Benjamin J Walker

List of Publications by Year in descending order

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1163117 1199594 19 185 8 12 citations g-index h-index papers 20 20 20 120 docs citations times ranked citing authors all docs

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

#	Article	lF	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