

Nicola Parolini

List of Publications by Year in descending order

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Version: 2024-02-01

40
papers

1,153
citations

567281

15
h-index

414414

32
g-index

42
all docs

42
docs citations

42
times ranked

1125
citing authors

#	ARTICLE	IF	CITATIONS
1	Quantitative benchmark computations of two-dimensional bubble dynamics. <i>International Journal for Numerical Methods in Fluids</i> , 2009, 60, 1259-1288.	1.6	396
2	Numerical Investigation on the Stability of Singular Driven Cavity Flow. <i>Journal of Computational Physics</i> , 2002, 183, 1-25.	3.8	121
3	Link Prediction in Criminal Networks: A Tool for Criminal Intelligence Analysis. <i>PLoS ONE</i> , 2016, 11, e0154244.	2.5	110
4	Efficient oxygen transfer by surface aeration in shaken cylindrical containers for mammalian cell cultivation at volumetric scales up to 1000L. <i>Biochemical Engineering Journal</i> , 2009, 45, 41-47.	3.6	62
5	Multiphysics simulation of corona discharge induced ionic wind. <i>Journal of Applied Physics</i> , 2013, 114, .	2.5	49
6	Mathematical models and numerical simulations for the America's Cup. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2005, 194, 1001-1026.	6.6	48
7	Mass preserving finite element implementations of the level set method. <i>Applied Numerical Mathematics</i> , 2006, 56, 1179-1195.	2.1	48
8	Use of Orbital Shaken Disposable Bioreactors for Mammalian Cell Cultures from the Milliliter-Scale to the 1,000-Liter Scale. <i>Advances in Biochemical Engineering/Biotechnology</i> , 2009, 115, 33-53.	1.1	42
9	Radial basis functions for inter-grid interpolation and mesh motion in FSI problems. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2013, 256, 117-131.	6.6	25
10	Fluid-structure interaction problems in free surface flows: Application to boat dynamics. <i>International Journal for Numerical Methods in Fluids</i> , 2008, 56, 965-978.	1.6	24
11	Essential imposition of Neumann condition in Galerkin-Legendre elliptic solvers. <i>Journal of Computational Physics</i> , 2003, 185, 427-444.	3.8	23
12	Numerical Simulation of Sailing Boats: Dynamics, FSI, and Shape Optimization. <i>Springer Optimization and Its Applications</i> , 2012, , 339-377.	0.9	21
13	SUIHTER : a new mathematical model for COVID-19. Application to the analysis of the second epidemic outbreak in Italy. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2021, 477, 20210027.	2.1	21
14	A Mixed-Basis Spectral Projection Method. <i>Journal of Computational Physics</i> , 2002, 175, 1-23.	3.8	19
15	An explicit dynamics GPU structural solver for thin shell finite elements. <i>Computers and Structures</i> , 2015, 154, 29-40.	4.4	19
16	Role of the LBB Condition in Weak Spectral Projection Methods. <i>Journal of Computational Physics</i> , 2001, 174, 405-420.	3.8	15
17	Topology optimization of multiple anisotropic materials, with application to self-assembling diblock copolymers. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2018, 338, 562-596.	6.6	15
18	Reduced basis approximation and a posteriori error estimates for parametrized elliptic eigenvalue problems. <i>ESAIM: Mathematical Modelling and Numerical Analysis</i> , 2016, 50, 1857-1885.	1.9	12

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19	Numerical Simulation using RANS-based Tools for America's Cup Design. , 2003, , .		11
20	Modelling the COVID-19 epidemic and the vaccination campaign in Italy by the SUIHTER model. Infectious Disease Modelling, 2022, 7, 45-63.	1.9	11
21	Topology optimization with a time-integral cost functional. Finite Elements in Analysis and Design, 2018, 140, 11-22.	3.2	9
22	A mathematical dashboard for the analysis of Italian COVID-19 epidemic data. International Journal for Numerical Methods in Biomedical Engineering, 2021, 37, e3513.	2.1	8
23	Shape Optimization for Stokes flows: a finite element convergence analysis. ESAIM: Mathematical Modelling and Numerical Analysis, 2015, 49, 921-951.	1.9	7
24	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
25	An efficient and accurate implicit DG solver for the incompressible Navier-Stokes equations. International Journal for Numerical Methods in Fluids, 2022, 94, 1484-1516.	1.6	6
26	An optimal control problem for two-phase compressible-incompressible flows. Computers and Fluids, 2018, 172, 538-548.	2.5	5
27	A Strongly Coupled Fluid-Structure Interaction Model for Wind-Sail Simulation. , 2012, , .		5
28	Simulation of viscoelastic Cosserat rods based on the geometrically exact dynamics of special Euclidean strands. International Journal for Numerical Methods in Engineering, 0, , .	2.8	4
29	Optimal control in ink-jet printing via instantaneous control. Computers and Fluids, 2018, 172, 264-273.	2.5	3
30	A three-dimensional model for the dynamics and hydrodynamics of rowing boats. Proceedings of the Institution of Mechanical Engineers, Part P: Journal of Sports Engineering and Technology, 2010, 224, 51-61.	0.7	2
31	High-Order Variational Time Integrators for Particle Dynamics. Communications in Applied and Industrial Mathematics, 2018, 9, 34-49.	0.3	2
32	Numerical Models and Simulations in Sailing Yacht Design. Lecture Notes in Computational Science and Engineering, 2009, , 1-31.	0.3	1
33	On a free-surface problem with moving contact line: From variational principles to stable numerical approximations. Journal of Computational Physics, 2018, 355, 253-284.	3.8	1
34	Four Fundamental Modes of Participation in Mathematics Group Activities. International Journal of Science and Mathematics Education, 2020, 18, 123-143.	2.5	1
35	HPC simulations of brownout: A noninteracting particles dynamic model. International Journal of High Performance Computing Applications, 2020, 34, 267-281.	3.7	1
36	Data Analysis and Predictive Mathematical Modeling for COVID-19 Epidemic Studies. Mathematics Online First Collections, 2020, , 1.	0.1	0

#	ARTICLE	IF	CITATIONS
37	Reduced Models for Liquid Food Packaging Systems. Sxl Springer Per L'Innovazione, 2021, , 45-58.	0.1	0
38	A diffuse interface box method for elliptic problems. Applied Mathematics Letters, 2021, 120, 107314.	2.7	0
39	2009. I Blu Pagine Di Scienza, 2013, , 303-312.	0.0	0
40	FINITE ELEMENT APPROXIMATION OF A TIME-DEPENDENT TOPOLOGY OPTIMIZATION PROBLEM. , 2016, , .		0