Franco Auteri

List of Publications by Year
in descending order

46 papers	742 citations	516710 16 h-index	526287 27 g-index
48 all docs	48 docs citations	48 times ranked	585 citing authors

#	Article	IF	Citations
1	On the frequency selection mechanism of the low-Re flow around rectangular cylinders. Journal of Fluid Mechanics, 2022, 933, .	3.4	10
2	A new scaling for the flow instability past symmetric bluff bodies. Journal of Fluid Mechanics, 2022, 936, .	3.4	2
3	Experimental evaluation of the aerodynamic performance of a large-scale high-lift morphing wing. Aerospace Science and Technology, 2022, 124, 107515.	4.8	9
4	A direction-splitting Navierâ€“Stokes solver on co-located grids. Journal of Computational Physics, 2021, 429, 110023.	3.8	2
5	Linear stability of the steady flow past rectangular cylinders. Journal of Fluid Mechanics, 2021, 929, .	3.4	9
6	Non-modal analysis of coaxial jets. Journal of Fluid Mechanics, 2019, 872, 665-696.	3.4	15
7	A Massively Parallel, Direction-Splitting Solver for DNS in Complex Geometries. ERCOFTAC Series, 2019, , 23-29.	0.1	0
8	Wind-tunnel tests of the ERICA tiltrotor optimised air-intake. Aeronautical Journal, 2018, 122, 821-837.	1.6	1
9	Computation of the bluff-body sound generation by a self-consistent mean flow formulation. Physics of Fluids, 2018, 30, .	4.0	16
10	Experimental investigation of a helicopter rotor with Gurney flaps. Aeronautical Journal, 2017, 121, 191-212.	1.6	4
11	Efficient stabilization and acceleration of numerical simulation of fluid flows by residual recombination. Journal of Computational Physics, 2017, 344, 234-246.	3.8	35
12	Linear global stability of two incompressible coaxial jets. Journal of Fluid Mechanics, 2017, 824, 886-911.	3.4	12
13	Robustness and Limits of Vortex Generator Effectiveness in Helicopter Drag Reduction. Journal of the American Helicopter Society, 2016, 61, 1-7.	0.8	3
14	Wind-tunnel tests of a heavy-class helicopter optimised for drag reduction. Aeronautical Journal, 2016, 120, 1446-1467.	1.6	3
15	Wind-tunnel tests of a heavy-class helicopter optimised for drag reduction â€“ CORRIGENDUM. Aeronautical Journal, 2016, 120, 1507-1507.	1.6	2
16	Global Linear Stability Analysis of the Flow Around a Superhydrophobic Circular Cylinder. Springer Proceedings in Physics, 2016, , 165-170.	0.2	0
17	Global stability and sensitivity analysis of boundary-layer flows past a hemispherical roughness element. Physics of Fluids, 2015, 27, .	4.0	35
18	Boundary-layer Flows Past an Hemispherical Roughness Element: DNS, Global Stability and Sensitivity Analysis. Procedia IUTAM, 2015, 14, 173-181.	1.2	5

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19	A novel approach for reconstructing pressure from PIV velocity measurements. Experiments in Fluids, 2015, 56, 1.	2.4	20
20	Centre-manifold reduction of bifurcating flows. Journal of Fluid Mechanics, 2015, 767, 109-145.	3.4	20
21	Helicopter drag reduction by vortex generators. Aerospace Science and Technology, 2015, 47, 324-339.	4.8	22
22	Secondary instabilities of the in-phase synchronized wakes past two circular cylinders in side-by-side arrangement. Journal of Fluids and Structures, 2015, 53, 70-83.	3.4	15
23	On the origin of the flipâ€“flop instability of two side-by-side cylinder wakes. Journal of Fluid Mechanics, 2014, 742, 552-576.	3.4	74
24	First instability and structural sensitivity of the flow past two side-by-side cylinders. Journal of Fluid Mechanics, 2014, 749, 627-648.	3.4	31
25	Laguerre Simulation of Boundary Layer Flows: Conditions at Large Distance from the Wall. Lecture Notes in Computational Science and Engineering, 2014, , 99-109.	0.3	0
26	Galerkin-Laguerre Spectral Solution of Self-Similar Boundary Layer Problems. Communications in Computational Physics, 2012, 12, 1329-1358.	1.7	7
27	Wind-tunnel tests of a tilt-rotor aircraft. Aeronautical Journal, 2011, 115, 315-322.	1.6	11
28	Spectral Matrix Conditioning in Cylindrical and Spherical Elliptic Equations. Numerical Mathematics, 2011, 4, 113-141.	1.3	0
29	Experimental assessment of drag reduction by traveling waves in a turbulent pipe flow. Physics of Fluids, 2010, 22, .	4.0	84
30	Navier-Stokes Spectral Solver in a Finite Cylinder. Communications in Computational Physics, 2010, 8, 663-689.	1.7	1
31	Interacting wakes of two normal flat plates an investigation based on phase averaging of LDA signals. Journal of Visualization, 2009, 12, 307-321.	1.8	10
32	Navierâ€“Stokes spectral solver in a sphere. Journal of Computational Physics, 2009, 228, 7197-7214.	3.8	4
33	Experimental assessment of turbulent drag reduction by wall traveling waves. Springer Proceedings in Physics, 2009, , 657-660.	0.2	2
34	Normal flat plates in tandem: An experimental investigation. Journal of Wind Engineering and Industrial Aerodynamics, 2008, 96, 872-879.	3.9	17
35	Spectral solvers for spherical elliptic problems. Journal of Computational Physics, 2007, 227, 36-54.	3.8	6
36	Essential imposition of Neumann condition in Galerkinâ€“Legendre elliptic solvers. Journal of Computational Physics, 2003, 185, 427-444.	3.8	23

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37	A Mixed-Basis Spectral Projection Method. Journal of Computational Physics, 2002, 175, 1-23.	3.8	19
38	Accurate Ï‰-Ï Spectral Solution of the Singular Driven Cavity Problem. Journal of Computational Physics, 2002, 180, 597-615.	3.8	22
39	Numerical Investigation on the Stability of Singular Driven Cavity Flow. Journal of Computational Physics, 2002, 183, 1-25.	3.8	121
40	Numerical investigation of the first instabilities in the differentially heated 8:1 cavity. International Journal for Numerical Methods in Fluids, 2002, 40, 1121-1132.	1.6	6
41	Incompressible Navierâ€“Stokes solutions by a triangular spectral/p element projection method. Computer Methods in Applied Mechanics and Engineering, 2001, 190, 6927-6945.	6.6	2
42	Role of the LBB Condition in Weak Spectral Projection Methods. Journal of Computational Physics, 2001, 174, 405-420.	3.8	15
43	Simulation of the differentially heated 8: 1 rectangular cavity by a Galerkin-Legendre spectral projection method. , 2001, , 1451-1455.		1
44	Galerkinâ€“Legendre Spectral Method for the 3D Helmholtz Equation. Journal of Computational Physics, 2000, 161, 454-483.	3.8	21
45	Spectral influence matrix for vorticity without corner pathology. Applied Numerical Mathematics, 2000, 33, 135-142.	2.1	0
46	Galerkin Spectral Method for the Vorticity and Stream Function Equations. Journal of Computational Physics, 1999, 149, 306-332.	3.8	22