

# Diego Villa

## List of Publications by Year in descending order

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Version: 2024-02-01

53  
papers

637  
citations

567281

15  
h-index

677142

22  
g-index

54  
all docs

54  
docs citations

54  
times ranked

288  
citing authors

#	ARTICLE	IF	CITATIONS
1	Large yacht resistance reduction by hydrodynamic multi-objective shape optimization. <i>Ship Technology Research</i> , 2023, 70, 90-105.	2.5	1
2	A method to assess safety and comfort for different ships types in a region of interest. <i>Ocean Engineering</i> , 2022, 250, 110995.	4.3	2
3	A marine propeller design method based on two-fidelity data levels. <i>Applied Ocean Research</i> , 2022, 123, 103156.	4.1	8
4	Development and assessment of CFD methods to calculate propeller and hull impact on the rudder inflow for a twin-screw ship. <i>Applied Ocean Research</i> , 2022, 125, 103227.	4.1	9
5	Computational prediction of underwater radiated noise of cavitating marine propellers: On the accuracy of semi-empirical models. <i>Ocean Engineering</i> , 2022, 259, 111477.	4.3	0
6	A study on the added resistance of a catamaran advancing in waves considering variations of both operating and geometric parameters. <i>Ships and Offshore Structures</i> , 2021, 16, 334-352.	1.9	5
7	The use of computational fluid dynamic technique in ship control design. <i>Ships and Offshore Structures</i> , 2021, 16, 31-45.	1.9	12
8	Investigating the Effect of Heterogeneous Hull Roughness on Ship Resistance Using CFD. <i>Journal of Marine Science and Engineering</i> , 2021, 9, 202.	2.6	9
9	A method for the probabilistic assessment of the on-board comfort on a passenger vessel route. <i>Ocean Engineering</i> , 2021, 225, 108702.	4.3	6
10	Assessment of the Manoeuvrability Characteristics of a Twin Shaft Naval Vessel Using an Open-Source CFD Code. <i>Journal of Marine Science and Engineering</i> , 2021, 9, 665.	2.6	16
11	An Effective Mesh Deformation Approach for Hull Shape Design by Optimization. <i>Journal of Marine Science and Engineering</i> , 2021, 9, 1107.	2.6	3
12	A reduced order approach for optimal design of efficient marine propellers. <i>Ships and Offshore Structures</i> , 2020, 15, 200-214.	1.9	21
13	Interactive design and variation of hull shapes: pros and cons of different CAD approaches. <i>International Journal on Interactive Design and Manufacturing</i> , 2020, 14, 103-114.	2.2	10
14	Parametric hull shape variations by Reduced Order Model based geometric transformation. <i>Ocean Engineering</i> , 2020, 216, 107826.	4.3	10
15	Numerical Analysis of the Rudderâ€™Propeller Interaction. <i>Journal of Marine Science and Engineering</i> , 2020, 8, 990.	2.6	17
16	Numerical analysis of escort tug manoeuvrability characteristics. <i>Applied Ocean Research</i> , 2020, 97, 102075.	4.1	16
17	Numerical and Experimental Comparison of Ducted and Non-Ducted Propellers. <i>Journal of Marine Science and Engineering</i> , 2020, 8, 257.	2.6	20
18	Design of Wake Equalizing Ducts using RANSE-based SBDO. <i>Applied Ocean Research</i> , 2020, 97, 102087.	4.1	19

#	ARTICLE	IF	CITATIONS
19	Numerical analysis of escort tug manoeuvrability characteristics – Part II: The skeg effect. Applied Ocean Research, 2020, 100, 102199.	4.1	10
20	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
21	An efficient and robust approach to predict ship self-propulsion coefficients. Applied Ocean Research, 2019, 92, 101862.	4.1	22
22	Hydrodynamic shape optimization by high fidelity CFD solver and Gaussian process based response surface method. Applied Ocean Research, 2019, 90, 101841.	4.1	45
23	Propeller modeling approaches for off-design operative conditions. Ocean Engineering, 2019, 178, 283-305.	4.3	28
24	CFD-based analyses for a slow speed manoeuvrability model. Journal of Marine Science and Technology, 2019, 24, 871-883.	2.9	15
25	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
26	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
27	A Study on the Added Resistance Performance of Catamarans in Waves. , 2018, , .		0
28	Surrogate-Based Optimization Using an Open-Source Framework: The Bulbous Bow Shape Optimization Case. Mathematical and Computational Applications, 2018, 23, 60.	1.3	7
29	Improving model scale propeller performance prediction using the $k-\epsilon$ transition model in OpenFOAM. International Shipbuilding Progress, 2018, 65, 187-226.	0.4	7
30	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
31	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
32	A Fluid-Structure Interaction case study on a square sail in a wind tunnel. Ocean Engineering, 2018, 163, 136-147.	4.3	2
33	Ship self-propulsion performance prediction by using OpenFOAM and different simplified propeller models. , 2018, , 195-203.		4
34	An Optimization Framework for PBCF Energy Saving Devices. , 2018, , .		1
35	All Around Approach for the Design of a New Escort Tug Family. , 2018, , .		2
36	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

#	ARTICLE	IF	CITATIONS
37	Efficient and multi-objective cavitating propeller optimization: An application to a high-speed craft. Applied Ocean Research, 2017, 64, 31-57.	4.1	38
38	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
39	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
40	Design of ducted propeller nozzles through a RANSE-based optimization approach. Ocean Engineering, 2017, 145, 444-463.	4.3	40
41	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
42	Ship propeller side effects: pressure pulses and radiated noise. Noise Mapping, 2016, 3, .	1.8	0
43	Assessment of different methods for the prediction of marine propellers induced pressures. , 2016, , 269-278.		1
44	OPEN SOURCE COMPUTATIONS OF PLANING HULL RESISTANCE. , 2015, 157, .		8
45	Numerical investigation of the impact of speed reduction on propeller excitation. , 2015, , 11-22.		0
46	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
47	Integration of seakeeping and powering computational techniques with meteo-marine forecasting data for in-service ship energy assessment. , 2013, , 93-101.		7
48	Numerical and Experimental Analysis of a CLT Propeller Cavitation Behavior. , 2012, , .		4
49	Investigation about wave profile effects on ship stability. , 2011, , 143-149.		2
50	A new approach in engine-propeller matching. , 2011, , 631-637.		5
51	Nonlinear motions in head waves with a RANS and a potential code. Journal of Hydrodynamics, 2010, 22, 172-177.	3.2	8
52	RANS and PANEL method for unsteady flow propeller analysis. Journal of Hydrodynamics, 2010, 22, 547-552.	3.2	31
53	Towards Green Marine Technology and Transport. , 0, , .		4