Giuliana Mattiazzo

List of Publications by Year
in descending order

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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	ISWEC: A gyroscopic mechanism for wave power exploitation. Mechanism and Machine Theory, 2011, 46, 1411-1424.	4.5	77
2	Linear Tubular Permanent-Magnet Generators for the Inertial Sea Wave Energy Converter. IEEE Transactions on Industry Applications, 2014, 50, 1817-1828.	4.9	56
3	PeWEC: Experimental validation of wave to PTO numerical model. Ocean Engineering, 2018, 167, 114-129.	4.3	52
4	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
5	Platform Optimization and Cost Analysis in a Floating Offshore Wind Farm. Journal of Marine Science and Engineering, 2020, 8, 835.	2.6	48
6	Experimental validation of the ISWEC wave to PTO model. Ocean Engineering, 2016, 120, 40-51.	4.3	46
7	Techno-Economic Optimisation for a Wave Energy Converter via Genetic Algorithm. Journal of Marine Science and Engineering, 2020, 8, 482.	2.6	43
8	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
9	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
10	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
11	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
12	Hardware-In-the-Loop test rig for the ISWEC wave energy system. Mechatronics, 2015, 25, 11-17.	3.3	27
13	On the principle of impedance-matching for underactuated wave energy harvesting systems. Applied Ocean Research, 2022, 118, 102958.	4.1	27
14	ISWEC linear quadratic regulator oscillating control. Renewable Energy, 2017, 103, 372-382.	8.9	25
15	Viscous Damping Identification for a Wave Energy Converter Using CFD-URANS Simulations. Journal of Marine Science and Engineering, 2020, 8, 355.	2.6	24
16	Data-driven control of a Pendulum Wave Energy Converter: A Gaussian Process Regression approach. Ocean Engineering, 2022, 253, 111191.	4.3	24
17	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
18	Analysis of a Gyroscopic-Stabilized Floating Offshore Hybrid Wind-Wave Platform. Journal of Marine Science and Engineering, 2020, 8, 439.	2.6	22

#	Article	IF	Citations
19	Numerical investigation of parametric resonance due to hydrodynamic coupling in a realistic wave energy converter. Nonlinear Dynamics, 2020, 101, 153-170.	5.2	21
20	Numerical and Experimental Identification of the Aerodynamic Power Losses of the ISWEC. Journal of Marine Science and Engineering, 2020, 8, 49.	2.6	20
21	Design and Techno-Economic Analysis of a Novel Hybrid Offshore Wind and Wave Energy System. Energies, 2022, 15, 2739.	3.1	20
22	An adaptive and energy-maximizing control optimization of wave energy converters using an extremum-seeking approach. Physics of Fluids, 2020, 32, .	4.0	19
23	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
24	Dynamic Modeling of an Offshore Floating Wind Turbine for Application in the Mediterranean Sea. Energies, 2021, 14, 248.	3.1	19
25	Intuitive LTI energy-maximising control for multi-degree of freedom wave energy converters: The PeWEC case. Ocean Engineering, 2022, 256, 111444.	4.3	19
26	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
27	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
28	Mathematical Modeling and Scaling of the Friction Losses of a Mechanical Gyroscope. International Journal of Applied Mechanics, 2018, 10, 1850024.	2.2	16
29	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
30	ISWEC design tool. International Journal of Marine Energy, 2016, 15, 201-213.	1.8	15
31	Stochastic Control of Inertial Sea Wave Energy Converter. Scientific World Journal, The, 2015, 2015, 1-14.	2.1	14
32	On-board sea state estimation method validation based on measured floater motion. IFAC-PapersOnLine, 2018, 51, 68-73.	0.9	14
33	Real-Time Wave Excitation Forces Estimation: An Application on the ISWEC Device. Journal of Marine Science and Engineering, 2020, 8, 825.	2.6	13
34	Acoustic impact of a wave energy converter in Mediterranean shallow waters. Scientific Reports, 2019, 9, 9586.	3.3	12
35	An application of model predictive control logic to inertial sea wave energy converter. Mechanisms and Machine Science, 2019, , 3561-3571.	0.5	12
36	Performance assessment of the full scale ISWEC system. , 2015, , .		11

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37	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
38	Deep Neural Network Trained to Mimic Nonlinear Economic Model Predictive Control: an Application to a Pendulum Wave Energy Converter. , 2021, , .		9
39	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
40	An Energy Cost Assessment of Future Energy Scenarios: A Case Study on San Pietro Island. Energies, 2022, 15, 4535.	3.1	8
41	LMIâ€based passivation of LTI systems with application to marine structures. IET Renewable Power Generation, 2021, 15, 3424-3433.	3.1	6
42	Excitation Forces Estimation for Non-linear Wave Energy Converters: A Neural Network Approach. IFAC-PapersOnLine, 2020, 53, 12334-12339.	0.9	6
43	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
44	Pitch Resonance Tuning Tanks: A novel technology for more efficient wave energy harvesting. , 2018, , .		5
45	Non Linear Simulation of a Wave Energy Converter With Multiple Degrees of Freedom Using a Harmonic Balance Method. , 2018, , .		5
46	Recycling Process of a Basalt Fiber-Epoxy Laminate by Solvolysis: Mechanical and Optical Tests. Fibers, 2022, 10, 55.	4.0	5
47	Double and single sided tubular linear Permanent Magnets generator for the Wave Energy conversion. , 2016, , .		4
48	ISWEC Approaching the Spectral-Domain: Modelling and Numerical Experiments. , 2021, , .		4
49	Effect of pitching motion on production in a OFWT. Journal of Ocean Engineering and Marine Energy, 2022, 8, 319-330.	1.7	4
50	Application of sub-optimal control techniques to a gyroscopic Wave Energy Converter. , 2015, , 265-269.		3
51	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
52	NLFK4ALL: An Open-Source Demostration Toolbox for Computationally Efficient Nonlinear Froude-Krylov Force Calculations. , 0, , .		2
53	Control and productivity analysis of the full scale ISWEC prototype. , 2013, , .		1
54	Design of a Reinforced Concrete Wave Energy Converter in Extreme Wave Conditions. Mechanisms and Machine Science, 2022, , 70-77.	0.5	1

#	Article	IF	Citations
55	Life Cycle Assessment for the ISWEC Wave Energy Device. Mechanisms and Machine Science, 2021, , 515-523.	0.5	1
56	Time-Varying Damping Coefficient to Increase Power Extraction from a Notional Wave Energy Harvester. , 2021, , .		1
57	Sea-wave power converter modeling for fault conditions analysis. , 2015, , .		0
58	Dynamic response of tube containing water subjected to impact loading. Multiscale and Multidisciplinary Modeling, Experiments and Design, 2019, 2, 281-290.	2.1	0
59	Data-driven nonlinear model reduction by moment-matching for the ISWEC system. , 2021, , .		0
60	Constraint handling in extremum-seeking control for wave energy systems: A case study. , 2021, , .		0
61	Collaborative strategy for model-free control of arrays of wave energy converters: A genetic algorithm approach. , 2021, , .		0