

# On Shun Pak

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/7904163/publications.pdf>

Version: 2024-02-01

45  
papers

2,453  
citations

393982

19  
h-index

243296

44  
g-index

47  
all docs

47  
docs citations

47  
times ranked

2632  
citing authors

#	ARTICLE	IF	CITATIONS
1	A laser-engraved wearable sensor for sensitive detection of uric acid and tyrosine in sweat. <i>Nature Biotechnology</i> , 2020, 38, 217-224.	9.4	683
2	Cargo-Flowing Fuel-Free Magnetic Nanoswimmers for Targeted Drug Delivery. <i>Small</i> , 2012, 8, 460-467.	5.2	393
3	High-speed propulsion of flexible nanowire motors: Theory and experiments. <i>Soft Matter</i> , 2011, 7, 8169.	1.2	195
4	Medical micro/nanorobots in complex media. <i>Chemical Society Reviews</i> , 2020, 49, 8088-8112.	18.7	180
5	Generalized squirming motion of a sphere. <i>Journal of Engineering Mathematics</i> , 2014, 88, 1-28.	0.6	129
6	Squirming through shear-thinning fluids. <i>Journal of Fluid Mechanics</i> , 2015, 784, .	1.4	80
7	Micropropulsion and microrheology in complex fluids via symmetry breaking. <i>Physics of Fluids</i> , 2012, 24, .	1.6	79
8	Roads to Smart Artificial Microswimmers. <i>Advanced Intelligent Systems</i> , 2020, 2, 1900137.	3.3	67
9	Viscous Marangoni migration of a drop in a Poiseuille flow at low surface Péclet numbers. <i>Journal of Fluid Mechanics</i> , 2014, 753, 535-552.	1.4	54
10	Filaments in curved streamlines: rapid formation of <i>Staphylococcus aureus</i> biofilm streamers. <i>New Journal of Physics</i> , 2014, 16, 065024.	1.2	50
11	Pumping by flapping in a viscoelastic fluid. <i>Physical Review E</i> , 2010, 81, 036312.	0.8	48
12	Self-learning how to swim at low Reynolds number. <i>Physical Review Fluids</i> , 2020, 5, .	1.0	46
13	Two-dimensional flagellar synchronization in viscoelastic fluids. <i>Journal of Fluid Mechanics</i> , 2010, 646, 505-515.	1.4	42
14	The transient swimming of a waving sheet. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2010, 466, 107-126.	1.0	38
15	A note on the breathing mode of an elastic sphere in Newtonian and complex fluids. <i>Physics of Fluids</i> , 2015, 27, .	1.6	38
16	Gating of a mechanosensitive channel due to cellular flows. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 9822-9827.	3.3	27
17	Squirming motion in a Brinkman medium. <i>Journal of Fluid Mechanics</i> , 2018, 855, 554-573.	1.4	23
18	Flow around a squirmer in a shear-thinning fluid. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2019, 268, 101-110.	1.0	23

#	ARTICLE	IF	CITATIONS
19	Gait switching and targeted navigation of microswimmers via deep reinforcement learning. <i>Communications Physics</i> , 2022, 5, .	2.0	21
20	Swimming efficiency in a shear-thinning fluid. <i>Physical Review E</i> , 2017, 96, 062606.	0.8	18
21	Sorting by interfacial tension (SIFT): Label-free enzyme sorting using droplet microfluidics. <i>Analytica Chimica Acta</i> , 2019, 1089, 108-114.	2.6	17
22	Maximizing propulsive thrust of a driven filament at low Reynolds number via variable flexibility. <i>Soft Matter</i> , 2017, 13, 2339-2347.	1.2	16
23	A Rapid and Low-Cost Pathogen Detection Platform by Using a Molecular Agglutination Assay. <i>ACS Central Science</i> , 2018, 4, 1485-1494.	5.3	15
24	Mechanical rotation at low Reynolds number via reinforcement learning. <i>Physics of Fluids</i> , 2021, 33, .	1.6	13
25	Hydrodynamics of the double-wave structure of insect spermatozoa flagella. <i>Journal of the Royal Society Interface</i> , 2012, 9, 1908-1924.	1.5	12
26	The effect of particle geometry on squirming through a shear-thinning fluid. <i>Journal of Fluid Mechanics</i> , 2022, 938, .	1.4	12
27	Dissipative Solitons in Coupled Complex Ginzburg-Landau Equations. <i>Journal of the Physical Society of Japan</i> , 2009, 78, 084001.	0.7	11
28	On the gating of mechanosensitive channels by fluid shear stress. <i>Acta Mechanica Sinica/Lixue Xuebao</i> , 2016, 32, 1012-1022.	1.5	11
29	Ellipsoidal Brownian self-driven particles in a magnetic field. <i>Physical Review E</i> , 2017, 95, 032605.	0.8	11
30	A note on a swirling squirmer in a shear-thinning fluid. <i>Physics of Fluids</i> , 2020, 32, .	1.6	11
31	Squirming in a viscous fluid enclosed by a Brinkman medium. <i>Physical Review E</i> , 2020, 101, 063105.	0.8	11
32	Helical locomotion in a porous medium. <i>Physical Review E</i> , 2020, 102, 043111.	0.8	10
33	Nonlocal shear-thinning effects substantially enhance helical propulsion. <i>Physical Review Fluids</i> , 2020, 5, .	1.0	10
34	Characteristics of undulatory locomotion in granular media. <i>Physics of Fluids</i> , 2016, 28, .	1.6	9
35	Effects of surfactant transport on electrodeformation of a viscous drop. <i>Physical Review E</i> , 2019, 99, 063104.	0.8	9
36	Propulsion of an elastic filament in a shear-thinning fluid. <i>Soft Matter</i> , 2021, 17, 3829-3839.	1.2	8

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37	Propulsion via flexible flapping in granular media. <i>Physical Review E</i> , 2017, 96, 012907.	0.8	6
38	Extensibility enables locomotion under isotropic drag. <i>Physics of Fluids</i> , 2011, 23, 081702.	1.6	5
39	Realization of a push-me-pull-you swimmer at low Reynolds numbers. <i>Bioinspiration and Biomimetics</i> , 2020, 15, 064001.	1.5	5
40	A 3D-Printed Self-Learning Three-Linked-Sphere Robot for Autonomous Confined-Space Navigation. <i>Advanced Intelligent Systems</i> , 2021, 3, 2100039.	3.3	5
41	Wall-induced translation of a rotating particle in a shear-thinning fluid. <i>Journal of Fluid Mechanics</i> , 2021, 927, .	1.4	5
42	Hydrodynamic Capture and Release of Passively Driven Particles by Active Particles Under Hele-Shaw Flows. <i>Journal of Nonlinear Science</i> , 2018, 28, 1379-1396.	1.0	2
43	Pore Dynamics of Lipid Vesicles Under Light-Induced Osmotic Stress. <i>Physical Review Applied</i> , 2022, 17, .	1.5	2
44	Viscoelastic levitation. <i>Journal of Fluid Mechanics</i> , 2022, 943, .	1.4	1
45	Quantification of a latex agglutination assay for bacterial pathogen detection in a low-cost capillary-driven fluidic platform. , 2016, , .		0