Hassan Masoud

List of Publications by Year in Descending Order

32 papers	716 citations	17 h-index	26 g-index
37 ext. papers	883 ext. citations	4.2 avg, IF	4.68 L-index

#	Paper	IF	Citations
32	Free-Decay Heave Motion of a Spherical Buoy. *Fluids*, **2022**, 7, 188	1.6	0
31	Collective Sensitivity of Artificial Hair Sensors to Flow Direction. *AIAA Journal*, **2021**, 59, 1135-1141	2.1	1
30	Heat transfer from a particle in laminar flows of a variable thermal conductivity fluid. *International Journal of Heat and Mass Transfer*, **2021**, 171, 121067	4.9	
29	Evaporation of multiple droplets. *Journal of Fluid Mechanics*, **2021**, 927,	3.7	2
28	A remotely controlled Marangoni surfer. *Bioinspiration and Biomimetics*, **2021**, 16,	2.6	1
27	Forward, reverse, and no motion of Marangoni surfers under confinement. *Physical Review Fluids*, **2020**, 5,	2.8	8
26	Forced Convection Heat Transfer From a Particle at Small and Large Peclet Numbers. *Journal of Heat Transfer*, **2020**, 142,	1.8	1
25	The reciprocal theorem in fluid dynamics and transport phenomena. *Journal of Fluid Mechanics*, **2019**, 879,	3.7	40
24	Translational and rotational motion of disk-shaped Marangoni surfers. *Physics of Fluids*, **2019**, 31, 102101	4.4	12
23	Conduction heat transfer from oblate spheroids and bispheres. *International Journal of Heat and Mass Transfer*, **2019**, 139, 115-120	4.9	3
22	Optimal viscous damping of vibrating porous cylinders. *Journal of Fluid Mechanics*, **2019**, 874, 339-358	3.7	4
21	Evaporation of a sessile droplet on a slope. *Scientific Reports*, **2019**, 9, 19803	4.9	12
20	Reverse Marangoni surfing. *Journal of Fluid Mechanics*, **2017**, 811, 612-621	3.7	18
19	Oscillatory Marangoni flows with inertia. *Journal of Fluid Mechanics*, **2016**, 803, 94-118	3.7	1
18	Reciprocal theorem for convective heat and mass transfer from a particle in Stokes and potential flows. *Physical Review Fluids*, **2016**, 1,	2.8	10
17	Alternative mechanism for coffee-ring deposition based on active role of free surface. *Physical Review E*, **2016**, 94, 063104	2.4	26
16	Drag and diffusion coefficients of a spherical particle attached to a fluid–fluid interface. *Journal of Fluid Mechanics*, **2016**, 790, 607-618	3.7	42

15	Hydrodynamic schooling of flapping swimmers. *Nature Communications*, **2015**, 6, 8514	17.4	60
14	Mobility of membrane-trapped particles. *Journal of Fluid Mechanics*, **2015**, 781, 494-505	3.7	22
13	Collective surfing of chemically active particles. *Physical Review Letters*, **2014**, 112, 128304	7.4	37
12	A reciprocal theorem for Marangoni propulsion. *Journal of Fluid Mechanics*, **2014**, 741,	3.7	57
11	On the rotation of porous ellipsoids in simple shear flows. *Journal of Fluid Mechanics*, **2013**, 733,	3.7	15
10	Efficient Flapping Flight Using Flexible Wings Oscillating at Resonance. *The IMA Volumes in Mathematics and Its Applications*, **2012**, 235-245	0.5	1
9	Designing maneuverable micro-swimmers actuated by responsive gel. *Soft Matter*, **2012**, 8, 8944	3.6	30
8	Controlled release of nanoparticles and macromolecules from responsive microgel capsules. *ACS Nano*, **2012**, 6, 212-9	16.7	72
7	Harnessing synthetic cilia to regulate motion of microparticles. *Soft Matter*, **2011**, 7, 8702	3.6	28
6	Selective control of surface properties using hydrodynamic interactions. *Chemical Communications*, **2011**, 47, 472-4	5.8	17
5	Resonance of flexible flapping wings at low Reynolds number. *Physical Review E*, **2010**, 81, 056304	2.4	70
4	Modeling magnetic microcapsules that crawl in microchannels. *Soft Matter*, **2010**, 6, 794-799	3.6	21
3	Permeability and Diffusion through Mechanically Deformed Random Polymer Networks. *Macromolecules*, **2010**, 43, 10117-10122	5.5	30
2	Analytical solution for Stokes flow inside an evaporating sessile drop: Spherical and cylindrical cap shapes. *Physics of Fluids*, **2009**, 21, 042102	4.4	43
1	Analytical solution for inviscid flow inside an evaporating sessile drop. *Physical Review E*, **2009**, 79, 016301	2.4	27