Angelo Iollo

List of Publications by Year
in descending order

44 papers	606 citations	471509 17 h-index	642732 23 g-index
44 all docs	44 docs citations	44 times ranked	467 citing authors

#	Article	IF	Citations
1	Advection modes by optimal mass transfer. Physical Review E, 2014, 89, 022923.	2.1	50
2	Accurate model reduction of transient and forced wakes. European Journal of Mechanics, B/Fluids, 2007, 26, 354-366.	2.5	37
3	Level-set, penalization and cartesian meshes: A paradigm for inverse problems and optimal design. Journal of Computational Physics, 2009, 228, 6291-6315.	3.8	32
4	A zonal Galerkin-free POD model for incompressible flows. Journal of Computational Physics, 2018, 352, 301-325.	3.8	28
5	Contribution to the Optimal Shape Design of Two-Dimensional Internal Flows with Embedded Shocks. Journal of Computational Physics, 1996, 125, 124-134.	3.8	24
6	Feedback control of the vortex-shedding instability based on sensitivity analysis. Physics of Fluids, 2010, 22, 094102.	4.0	24
7	Trapped vortex optimal control by suction and blowing at the wall. European Journal of Mechanics, B/Fluids, 2001, 20, 7-24.	2.5	23
8	Feedback control by low-order modelling of the laminar flow past a bluff body. Journal of Fluid Mechanics, 2009, 634, 405.	3.4	23
9	Two stable POD-based approximations to the Navierâ€“Stokes equations. Computing and Visualization in Science, 2000, 3, 61-66.	1.2	22
10	An Asymptotic-Preserving All-Speed Scheme for Fluid Dynamics and Nonlinear Elasticity. SIAM Journal of Scientific Computing, 2019, 41, A2850-A2879.	2.8	20
11	A simple Cartesian scheme for compressible multimaterials. Journal of Computational Physics, 2014, 272, 772-798.	3.8	19
12	A finite-difference method for the variable coefficient Poisson equation on hierarchical Cartesian meshes. Journal of Computational Physics, 2018, 355, 59-77.	3.8	19
13	Linearly implicit all Mach number shock capturing schemes for the Euler equations. Journal of Computational Physics, 2019, 393, 278-312.	3.8	19
14	Field inversion for data-augmented RANS modelling in turbomachinery flows. Computers and Fluids, 2020, 201, 104474.	2.5	19
15	On continuation of inviscid vortex patches. Physica D: Nonlinear Phenomena, 2010, 239, 190-201.	2.8	18
16	A Cartesian scheme for compressible multimaterial models in 3D. Journal of Computational Physics, 2016, 313, 121-143.	3.8	18
17	A simple second order cartesian scheme for compressible Euler flows. Journal of Computational Physics, 2012, 231, 7780-7794.	3.8	17
18	A Cartesian Scheme for Compressible Multimaterial Hyperelastic Models with Plasticity. Communications in Computational Physics, 2017, 22, 1362-1384.	1.7	16

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19	Accurate Asymptotic Preserving Boundary Conditions for Kinetic Equations on Cartesian Grids. Journal of Scientific Computing, 2015, 65, 735-766.	2.3	15
20	Global and local POD models for the prediction of compressible flows with DG methods. International Journal for Numerical Methods in Engineering, 2018, 116, 332-357.	2.8	15
21	BGK Polyatomic Model for Rarefied Flows. Journal of Scientific Computing, 2019, 78, 1893-1916.	2.3	15
22	SYSTEM IDENTIFICATION IN TUMOR GROWTH MODELING USING SEMI-EMPIRICAL EIGENFUNCTIONS. Mathematical Models and Methods in Applied Sciences, 2012, 22, 1250003.	3.3	13
23	An inverse problem for the recovery of the vascularization of a tumor. Journal of Inverse and Ill-Posed Problems, 2014, 22, 759-786.	1.0	12
24	An all-speed relaxation scheme for gases and compressible materials. Journal of Computational Physics, 2017, 351, 1-24.	3.8	12
25	A lagrangian scheme for the solution of the optimal mass transfer problem. Journal of Computational Physics, 2011, 230, 3430-3442.	3.8	11
26	Bioinspired swimming simulations. Journal of Computational Physics, 2016, 323, 310-321.	3.8	11
27	The DGDD method for reduced-order modeling of conservation laws. Journal of Computational Physics, 2021, 437, 110336.	3.8	11
28	Reduced-order model for the BGK equation based on POD and optimal transport. Journal of Computational Physics, 2018, 373, 545-570.	3.8	10
29	A Local Velocity Grid Approach for BGK Equation. Communications in Computational Physics, 2014, 16, 956-982.	1.7	9
30	Pseudotime method for shape design of Euler flows. AIAA Journal, 1996, 34, 1807-1813.	2.6	6
31	Optimum transonic airfoils based on the Euler equations. Computers and Fluids, 1999, 28, 653-674.	2.5	6
32	Modelling and shape optimization of an actuator. Structural and Multidisciplinary Optimization, 2013, 48, 1143-1151.	3.5	4
33	Reduced order modelling for turbomachinery shape design. International Journal of Computational Fluid Dynamics, 2020, 34, 127-138.	1.2	4
34	Analytic Hessian derivation for the quasi-one-dimensional Euler equations. Journal of Computational Physics, 2009, 228, 476-490.	3.8	3
35	Simulation of particle dynamics for rarefied flows: Backflow in thruster plumes. European Journal of Mechanics, B/Fluids, 2017, 63, 25-38.	2.5	3
36	Second Order ADER Scheme for Unsteady Advection-Diffusion on Moving Overset Grids with a Compact Transmission Condition. SIAM Journal of Scientific Computing, 2022, 44, A524-A553.	2.8	3

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37	An adaptive projectionâ€based model reduction method for nonlinear mechanics with internal variables: Application to thermoâ€hydroâ€mechanical systems. International Journal for Numerical Methods in Engineering, 2022, 123, 2894-2918.	2.8	3
38	ADER scheme for incompressible Navier-Stokes equations on overset grids with a compact transmission condition. Journal of Computational Physics, 2022, 467, 111414.	3.8	3
39	Challenges in Aerodynamic Optimization. , 2010, , 447-467.		2
40	A Sharp Contact Discontinuity Scheme for Multimaterial Models. Springer Proceedings in Mathematics, 2011, , 581-588.	0.5	2
41	Numerical solution of the Mongeâ€“Kantorovich problem by density lift-up continuation. ESAIM: Mathematical Modelling and Numerical Analysis, 2015, 49, 1577-1592.	1.9	2
42	Shape optimization governed by the quasi 1D Euler equations using an adjoint method. Lecture Notes in Physics, 1995, , 274-279.	0.7	2
43	Reduced Order Models at Work in Aeronautics and Medicine. , 2014, , 305-332.		1
44	Fast design of transonic airfoils using the euler equations. , 1997, , 322-327.		0