Gianluca Iaccarino

List of Publications by Year in descending order

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471509 330143 4,229 36 17 37 citations h-index g-index papers 38 38 38 3534 docs citations times ranked citing authors all docs

#	Article	IF	CITATIONS
1	IMMERSED BOUNDARY METHODS. Annual Review of Fluid Mechanics, 2005, 37, 239-261.	25.0	2,714
2	Turbulence Modeling in the Age of Data. Annual Review of Fluid Mechanics, 2019, 51, 357-377.	25.0	755
3	LES Prediction of Wall-Pressure Fluctuations and Noise of a Low-Speed Airfoil. International Journal of Aeroacoustics, 2009, 8, 177-197.	1.3	85
4	Modeling of structural uncertainties in Reynolds-averaged Navier-Stokes closures. Physics of Fluids, 2013, 25, .	4.0	85
5	Simulations of three-dimensional viscoelastic flows past a circular cylinder at moderate Reynolds numbers. Journal of Fluid Mechanics, 2010, 651, 415-442.	3.4	80
6	Stable Boundary Treatment for the Wave Equation onÂSecond-Order Form. Journal of Scientific Computing, 2009, 41, 366-383.	2.3	51
7	Unsteady Aerodynamic Flow Investigation Around a Simplified Square-Back Road Vehicle With Drag Reduction Devices. Journal of Fluids Engineering, Transactions of the ASME, 2012, 134, .	1.5	40
8	Large-eddy simulation of passive scalar dispersion in an urban-like canopy. Journal of Fluid Mechanics, 2013, 723, 404-428.	3.4	31
9	Immersed-finite-element method for deformable particle suspensions in viscous and viscoelastic media. Physical Review E, 2018, 98, .	2.1	31
10	Flow past a transversely rotating sphere at Reynolds numbers above the laminar regime. Journal of Fluid Mechanics, 2014, 759, 751-781.	3.4	29
11	Uncertainty Quantification for the Trailing-Edge Noise of a Controlled-Diffusion Airfoil. AIAA Journal, 2015, 53, 42-54.	2.6	29
12	Effects of viscoelasticity in the high Reynolds number cylinder wake. Journal of Fluid Mechanics, 2012, 693, 297-318.	3.4	23
13	A generalized multi-resolution expansion for uncertainty propagation with application to cardiovascular modeling. Computer Methods in Applied Mechanics and Engineering, 2017, 314, 196-221.	6.6	22
14	Vortex-induced rotations of a rigid square cylinder at low Reynolds numbers. Journal of Fluid Mechanics, 2017, 813, 482-507.	3.4	21
15	Local shear and mass transfer on individual coral colonies: Computations in unidirectional and wave-driven flows. Journal of Geophysical Research: Oceans, 2014, 119, 2599-2619.	2.6	20
16	An Aerodynamic Investigation of an Isolated Stationary Formula 1 Wheel Assembly. Journal of Fluids Engineering, Transactions of the ASME, 2012, 134, .	1.5	19
17	A scalable geometric multigrid solver for nonsymmetric elliptic systems with application to variable-density flows. Journal of Computational Physics, 2018, 357, 142-158.	3.8	19
18	A benchmark for particle-laden turbulent duct flow: A joint computational and experimental study. International Journal of Multiphase Flow, 2020, 132, 103410.	3.4	18

#	Article	IF	CITATIONS
19	Study of the flow unsteadiness in the human airway using large eddy simulation. Physical Review Fluids, $2017, 2, .$	2.5	18
20	A subgrid-scale eddy-viscosity model based on the volumetric strain-stretching. Physics of Fluids, 2014, 26, .	4.0	16
21	Estimating RANS model uncertainty using machine learning. Journal of the Global Power and Propulsion Society, 2021, , 1-14.	0.8	15
22	Cutting the double loop: Theory and algorithms for reliabilityâ€based design optimization with parametric uncertainty. International Journal for Numerical Methods in Engineering, 2019, 118, 718-740.	2.8	14
23	An Aerodynamic Investigation of an Isolated Rotating Formula 1 Wheel Assembly. Journal of Fluids Engineering, Transactions of the ASME, 2012, 134, .	1.5	13
24	A simplex-based numerical framework for simple and efficient robust design optimization. Computational Optimization and Applications, 2013, 56, 231-251.	1.6	10
25	Assessment of Uncertainties in Modeling of Laminar to Turbulent Transition for Transonic Flows. Flow, Turbulence and Combustion, 2013, 91, 41-61.	2.6	9
26	Suspension flow through an asymmetric T-junction. Journal of Fluid Mechanics, 2018, 844, 247-273.	3.4	9
27	A Novel Weakly-Intrusive Non-linear Multiresolution Framework for Uncertainty Quantification in Hyperbolic Partial Differential Equations. Journal of Scientific Computing, 2016, 66, 358-405.	2.3	8
28	Growth of viscoelastic wings and the reduction of particle mobility in a viscoelastic shear flow. Physical Review Fluids, $2017, 2, .$	2.5	8
29	Simulations of High Reynolds Number Air Flow Over the NACA-0012 Airfoil Using the Immersed Boundary Method. Journal of Fluids Engineering, Transactions of the ASME, 2014, 136, .	1.5	7
30	An adaptive multiresolution semiâ€intrusive scheme for UQ in compressible fluid problems. International Journal for Numerical Methods in Fluids, 2015, 78, 595-637.	1.6	7
31	The discrete Green's function paradigm for two-way coupled Euler–Lagrange simulation. Journal of Fluid Mechanics, 2022, 931, .	3.4	7
32	Towards Rapid Analysis of Turbulent Flows in Complex Internal Passages. Flow, Turbulence and Combustion, 2006, 77, 27-39.	2.6	5
33	Task-parallel in situ temporal compression of large-scale computational fluid dynamics data. International Journal of High Performance Computing Applications, 2022, 36, 388-418.	3.7	4
34	Numerical Simulation of Polymer Injection in Turbulent Flow Past a Circular Cylinder. Journal of Fluids Engineering, Transactions of the ASME, 2011, 133, .	1.5	2
35	Reusing Chebyshev points for polynomial interpolation. Numerical Algorithms, 2015, 70, 249-267.	1.9	2
36	Simulation of microparticle inhalation in rhesus monkey airways. Physical Review Fluids, 2019, 4, .	2.5	2