

Sandro Manservisi

List of Publications by Year in descending order

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71
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times ranked

821
citing authors

#	ARTICLE	IF	CITATIONS
1	A New Anisotropic Four-Parameter Turbulence Model for Low Prandtl Number Fluids. <i>Fluids</i> , 2022, 7, 6.	0.8	1
2	Analysis and Computations of Optimal Control Problems for Boussinesq Equations. <i>Fluids</i> , 2022, 7, 203.	0.8	5
3	Optimal Pressure Boundary Control of Steady Multiscale Fluid-Structure Interaction Shell Model Derived from Koiter Equations. <i>Fluids</i> , 2021, 6, 149.	0.8	1
4	ASTEC code DBA analysis of a passive mitigation strategy on a generic IRIS SMR. <i>Annals of Nuclear Energy</i> , 2021, 156, 108194.	0.9	3
5	An optimal control approach to a fluid-structure interaction parameter estimation problem with inequality constraints. <i>Computers and Fluids</i> , 2021, 226, 104999.	1.3	0
6	ASTEC - RAVEN coupling for uncertainty analysis of an ingress of coolant event in fusion plants. <i>Fusion Engineering and Design</i> , 2021, 169, 112442.	1.0	3
7	A Logarithmic Turbulent Heat Transfer Model in Applications with Liquid Metals for $Pr = 0.01 \hat{=} 0.025$. <i>Applied Sciences (Switzerland)</i> , 2020, 10, 4337.	1.3	8
8	On the Optimal Control of Stationary Fluid-Structure Interaction Systems. <i>Fluids</i> , 2020, 5, 144.	0.8	10
9	CFD simulation of turbulent flows over wire-wrapped nuclear reactor bundles using immersed boundary method. <i>Journal of Physics: Conference Series</i> , 2020, 1599, 012022.	0.3	2
10	VOF evaluation of the surface tension by using variational representation and Galerkin interpolation projection. <i>Journal of Computational Physics</i> , 2019, 395, 537-562.	1.9	4
11	Projection algorithm for simulation of fluid flow around moving objects with immersed boundary method. <i>Journal of Physics: Conference Series</i> , 2019, 1224, 012002.	0.3	1
12	Numerical simulation of a turbulent Lead Bismuth Eutectic flow inside a 19 pin nuclear reactor bundle with a four logarithmic parameter turbulence model. <i>Journal of Physics: Conference Series</i> , 2019, 1224, 012030.	0.3	3
13	An adjoint based pressure boundary optimal control approach for fluid-structure interaction problems. <i>Computers and Fluids</i> , 2019, 182, 118-127.	1.3	6
14	Numerical simulation of forced and mixed convection turbulent liquid sodium flow over a vertical backward facing step with a four parameter turbulence model. <i>International Journal of Heat and Mass Transfer</i> , 2019, 135, 591-603.	2.5	16
15	A projection method for coupling two-phase VOF and fluid structure interaction simulations. <i>Journal of Computational Physics</i> , 2018, 354, 646-671.	1.9	8
16	Numerical simulation of a falling drop on a bending wall by coupling a VOF method with a fluid structure interaction solver. <i>AIP Conference Proceedings</i> , 2018, , .	0.3	1
17	Thermal-hydraulic analysis of the LORELEI test design by means of CATHARE2 V2.5. <i>Nuclear Engineering and Design</i> , 2017, 322, 397-411.	0.8	0
18	Optimal control problems for the Navier-Stokes system coupled with the $k\text{-}\epsilon$ turbulence model. <i>Computers and Mathematics With Applications</i> , 2016, 71, 2389-2406.	1.4	11

#	ARTICLE	IF	CITATIONS
19	Vof $\hat{\epsilon}$ A library to initialize the volume fraction scalar field. Computer Physics Communications, 2016, 200, 291-299.	3.0	25
20	A $\hat{\epsilon}$ $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si14.gif" overflow="scroll" \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mi} \text{mathvariant="normal"} \rangle \hat{\epsilon} \langle \text{mml:mi} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:math} \rangle \hat{\epsilon} \langle \text{mml:math} \text{xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si12.gif" overflow="scroll" \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:msub} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mi} \rangle k \langle \text{mml:mi} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mi} \rangle \langle \text{mml:mi} \rangle \langle \text{mml:math} \text{xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si16.gif" overflow="scroll" \rangle \langle \text{mml:mrow} \rangle$	2.5	22
21	A penalty-projection algorithm for a monolithic fluid-structure interaction solver. Journal of Computational Physics, 2016, 313, 13-30.	1.9	7
22	Numerical simulations of optimal control problems for the Reynolds averaged Navier-Stokes system closed with a two-equation turbulence model. Computers and Fluids, 2016, 125, 130-143.	1.3	13
23	Boundary Control Problems in Convective Heat Transfer with Lifting Function Approach and Multigrid Vanka-Type Solvers. Communications in Computational Physics, 2015, 18, 621-649.	0.7	13
24	CFD simulations in heavy liquid metal flows for square lattice bare rod bundle geometries with a four parameter heat transfer turbulence model. Nuclear Engineering and Design, 2015, 295, 251-260.	0.8	28
25	Heat transfer to liquid metals in a hexagonal rod bundle with grid spacers: Experimental and simulation results. Nuclear Engineering and Design, 2015, 290, 27-39.	0.8	38
26	Numerical integration of implicit functions for the initialization of the VOF function. Computers and Fluids, 2015, 113, 42-52.	1.3	23
27	Preliminary Results on the Coupling of a Three-Dimensional Lead Fast Reactor Model and a One-Dimensional External Loop. , 2014, , .		0
28	Triangular rod bundle simulations of a CFD $\hat{\epsilon}$ - k - μ heat transfer turbulence model for heavy liquid metals. Nuclear Engineering and Design, 2014, 273, 251-270.	0.8	48
29	A CFD four parameter heat transfer turbulence model for engineering applications in heavy liquid metals. International Journal of Heat and Mass Transfer, 2014, 69, 312-326.	2.5	66
30	Review of split and unsplit geometric advection algorithms. , 2013, , .		3
31	A Distributed Control Approach for the Boundary Optimal Control of the Steady MHD Equations. Communications in Computational Physics, 2013, 14, 722-752.	0.7	10
32	A multilevel domain decomposition solver for monolithic fluid-structure interaction problems. , 2013, , .		2
33	An optimal constrained approach for divergence-free velocity interpolation and multilevel VOF method. Computers and Fluids, 2011, 47, 101-114.	1.3	13
34	On the properties and limitations of the height function method in two-dimensional Cartesian geometry. Journal of Computational Physics, 2011, 230, 851-862.	1.9	43
35	Distributed Computational Method for Coupled Fluid Structure Thermal Interaction Applications. Journal of Algorithms and Computational Technology, 2010, 4, 291-309.	0.4	1
36	Simulation of axisymmetric jets with a finite element Navier-Stokes solver and a multilevel VOF approach. Journal of Computational Physics, 2010, 229, 6853-6873.	1.9	23

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37	A FEM SOLVER COUPLED TO A MULTILEVEL VOF METHOD FOR SIMULATION OF AXISYMMETRIC JETS AND TO A FRONT-TRACKING METHOD FOR SIMULATION OF SPREADING DROPLETS. <i>Atomization and Sprays</i> , 2010, 20, 115-131.	0.3	2
38	A geometrical predictor-corrector advection scheme and its application to the volume fraction function. <i>Journal of Computational Physics</i> , 2009, 228, 406-419.	1.9	42
39	A variational approach to the contact angle dynamics of spreading droplets. <i>Computers and Fluids</i> , 2009, 38, 406-424.	1.3	51
40	A multilevel domain decomposition approach to solving coupled applications in computational fluid dynamics. <i>International Journal for Numerical Methods in Fluids</i> , 2008, 56, 1139-1145.	0.9	8
41	Interface reconstruction with least-squares fit and split advection in three-dimensional Cartesian geometry. <i>Journal of Computational Physics</i> , 2007, 225, 2301-2319.	1.9	200
42	Numerical Analysis of Vanka-Type Solvers for Steady Stokes and Navier-Stokes Flows. <i>SIAM Journal on Numerical Analysis</i> , 2006, 44, 2025-2056.	1.1	34
43	A computational multilevel approach for solving 2D Navier-Stokes equations over non-matching grids. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2006, 195, 4604-4616.	3.4	22
44	A novel representation of the surface tension force for two-phase flow with reduced spurious currents. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2006, 195, 6239-6257.	3.4	30
45	Interface tracking with dynamically-redistributed surface markers in unstructured quadrangular grids. <i>Computers and Fluids</i> , 2006, 35, 1332-1343.	1.3	7
46	On a low-dimensional model for magnetostriction. <i>Physica B: Condensed Matter</i> , 2006, 372, 378-382.	1.3	10
47	A Multilevel Domain Decomposition Methodology for Solving Coupled Problems in Fluid-Structure-Thermal Interaction. , 2006, , 417-417.		1
48	A non-conforming computational methodology for modeling coupled problems. <i>Nonlinear Analysis: Theory, Methods & Applications</i> , 2005, 63, e1445-e1454.	0.6	8
49	Modelling of radiation transport. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2004, 213, 75-81.	0.6	0
50	Bremsstrahlung emission spectrum for electron microprobe analysis. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2004, 213, 134-138.	0.6	1
51	Fokker-Planck modeling for particle slowing down and thermalization in a Maxwellian plasma. <i>European Physical Journal D</i> , 2004, 29, 379-389.	0.6	0
52	A surface marker algorithm coupled to an area-preserving marker redistribution method for three-dimensional interface tracking. <i>Journal of Computational Physics</i> , 2004, 197, 555-584.	1.9	72
53	A geometrical area-preserving Volume-of-Fluid advection method. <i>Journal of Computational Physics</i> , 2003, 192, 355-364.	1.9	122
54	A mixed markers and volume-of-fluid method for the reconstruction and advection of interfaces in two-phase and free-boundary flows. <i>Journal of Computational Physics</i> , 2003, 188, 611-639.	1.9	115

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55	A Marker-VOF Algorithm for Incompressible Flows With Interfaces. , 2002, , 905.		4
56	Optimal Design of Thermo-Electrical Flanges. Mathematics in Industry, 2002, , 225-229.	0.1	0
57	Flow Matching by Shape Design for the Navier-Stokes System. , 2001, , 279-289.		0
58	On a shape control problem for the stationary Navier-Stokes equations. ESAIM: Mathematical Modelling and Numerical Analysis, 2000, 34, 1233-1258.	0.8	29
59	Analysis and approximation for linear feedback control for tracking the velocity in Navier-Stokes flows. Computer Methods in Applied Mechanics and Engineering, 2000, 189, 803-823.	3.4	25
60	A variational inequality formulation of an inverse elasticity problem. Applied Numerical Mathematics, 2000, 34, 99-126.	1.2	18
61	An optimal control approach to an inverse nonlinear elastic shell problem applied to car windscreen design. Computer Methods in Applied Mechanics and Engineering, 2000, 189, 463-480.	3.4	9
62	On some optimal control problems for the heat radiative transfer equation. ESAIM - Control, Optimisation and Calculus of Variations, 2000, 5, 425-444.	0.7	4
63	Analysis and Approximation of the Velocity Tracking Problem for Navier-Stokes Flows with Distributed Control. SIAM Journal on Numerical Analysis, 2000, 37, 1481-1512.	1.1	115
64	The Velocity Tracking Problem for Navier-Stokes Flows With Boundary Control. SIAM Journal on Control and Optimization, 2000, 39, 594-634.	1.1	80
65	The Velocity Tracking Problem for Navier-Stokes Flows with Bounded Distributed Controls. SIAM Journal on Control and Optimization, 1999, 37, 1913-1945.	1.1	85
66	Computations of Optimal Controls for Incompressible Flows. International Journal of Computational Fluid Dynamics, 1998, 11, 181-191.	0.5	7
67	Space distribution and energy straggling of charged particles via Fokker-Planck equation. Nuovo Cimento Della Societa Italiana Di Fisica D - Condensed Matter, Atomic, Molecular and Chemical Physics, Biophysics, 1996, 18, 435-448.	0.4	3
68	Electron distribution function in a strong electric field. , 1993, , .		0
69	Slowing-Down Time of Fast Electrons in Plasmas via the Fokker-Planck Equation. Nuclear Science and Engineering, 1992, 112, 296-300.	0.5	6
70	Charged-particle distribution in velocity, angle and time by Fokker-Planck equation. Nuovo Cimento Della Societa Italiana Di Fisica D - Condensed Matter, Atomic, Molecular and Chemical Physics, Biophysics, 1992, 14, 9-25.	0.4	9
71	A multigrid local smoother approach for a domain decomposition solver over non-matching grids. Numerical Methods for Partial Differential Equations, 0, , .	2.0	0