Benjamin J Walker

List of Publications by Year
in descending order

19	185	1163117 8	1199594 12
papers	citations	h-index	g-index

20	20	20	120
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Boundary behaviours of Leishmania mexicana: A hydrodynamic simulation study. Journal of Theoretical Biology, 2019, 462, 311-320.	1.7	25
2	Filament mechanics in a half-space via regularised Stokeslet segments. Journal of Fluid Mechanics, 2019, 879, 808-833.	3.4	16
3	Pairwise hydrodynamic interactions of synchronized spermatozoa. Physical Review Fluids, 2019, 4, .	2.5	15
4	Modelling Motility: The Mathematics of Spermatozoa. Frontiers in Cell and Developmental Biology, 2021, 9, 710825.	3.7	13
5	High-speed multifocal plane fluorescence microscopy for three-dimensional visualisation of beating flagella. Journal of Cell Science, 2019, 132, .	2.0	12
6	Response of monoflagellate pullers to a shearing flow: A simulation study of microswimmer guidance. Physical Review E, 2018, 98, .	2.1	11
7	Computer-assisted beat-pattern analysis and the flagellar waveforms of bovine spermatozoa. Royal Society Open Science, 2020, 7, 200769.	2.4	10
8	Regularized representation of bacterial hydrodynamics. Physical Review Fluids, 2020, 5, .	2.5	10
9	Efficient simulation of filament elastohydrodynamics in three dimensions. Physical Review Fluids, 2020, 5, .	2.5	10
10	Control and controllability of microswimmers by a shearing flow. Royal Society Open Science, 2021, 8, 211141.	2.4	9
11	Emergent rheotaxis of shape-changing swimmers in Poiseuille flow. Journal of Fluid Mechanics, 2022, 944, .	3.4	9
12	A regularised slender-body theory of non-uniform filaments. Journal of Fluid Mechanics, 2020, 899, .	3.4	8
13	Canonical orbits for rapidly deforming planar microswimmers in shear flow. Physical Review Fluids, 2022, 7, .	2.5	7
14	Automated identification of flagella from videomicroscopy via the medial axis transform. Scientific Reports, 2019, 9, 5015.	3.3	6
15	Regularised non-uniform segments and efficient no-slip elastohydrodynamics. Journal of Fluid Mechanics, 2021, 915, .	3.4	6
16	Effects of rapid yawing on simple swimmer models and planar Jeffery's orbits. Physical Review Fluids, 2022, 7, .	2.5	6
17	A Morphoelastic Shell Model of the Eye. Journal of Elasticity, 2021, 145, 5-29.	1.9	4
18	The control of particles in the Stokes limit. Journal of Fluid Mechanics, 2022, 942, .	3.4	4

#	Article	IF	Citations
19	Response of monoflagellate pullers to a shearing flow: A simulation study of microswimmer guidance. Physical Review E, 2018, 98, 063111.	2.1	3