Henry Fu

List of Publications by Year in descending order

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25 papers	841 citations	567144 15 h-index	580701 25 g-index
25 all docs	25 docs citations	25 times ranked	737 citing authors

#	Article	IF	Citations
1	Theory of Swimming Filaments in Viscoelastic Media. Physical Review Letters, 2007, 99, 258101.	2.9	138
2	The wiggling trajectories of bacteria. Journal of Fluid Mechanics, 2012, 705, 58-76.	1.4	94
3	Minimal geometric requirements for micropropulsion via magnetic rotation. Physical Review E, 2014, 90, 033007.	0.8	89
4	Beating patterns of filaments in viscoelastic fluids. Physical Review E, 2008, 78, 041913.	0.8	83
5	Helical and rod-shaped bacteria swim in helical trajectories with little additional propulsion from helical shape. Science Advances, 2016, 2, e1601661.	4.7	68
6	Bacteria-inspired nanorobots with flagellar polymorphic transformations and bundling. Scientific Reports, 2017, 7, 14098.	1.6	56
7	Versatile microrobotics using simple modular subunits. Scientific Reports, 2016, 6, 30472.	1.6	41
8	Helicobacter pyloriCouples Motility and Diffusion to Actively Create a Heterogeneous Complex Medium in Gastric Mucus. Physical Review Letters, 2016, 116, 198101.	2.9	38
9	Modeling rigid magnetically rotated microswimmers: Rotation axes, bistability, and controllability. Physical Review E, 2014, 90, 063006.	0.8	34
10	Symmetry breaking propulsion of magnetic microspheres in nonlinearly viscoelastic fluids. Nature Communications, 2021, 12, 1116.	5.8	30
11	Magnetization directions and geometries of helical microswimmers for linear velocity-frequency response. Physical Review E, 2015, 91, 043011.	0.8	29
12	Kinematic Model of a Magnetic-Microrobot Swarm in a Rotating Magnetic Dipole Field. IEEE Robotics and Automation Letters, 2020, 5, 2419-2426.	3.3	22
13	Role of slip between a probe particle and a gel in microrheology. Physical Review E, 2008, 78, 061503.	0.8	21
14	Swimming fluctuations of micro-organisms due to heterogeneous microstructure. Physical Review E, 2014, 90, 043021.	0.8	16
15	Dynamic instability in the hook-flagellum system that triggers bacterial flicks. Physical Review E, 2018, 97, 012402.	0.8	16
16	Viscous constraints on microorganism approachÂand interaction. Journal of Fluid Mechanics, 2018, 851, 715-738.	1.4	16
17	A numerical method for inextensible elastic filaments in viscous fluids. Journal of Computational Physics, 2020, 418, 109643.	1.9	14
18	Stability of Soft Magnetic Helical Microrobots. Fluids, 2020, 5, 19.	0.8	9

#	Article	IF	Citations
19	Traction reveals mechanisms of wall effects for microswimmers near boundaries. Physical Review E, 2017, 95, 033105.	0.8	5
20	Autonomously responsive pumping by a bacterial flagellar forest: A mean-field approach. Physical Review E, 2017, 96, 033107.	0.8	5
21	How the bending mechanics of setae modulate hydrodynamic sensing in copepods. Limnology and Oceanography, 2020, 65, 749-761.	1.6	5
22	Improved structural and mechanical performance of iron oxide scaffolds freeze cast under oscillating magnetic fields. Ceramics International, 2022, 48, 15034-15042.	2.3	5
23	Saturation and coercivity limit the velocity of rotating active magnetic microparticles. Physical Review Fluids, 2020, 5, .	1.0	3
24	Large deformations of the hook affect free-swimming singly flagellated bacteria during flick motility. Physical Review E, 2020, 102, 033115.	0.8	2
25	Can the mechanoreceptional setae of a feedingâ€current feeding copepod detect hydrodynamic disturbance induced by entrained freeâ€floating prey?. Limnology and Oceanography, 2021, 66, 4096.	1.6	2