Diego Villa

List of Publications by Year in descending order

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Version: 2024-02-01

53	637	567281 15	677142 22
papers	citations	h-index	g-index

54	54	54	288
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	An extensive analysis of numerical ship self-propulsion prediction via a coupled BEM/RANS approach. Applied Ocean Research, 2017, 66, 55-78.	4.1	50
2	Hydrodynamic shape optimization by high fidelity CFD solver and Gaussian process based response surface method. Applied Ocean Research, 2019, 90, 101841.	4.1	45
3	Design of ducted propeller nozzles through a RANSE-based optimization approach. Ocean Engineering, 2017, 145, 444-463.	4.3	40
4	Efficient and multi-objective cavitating propeller optimization: An application to a high-speed craft. Applied Ocean Research, 2017, 64, 31-57.	4.1	38
5	RANS and PANEL method for unsteady flow propeller analysis. Journal of Hydrodynamics, 2010, 22, 547-552.	3.2	31
6	Propeller modeling approaches for offâ€“design operative conditions. Ocean Engineering, 2019, 178, 283-305.	4.3	28
7	Numerical Evaluation of Rudder Performance Behind a Propeller in Bollard Pull Condition. Journal of Marine Science and Application, 2018, 17, 153-164.	1.7	24
8	A combined approach based on Subdivision Surface and Free Form Deformation for smart ship hull form design and variation. Ships and Offshore Structures, 2018, 13, 769-778.	1.9	23
9	An efficient and robust approach to predict ship self-propulsion coefficients. Applied Ocean Research, 2019, 92, 101862.	4.1	22
10	A reduced order approach for optimal design of efficient marine propellers. Ships and Offshore Structures, 2020, 15, 200-214.	1.9	21
11	Numerical and Experimental Comparison of Ducted and Non-Ducted Propellers. Journal of Marine Science and Engineering, 2020, 8, 257.	2.6	20
12	Design of Wake Equalizing Ducts using RANSE-based SBDO. Applied Ocean Research, 2020, 97, 102087.	4.1	19
13	Numerical Analysis of the Rudderâ€“Propeller Interaction. Journal of Marine Science and Engineering, 2020, 8, 990.	2.6	17
14	Numerical analysis of escort tug manoeuvrability characteristics. Applied Ocean Research, 2020, 97, 102075.	4.1	16
15	Assessment of the Manoeuvrability Characteristics of a Twin Shaft Naval Vessel Using an Open-Source CFD Code. Journal of Marine Science and Engineering, 2021, 9, 665.	2.6	16
16	Steady cavitating propeller performance by using OpenFOAM, StarCCM+and a boundary element method. Proceedings of the Institution of Mechanical Engineers Part M: Journal of Engineering for the Maritime Environment, 2017, 231, 411-440.	0.5	15
17	CFD-based analyses for a slow speed manoeuvrability model. Journal of Marine Science and Technology, 2019, 24, 871-883.	2.9	15
18	Cavitating Propeller Performance in Inclined Shaft Conditions with OpenFOAM: PPTC 2015 Test Case. Journal of Marine Science and Application, 2018, 17, 1-20.	1.7	14

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19	Experimental investigation of pressure pulses and radiated noise for two alternative designs of the propeller of a high-speed craft. Ocean Engineering, 2017, 132, 45-69.	4.3	12
20	The use of computational fluid dynamic technique in ship control design. Ships and Offshore Structures, 2021, 16, 31-45.	1.9	12
21	Interactive design and variation of hull shapes: pros and cons of different CAD approaches. International Journal on Interactive Design and Manufacturing, 2020, 14, 103-114.	2.2	10
22	Parametric hull shape variations by Reduced Order Model based geometric transformation. Ocean Engineering, 2020, 216, 107826.	4.3	10
23	Numerical analysis of escort tug manoeuvrability characteristics â€“ Part II: The skeg effect. Applied Ocean Research, 2020, 100, 102199.	4.1	10
24	An Investigation on the Discrepancies Between RANSE and BEM Approaches for the Prediction of Marine Propeller Unsteady Performances in Strongly Non-Homogeneous Wakes. , 2014, , .		9
25	Investigating the Effect of Heterogeneous Hull Roughness on Ship Resistance Using CFD. Journal of Marine Science and Engineering, 2021, 9, 202.	2.6	9
26	Development and assessment of CFD methods to calculate propeller and hull impact on the rudder inflow for a twin-screw ship. Applied Ocean Research, 2022, 125, 103227.	4.1	9
27	Nonlinear motions in head waves with a RANS and a potential code. Journal of Hydrodynamics, 2010, 22, 172-177.	3.2	8
28	An All-Round Design-to-Simulation Approach of a New Z-Drive Escort Tug Class. Journal of Offshore Mechanics and Arctic Engineering, 2020, 142, .	1.2	8
29	OPEN SOURCE COMPUTATIONS OF PLANING HULL RESISTANCE. , 2015, 157, .		8
30	A marine propeller design method based on two-fidelity data levels. Applied Ocean Research, 2022, 123, 103156.	4.1	8
31	Surrogate-Based Optimization Using an Open-Source Framework: The Bulbous Bow Shape Optimization Case. Mathematical and Computational Applications, 2018, 23, 60.	1.3	7
32	Improving model scale propeller performance prediction using the k â^' k L â^' ï‰ transition model in OpenFOAM. International Shipbuilding Progress, 2018, 65, 187-226.	0.4	7
33	Integration of seakeeping and powering computational techniques with meteo-marine forecasting data for in-service ship energy assessment. , 2013, , 93-101.		7
34	A method for the probabilistic assessment of the on-board comfort on a passenger vessel route. Ocean Engineering, 2021, 225, 108702.	4.3	6
35	A study on the added resistance of a catamaran advancing in waves considering variations of both operating and geometric parameters. Ships and Offshore Structures, 2021, 16, 334-352.	1.9	5
36	A new approach in engine-propeller matching. , 2011, , 631-637.		5

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37	Three-dimensional fluid-structure interaction case study on cubical fluid cavity with flexible bottom. Journal of Marine Science and Application, 2017, 16, 382-394.	1.7	4
38	Ship self-propulsion performance prediction by using OpenFOAM and different simplified propeller models. , 2018, , 195-203.		4
39	Towards Green Marine Technology and Transport. , 0, , .		4
40	Numerical and Experimental Analysis of a CLT Propeller Cavitation Behavior. , 2012, , .		4
41	An Effective Mesh Deformation Approach for Hull Shape Design by Optimization. Journal of Marine Science and Engineering, 2021, 9, 1107.	2.6	3
42	A Fluid-Structure Interaction case study on a square sail in a wind tunnel. Ocean Engineering, 2018, 163, 136-147.	4.3	2
43	Investigation about wave profile effects on ship stability. , 2011, , 143-149.		2
44	All Around Approach for the Design of a New Escort Tug Family. , 2018, , .		2
45	A method to assess safety and comfort for different ships types in a region of interest. Ocean Engineering, 2022, 250, 110995.	4.3	2
46	Assessment of different methods for the prediction of marine propellers induced pressures. , 2016, , 269-278.		1
47	An Optimization Framework for PBCF Energy Saving Devices. , 2018, , .		1
48	Large yacht resistance reduction by hydrodynamic multi-objective shape optimization. Ship Technology Research, 2023, 70, 90-105.	2.5	1
49	Ship propeller side effects: pressure pulses and radiated noise. Noise Mapping, 2016, 3, .	1.8	0
50	A study on the influence of hull wake on model scale cavitation and noise tests for a fast twin screw vessel with inclined shaft. Proceedings of the Institution of Mechanical Engineers Part M: Journal of Engineering for the Maritime Environment, 2018, 232, 307-330.	0.5	0
51	A Study on the Added Resistance Performance of Catamarans in Waves. , 2018, , .		0
52	Numerical investigation of the impact of speed reduction on propeller excitation. , 2015, , 11-22.		0
53	Computational prediction of underwater radiated noise of cavitating marine propellers: On the accuracy of semi-empirical models. Ocean Engineering, 2022, 259, 111477.	4.3	0