

# Gwynn J Elfring

## List of Publications by Year in descending order

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Version: 2024-02-01

39  
papers

970  
citations

361296  
20  
h-index

434063  
31  
g-index

39  
all docs

39  
docs citations

39  
times ranked

605  
citing authors

#	ARTICLE	IF	CITATIONS
1	Hydrodynamic Phase Locking of Swimming Microorganisms. <i>Physical Review Letters</i> , 2009, 103, 088101.	2.9	109
2	Squirming through shear-thinning fluids. <i>Journal of Fluid Mechanics</i> , 2015, 784, .	1.4	80
3	Surface viscosity and Marangoni stresses at surfactant laden interfaces. <i>Journal of Fluid Mechanics</i> , 2016, 792, 712-739.	1.4	57
4	Synchronization of flexible sheets. <i>Journal of Fluid Mechanics</i> , 2011, 674, 163-173.	1.4	54
5	Active Particles in Viscosity Gradients. <i>Physical Review Letters</i> , 2019, 123, 158006.	2.9	53
6	Taylor's swimming sheet: Analysis and improvement of the perturbation series. <i>Physica D: Nonlinear Phenomena</i> , 2011, 240, 1567-1573.	1.3	51
7	Passive hydrodynamic synchronization of two-dimensional swimming cells. <i>Physics of Fluids</i> , 2011, 23, 011902.	1.6	47
8	An active particle in a complex fluid. <i>Journal of Fluid Mechanics</i> , 2017, 823, 675-688.	1.4	47
9	Two-dimensional flagellar synchronization in viscoelastic fluids. <i>Journal of Fluid Mechanics</i> , 2010, 646, 505-515.	1.4	42
10	The effect of gait on swimming in viscoelastic fluids. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2016, 234, 8-14.	1.0	31
11	Theory of Locomotion Through Complex Fluids. <i>Biological and Medical Physics Series</i> , 2015, , 283-317.	0.3	28
12	A note on the reciprocal theorem for the swimming of simple bodies. <i>Physics of Fluids</i> , 2015, 27, 023101.	1.6	27
13	Force moments of an active particle in a complex fluid. <i>Journal of Fluid Mechanics</i> , 2017, 829, .	1.4	27
14	Two-sphere swimmers in viscoelastic fluids. <i>Physical Review Fluids</i> , 2018, 3, .	1.0	26
15	Thermodynamic considerations on the stability of water in Nafion. <i>Journal of Membrane Science</i> , 2007, 297, 190-198.	4.1	23
16	Autophoretic locomotion in weakly viscoelastic fluids at finite Péclet number. <i>Physics of Fluids</i> , 2017, 29, .	1.6	23
17	Flow around a squirmer in a shear-thinning fluid. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2019, 268, 101-110.	1.0	23
18	Jeffery orbits in shear-thinning fluids. <i>Physics of Fluids</i> , 2019, 31, .	1.6	22

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19	Elastic two-sphere swimmer in Stokes flow. <i>Physical Review Fluids</i> , 2017, 2, .	1.0	22
20	Thermodynamics of pore wetting and swelling in Nafion. <i>Journal of Membrane Science</i> , 2008, 315, 125-132.	4.1	20
21	Dynamics and rheology of particles in shear-thinning fluids. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2018, 262, 107-114.	1.0	18
22	Hydrodynamic interactions of cilia on a spherical body. <i>Physical Review E</i> , 2016, 93, 033111.	0.8	17
23	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
24	Higher-order force moments of active particles. <i>Physical Review Fluids</i> , 2018, 3, .	1.0	16
25	Hydrodynamics of active particles in viscosity gradients. <i>Physical Review Fluids</i> , 2021, 6, .	1.0	14
26	Fully turbulent flows of viscoplastic fluids in a rectangular duct. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2021, 293, 104570.	1.0	11
27	Turbulent drag reduction of viscoelastic wormlike micellar gels. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2022, 301, 104724.	1.0	11
28	External losses in high-bypass turbo fan air engines. <i>International Journal of Exergy</i> , 2008, 5, 400.	0.2	9
29	Characteristics of undulatory locomotion in granular media. <i>Physics of Fluids</i> , 2016, 28, .	1.6	9
30	A note on higher-order perturbative corrections to squirming speed in weakly viscoelastic fluids. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2019, 270, 51-55.	1.0	9
31	Propulsion via flexible flapping in granular media. <i>Physical Review E</i> , 2017, 96, 012907.	0.8	6
32	Dynamics of poroelastocapillary rise. <i>Journal of Fluids and Structures</i> , 2019, 85, 220-228.	1.5	6
33	Buckling instability of squeezed droplets. <i>Physics of Fluids</i> , 2012, 24, 072102.	1.6	5
34	Rheology of wormlike micellar gels formed by long-chained zwitterionic surfactants. <i>Journal of Rheology</i> , 2021, 65, 1065-1080.	1.3	5
35	Rheology and flow studies of drag-reducing gravel packing fluids. <i>Rheologica Acta</i> , 2017, 56, 905-914.	1.1	4
36	The morphological role of ligand inhibitors in blocking receptor- and clathrin-mediated endocytosis. <i>Soft Matter</i> , 2022, 18, 3531-3545.	1.2	2

#	ARTICLE	IF	CITATIONS
37	Synchronization of Swimming Microorganisms. Biophysical Journal, 2012, 102, 415a.	0.2	0
38	Editorial: Special issue on "Complex fluids in Biological Systems". Journal of Non-Newtonian Fluid Mechanics, 2020, 275, 104175.	1.0	0
39	Editorial: Introduction to the 37th Annual Gallery of Fluid Motion (Seattle, Washington, USA, 2019). Physical Review Fluids, 2020, 5, .	1.0	0