Aurélien Babarit

List of Publications by Year in descending order

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50 papers 2,903 citations

304368 22 h-index 243296 44 g-index

62 all docs

62 docs citations

times ranked

62

1461 citing authors

#	Article	IF	Citations
1	Experimental proof-of-concept of an energy ship propelled by a Flettner rotor. Journal of Physics: Conference Series, 2022, 2265, 042057.	0.3	1
2	Exploitation of the far-offshore wind energy resource by fleets of energy ships – Part 2: Updated ship design and cost of energy estimate. Wind Energy Science, 2021, 6, 1191-1204.	1.2	4
3	Experimental validation of the energy ship concept for far-offshore wind energy conversion. Ocean Engineering, 2021, 239, 109830.	1.9	7
4	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
5	Exploitation of the far-offshore wind energy resource by fleets of energy ships – Part 1: Energy ship design and performance. Wind Energy Science, 2020, 5, 839-853.	1.2	12
6	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
7	Energy and economic performance of the FARWIND energy system for sustainable fuel production from the far-offshore wind energy resource., 2019,,.		5
8	A new ordinary differential equation for the evaluation of the frequency-domain Green function. Applied Ocean Research, 2019, 86, 239-245.	1.8	9
9	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
10	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
11	Weakly nonlinear modeling of submerged wave energy converters. Applied Ocean Research, 2018, 75, 201-222.	1.8	20
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	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
14	Comparison of existing methods for the calculation of the infinite water depth free-surface Green function for the wave–structure interaction problem. Applied Ocean Research, 2018, 81, 150-163.	1.8	22
15	Comparison Between Experiments and a Multibody Weakly Nonlinear Potential Flow Approach for Modeling of Marine Operations. , 2018, , .		3
16	Proof of the equivalence of Tanizawa–Berkvens' and Cointe–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
17	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
18	Stakeholder requirements for commercially successful wave energy converter farms. Renewable Energy, 2017, 113, 742-755.	4.3	17

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19	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
20	Preliminary Design of a Wind Driven Vessel Dedicated to Hydrogen Production., 2017,,.		7
21	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
22	Development of a wave-to-wire model to calculate flicker caused by wave energy converters and study power quality., 2017,,.		3
23	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
24	Progresses in the Development of a Weakly-Nonlinear Wave Body Interaction Model Based on the Weak-Scatterer Approximation. , 2015 , , .		1
25	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
26	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
27	SEAREV: Case study of the development of a wave energy converter. Renewable Energy, 2015, 80, 40-52.	4.3	99
28	A database of capture width ratio of wave energy converters. Renewable Energy, 2015, 80, 610-628.	4.3	250
29	Hydrodynamic modelling of marine renewable energy devices: A state of the art review. Ocean Engineering, 2015, 108, 46-69.	1.9	111
30	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
31	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
32	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
33	Modes of response of an offshore wind turbine with directional wind and waves. Renewable Energy, 2013, 49, 151-155.	4.3	34
34	On the park effect in arrays of oscillating wave energy converters. Renewable Energy, 2013, 58, 68-78.	4.3	143
35	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
36	C-HyP: A Combined Wind and Wave Energy Platform With Balanced Contributions. , 2013, , .		12

#	Article	IF	Citations
37	Discrete control of resonant wave energy devices. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2012, 370, 288-314.	1.6	49
38	Numerical Assessment of the Mean Power Production of a Combined Wind and Wave Energy Platform. , 2012, , .		8
39	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
40	Numerical benchmarking study of a selection of wave energy converters. Renewable Energy, 2012, 41, 44-63.	4.3	539
41	Impact of wave interactions effects on energy absorption in large arrays of wave energy converters. Ocean Engineering, 2012, 41, 79-88.	1.9	131
42	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
43	Impact of long separating distances on the energy production of two interacting wave energy converters. Ocean Engineering, 2010, 37, 718-729.	1.9	94
44	Design Methodology for a SEAREV Wave Energy Converter. IEEE Transactions on Energy Conversion, 2010, 25, 760-767.	3.7	79
45	Declutching control of a wave energy converter. Ocean Engineering, 2009, 36, 1015-1024.	1.9	181
46	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
47	Optimal latching control of a wave energy device in regular and irregular waves. Applied Ocean Research, 2006, 28, 77-91.	1.8	299
48	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
49	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
50	Comparison of latching control strategies for a heaving wave energy device in random sea. Applied Ocean Research, 2004, 26, 227-238.	1.8	180