

A E Hosoi

List of Publications by Year in descending order

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Version: 2024-02-01

52
papers

2,905
citations

257450

24
h-index

189892

50
g-index

52
all docs

52
docs citations

52
times ranked

2602
citing authors

#	ARTICLE	IF	CITATIONS
1	Public health implications of opening National Football League stadiums during the COVID-19 pandemic. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, e2114226119.	7.1	2
2	Fluid flow in the sarcomere. Archives of Biochemistry and Biophysics, 2021, 706, 108923.	3.0	6
3	Estimating the filtration efficacy of cloth masks. Physical Review Fluids, 2021, 6, .	2.5	4
4	Confinement-induced stabilization of the Rayleigh-Taylor instability and transition to the unconfined limit. Science Advances, 2020, 6, .	10.3	18
5	Flagellar kinematics reveals the role of environment in shaping sperm motility. Journal of the Royal Society Interface, 2020, 17, 20200525.	3.4	10
6	Drop impact on hairy surfaces. Physical Review Fluids, 2019, 4, .	2.5	9
7	Corrsin lecture on hairy hydrodynamics. Physical Review Fluids, 2019, 4, .	2.5	3
8	Marine crustaceans with hairy appendages: Role of hydrodynamic boundary layers in sensing and feeding. Physical Review Fluids, 2019, 4, .	2.5	4
9	Self-similar kinematics among efficient slender swimmers. Journal of Fluid Mechanics, 2018, 840, 106-130.	3.4	2
10	Thin films in partial wetting: stability, dewetting and coarsening. Journal of Fluid Mechanics, 2018, 845, 642-681.	3.4	41
11	Starting Problems in Mechanical Engineering. , 2018, , .		1
12	Viscous entrainment on hairy surfaces. Physical Review Fluids, 2018, 3, .	2.5	19
13	Nonlinear flow response of soft hair beds. Nature Physics, 2017, 13, 1014-1019.	16.7	37
14	Air entrainment in hairy surfaces. Physical Review Fluids, 2016, 1, .	2.5	15
15	Drag kings: characterizing large-scale flows in cycling aerodynamics. Journal of Fluid Mechanics, 2014, 748, 1-4.	3.4	12
16	Flagellar waveform dynamics of freely swimming algal cells. Physical Review E, 2013, 88, 013015.	2.1	17
17	Structure evolution in electrorheological fluids flowing through microchannels. Soft Matter, 2013, 9, 2889.	2.7	22
18	Coarsening and solidification via solvent-annealing in thin liquid films. Journal of Fluid Mechanics, 2013, 723, 69-90.	3.4	3

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19	Spinodal decomposition in particle-laden Landau-Levich flow. <i>Physics of Fluids</i> , 2012, 24, .	4.0	9
20	A two-dimensional model of low-Reynolds number swimming beneath a free surface. <i>Journal of Fluid Mechanics</i> , 2011, 681, 24-47.	3.4	40
21	Tuning nanoscopic self-assembly of diblock copolymer blends on a two-dimensional interface. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2011, 49, 136-143.	2.1	2
22	Optimal kinematics and morphologies for spermatozoa. <i>Physical Review E</i> , 2011, 83, 045303.	2.1	41
23	Controllable adhesion using field-activated fluids. <i>Physics of Fluids</i> , 2011, 23, .	4.0	37
24	Optimal feeding and swimming gaits of biflagellated organisms. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2011, 108, 1001-1006.	7.1	80
25	Mechanical Aspects of Biological Locomotion. <i>Experimental Mechanics</i> , 2010, 50, 1259-1261.	2.0	4
26	Pulling bubbles from a bath. <i>Physics of Fluids</i> , 2010, 22, 061705.	4.0	7
27	Nonlinear viscoelastic biomaterials: meaningful characterization and engineering inspiration. <i>Integrative and Comparative Biology</i> , 2009, 49, 40-50.	2.0	67
28	Experimental study of gravitation effects in the flow of a particle-laden thin film on an inclined plane. <i>Physics of Fluids</i> , 2009, 21, .	4.0	32
29	Marangoni convection in droplets on superhydrophobic surfaces. <i>Journal of Fluid Mechanics</i> , 2009, 624, 101-123.	3.4	149
30	Shock Solutions for Particle-Laden Thin Films. <i>SIAM Journal on Applied Mathematics</i> , 2008, 68, 760-783.	1.8	43
31	New measures for characterizing nonlinear viscoelasticity in large amplitude oscillatory shear. <i>Journal of Rheology</i> , 2008, 52, 1427-1458.	2.6	787
32	Shape optimization of a sheet swimming over a thin liquid layer. <i>Journal of Fluid Mechanics</i> , 2008, 601, 25-61.	3.4	11
33	Crawling beneath the free surface: Water snail locomotion. <i>Physics of Fluids</i> , 2008, 20, .	4.0	35
34	Instabilities and Taylor dispersion in isothermal binary thin fluid films. <i>Physics of Fluids</i> , 2008, 20, 102103.	4.0	0
35	An Ontology for Large Amplitude Oscillatory Shear Flow. <i>AIP Conference Proceedings</i> , 2008, , .	0.4	13
36	Soft Swimming: Exploiting Deformable Interfaces for Low Reynolds Number Locomotion. <i>Physical Review Letters</i> , 2008, 101, 048102.	7.8	90

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37	Optimal Stroke Patterns for Purcell's Three-Link Swimmer. <i>Physical Review Letters</i> , 2007, 98, 068105.	7.8	166
38	Mechanical Devices for Snail-like Locomotion. <i>Journal of Intelligent Material Systems and Structures</i> , 2007, 18, 111-116.	2.5	20
39	Rheological fingerprinting of gastropod pedal mucus and synthetic complex fluids for biomimicking adhesive locomotion. <i>Soft Matter</i> , 2007, 3, 634.	2.7	192
40	An experimental investigation of the stability of the circular hydraulic jump. <i>Journal of Fluid Mechanics</i> , 2006, 558, 33.	3.4	97
41	Experimental investigations of elastic tail propulsion at low Reynolds number. <i>Physics of Fluids</i> , 2006, 18, 091701.	4.0	148
42	Tuning gastropod locomotion: Modeling the influence of mucus rheology on the cost of crawling. <i>Physics of Fluids</i> , 2006, 18, 113102.	4.0	37
43	Theory for Shock Dynamics in Particle-Laden Thin Films. <i>Physical Review Letters</i> , 2005, 94, 117803.	7.8	67
44	Lubrication in a corner. <i>Journal of Fluid Mechanics</i> , 2005, 544, 353.	3.4	12
45	Building a better snail: Lubrication and adhesive locomotion. <i>Physics of Fluids</i> , 2005, 17, 113101.	4.0	116
46	Periodic Knolls and Valleys: Coexistence of Solid and Liquid States in Granular Suspensions. <i>Physical Review Letters</i> , 2004, 92, 224502.	7.8	22
47	Peeling, Healing, and Bursting in a Lubricated Elastic Sheet. <i>Physical Review Letters</i> , 2004, 93, 137802.	7.8	78
48	Corner flow in free liquid films. <i>Journal of Engineering Mathematics</i> , 2004, 50, 267-288.	1.2	4
49	The effect of surface tension on rimming flows in a partially filled rotating cylinder. <i>Journal of Fluid Mechanics</i> , 2003, 479, 65-98.	3.4	97
50	Evaporative instabilities in climbing films. <i>Journal of Fluid Mechanics</i> , 2001, 442, 217-239.	3.4	81
51	Axial instability of a free-surface front in a partially filled horizontal rotating cylinder. <i>Physics of Fluids</i> , 1999, 11, 97-106.	4.0	87
52	Layer formation in monodisperse suspensions and colloids. <i>Journal of Fluid Mechanics</i> , 1996, 328, 297-311.	3.4	9