Shervin Bagheri

List of Publications by Year
in descending order

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50 papers	3,635 citations	279798 23 h-index	182427 51 g-index
51 all docs	51 docs citations	51 times ranked	2058 citing authors

#	Article	IF	Citations
1	Nanoscale sheared droplet: volume-of-fluid, phase-field and no-slip molecular dynamics. Journal of Fluid Mechanics, 2022, 940, .	3.4	10
2	Predicting drag on rough surfaces by transfer learning of empirical correlations. Journal of Fluid Mechanics, 2022, 933, .	3.4	13
3	Experimental Characterization and Mathematical Modeling of the Adsorption of Proteins and Cells on Biomimetic Hydroxyapatite. ACS Omega, 2022, 7, 908-920.	3.5	3
4	Heat transfer increase by convection in liquid-infused surfaces for laminar and turbulent flows. Journal of Fluid Mechanics, 2022, 941, .	3.4	3
5	Near-wall turbulence alteration with the transpiration-resistance model. Journal of Fluid Mechanics, 2022, 942, .	3.4	3
6	Droplet Impact on Asymmetric Hydrophobic Microstructures. Langmuir, 2022, 38, 7956-7964.	3.5	12
7	A Soft Material Flow Sensor for Micro Air Vehicles. Soft Robotics, 2021, 8, 119-127.	8.0	7
8	Higher-Order Homogenized Boundary Conditions for Flows Over Rough and Porous Surfaces. Transport in Porous Media, 2021, 136, 1-42.	2.6	16
9	Fluid interfacial energy drives the emergence of three-dimensional periodic structures in micropillar scaffolds. Nature Physics, 2021, 17, 794-800.	16.7	17
10	Roughness on liquid-infused surfaces induced by capillary waves. Journal of Fluid Mechanics, 2021, 915, .	3.4	11
11	Droplet Impact on Surfaces with Asymmetric Microscopic Features. Langmuir, 2021, 37, 10849-10858.	3.5	9
12	Modal Analysis of Fluid Flows: Applications and Outlook. AIAA Journal, 2020, 58, 998-1022.	2.6	301
13	Transfer of mass and momentum at rough and porous surfaces. Journal of Fluid Mechanics, 2020, 884, .	3.4	39
14	Steady moving contact line of water over a no-slip substrate. European Physical Journal: Special Topics, 2020, 229, 1897-1921.	2.6	19
15	Lift induced by slip inhomogeneities in lubricated contacts. Physical Review Fluids, 2020, 5, .	2.5	6
16	Droplet leaping governs microstructured surface wetting. Soft Matter, 2019, 15, 9528-9536.	2.7	5
17	Interaction between hairy surfaces and turbulence for different surface time scales. Journal of Fluid Mechanics, 2019, 861, 556-584.	3.4	12
18	Modeling waves in fluids flowing over and through poroelastic media. International Journal of Multiphase Flow, 2019, 110, 148-164.	3.4	12

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19	Edge state modulation by mean viscosity gradients. Journal of Fluid Mechanics, 2018, 838, 379-403.	3.4	4
20	Energy efficiency and performance limitations of linear adaptive control for transition delay. Journal of Fluid Mechanics, 2017, 810, 60-81.	3.4	17
21	A framework for computing effective boundaryÂconditions at the interface betweenÂfree fluid and a porous medium. Journal of Fluid Mechanics, 2017, 812, 866-889.	3.4	57
22	A computational continuum model of poroelastic beds. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2017, 473, 20160932.	2.1	13
23	Passive control of a falling sphere by elliptic-shaped appendages. Physical Review Fluids, 2017, 2, .	2.5	3
24	In-flight active wave cancelation with delayed-x-LMS control algorithm in a laminar boundary layer. Experiments in Fluids, 2016, 57, 1.	2.4	12
25	Stabilizing effect of porosity on a flapping filament. Journal of Fluids and Structures, 2016, 61, 362-375.	3.4	6
26	A stable fluidâ€“structure-interaction solver for low-density rigid bodies using the immersed boundary projection method. Journal of Computational Physics, 2016, 305, 300-318.	3.8	34
27	On the role of adaptivity for robust laminar flow control. Journal of Fluid Mechanics, 2015, 767, .	3.4	34
28	Experimental study of a three-dimensional cylinderâ€“filament system. Experiments in Fluids, 2015, 56, 1.	2.4	2
29	Adaptive and Model-Based Control Theory Applied to Convectively Unstable Flows. Applied Mechanics Reviews, 2014, 66, .	10.1	61
30	Passive appendages generate drift through symmetry breaking. Nature Communications, 2014, 5, 5310.	12.8	44
31	Centralised Versus Decentralised Active Control of Boundary Layer Instabilities. Flow, Turbulence and Combustion, 2014, 93, 537-553.	2.6	5
32	Effects of weak noise on oscillating flows: Linking quality factor, Floquet modes, and Koopman spectrum. Physics of Fluids, 2014, 26, .	4.0	54
33	Koopman-mode decomposition of the cylinder wake. Journal of Fluid Mechanics, 2013, 726, 596-623.	3.4	219
34	Transition delay in a boundary layer flow using active control. Journal of Fluid Mechanics, 2013, 731, 288-311.	3.4	39
35	Spontaneous Symmetry Breaking of a Hinged Flapping Filament Generates Lift. Physical Review Letters, 2012, 109, 154502.	7.8	65
36	Bifurcation and stability analysis of a jet in cross-flow: onset of global instability at a low velocity ratio. Journal of Fluid Mechanics, 2012, 696, 94-121.	3.4	48

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37	Computational Hydrodynamic Stability and Flow Control Based on Spectral Analysis of Linear Operators. Archives of Computational Methods in Engineering, 2012, 19, 341-379.	10.2	11
38	Transition delay using control theory. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2011, 369, 1365-1381.	3.4	35
39	Self-sustained global oscillations in a jet in crossflow. Theoretical and Computational Fluid Dynamics, 2011, 25, 129-146.	2.2	38
40	Secondary threshold amplitudes for sinuous streak breakdown. Physics of Fluids, 2011, 23, .	4.0	33
41	Feedback control of three-dimensional optimal disturbances using reduced-order models. Journal of Fluid Mechanics, 2011, 677, 63-102.	3.4	56
42	Model Reduction of the Nonlinear Complex Ginzburgâ€“Landau Equation. SIAM Journal on Applied Dynamical Systems, 2010, 9, 1284-1302.	1.6	43
43	Reduced-order models for flow control: balanced models and Koopman modes. IUTAM Symposium on Cellular, Molecular and Tissue Mechanics, 2010, , 43-50.	0.2	17
44	Linear control of 3D disturbances on a flat-plate. IUTAM Symposium on Cellular, Molecular and Tissue Mechanics, 2010, , 373-378.	0.2	2
45	Global stability of a jet in crossflow. Journal of Fluid Mechanics, 2009, 624, 33-44.	3.4	194
46	Input-Output Analysis and Control Design Applied to a Linear Model of Spatially Developing Flows. Applied Mechanics Reviews, 2009, 62, .	10.1	131
47	Spectral analysis of nonlinear flows. Journal of Fluid Mechanics, 2009, 641, 115-127.	3.4	1,592
48	Matrix-Free Methods for the Stability and Control of Boundary Layers. AIAA Journal, 2009, 47, 1057-1068.	2.6	84
49	Inputâ€“output analysis, model reduction and control of the flat-plate boundary layer. Journal of Fluid Mechanics, 2009, 620, 263-298.	3.4	131
50	The stabilizing effect of streaks on Tollmien-Schlichting and oblique waves: A parametric study. Physics of Fluids, 2007, 19, .	4.0	50