David F Blair

List of Publications by Citations

45 papers	3,897 citations	33 h-index	46 g-index
46 ext. papers	4,354 ext. citations	8.9 avg, IF	5.33 L-index

#	Paper	IF	Citations
45	The c-di-GMP binding protein YcgR controls flagellar motor direction and speed to affect chemotaxis by a "backstop brake" mechanism. *Molecular Cell*, **2010**, 38, 128-39	17.6	309
44	The MotA protein of E. coli is a proton-conducting component of the flagellar motor. *Cell*, **1990**, 60, 439-49	30.2	273
43	Energy source of flagellar type III secretion. *Nature*, **2008**, 451, 489-92	50.4	249
42	Conformational change in the stator of the bacterial flagellar motor. *Biochemistry*, **2001**, 40, 13041-50	3.2	188
41	The bacterial flagellar motor: structure and function of a complex molecular machine. *International Review of Cytology*, **2004**, 233, 93-134		177
40	Function of protonatable residues in the flagellar motor of Escherichia coli: a critical role for Asp 32 of MotB. *Journal of Bacteriology*, **1998**, 180, 2729-35	3.5	172
39	Flagellar movement driven by proton translocation. *FEBS Letters*, **2003**, 545, 86-95	3.8	152
38	Solubilization and purification of the MotA/MotB complex of Escherichia coli. *Biochemistry*, **2004**, 43, 26-34	3.2	140
37	Charged residues of the rotor protein FliG essential for torque generation in the flagellar motor of Escherichia coli. *Journal of Molecular Biology*, **1997**, 266, 733-44	6.5	127
36	Chemotaxis signaling protein CheY binds to the rotor protein FliN to control the direction of flagellar rotation in Escherichia coli. *Proceedings of the National Academy of Sciences of the United States of America*, **2010**, 107, 9370-5	11.5	123
35	Arrangement of core membrane segments in the MotA/MotB proton-channel complex of Escherichia coli. *Biochemistry*, **2004**, 43, 35-45	3.2	121
34	Crystal structure of the middle and C-terminal domains of the flagellar rotor protein FliG. *EMBO Journal*, **2002**, 21, 3225-34	13	117
33	Residues of the cytoplasmic domain of MotA essential for torque generation in the bacterial flagellar motor. *Journal of Molecular Biology*, **1997**, 273, 428-39	6.5	114
32	Membrane topology of the MotA protein of Escherichia coli. *Journal of Molecular Biology*, **1995**, 251, 237-42	6.5	114
31	Motility protein complexes in the bacterial flagellar motor. *Journal of Molecular Biology*, **1996**, 261, 209-21	6.5	110
30	Crystal structure of the flagellar rotor protein FliN from Thermotoga maritima. *Journal of Bacteriology*, **2005**, 187, 2890-902	3.5	104
29	Targeted disulfide cross-linking of the MotB protein of Escherichia coli: evidence for two H(+) channels in the stator Complex. *Biochemistry*, **2001**, 40, 13051-9	3.2	104

28	Tryptophan-scanning mutagenesis of MotB, an integral membrane protein essential for flagellar rotation in Escherichia coli. *Biochemistry*, **1995**, 34, 9166-71	3.2	104
27	Structure of the C-terminal domain of FliG, a component of the rotor in the bacterial flagellar motor. *Nature*, **1999**, 400, 472-5	50.4	93
26	Structure of FliM provides insight into assembly of the switch complex in the bacterial flagella motor. *Proceedings of the National Academy of Sciences of the United States of America*, **2006**, 103, 11886-91	11.5	89
25	Mutations in the MotA protein of Escherichia coli reveal domains critical for proton conduction. *Journal of Molecular Biology*, **1991**, 221, 1433-42	6.5	86
24	Architecture of the flagellar rotor. *EMBO Journal*, **2011**, 30, 2962-71	13	75
23	Mutational analysis of the flagellar protein FliG: sites of interaction with FliM and implications for organization of the switch complex. *Journal of Bacteriology*, **2007**, 189, 305-12	3.5	75
22	Function of proline residues of MotA in torque generation by the flagellar motor of Escherichia coli. *Journal of Bacteriology*, **1999**, 181, 3542-51	3.5	73
21	Roles of charged residues of rotor and stator in flagellar rotation: comparative study using H+-driven and Na+-driven motors in Escherichia coli. *Journal of Bacteriology*, **2006**, 188, 1466-72	3.5	66
20	A molecular mechanism of direction switching in the flagellar motor of Escherichia coli. *Proceedings of the National Academy of Sciences of the United States of America*, **2011**, 108, 17171-6	11.5	64
19	Domain analysis of the FliM protein of Escherichia coli. *Journal of Bacteriology*, **1998**, 180, 5580-90	3.5	55
18	Membrane segment organization in the stator complex of the flagellar motor: implications for proton flow and proton-induced conformational change. *Biochemistry*, **2008**, 47, 11332-9	3.2	51
17	Organization of FliN subunits in the flagellar motor of Escherichia coli. *Journal of Bacteriology*, **2006** , 188, 2502-11	3.5	50
16	Mechanism of type-III protein secretion: Regulation of FlhA conformation by a functionally critical charged-residue cluster. *Molecular Microbiology*, **2017**, 104, 234-249	4.1	42
15	Mutational analysis of the flagellar rotor protein FliN: identification of surfaces important for flagellar assembly and switching. *Journal of Bacteriology*, **2006**, 188, 5240-8	3.5	41
14	FliG subunit arrangement in the flagellar rotor probed by targeted cross-linking. *Journal of Bacteriology*, **2005**, 187, 5640-7	3.5	41
13	Co-Folding of a FliF-FliG Split Domain Forms the Basis of the MS:C Ring Interface within the Bacterial Flagellar Motor. *Structure*, **2017**, 25, 317-328	5.2	40
12	Subunit organization and reversal-associated movements in the flagellar switch of Escherichia coli. *Journal of Biological Chemistry*, **2010**, 285, 675-84	5.4	32
11	Architecture of the Flagellar Switch Complex of Escherichia coli: Conformational Plasticity of FliG and Implications for Adaptive Remodeling. *Journal of Molecular Biology*, **2017**, 429, 1305-1320	6.5	25

10	Type-III secretion pore formed by flagellar protein FliP. *Molecular Microbiology*, **2018**, 107, 94-103	4.1	18
9	Function of the Histone-Like Protein H-NS in Motility of Escherichia coli: Multiple Regulatory Roles Rather than Direct Action at the Flagellar Motor. *Journal of Bacteriology*, **2015**, 197, 3110-20	3.5	17
8	Organization of the Flagellar Switch Complex of Bacillus subtilis. *Journal of Bacteriology*, **2019**, 201,	3.5	15
7	Adjusting the spokes of the flagellar motor with the DNA-binding protein H-NS. *Journal of Bacteriology*, **2011**, 193, 5914-22	3.5	14
6	Loose coupling in the bacterial flagellar motor. *Proceedings of the National Academy of Sciences of the United States of America*, **2015**, 112, 4755-60	11.5	10
5	Biogenesis of the Flagellar Switch Complex in Escherichia coli: Formation of Sub-Complexes Independently of the Basal-Body MS-Ring. *Journal of Molecular Biology*, **2017**, 429, 2353-2359	6.5	7
4	Fine structure of a fine machine. *Journal of Bacteriology*, **2006**, 188, 7033-5	3.5	7
3	Allosteric Priming of E.□coli CheY by the Flagellar Motor Protein FliM. *Biophysical Journal*, **2020**, 119, 1108-1122	3.9	2
2	Control of membrane barrier during bacterial type-III protein secretion. *Nature Communications*, **2021**, 12, 3999	17.4	2
1	Controlling membrane barrier during bacterial type-III protein secretion		1