Mohammad-Reza Alam

List of Publications by Year
in descending order

54	1,237	394286	377752
papers	citations	19 h-index	34 g-index

54	54	54	1121
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Ocean wave energy in the United States: Current status and future perspectives. Renewable and Sustainable Energy Reviews, 2017, 74, 1300-1313.	8.2	151
2	Multi-stable mechanisms for high-efficiency and broadband ocean wave energy harvesting. Applied Energy, 2017, 197, 292-302.	5.1	150
3	Continuous profile flexural GRIN lens: Focusing and harvesting flexural waves. Applied Physics Letters, 2018, 112, .	1.5	58
4	Broadband Cloaking in Stratified Seas. Physical Review Letters, 2012, 108, 084502.	2.9	52
5	Shape optimization of wave energy converters for broadband directional incident waves. Ocean Engineering, 2019, 174, 186-200.	1.9	48
6	Oblique sub- and super-harmonic Bragg resonance of surface waves by bottom ripples. Journal of Fluid Mechanics, 2010, 643, 437-447.	1.4	47
7	Bragg resonance of waves in a two-layer fluid propagating over bottom ripples. Part II. Numerical simulation. Journal of Fluid Mechanics, 2009, 624, 225-253.	1.4	44
8	Bragg resonance of waves in a two-layer fluid propagating over bottom ripples. Part I. Perturbation analysis. Journal of Fluid Mechanics, 2009, 624, 191-224.	1.4	42
9	Cloaking in shallow-water waves via nonlinear medium transformation. Journal of Fluid Mechanics, 2015, 778, 273-287.	1.4	42
10	Ultrasonic sculpting of virtual optical waveguides in tissue. Nature Communications, 2019, 10, 92.	5.8	39
11	A new triad resonance between co-propagating surface and interfacial waves. Journal of Fluid Mechanics, 2012, 691, 267-278.	1.4	33
12	The evolution of air resonance power efficiency in the violin and its ancestors. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2015, 471, 20140905.	1.0	30
13	Landslide tsunamis in lakes. Journal of Fluid Mechanics, 2015, 772, 784-804.	1.4	25
14	Waves due to an oscillating and translating disturbance in a two-layer density-stratified fluid. Journal of Engineering Mathematics, 2009, 65, 179-200.	0.6	24
15	Nonlinear analysis of an actuated seafloor-mounted carpet for a high-performance wave energy extraction. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2012, 468, 3153-3171.	1.0	24
16	Predictability horizon of oceanic rogue waves. Geophysical Research Letters, 2014, 41, 8477-8485.	1.5	24
17	Broadband cloaking of flexural waves. Physical Review E, 2017, 95, 063002.	0.8	24
18	Attenuation of long interfacial waves over a randomly rough seabed. Journal of Fluid Mechanics, 2007, 587, 73-96.	1.4	22

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19	Dromions of flexural-gravity waves. Journal of Fluid Mechanics, 2013, 719, 1-13.	1.4	22
20	Versatile low-Reynolds-number swimmer with three-dimensional maneuverability. Physical Review E, 2014, 90, 053006.	0.8	21
21	Hydrodynamic Choreographies of Microswimmers. Scientific Reports, 2018, 8, 3670.	1.6	19
22	Attenuation of short surface waves by the sea floor via nonlinear sub-harmonic interaction. Journal of Fluid Mechanics, 2011, 689, 529-540.	1.4	18
23	Microswimmer-induced chaotic mixing. Journal of Fluid Mechanics, 2015, 779, 669-683.	1.4	18
24	Real time hybrid modeling for ocean wave energy converters. Renewable and Sustainable Energy Reviews, 2015, 43, 784-795.	8.2	18
25	In situ 3D reconfigurable ultrasonically sculpted optical beam paths. Optics Express, 2019, 27, 7249.	1.7	18
26	Closed-loop separation control: An analytic approach. Physics of Fluids, 2006, 18, 043601.	1.6	17
27	Broadband Bending of Flexural Waves: Acoustic Shapes and Patterns. Scientific Reports, 2018, 8, 11219.	1.6	17
28	Real-time in situ prediction of ocean currents. Ocean Engineering, 2021, 228, 108922.	1.9	17
29	Terminal retrograde turn of rolling rings. Physical Review E, 2015, 92, 032913.	0.8	15
30	Ships advancing near the critical speed in a shallow channel with a randomly uneven bed. Journal of Fluid Mechanics, 2008, 616, 397-417.	1.4	14
31	Shore protection by oblique seabed bars. Journal of Fluid Mechanics, 2017, 815, 481-510.	1.4	14
32	Frequency-dependent higher-order Stokes singularities near a planar elastic boundary: Implications for the hydrodynamics of an active microswimmer near an elastic interface. Physical Review E, 2019, 100, 032610.	0.8	14
33	Surface gravity-wave lensing. Physical Review E, 2014, 89, 023012.	0.8	13
34	Flow characteristics of Chlamydomonas result in purely hydrodynamic scattering. Physical Review E, 2018, 98, 012603.	0.8	13
35	Active cloaking in Stokes flows via reinforcement learning. Journal of Fluid Mechanics, 2020, 903, .	1.4	13
36	Rapid phase-resolved prediction of nonlinear dispersive waves using machine learning. Applied Ocean Research, 2021, 117, 102920.	1.8	12

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37	Interaction of surface waves with an actuated submerged flexible plate: Optimization for wave energy extraction. Journal of Fluids and Structures, 2018, 81, 673-692.	1.5	9
38	Brownian motion of tethered nanowires. Physical Review E, 2014, 89, 053010.	0.8	8
39	Fabry-Perot resonance of water waves. Physical Review E, 2015, 92, 043015.	0.8	8
40	Inherently unstable internal gravity waves due to resonant harmonic generation. Journal of Fluid Mechanics, 2017, 811, 400-420.	1.4	8
41	The Experimental Realization of an Artificial Low-Reynolds-Number Swimmer with Three-Dimensional Maneuverability. , 2019, , .		6
42	Resonant-wave signature of an oscillating and translating disturbance in a two-layer density stratified fluid. Journal of Fluid Mechanics, 2011, 675, 477-494.	1.4	5
43	Stealthy movements and concealed swarms of swimming micro-robots. Physics of Fluids, 2020, 32, 071901.	1.6	5
44	A Flexible Seafloor Carpet for High-Performance Wave Energy Extraction. , 2012, , .		4
45	The â€œWave Bridgeâ€•for bypassing oceanic wave momentum. Journal of Ocean Engineering and Marine Energy, 2015, 1, 395-404.	0.9	3
46	Bragg Resonance of Gravity Waves and Ocean Renewable Energy. , 2015, , 211-225.		3
47	Reply to: The overwhelming role of ballistic photons in ultrasonically guided light through tissue. Nature Communications, 2022, 13, 1872.	5.8	2
48	Suppression of epileptic seizures via Anderson localization. Journal of the Royal Society Interface, 2017, 14, 20160872.	1.5	1
49	Sensitivity of internal wave energy distribution over seabed corrugations to adjacent seabed features. Journal of Fluid Mechanics, 2017, 824, 74-96.	1.4	1
50	Oblique internal-wave chain resonance over seabed corrugations. Journal of Fluid Mechanics, 2017, 833, 538-562.	1.4	1
51	Why does water shoot higher if we partially block the garden hose outlet?. American Journal of Physics, 2021, 89, 567-574.	0.3	1
52	Sheltering the Shore via Nearshore Oblique Seabed Bars. , 2016, , .		0
53	Statistical Investigation of the Surface Profile of Rogue Waves in 2D Non-Breaking Seas. , 2016, , .		0
54	Propulsion and Mixing Generated by the Digitized Gait of Caenorhabditis elegans. Physical Review Applied, 2019, 11, .	1.5	0