Riccardo Broglia

List of Publications by Year
in descending order

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71 papers	1,443 citations	257450 24 h-index	345221 36 g-index
71 all docs	71 docs citations	71 times ranked	580 citing authors

#	Article	IF	Citations
1	Experience from SIMMAN 2008â€"The First Workshop on Verification and Validation of Ship Maneuvering Simulation Methods. Journal of Ship Research, 2011, 55, 135-147.	1.1	99
2	Simulation of turning circle by CFD: Analysis of different propeller models and their effect on manoeuvring prediction. Applied Ocean Research, 2013, 39, 1-10.	4.1	90
3	On the application of the single-phase level set method to naval hydrodynamic flows. Computers and Fluids, 2007, 36, 868-886.	2.5	87
4	Characterization of the wake of a submarine propeller via Large-Eddy simulation. Computers and Fluids, 2019, 184, 138-152.	2.5	84
5	Turning ability analysis of a fully appended twin screw vessel by CFD. Part I: Single rudder configuration. Ocean Engineering, 2015, 105, 275-286.	4.3	51
6	Prediction of hydrodynamic coefficients of ship hulls by high-order Godunov-type methods. Journal of Marine Science and Technology, 2009, 14, 19-29.	2.9	50
7	CFD analysis of turning abilities of a submarine model. Ocean Engineering, 2017, 129, 459-479.	4.3	50
8	MULTIGRID ACCELERATION OF SECOND-ORDER ENO SCHEMES FROM LOW SUBSONIC TO HIGH SUPERSONIC FLOWS. International Journal for Numerical Methods in Fluids, 1996, 23, 589-606.	1.6	46
9	Turning ability analysis of a fully appended twin screw vessel by CFD. Part II: Single vs. twin rudder configuration. Ocean Engineering, 2016, 117, 259-271.	4.3	45
10	The wake structure of a propeller operating upstream of a hydrofoil. Journal of Fluid Mechanics, 2020, 904, .	3.4	43
11	Large-eddy simulations of ducts with a free surface. Journal of Fluid Mechanics, 2003, 484, 223-253.	3.4	42
12	Analysis of the interference effects for high-speed catamarans by model tests and numerical simulations. Ocean Engineering, 2011, 38, 2110-2122.	4.3	40
13	Experimental investigation of interference effects for high-speed catamarans. Ocean Engineering, 2014, 76, 75-85.	4.3	38
14	LES study of the wake features of a propeller in presence of an upstream rudder. Computers and Fluids, 2019, 192, 104247.	2.5	33
15	Accurate prediction of complex free surface flow around a high speed craft using a single-phase level set method. Computational Mechanics, 2018, 62, 421-437.	4.0	32
16	Numerical simulation of interference effects for a high-speed catamaran. Journal of Marine Science and Technology, 2011, 16, 254-269.	2.9	31
17	Experimental investigation of a fast catamaran in head waves. Ocean Engineering, 2013, 72, 318-330.	4.3	29
18	Flow over a hydrofoil in the wake of a propeller. Computers and Fluids, 2020, 213, 104714.	2.5	29

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19	The wake flow downstream of a propeller-rudder system. International Journal of Heat and Fluid Flow, 2021, 87, 108765.	2.4	29
20	SPIV measurements around the DELFT 372 catamaran in steady drift. Experiments in Fluids, 2014, 55, 1.	2.4	26
21	Modeling ship-induced waves in shallow water systems: The Venice experiment. Ocean Engineering, 2018, 155, 227-239.	4.3	26
22	Instability of the tip vortices shed by an axial-flow turbine in uniform flow. Journal of Fluid Mechanics, 2021, 920, .	3.4	26
23	Flow over a hydrofoil at incidence immersed within the wake of a propeller. Physics of Fluids, 2021, 33, .	4.0	25
24	The dynamics of the tip and hub vortices shed by a propeller: Eulerian and Lagrangian approaches. Computers and Fluids, 2022, 236, 105313.	2.5	24
25	Method for estimating parameters of practical ship manoeuvring models based on the combination of RANSE computations and System Identification. Applied Ocean Research, 2015, 52, 274-294.	4.1	23
26	Application of dynamic overlapping grids to the simulation of the flow around a fully-appended submarine. Mathematics and Computers in Simulation, 2015, 116, 75-88.	4.4	21
27	Development of the wake shed by a system composed of a propeller and a rudder at incidence. International Journal of Heat and Fluid Flow, 2022, 94, 108919.	2.4	21
28	Near wake of a propeller across a hydrofoil at incidence. Physics of Fluids, 2022, 34, .	4.0	21
29	Influence of an upstream hydrofoil on the acoustic signature of a propeller. Physics of Fluids, 2022, 34, .	4.0	20
30	Hydrogeological effects of dredging navigable canals through lagoon shallows. A case study in Venice. Hydrology and Earth System Sciences, 2017, 21, 5627-5646.	4.9	19
31	Characterization of the turbulent wake of an axial-flow hydrokinetic turbine via large-eddy simulation. Computers and Fluids, 2021, 216, 104815.	2.5	18
32	A Second Order Godunov-Type Scheme for Naval Hydrodynamics. , 2001, , 253-261.		17
33	Recovery in the wake of in-line axial-flow rotors. Physics of Fluids, 2022, 34, .	4.0	17
34	Acoustic signature of a propeller operating upstream of a hydrofoil. Physics of Fluids, 2022, 34, .	4.0	17
35	Experimental and numerical investigations on fast catamarans interference effects. Journal of Hydrodynamics, 2010, 22, 528-533.	3.2	15
36	Enabling hydrodynamics solver for efficient parallel simulations. , 2014, , .		12

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37	Hydrodynamic Characterization of USV Vessels with Innovative SWATH Configuration for Coastal Monitoring and Low Environmental Impact. Transportation Research Procedia, 2016, 14, 1562-1570.	1.5	12
38	Accurate experimental benchmark study of a catamaran in regular and irregular head waves including uncertainty quantification. Ocean Engineering, 2020, 195, 106685.	4.3	12
39	Momentum recovery downstream of an axial-flow hydrokinetic turbine. Renewable Energy, 2021, 170, 1275-1291.	8.9	12
40	Assessment of Computational Fluid Dynamics Capabilities for the Prediction of Three-Dimensional Separated Flows: The DELFT 372 Catamaran in Static Drift Conditions. Journal of Fluids Engineering, Transactions of the ASME, 2019, 141, .	1.5	11
41	Resistance and Payload Optimization of a Sea Vehicle by Adaptive Multi-Fidelity Metamodeling. , 2018, , .		10
42	Numerical investigation of the components of calm-water resistance of a surface-effect ship. Ocean Engineering, 2013, 72, 375-385.	4.3	9
43	An immersed boundary method coupled with a dynamic overlapping-grids strategy. Computers and Fluids, 2019, 191, 104250.	2.5	9
44	Nonlinear wave resistance of a two-dimensional pressure patch moving on a free surface. Ocean Engineering, 2012, 39, 62-71.	4.3	8
45	Analysis of vortices shed by a notional submarine model in steady drift and pitch advancement. Ocean Engineering, 2020, 218, 108236.	4.3	8
46	Statistical Assessment and Validation of Experimental and Computational Ship Response in Irregular Waves. Journal of Verification, Validation and Uncertainty Quantification, 2018, 3, .	0.4	6
47	Flow separation prevention around a NACA0012 profile through multivariable feedback controlled plasma actuators. Computers and Fluids, 2019, 182, 85-107.	2.5	6
48	Uncertainty Quantification of Ship Resistance via Multi-Index Stochastic Collocation and Radial Basis Function Surrogates: A Comparison. , 2020, , .		6
49	Vortex Suppression Efficiency of Discontinuous Helicoidal Fins. , 2007, , 813.		5
50	Development and Assessment of Uncertainty Quantification Methods for Ship Hydrodynamics. , 2017, , .		5
51	Validation of Uncertainty Quantification Methods for High-Fidelity CFD of Ship Response in Irregular Waves. , 2017, , .		5
52	Robust control of flow separation over a pitching aerofoil using plasma actuators. IFAC-PapersOnLine, 2017, 50, 11120-11125.	0.9	4
53	Comparing multi-index stochastic collocation and multi-fidelity stochastic radial basis functions for forward uncertainty quantification of ship resistance. Engineering With Computers, 0, , 1.	6.1	4
54	Mitigation of rotor thrust fluctuations through passive pitch. Journal of Fluids and Structures, 2022, 112, 103599.	3.4	3

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55	Numerical Investigation of the Unsteady Flow at High Reynolds Number Over a Marine Riser With Helical Strakes. , 2006, , 587.		2
56	A Generalized Hybrid RANSE/BEM Approach for the Analysis of Hullâ€“Propeller Interaction in Off-Design Conditions. Journal of Marine Science and Engineering, 2021, 9, 482.	2.6	2
57	Calm-Water Resistance Prediction of a Surface-Effect Ship. , 2009, , .		2
58	CFD Validation for DELFT 372 Catamaran in Static Drift Conditions, Including Onset and Progression Analysis. , 2015, , .		2
59	Numerical Simulation of the Flow around an Array of Free-Surface Piercing Cylinders in Waves. Ship Technology Research, 2007, 54, 42-52.	2.5	1
60	Analysis of the Flow Around a Manoeuvring VLCC. , 2008, , .		1
61	Robust Feedback Control of Two and Three Dimensional Flow Separation Around a NACA0012 Profile Using Plasma Actuators. ERCOFTAC Series, 2019, , 389-395.	0.1	1
62	Analysis of the Roll Decay Motion for a Patrol Boat by URANS Simulations. , 2009, , .		1
63	Analytical solutions of one-dimensional Stokes' problems for infinite and finite domains with generally periodic boundary conditions. , 2012, , .		0
64	A study on the effect of the cushion pressure on a planing surface. Ocean Engineering, 2014, 91, 122-132.	4.3	0
65	A Residual Theorem Approach Applied to Stokesâ€™ Problems with Generally Periodic Boundary Conditions including a Pressure Gradient Term. Mathematical Problems in Engineering, 2018, 2018, 1-16.	1.1	0
66	Hydrodynamic Tools in Ship Design. , 2019, , 139-207.		0
67	Design of a Double Ended Ferry. , 2021, , 373-426.		0
68	Numerical Simulation of the Flow Around Free-Surface Piercing Bodies in Waves by an Overlapping Grids Approach. , 2006, , .		0
69	Numerical Simulation of the Flow Around an Array of Free-Surface Piercing Cylinders in Waves. , 2007, , .		0
70	Numerical and experimental analysis of the flow field around a surface combatant ship. , 2011, , 87-94.		0
71	Validation of High-Fidelity Uncertainty Quantification of a High-speed Catamaran in Irregular Waves. , 2015, , .		0