4929.	1.7	27
97	Stepping Rotation of F1-ATPase with One, Two, or Three Altered Catalytic Sites That Bind ATP Only Slowly. Journal of Biological Chemistry, 2002, 277, 24870-24874.	1.6	26
98	Rotary catalysis of bovine mitochondrial F ₁ -ATPase studied by single-molecule experiments. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 1447-1456.	3.3	26
99	Acceleration of the ATPâ€binding rate of F₁â€ATPase by forcible forward rotation. FEBS Letters, 2009, 583, 3187-3191.	1.3	25
100	Catalysis-Enhancement via Rotary Fluctuation of F1-ATPase. Biophysical Journal, 2013, 105, 2385-2391.	0.2	24
101	Rate constants, processivity, and productive binding ratio of chitinase A revealed by single-molecule analysis. Physical Chemistry Chemical Physics, 2018, 20, 3010-3018.	1.3	24
102	Single-molecule Study on the Temperature-sensitive Reaction of F1-ATPase with a Hybrid F1 Carrying a Single Î²(E190D). Journal of Biological Chemistry, 2009, 284, 23169-23176.	1.6	23
103	ATP hydrolysis assists phosphate release and promotes reaction ordering in F1-ATPase. Nature Communications, 2015, 6, 10223.	5.8	23
104	Revealing the Metabolic Activity of Persisters in Mycobacteria by Single-Cell D₂O Raman Imaging Spectroscopy. Analytical Chemistry, 2019, 91, 15171-15178.	3.2	23
105	Synthetic Ion Channel Formed by Multiblock Amphiphile with Anisotropic Dual-Stimuli-Responsiveness. Journal of the American Chemical Society, 2021, 143, 1348-1355.	6.6	23
106	Comprehensive chemical secretory measurement of single cells trapped in a micro-droplet array with mass spectrometry. RSC Advances, 2015, 5, 16968-16971.	1.7	22
107	[11] Single-molecule imaging of rotation of F1-ATPase. Methods in Enzymology, 2003, 361, 211-227.	0.4	21
108	A Microfluidic Device for Simple and Rapid Evaluation of Multidrug Efflux Pump Inhibitors. Frontiers in Microbiology, 2012, 3, 40.	1.5	21

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109	Biophysical Characterization of a Thermoalkaliphilic Molecular Motor with a High Stepping Torque Gives Insight into Evolutionary ATP Synthase Adaptation. Journal of Biological Chemistry, 2016, 291, 23965-23977.	1.6	21
110	Direct Measurement of Single-Molecule Adenosine Triphosphatase Hydrolysis Dynamics. ACS Nano, 2017, 11, 12789-12795.	7.3	20
111	Antibody-free digital influenza virus counting based on neuraminidase activity. Scientific Reports, 2019, 9, 1067.	1.6	19
112	The 3 Ã— 120Â° rotary mechanism of <i>Paracoccus denitrificans</i> F ₁ -ATPase is different from that of the bacterial and mitochondrial F ₁ -ATPases. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 29647-29657.	3.3	19
113	A CMOS image sensor with stacked photodiodes for lensless observation system of digital enzyme-linked immunosorbent assay. Japanese Journal of Applied Physics, 2014, 53, 04EL02.	0.8	18
114	Multiplexed homogeneous digital immunoassay based on single-particle motion analysis. Lab on A Chip, 2020, 20, 2113-2121.	3.1	18
115	Monodisperse Liposomes with Femtoliter Volume Enable Quantitative Digital Bioassays of Membrane Transporters and Cell-Free Gene Expression. ACS Nano, 2020, 14, 11700-11711.	7.3	17
116	Supramolecular Mechanosensitive Potassium Channel Formed by Fluorinated Amphiphilic Cyclophane. Journal of the American Chemical Society, 2022, 144, 11802-11809.	6.6	17
117	High-throughput single-molecule bioassay using micro-reactor arrays with a concentration gradient of target molecules. Lab on A Chip, 2018, 18, 2849-2853.	3.1	16
118	Multidimensional Digital Bioassay Platform Based on an Air-Sealed Femtoliter Reactor Array Device. Analytical Chemistry, 2021, 93, 5494-5502.	3.2	16
119	Elucidation and control of low and high active populations of alkaline phosphatase molecules for quantitative digital bioassay. Protein Science, 2021, 30, 1628-1639.	3.1	16
120	Single Molecule Energetics of F1-ATPase Motor. Biophysical Journal, 2007, 92, 1806-1812.	0.2	15
121	Highly sensitive restriction enzyme assay and analysis: a review. Analytical and Bioanalytical Chemistry, 2008, 391, 2423-2432.	1.9	15
122	Sequential processing from cell lysis to protein assay on a chip enabling the optimization of an F1-ATPase single molecule assay condition. Lab on A Chip, 2009, 9, 3567.	3.1	15
123	Single-Molecule Analysis of the Rotation of F1-ATPase under High Hydrostatic Pressure. Biophysical Journal, 2013, 105, 1635-1642.	0.2	15
124	Torque Transmission Mechanism via DELSEED Loop of F1-ATPase. Biophysical Journal, 2015, 108, 1144-1152.	0.2	15
125	An integrated system for enzymatic cleavage and electrostretching of freely-suspended single DNA molecules. Lab on A Chip, 2007, 7, 1738.	3.1	14
126	Quantifying genetically inserted fluorescent protein in single iPS cells to monitor Nanog expression using electroactive microchamber arrays. Lab on A Chip, 2014, 14, 730-736.	3.1	14

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127	Torque Generation Mechanism of F1-ATPase upon NTP Binding. Biophysical Journal, 2014, 107, 156-164.	0.2	14
128	Rotation of artificial rotor axles in rotary molecular motors. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 11214-11219.	3.3	13
129	Winding single-molecule double-stranded DNA on a nanometer-sized reel. Nucleic Acids Research, 2012, 40, e151-e151.	6.5	12
130	Characterization of the temperature-sensitive reaction of F1-ATPase by using single-molecule manipulation. Scientific Reports, 2014, 4, 4962.	1.6	12
131	Molecular switch of F0F1-ATP synthase, G-protein, and other ATP-driven enzymes. Journal of Bioenergetics and Biomembranes, 1996, 28, 451-457.	1.0	11
132	Chemomechanical Coupling in Single-Molecule F-Type ATP Synthase. Journal of Bioenergetics and Biomembranes, 2005, 37, 451-454.	1.0	11
133	Chemical delivery microsystem for single-molecule analysis using multilaminar continuous flow. Enzyme and Microbial Technology, 2006, 39, 519-525.	1.6	11
134	Thermodynamic analysis of <scp>F</scp>₁â€<scp>ATP</scp>ase rotary catalysis using highâ€speed imaging. Protein Science, 2014, 23, 1773-1779.	3.1	11
135	Correlation between the numbers of rotation steps in the ATPase and proton-conducting domains of F- and V-ATPases. Biophysical Reviews, 2020, 12, 303-307.	1.5	11
136	How Does F1-ATPase Generate Torque?: Analysis From Cryo-Electron Microscopy and Rotational Catalysis of Thermophilic F1. Frontiers in Microbiology, 2022, 13, .	1.5	11
137	Mechanochemistry of F1 motor protein. Chemical Science, 2011, 2, 2086.	3.7	10
138	Robustness of the Rotary Catalysis Mechanism of F1-ATPase. Journal of Biological Chemistry, 2014, 289, 19331-19340.	1.6	10
139	Visualization of RecA Filaments and DNA by Fluorescence Microscopy. Journal of Biochemistry, 2007, 141, 147-156.	0.9	9
140	Single-molecule Analysis of Inhibitory Pausing States of V1-ATPase. Journal of Biological Chemistry, 2012, 287, 28327-28335.	1.6	9
141	MRT letter: Expression of ATP sensor protein in <i>Caenorhabditis elegans</i>. Microscopy Research and Technique, 2012, 75, 15-19.	1.2	9
142	F-subunit reinforces torque generation in V-ATPase. European Biophysics Journal, 2014, 43, 415-422.	1.2	9
143	Imidazoliniumâ€based Multiblock Amphiphile as Transmembrane Anion Transporter. Chemistry - an Asian Journal, 2021, 16, 147-157.	1.7	9
144	Design of Sealable Custom-Shaped Cell Mimicries Based on Self-Assembled Monolayers on CYTOP Polymer. ACS Applied Materials & Interfaces, 2019, 11, 21372-21380.	4.0	8

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145	Osmolyte-Enhanced Protein Synthesis Activity of a Reconstituted Translation System. ACS Synthetic Biology, 2019, 8, 557-567.	1.9	8
146	Single Cell Array Enclosed with a Photodegradable Hydrogel in Microwells for Image-Based Cell Classification and Selective Photorelease of Cells. ACS Applied Bio Materials, 2020, 3, 5887-5895.	2.3	8
147	Amplification of over 100 kbp DNA from Single Template Molecules in Femtoliter Droplets. ACS Synthetic Biology, 2021, 10, 2179-2186.	1.9	8
148	Hybrid cell reactor system from Escherichia coli protoplast cells and arrayed lipid bilayer chamber device. Scientific Reports, 2018, 8, 11757.	1.6	7
149	Kinetic analysis of the inhibition mechanism of bovine mitochondrial F1-ATPase inhibitory protein using biochemical assay. Journal of Biochemistry, 2021, 170, 79-87.	0.9	7
150	Mechanical Modulation of ATP-binding Affinity of V1-ATPase. Journal of Biological Chemistry, 2013, 288, 619-623.	1.6	6
151	Motion Capture and Manipulation of a Single Synthetic Molecular Rotor by Optical Microscopy. Angewandte Chemie, 2014, 126, 10246-10249.	1.6	6
152	Essential Role of the Îµ Subunit for Reversible Chemo-Mechanical Coupling in F1-ATPase. Biophysical Journal, 2018, 114, 178-187.	0.2	6
153	Use of Ghost Cytometry to Differentiate Cells with Similar Gross Morphologic Characteristics. Cytometry Part A: the Journal of the International Society for Analytical Cytology, 2020, 97, 415-422.	1.1	6
154	Micro Device for Local Temperature Control under Microscope. IEEJ Transactions on Sensors and Micromachines, 2004, 124, 284-288.	0.0	6
155	Simultaneous Optical and Electrical Single Channel Recordings on a PEG Glass. Langmuir, 2010, 26, 8540-8543.	1.6	5
156	Light-triggered vesicle formation: important factors for generation of vesicles and possible applications. Pure and Applied Chemistry, 2014, 86, 1259-1267.	0.9	5
157	Novel Nano-Device to Measure Voltage-Driven Membrane Transporter Activity. IEEE Nanotechnology Magazine, 2016, 15, 70-73.	1.1	5
158	Effects of non-equilibrium angle fluctuation on F₁-ATPase kinetics induced by temperature increase. Physical Chemistry Chemical Physics, 2018, 20, 1872-1880.	1.3	5
159	Multiparameter single-particle motion analysis for homogeneous digital immunoassay. Analyst, The, 2021, 146, 1303-1310.	1.7	5
160	Editorial: Special issue of Biophysical Reviews dedicated to the joint 10th Asian Biophysics Association Symposium and 42nd Australian Society for Biophysics Meeting, Melbourne, Australia, December 2â€“6, 2018. Biophysical Reviews, 2019, 11, 245-247.	1.5	4
161	Monitoring and mathematical modeling of mitochondrial ATP in myotubes at singleâ€cell level reveals two distinct population with different kinetics. Quantitative Biology, 2020, 8, 228-237.	0.3	4
162	Single-Molecule Analysis of Membrane Transporter Activity by Means of a Microsystem. Methods in Molecular Biology, 2018, 1700, 321-330.	0.4	3

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163	Response to Comment on â€œGhost cytometryâ€• Science, 2019, 364, .	6.0	3
164	Single-biomolecule observation with micro one-way valves for rapid buffer exchange. Journal of Applied Physics, 2009, 105, 102016.	1.1	2
165	Chemomechanical coupling of F₁-ATPase under hydrolysis conditions. Biophysics (Nagoya-shi, Japan), 2012, 8, 73-78.	0.4	2
166	Effects of an ATP analogue, adenosine 5â€²-[Î±-thio]-triphosphate, on F1-ATPase rotary catalysis, torque generation, and inhibited intermediated formation. Biochemical and Biophysical Research Communications, 2015, 458, 515-519.	1.0	2
167	Automatic Quantitative Segmentation of Myotubes Reveals Single-cell Dynamics of S6 Kinase Activation. Cell Structure and Function, 2018, 43, 153-169.	0.5	2
168	The Asian Biophysics Associationâ€"supporting biophysics in the greater Asia region. Biophysical Reviews, 2019, 11, 251-252.	1.5	2
169	Regeneration of Escherichia coli Giant Protoplasts to Their Original Form. Life, 2019, 9, 24.	1.1	2
170	An artificial lipid bilayer formed on a PEG-coated glass for simultaneous electrical and optical measurement of single ion-channels. E-Journal of Surface Science and Nanotechnology, 2005, 3, 70-73.	0.1	1
171	Measurement of the Conformational State of F1-ATPase by Single-Molecule Rotation. Methods in Enzymology, 2010, 475, 279-296.	0.4	1
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183	1L1424 P10 1YE1115 Key mechanism for high efficiency and reversibility of chemomechanical coupling in F_1-ATPase revealed by single-molecule manipulation(Molecular motor 1,Early Research in Biophysics) Tj ETQq1 1 0.784314 rgBT /Overlo	0.0	0
184	1L1336 Detection of rotaton of F1-ATPase using high-speed orientational detection of gold nanorod(Molecular motor 1,The 49th Annual Meeting of the Biophysical Society of Japan). Seibutsu Butsuri, 2011, 51, S60.	0.0	0
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