Richard M Berry

List of Publications by Year
in descending order

55 papers	3,696 citations	218677 26 h-index	223800 46 g-index
64 all docs	64 docs citations	64 times ranked	2389 citing authors

#	Article	IF	Citations
1	Stoichiometry and turnover in single, functioning membrane protein complexes. Nature, 2006, 443, 355-358.	27.8	559
2	Bacterial flagellar motor. Quarterly Reviews of Biophysics, 2008, 41, 103-132.	5.7	420
3	Direct observation of steps in rotation of the bacterial flagellar motor. Nature, 2005, 437, 916-919.	27.8	309
4	The maximum number of torque-generating units in the flagellar motor of Escherichia coli is at least 11. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 8066-8071.	7.1	254
5	Torque-generating units of the flagellar motor of Escherichia coli have a high duty ratio. Nature, 2000, 403, 444-447.	27.8	244
6	Signal-dependent turnover of the bacterial flagellar switch protein FliM. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 11347-11351.	7.1	176
7	Load-Dependent Assembly of the Bacterial Flagellar Motor. MBio, 2013, 4, .	4.1	166
8	Torque-speed relationship of the bacterial flagellar motor. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 1260-1265.	7.1	103
9	Composition, Formation, and Regulation of the Cytosolic C-ring, a Dynamic Component of the Type III Secretion Injectisome. PLoS Biology, 2015, 13, e1002039.	5.6	98
10	Nonequivalence of Membrane Voltage and Ion-Gradient as Driving Forces for the Bacterial Flagellar Motor at Low Load. Biophysical Journal, 2007, 93, 294-302.	0.5	93
11	Cryo-EM structures provide insight into how E. coli F1Fo ATP synthase accommodates symmetry mismatch. Nature Communications, 2020, 11, 2615.	12.8	85
12	Quantification of flagellar motor stator dynamics through <i>in vivo</i> protonâ€motive force control. Molecular Microbiology, 2013, 87, 338-347.	2.5	78
13	Catch bond drives stator mechanosensitivity in the bacterial flagellar motor. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 12952-12957.	7.1	78
14	Torque Generated by the Flagellar Motor of Escherichia coli while Driven Backward. Biophysical Journal, 1999, 76, 580-587.	0.5	77
15	Torqueâ€“Speed Relationships of Na+-driven Chimeric Flagellar Motors in Escherichia coli. Journal of Molecular Biology, 2008, 376, 1251-1259.	4.2	76
16	A molecular brake, not a clutch, stops the <i>Rhodobacter sphaeroides</i> flagellar motor. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 11582-11587.	7.1	71
17	Flagellar Hook Flexibility Is Essential for Bundle Formation in Swimming Escherichia coli Cells. Journal of Bacteriology, 2012, 194, 3495-3501.	2.2	71
18	Stoichiometry and Turnover of the Bacterial Flagellar Switch Protein FliN. MBio, 2014, 5, e01216-14.	4.1	69

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19	Molecular structure of the intact bacterial flagellar basal body. Nature Microbiology, 2021, 6, 712-721.	13.3	61
20	Dual stator dynamics in the <scp><i>S</i></scp><i>hewanella oneidensis</i>â€…<scp>MR</scp>â€1 flagellar motor. Molecular Microbiology, 2015, 96, 993-1001.	2.5	52
21	Mechanism and kinetics of a sodium-driven bacterial flagellar motor. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, E2544-51.	7.1	51
22	Mechanics of torque generation in the bacterial flagellar motor. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, E4381-9.	7.1	48
23	Domain-swap polymerization drives the self-assembly of the bacterial flagellar motor. Nature Structural and Molecular Biology, 2016, 23, 197-203.	8.2	48
24	Assembly and Dynamics of the Bacterial Flagellum. Annual Review of Microbiology, 2020, 74, 181-200.	7.3	42
25	A simple backscattering microscope for fast tracking of biological molecules. Review of Scientific Instruments, 2010, 81, 113704.	1.3	38
26	Rapid rotation of micron and submicron dielectric particles measured using optical tweezers. Journal of Modern Optics, 2003, 50, 1539-1554.	1.3	36
27	Speed of the bacterial flagellar motor near zero load depends on the number of stator units. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 11603-11608.	7.1	30
28	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.	7.1	28
29	A modular platform for one-step assembly of multi-component membrane systems by fusion of charged proteoliposomes. Nature Communications, 2016, 7, 13025.	12.8	28
30	Subunit Exchange in Protein Complexes. Journal of Molecular Biology, 2018, 430, 4557-4579.	4.2	27
31	Model Studies of the Dynamics of Bacterial Flagellar Motors. Biophysical Journal, 2009, 96, 3154-3167.	0.5	22
32	An introduction to the physics of the bacterial flagellar motor: a nanoscale rotary electric motor. Contemporary Physics, 2009, 50, 617-632.	1.8	17
33	Comparison between single-molecule and X-ray crystallography data on yeast F1-ATPase. Scientific Reports, 2015, 5, 8773.	3.3	17
34	The Limiting Speed of the Bacterial Flagellar Motor. Biophysical Journal, 2016, 111, 557-564.	0.5	17
35	Load-dependent adaptation near zero load in the bacterial flagellar motor. Journal of the Royal Society Interface, 2019, 16, 20190300.	3.4	16
36	Simultaneous Tracking of Pseudomonas aeruginosa Motility in Liquid and at the Solid-Liquid Interface Reveals Differential Roles for the Flagellar Stators. MSystems, 2019, 4, .	3.8	16

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37	Single-molecule imaging of electroporated dye-labelled CheY in live<i>Escherichia coli</i>. Philosophical Transactions of the Royal Society B: Biological Sciences, 2016, 371, 20150492.	4.0	12
38	A multi-mode digital holographic microscope. Review of Scientific Instruments, 2019, 90, 023705.	1.3	12
39	Mutations targeting the plugâ€domain of the <scp><i>S</i></scp><i>hewanella oneidensis</i> protonâ€driven stator allow swimming at increased viscosity and under anaerobic conditions. Molecular Microbiology, 2016, 102, 925-938.	2.5	10
40	Distinct chemotactic behavior in the original Escherichia coli K-12 depending on forward-and-backward swimming, not on run-tumble movements. Scientific Reports, 2020, 10, 15887.	3.3	10
41	A Simple low-cost device enables four epi-illumination techniques on standard light microscopes. Scientific Reports, 2016, 6, 20729.	3.3	7
42	How Bacteria Change Gear. Science, 2008, 320, 1599-1600.	12.6	6
43	Motile ghosts of the halophilic archaeon, <i>Haloferax volcanii</i>. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 26766-26772.	7.1	6
44	Rapid rotation of micron and submicron dielectric particles measured using optical tweezers. Journal of Modern Optics, 2003, 50, 1539-1554.	1.3	5
45	Detergent-free Ultrafast Reconstitution of Membrane Proteins into Lipid Bilayers Using Fusogenic Complementary-charged Proteoliposomes.. Journal of Visualized Experiments, 2018, , .	0.3	2
46	Imaging of Single Dye-Labeled Chemotaxis Proteins in Live Bacteria Using Electroporation. Methods in Molecular Biology, 2018, 1729, 233-246.	0.9	1
47	2P569 Structural analysis of a DNA tetrahedron by electron cryomicroscopy(53. Bioengineering,Poster) Tj ETQq1 1 0.784314 rgBT /Ove	0.1	0
48	3P-133 Step detection of flagellar rotation at high temporal and spatial resolution(The 46th Annual) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5	0.1	0
49	2S3-6 Torque, Speed and Steps of the Bacterial Flagellar Motor(2S3 Structure and functional) Tj ETQq1 1 0.784314 rgBT /Overlock 10 T	0.1	0
50	3P-143 Steps in fast flagellar rotation(Molecular motor,The 47th Annual Meeting of the Biophysical) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5	0.1	0
51	1P185 1B1420 Conformational Spread as a Mechanism for Cooperativity in the Bacterial Flagellar Switch-from structure to dynamics(Molecular motor,Oral Presentations,The 48th Annual Meeting of) Tj ETQq1 1 0.784314 rgBT /Overlo	0.1	0
52	3P179 Discrete steps in fast bacterial flagellar rotation detected by back-scattering microscopy(Molecular motor,The 48th Annual Meeting of the Biophysical Society of Japan). Seibutsu Butsuri, 2010, 50, S176.	0.1	0
53	1SA-01 Theoretical and experimental approaches to analyze the mechanism of rotational switching in bacterial flagellar motor(1SA Dynamics and Robustness in Biological networks,The 49th Annual) Tj ETQq1 1 0.784314 rgBT /Overlock 10	0.1	0
54	1K1512 Biotinylation of the Flagellar Hook in E. coil(Cell biology 1,The 49th Annual Meeting of the) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	0.1	0

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55	1A1534 Sodium Dynamics of the Bacterial Flagellar Motor(Molecular Motors I,Oral Presentation,The) Tj ETQq1 1 0.784314 rgBT /Overlo	0.1	0