

# Shoichi Toyabe

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/6392701/publications.pdf>

Version: 2024-02-01

22  
papers

1,197  
citations

1040056

9  
h-index

839539

18  
g-index

24  
all docs

24  
docs citations

24  
times ranked

906  
citing authors

#	ARTICLE	IF	CITATIONS
1	Experimental demonstration of information-to-energy conversion and validation of the generalized Jarzynski equality. <i>Nature Physics</i> , 2010, 6, 988-992.	16.7	714
2	Nonequilibrium Energetics of a Single $F_1$ -ATPase Molecule. <i>Physical Review Letters</i> , 2010, 104, 198103.	7.8	149
3	Thermodynamic efficiency and mechanochemical coupling of $F_1$ -ATPase. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2011, 108, 17951-17956.	7.1	145
4	Recovery of state-specific potential of molecular motor from single-molecule trajectory. <i>Europhysics Letters</i> , 2012, 97, 40004.	2.0	39
5	Effect of external torque on the ATP-driven rotation of F1-ATPase. <i>Biochemical and Biophysical Research Communications</i> , 2008, 366, 951-957.	2.1	37
6	Single molecule thermodynamics of ATP synthesis by F1-ATPase. <i>New Journal of Physics</i> , 2015, 17, 015008.	2.9	31
7	Nonequilibrium Fluctuations in Biological Strands, Machines, and Cells. <i>Journal of the Physical Society of Japan</i> , 2015, 84, 102001.	1.6	15
8	Evaluation of the Duty Ratio of the Bacterial Flagellar Motor by Dynamic Load Control. <i>Biophysical Journal</i> , 2019, 116, 1952-1959.	0.5	15
9	Experimental thermodynamics of single molecular motor. <i>Biophysics (Nagoya-shi, Japan)</i> , 2013, 9, 91-98.	0.4	13
10	Cooperative stator assembly of bacterial flagellar motor mediated by rotation. <i>Nature Communications</i> , 2021, 12, 3218.	12.8	11
11	Efficiencies of molecular motors: a comprehensible overview. <i>Biophysical Reviews</i> , 2020, 12, 419-423.	3.2	10
12	Assembly of a functional and responsive microstructure by heat bonding of DNA-grafted colloidal brick. <i>Scientific Reports</i> , 2017, 7, 9104.	3.3	4
13	Tight Chemomechanical Coupling of the F1 Motor Relies on Structural Stability. <i>Biophysical Journal</i> , 2020, 119, 48-54.	0.5	3
14	Experimental characterization of autonomous heat engine based on minimal dynamical-system model. <i>Physical Review Research</i> , 2020, 2, .	3.6	3
15	Decoding Fluctuation: Diffusional Analysis of Biological Molecular Motors. <i>JPSJ News and Comments</i> , 2016, 13, 07.	0.1	2
16	Harnessing random low Reynolds number flow for net migration. <i>Physical Review E</i> , 2020, 101, 063101.	2.1	2
17	Session 2SDA "Nonequilibrium energetics of biological molecular machines. <i>Biophysical Reviews</i> , 2020, 12, 273-274.	3.2	2
18	Optimal Rectification without Forward-Current Suppression by Biological Molecular Motor. <i>Physical Review Letters</i> , 2021, 126, 208101.	7.8	2

#	ARTICLE	IF	CITATIONS
19	3P-214 Electrogenic activity of bacteriorhodopsin adsorbed on Lumirror membrane(The 46th Annual) Tj ETQq1 1 0.784314 rgBT /Overlock 10 T	0.1	0
20	2P-310 Measurement of Violation of Fluctuation Dissipation Theorem of Single Molecule F <sub>1</sub> -ATPase(The 46th Annual Meeting of the Biophysical Society of Japan). Seibutsu Butsuri, 2008, 48, S122.	0.1	0
21	2TA4-03 Stall torque of F1-ATPase(The 47th Annual Meeting of the Biophysical Society of Japan). Seibutsu Butsuri, 2009, 49, S43.	0.1	0
22	1L1548 P05 1YE1000 Single-molecule nonequilibrium thermodynamics of molecular motor(Molecular) Tj ETQq0 0 0 rgBT /Overlock 10 T	0.1	0