Bhargav Rallabandi

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/6096580/publications.pdf

Version: 2024-02-01

36 papers 594

623188 14 h-index 24 g-index

38 all docs 38 docs citations

38 times ranked 564 citing authors

#	Article	IF	CITATIONS
1	Frequency dependence and frequency control of microbubble streaming flows. Physics of Fluids, 2013, 25, .	1.6	79
2	Diffusiophoretic and diffusioosmotic velocities for mixtures of valence-asymmetric electrolytes. Physical Review Fluids, 2019, 4, .	1.0	50
3	Three-Dimensional Phenomena in Microbubble Acoustic Streaming. Physical Review Applied, 2015, 3, .	1.5	48
4	Membrane-induced hydroelastic migration of a particle surfing its own wave. Nature Physics, 2018, 14, 1211-1215.	6.5	39
5	Rotation of an immersed cylinder sliding near a thin elastic coating. Physical Review Fluids, 2017, 2, .	1.0	37
6	Enhanced Boiling Heat Transfer using Self-Actuated Nanobimorphs. Nano Letters, 2018, 18, 6392-6396.	4.5	35
7	Two-dimensional streaming flows driven by sessile semicylindrical microbubbles. Journal of Fluid Mechanics, 2014, 739, 57-71.	1.4	32
8	Particle migration and sorting in microbubble streaming flows. Biomicrofluidics, 2016, 10, 014124.	1.2	30
9	Reciprocal theorem for the prediction of the normal force induced on a particle translating parallel to an elastic membrane. Physical Review Fluids, 2018, 3, .	1.0	21
10	Foam-driven fracture. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 8082-8086.	3.3	20
11	Migration of ferrofluid droplets in shear flow under a uniform magnetic field. Soft Matter, 2019, 15, 2439-2446.	1.2	19
12	Three-dimensional streaming flow in confined geometries. Journal of Fluid Mechanics, 2015, 777, 408-429.	1.4	18
13	CO ₂ -Driven diffusiophoresis for maintaining a bacteria-free surface. Soft Matter, 2021, 17, 2568-2576.	1.2	15
14	Fast inertial particle manipulation in oscillating flows. Physical Review Fluids, 2017, 2, .	1.0	15
15	Lift forces on three-dimensional elastic and viscoelastic lubricated contacts. Physical Review Fluids, 2021, 6, .	1.0	14
16	Formation of sea ice bridges in narrow straits in response to wind and water stresses. Journal of Geophysical Research: Oceans, 2017, 122, 5588-5610.	1.0	13
17	Hydrodynamic force on a sphere normal to an obstacle due to a non-uniform flow. Journal of Fluid Mechanics, 2017, 818, 407-434.	1.4	12
18	Analysis of optimal mixing in open-flow mixers with time-modulated vortex arrays. Physical Review Fluids, 2017, 2, .	1.0	11

#	Article	IF	Citations
19	Entry and exit flows in curved pipes. Journal of Fluid Mechanics, 2017, 815, 570-591.	1.4	10
20	Silver-Based Self-Powered pH-Sensitive Pump and Sensor. Langmuir, 2020, 36, 7948-7955.	1.6	10
21	Rotation of a submerged finite cylinder moving down a soft incline. Soft Matter, 2020, 16, 4000-4007.	1.2	10
22	Autophoresis of two adsorbing/desorbing particles in an electrolyte solution. Journal of Fluid Mechanics, 2019, 865, 440-459.	1.4	8
23	Inertial forces for particle manipulation near oscillating interfaces. Physical Review Fluids, 2018, 3, .	1.0	7
24	Electrostatic wrapping of a microfiber around a curved particle. Soft Matter, 2021, 17, 3609-3618.	1.2	6
25	Inertial forces in the Maxey–Riley equation in nonuniform flows. Physical Review Fluids, 2021, 6, .	1.0	6
26	Size-dependent particle migration and trapping in three-dimensional microbubble streaming flows. Physical Review Fluids, 2020, 5, .	1.0	6
27	An unrecognized inertial force induced by flow curvature in microfluidics. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3 . 3	5
28	Wind-Driven Formation of Ice Bridges in Straits. Physical Review Letters, 2017, 118, 128701.	2.9	3
29	Representative subsampling of sedimenting blood. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2019, 475, 20190223.	1.0	3
30	Motion of a tightly fitting axisymmetric object through a lubricated elastic tube. Journal of Fluid Mechanics, 2021, 926, .	1.4	3
31	Curvature Regularization near Contacts with Stretched Elastic Tubes. Physical Review Letters, 2019, 123, 168002.	2.9	2
32	Effect of swarm configuration on fluid transport during vertical collective motion. Bioinspiration and Biomimetics, 2020, 15, 015002.	1.5	2
33	Coupling of translation and rotation in the motion of finite-length rods near solid boundaries. Journal of Fluid Mechanics, 2022, 938, .	1.4	2
34	Pattern formation in oil-in-water emulsions exposed to a salt gradient. Physical Review Fluids, 2019, 4,	1.0	1
35	Rotation–translation coupling of soft objects in lubricated contact. Soft Matter, 2022, 18, 4887-4896.	1.2	1
36	Self-sustained three-dimensional beating of a model eukaryotic flagellum. Soft Matter, 0, , .	1.2	1