Giuliana Mattiazzo

List of Publications by Year
in descending order

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Version: 2024-02-01

61	1,063	394421	454955
papers	citations	19 h-index	30 g-index

62	62	62	473
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Design of a Reinforced Concrete Wave Energy Converter in Extreme Wave Conditions. Mechanisms and Machine Science, 2022, , 70-77.	0.5	1
2	On the principle of impedance-matching for underactuated wave energy harvesting systems. Applied Ocean Research, 2022, 118, 102958.	4.1	27
3	Supporting Decarbonization Strategies of Local Energy Systems by De-Risking Investments in Renewables: A Case Study on Pantelleria Island. Energies, 2022, 15, 1103.	3.1	9
4	Low-Cost Heaving Single-Buoy Wave-Energy Point Absorber Optimization for Sardinia West Coast. Journal of Marine Science and Engineering, 2022, 10, 397.	2.6	6
5	Design and Techno-Economic Analysis of a Novel Hybrid Offshore Wind and Wave Energy System. Energies, 2022, 15, 2739.	3.1	20
6	Data-driven control of a Pendulum Wave Energy Converter: A Gaussian Process Regression approach. Ocean Engineering, 2022, 253, 111191.	4.3	24
7	Nonlinear Model Reduction by Moment-Matching for a Point Absorber Wave Energy Conversion System. Journal of Marine Science and Engineering, 2022, 10, 656.	2.6	3
8	Effect of pitching motion on production in a OFWT. Journal of Ocean Engineering and Marine Energy, 2022, 8, 319-330.	1.7	4
9	Intuitive LTI energy-maximising control for multi-degree of freedom wave energy converters: The PeWEC case. Ocean Engineering, 2022, 256, 111444.	4.3	19
10	Optimal control of wave energy systems considering nonlinear Froudeâ€“Krylov effects: control-oriented modelling and moment-based control. Nonlinear Dynamics, 2022, 109, 1777-1804.	5.2	18
11	Recycling Process of a Basalt Fiber-Epoxy Laminate by Solvolysis: Mechanical and Optical Tests. Fibers, 2022, 10, 55.	4.0	5
12	An Energy Cost Assessment of Future Energy Scenarios: A Case Study on San Pietro Island. Energies, 2022, 15, 4535.	3.1	8
13	Fast nonlinear Froudeâ€“Krylov force calculation for prismatic floating platforms: a wave energy conversion application case. Journal of Ocean Engineering and Marine Energy, 2021, 7, 439-457.	1.7	17
14	LMIâ€based passivation of LTI systems with application to marine structures. IET Renewable Power Generation, 2021, 15, 3424-3433.	3.1	6
15	Dynamic Modeling of an Offshore Floating Wind Turbine for Application in the Mediterranean Sea. Energies, 2021, 14, 248.	3.1	19
16	Life Cycle Assessment for the ISWEC Wave Energy Device. Mechanisms and Machine Science, 2021, , 515-523.	0.5	1
17	Time-Varying Damping Coefficient to Increase Power Extraction from a Notional Wave Energy Harvester. , 2021, , .		1
18	ISWEC Approaching the Spectral-Domain: Modelling and Numerical Experiments. , 2021, , .		4

#	Article	IF	Citations
19	Data-driven nonlinear model reduction by moment-matching for the ISWEC system. , 2021, , .		0
20	Constraint handling in extremum-seeking control for wave energy systems: A case study. , 2021, , .		0
21	Deep Neural Network Trained to Mimic Nonlinear Economic Model Predictive Control: an Application to a Pendulum Wave Energy Converter. , 2021, , .		9
22	Collaborative strategy for model-free control of arrays of wave energy converters: A genetic algorithm approach. , 2021, , .		0
23	Detecting parametric resonance in a floating oscillating water column device for wave energy conversion: Numerical simulations and validation with physical model tests. Applied Energy, 2020, 276, 115421.	10.1	29
24	Nonlinear Dynamic and Kinematic Model of a Spar-Buoy: Parametric Resonance and Yaw Numerical Instability. Journal of Marine Science and Engineering, 2020, 8, 504.	2.6	16
25	Real-Time Wave Excitation Forces Estimation: An Application on the ISWEC Device. Journal of Marine Science and Engineering, 2020, 8, 825.	2.6	13
26	Comparison of waveâ€“structure interaction dynamics of a submerged cylindrical point absorber with three degrees of freedom using potential flow and computational fluid dynamics models. Physics of Fluids, 2020, 32, .	4.0	30
27	Experimental Validation and Comparison of Numerical Models for the Mooring System of a Floating Wave Energy Converter. Journal of Marine Science and Engineering, 2020, 8, 565.	2.6	41
28	An adaptive and energy-maximizing control optimization of wave energy converters using an extremum-seeking approach. Physics of Fluids, 2020, 32, .	4.0	19
29	Platform Optimization and Cost Analysis in a Floating Offshore Wind Farm. Journal of Marine Science and Engineering, 2020, 8, 835.	2.6	48
30	Analysis of a Gyroscopic-Stabilized Floating Offshore Hybrid Wind-Wave Platform. Journal of Marine Science and Engineering, 2020, 8, 439.	2.6	22
31	Numerical investigation of parametric resonance due to hydrodynamic coupling in a realistic wave energy converter. Nonlinear Dynamics, 2020, 101, 153-170.	5.2	21
32	Unsteady RANS CFD Simulations of Sailboatâ€™s Hull and Comparison with Full-Scale Test. Journal of Marine Science and Engineering, 2020, 8, 394.	2.6	10
33	Techno-Economic Optimisation for a Wave Energy Converter via Genetic Algorithm. Journal of Marine Science and Engineering, 2020, 8, 482.	2.6	43
34	Viscous Damping Identification for a Wave Energy Converter Using CFD-URANS Simulations. Journal of Marine Science and Engineering, 2020, 8, 355.	2.6	24
35	The Effect of Mooring Line Parameters in Inducing Parametric Resonance on the Spar-Buoy Oscillating Water Column Wave Energy Converter. Journal of Marine Science and Engineering, 2020, 8, 29.	2.6	19
36	Numerical and Experimental Identification of the Aerodynamic Power Losses of the ISWEC. Journal of Marine Science and Engineering, 2020, 8, 49.	2.6	20

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37	Experimental Investigation of the Mooring System of a Wave Energy Converter in Operating and Extreme Wave Conditions. Journal of Marine Science and Engineering, 2020, 8, 180.	2.6	34
38	Excitation Forces Estimation for Non-linear Wave Energy Converters: A Neural Network Approach. IFAC-PapersOnLine, 2020, 53, 12334-12339.	0.9	6
39	Dynamic response of tube containing water subjected to impact loading. Multiscale and Multidisciplinary Modeling, Experiments and Design, 2019, 2, 281-290.	2.1	0
40	Acoustic impact of a wave energy converter in Mediterranean shallow waters. Scientific Reports, 2019, 9, 9586.	3.3	12
41	An application of model predictive control logic to inertial sea wave energy converter. Mechanisms and Machine Science, 2019, , 3561-3571.	0.5	12
42	State of the Art and Perspectives of Wave Energy in the Mediterranean Sea: Backstage of ISWEC. Frontiers in Energy Research, 2019, 7, .	2.3	48
43	Pitch Resonance Tuning Tanks: A novel technology for more efficient wave energy harvesting. , 2018, , .		5
44	On-board sea state estimation method validation based on measured floater motion. IFAC-PapersOnLine, 2018, 51, 68-73.	0.9	14
45	Non Linear Simulation of a Wave Energy Converter With Multiple Degrees of Freedom Using a Harmonic Balance Method. , 2018, , .		5
46	PeWEC: Experimental validation of wave to PTO numerical model. Ocean Engineering, 2018, 167, 114-129.	4.3	52
47	Mathematical Modeling and Scaling of the Friction Losses of a Mechanical Gyroscope. International Journal of Applied Mechanics, 2018, 10, 1850024.	2.2	16
48	ISWEC linear quadratic regulator oscillating control. Renewable Energy, 2017, 103, 372-382.	8.9	25
49	Double and single sided tubular linear Permanent Magnets generator for the Wave Energy conversion. , 2016, , .		4
50	ISWEC design tool. International Journal of Marine Energy, 2016, 15, 201-213.	1.8	15
51	Experimental validation of the ISWEC wave to PTO model. Ocean Engineering, 2016, 120, 40-51.	4.3	46
52	Performance assessment of the full scale ISWEC system. , 2015, , .		11
53	Productivity analysis of the full scale inertial sea wave energy converter prototype: A test case in Pantelleria Island. Journal of Renewable and Sustainable Energy, 2015, 7, 061703.	2.0	22
54	Stochastic Control of Inertial Sea Wave Energy Converter. Scientific World Journal, The, 2015, 2015, 1-14.	2.1	14

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55	Hardware-In-the-Loop test rig for the ISWEC wave energy system. Mechatronics, 2015, 25, 11-17.	3.3	27
56	Sea-wave power converter modeling for fault conditions analysis. , 2015, , .		0
57	Application of sub-optimal control techniques to a gyroscopic Wave Energy Converter. , 2015, , 265-269.		3
58	Linear Tubular Permanent-Magnet Generators for the Inertial Sea Wave Energy Converter. IEEE Transactions on Industry Applications, 2014, 50, 1817-1828.	4.9	56
59	Control and productivity analysis of the full scale ISWEC prototype. , 2013, , .		1
60	ISWEC: A gyroscopic mechanism for wave power exploitation. Mechanism and Machine Theory, 2011, 46, 1411-1424.	4.5	77
61	NLFK4ALL: An Open-Source Demostration Toolbox for Computationally Efficient Nonlinear Froude-Krylov Force Calculations. , 0, , .		2