AurÃ©lien Babarit

List of Publications by Year
in descending order

50 papers	2,903 citations	304368 22 h-index	243296 44 g-index
62 all docs	62 docs citations	62 times ranked	1461 citing authors

#	Article	IF	Citations
1	Numerical benchmarking study of a selection of wave energy converters. Renewable Energy, 2012, 41, 44-63.	4.3	539
2	Optimal latching control of a wave energy device in regular and irregular waves. Applied Ocean Research, 2006, 28, 77-91.	1.8	299
3	A database of capture width ratio of wave energy converters. Renewable Energy, 2015, 80, 610-628.	4.3	250
4	Declutching control of a wave energy converter. Ocean Engineering, 2009, 36, 1015-1024.	1.9	181
5	Comparison of latching control strategies for a heaving wave energy device in random sea. Applied Ocean Research, 2004, 26, 227-238.	1.8	180
6	On the park effect in arrays of oscillating wave energy converters. Renewable Energy, 2013, 58, 68-78.	4.3	143
7	Impact of wave interactions effects on energy absorption in large arrays of wave energy converters. Ocean Engineering, 2012, 41, 79-88.	1.9	131
8	Hydrodynamic modelling of marine renewable energy devices: A state of the art review. Ocean Engineering, 2015, 108, 46-69.	1.9	111
9	SEAREV: Case study of the development of a wave energy converter. Renewable Energy, 2015, 80, 40-52.	4.3	99
10	Impact of long separating distances on the energy production of two interacting wave energy converters. Ocean Engineering, 2010, 37, 718-729.	1.9	94
11	Wave Basin Experiments with Large Wave Energy Converter Arrays to Study Interactions between the Converters and Effects on Other Users in the Sea and the Coastal Area. Energies, 2014, 7, 701-734.	1.6	85
12	Techno-economic feasibility of fleets of far offshore hydrogen-producing wind energy converters. International Journal of Hydrogen Energy, 2018, 43, 7266-7289.	3.8	84
13	Design Methodology for a SEAREV Wave Energy Converter. IEEE Transactions on Energy Conversion, 2010, 25, 760-767.	3.7	79
14	Discrete control of resonant wave energy devices. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2012, 370, 288-314.	1.6	49
15	Effect of non-ideal power take-off on the energy absorption of a reactively controlled one degree of freedom wave energy converter. Applied Ocean Research, 2014, 48, 236-243.	1.8	46
16	Potential time domain model with viscous correction and CFD analysis of a generic surging floating wave energy converter. International Journal of Marine Energy, 2015, 10, 70-96.	1.8	38
17	Simulation of electricity supply of an Atlantic island by offshore wind turbines and wave energy converters associated with a medium scale local energy storage. Renewable Energy, 2006, 31, 153-160.	4.3	36
18	Modes of response of an offshore wind turbine with directional wind and waves. Renewable Energy, 2013, 49, 151-155.	4.3	34

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19	A wave-to-wire model of the SEAREV wave energy converter. Proceedings of the Institution of Mechanical Engineers Part M: Journal of Engineering for the Maritime Environment, 2007, 221, 81-93.	0.3	31
20	Analysis of a Two-Body Floating Wave Energy Converter With Particular Focus on the Effects of Power Take-Off and Mooring Systems on Energy Capture. Journal of Offshore Mechanics and Arctic Engineering, 2013, 135, .	0.6	31
21	Ocean Energy Systems Wave Energy Modelling Task: Modelling, Verification and Validation of Wave Energy Converters. Journal of Marine Science and Engineering, 2019, 7, 379.	1.2	30
22	Optimizing the Power Take Off of a Wave Energy Converter With Regard to the Wave Climate. Journal of Offshore Mechanics and Arctic Engineering, 2006, 128, 56-64.	0.6	25
23	Comparison of existing methods for the calculation of the infinite water depth free-surface Green function for the waveâ€“structure interaction problem. Applied Ocean Research, 2018, 81, 150-163.	1.8	22
24	A fast approach coupling Boundary Element Method and plane wave approximation for wave interaction analysis in sparse arrays of wave energy converters. Ocean Engineering, 2014, 85, 12-20.	1.9	20
25	Sea-state modification and heaving float interaction factors from physical modelling of arrays of wave energy converters. Journal of Renewable and Sustainable Energy, 2015, 7, .	0.8	20
26	A linear numerical model for analysing the hydroelastic response of a flexible electroactive wave energy converter. Journal of Fluids and Structures, 2017, 74, 356-384.	1.5	20
27	Weakly nonlinear modeling of submerged wave energy converters. Applied Ocean Research, 2018, 75, 201-222.	1.8	20
28	Assessment of the influence of the distance between two wave energy converters on energy production. IET Renewable Power Generation, 2010, 4, 592.	1.7	19
29	Investigation on the energy absorption performance of a fixed-bottom pressure-differential wave energy converter. Applied Ocean Research, 2017, 65, 90-101.	1.8	19
30	Stakeholder requirements for commercially successful wave energy converter farms. Renewable Energy, 2017, 113, 742-755.	4.3	17
31	On the numerical modeling and optimization of a bottom-referenced heave-buoy array of wave energy converters. International Journal of Marine Energy, 2017, 19, 1-15.	1.8	17
32	A numerical tool for the frequency domain simulation of large arrays of identical floating bodies in waves. Ocean Engineering, 2018, 148, 299-311.	1.9	16
33	Wake effect assessment of a flap type wave energy converter farm under realistic environmental conditions by using a numerical coupling methodology. Coastal Engineering, 2019, 143, 96-112.	1.7	14
34	C-HyP: A Combined Wind and Wave Energy Platform With Balanced Contributions. , 2013, , .		12
35	Exploitation of the far-offshore wind energy resource by fleets of energy ships â€“ Part 1: Energy ship design and performance. Wind Energy Science, 2020, 5, 839-853.	1.2	12
36	A new ordinary differential equation for the evaluation of the frequency-domain Green function. Applied Ocean Research, 2019, 86, 239-245.	1.8	9

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37	Numerical Assessment of the Mean Power Production of a Combined Wind and Wave Energy Platform. , 2012, , .		8
38	An implementation of the fast multipole algorithm for wave interaction problems on sparse arrays of floating bodies. Journal of Engineering Mathematics, 2012, 77, 51-68.	0.6	8
39	Proof of the equivalence of Tanizawaâ€“Berkvensâ€™ and Cointeâ€“van Daalen's formulations for the time derivative of the velocity potential for non-linear potential flow solvers. Applied Ocean Research, 2017, 63, 184-199.	1.8	7
40	Preliminary Design of a Wind Driven Vessel Dedicated to Hydrogen Production. , 2017, , .		7
41	Experimental validation of the energy ship concept for far-offshore wind energy conversion. Ocean Engineering, 2021, 239, 109830.	1.9	7
42	Energy and economic performance of the FARWIND energy system for sustainable fuel production from the far-offshore wind energy resource. , 2019, , .		5
43	Comparison of the capacity factor of stationary wind turbines and weather-routed energy ships in the far-offshore. Journal of Physics: Conference Series, 2019, 1356, 012001.	0.3	4
44	Exploitation of the far-offshore wind energy resource by fleets of energy ships â€“ Part 2: Updated ship design and cost of energy estimate. Wind Energy Science, 2021, 6, 1191-1204.	1.2	4
45	MODELLING OF WAVE ATTENUATION INDUCED BY MULTI-PURPOSE FLOATING STRUCTURES USED FOR POWER SUPPLY AND COASTAL PROTECTION. Coastal Engineering Proceedings, 2015, 1, 20.	0.1	3
46	Development of a wave-to-wire model to calculate flicker caused by wave energy converters and study power quality. , 2017, , .		3
47	Comparison Between Experiments and a Multibody Weakly Nonlinear Potential Flow Approach for Modeling of Marine Operations. , 2018, , .		3
48	Progresses in the Development of a Weakly-Nonlinear Wave Body Interaction Model Based on the Weak-Scatterer Approximation. , 2015, , .		1
49	Numerical simulation of lowering operations from the coupling between the Composite-Rigid-Body Algorithm and the weak-scatterer approach. Ocean Engineering, 2021, 241, 109997.	1.9	1
50	Experimental proof-of-concept of an energy ship propelled by a Flettner rotor. Journal of Physics: Conference Series, 2022, 2265, 042057.	0.3	1