

# Hepeng Zhang

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/1344068/publications.pdf>

Version: 2024-02-01

40  
papers

2,681  
citations

236612

25  
h-index

301761

39  
g-index

40  
all docs

40  
docs citations

40  
times ranked

2958  
citing authors

#	ARTICLE	IF	CITATIONS
1	Unraveling the physiochemical nature of colloidal motion waves among silver colloids. <i>Science Advances</i> , 2022, 8, .	4.7	15
2	Efficient and Fast Immuno-labeling of Clarified Tissues Using Low-Field Enhanced Diffusion. <i>IEEE Transactions on Biomedical Engineering</i> , 2021, 68, 1-1.	2.5	0
3	Controlling Cell Motion and Microscale Flow with Polarized Light Fields. <i>Physical Review Letters</i> , 2021, 126, 058001.	2.9	12
4	Robust propagation of internal coastal Kelvin waves in complex domains. <i>Physical Review Fluids</i> , 2021, 6, .	1.0	1
5	Circular swimming motility and disordered hyperuniform state in an algae system. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	3.3	38
6	Synergistic Speed Enhancement of an Electric-Photochemical Hybrid Micromotor by Tilt Rectification. <i>ACS Nano</i> , 2020, 14, 8658-8667.	7.3	49
7	Robust boundary flow in chiral active fluid. <i>Physical Review E</i> , 2020, 101, 022603.	0.8	28
8	Symmetry properties of fluctuations in an actively driven rotor*. <i>Chinese Physics B</i> , 2020, 29, 060502.	0.7	5
9	A scalable photonic computer solving the subset sum problem. <i>Science Advances</i> , 2020, 6, eaay5853.	4.7	32
10	Diffusion of colloidal rods in corrugated channels. <i>Physical Review E</i> , 2019, 99, 020601.	0.8	10
11	Data-driven quantitative modeling of bacterial active nematics. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 777-785.	3.3	89
12	Photochemically Powered AgCl Janus Micromotors as a Model System to Understand Ionic Self-Diffusiophoresis. <i>Langmuir</i> , 2018, 34, 3289-3295.	1.6	112
13	Hydrodynamic and entropic effects on colloidal diffusion in corrugated channels. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, 9564-9569.	3.3	95
14	Individual behaviors and dynamic self-assembly of active colloids. <i>Chinese Science Bulletin</i> , 2017, 62, 194-208.	0.4	1
15	Bimetallic Microswimmers Speed Up in Confining Channels. <i>Physical Review Letters</i> , 2016, 117, 198001.	2.9	75
16	Dynamic clustering in suspension of motile bacteria. <i>Europhysics Letters</i> , 2015, 111, 54002.	0.7	37
17	Using confined bacteria as building blocks to generate fluid flow. <i>Lab on A Chip</i> , 2015, 15, 4555-4562.	3.1	19
18	Propulsive matrix of a helical flagellum. <i>Chinese Physics B</i> , 2014, 23, 114703.	0.7	5

#	ARTICLE	IF	CITATIONS
19	Measuring Crowd Collectiveness. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2014, 36, 1586-1599.	9.7	118
20	Asymmetric gear rectifies random robot motion. Europhysics Letters, 2013, 102, 50007.	0.7	27
21	Propulsion of microorganisms by a helical flagellum. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, E338-47.	3.3	186
22	Experimental study of a freely falling plate with an inhomogeneous mass distribution. Physical Review E, 2013, 88, 053008.	0.8	18
23	Buoyancy frequency profiles and internal semidiurnal tide turning depths in the oceans. Journal of Geophysical Research, 2012, 117, .	3.3	33
24	Scale-Invariant Correlations in Dynamic Bacterial Clusters. Physical Review Letters, 2012, 108, 148101.	2.9	126
25	Scaling of crack propagation in rubber sheets. Europhysics Letters, 2011, 96, 36009.	0.7	18
26	Harmonic generation by reflecting internal waves. Physics of Fluids, 2011, 23, 026601.	1.6	34
27	Collective motion and density fluctuations in bacterial colonies. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 13626-13630.	3.3	599
28	Lethal protein produced in response to competition between sibling bacterial colonies. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 6258-6263.	3.3	52
29	Tidal flow over three-dimensional topography generates out-of-plane harmonics. Geophysical Research Letters, 2010, 37, .	1.5	20
30	Deadly competition between sibling bacterial colonies. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 428-433.	3.3	125
31	<i>Paenibacillus dendritiformis</i> Bacterial Colony Growth Depends on Surfactant but Not on Bacterial Motion. Journal of Bacteriology, 2009, 191, 5758-5764.	1.0	61
32	Swarming dynamics in bacterial colonies. Europhysics Letters, 2009, 87, 48011.	0.7	96
33	Tidal flow over three-dimensional topography in a stratified fluid. Physics of Fluids, 2009, 21, .	1.6	37
34	Toughening Effect of Strain-Induced Crystallites in Natural Rubber. Physical Review Letters, 2009, 102, 245503.	2.9	57
35	Dynamics of static friction between steel and silicon. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 13264-13268.	3.3	36
36	Resonant Generation of Internal Waves on a Model Continental Slope. Physical Review Letters, 2008, 100, 244504.	2.9	51

#	ARTICLE	IF	CITATIONS
37	Experimental study of internal gravity waves generated by supercritical topography. <i>Physics of Fluids</i> , 2007, 19, 096602.	1.6	46
38	The liquid-glass transition in sugars: Relaxation dynamics in trehalose. <i>Journal of Non-Crystalline Solids</i> , 2006, 352, 4464-4474.	1.5	24
39	Jamming transition in emulsions and granular materials. <i>Physical Review E</i> , 2005, 72, 011301.	0.8	272
40	Brillouin scattering study of salol: Exploring the effects of rotation-translation coupling. <i>Physical Review E</i> , 2004, 70, 011502.	0.8	22