FÃ©licien Bonnefoy

List of Publications by Year
in descending order

42 papers	1,048 citations	361413 20 h-index	414414 32 g-index
42 all docs	42 docs citations	42 times ranked	532 citing authors

#	Article	IF	Citations
1	A modified High-Order Spectral method for wavemaker modeling in a numerical wave tank. European Journal of Mechanics, B/Fluids, 2012, 34, 19-34.	2.5	114
2	HOS-ocean: Open-source solver for nonlinear waves in open ocean based on High-Order Spectral method. Computer Physics Communications, 2016, 203, 245-254.	7.5	110
3	3-D HOS simulations of extreme waves in open seas. Natural Hazards and Earth System Sciences, 2007, 7, 109-122.	3.6	91
4	Hydroelastic response of floating elastic discs to regular waves. Part 1. Wave basin experiments. Journal of Fluid Mechanics, 2013, 723, 604-628.	3.4	51
5	Nonlinear Spectral Synthesis of Soliton Gas in Deep-Water Surface Gravity Waves. Physical Review Letters, 2020, 125, 264101.	7.8	50
6	Hydroelastic response of floating elastic discs to regular waves. Part 2. Modal analysis. Journal of Fluid Mechanics, 2013, 723, 629-652.	3.4	49
7	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.	4.1	46
8	Deterministic non-linear wave prediction using probe data. Ocean Engineering, 2010, 37, 913-926.	4.3	44
9	Nonlinear higher-order spectral solution for a two-dimensional moving load on ice. Journal of Fluid Mechanics, 2009, 621, 215-242.	3.4	39
10	Role of the basin boundary conditions in gravity wave turbulence. Journal of Fluid Mechanics, 2015, 781, 196-225.	3.4	36
11	Applicability and limitations of highly non-linear potential flow solvers in the context of water waves. Ocean Engineering, 2017, 142, 233-244.	4.3	32
12	A fully-spectral 3D time-domain model for second-order simulation of wavetank experiments. Part A: Formulation, implementation and numerical properties. Applied Ocean Research, 2006, 28, 33-43.	4.1	30
13	Simulation of breaking waves using the high-order spectral method with laboratory experiments: Wave-breaking onset. Ocean Modelling, 2017, 119, 94-104.	2.4	30
14	Observation of resonant interactions among surface gravity waves. Journal of Fluid Mechanics, 2016, 805, .	3.4	29
15	A comparative study of two fast nonlinear free‐surface water wave models. International Journal for Numerical Methods in Fluids, 2012, 69, 1818-1834.	1.6	28
16	From modulational instability to focusing dam breaks in water waves. Physical Review Fluids, 2020, 5, .	2.5	28
17	TIME DOMAIN SIMULATION OF NONLINEAR WATER WAVES USING SPECTRAL METHODS. Series on Quality, Reliability and Engineering Statistics, 2010, , 129-164.	0.2	27
18	Experimental validation of non-linear deterministic prediction schemes for long-crested waves. Ocean Engineering, 2013, 58, 284-292.	4.3	27

#	Article	IF	Citations
19	Coexistence of solitons and extreme events in deep water surface waves. Physical Review Fluids, 2018, 3, .	2.5	24
20	A fully-spectral 3D time-domain model for second-order simulation of wavetank experiments. Part B: Validation, calibration versus experiments and sample applications. Applied Ocean Research, 2006, 28, 121-132.	4.1	22
21	Experimental and numerical assessment of deterministic nonlinear ocean waves prediction algorithms using non-uniformly sampled wave gauges. Ocean Engineering, 2020, 212, 107659.	4.3	21
22	On the equivalence of unidirectional rogue waves detected in periodic simulations and reproduced in numerical wave tanks. Ocean Engineering, 2016, 117, 346-358.	4.3	17
23	Emergence of Peregrine solitons in integrable turbulence of deep water gravity waves. Physical Review Fluids, 2020, 5, .	2.5	15
24	Prediction and manipulation of hydrodynamic rogue waves via nonlinear spectral engineering. Physical Review Fluids, 2022, 7, .	2.5	13
25	Experimental reconstruction of extreme sea waves by time reversal principle. Journal of Fluid Mechanics, 2020, 884, .	3.4	11
26	Improved transient water wave technique for the experimental estimation of ship responses. Journal of Fluids and Structures, 2011, 27, 456-466.	3.4	10
27	Saturation of the Inverse Cascade in Surface Gravity-Wave Turbulence. Physical Review Letters, 2020, 125, 134501.	7.8	10
28	In-vitro validation of 4D flow MRI measurements with an experimental pulsatile flow model. Diagnostic and Interventional Imaging, 2019, 100, 17-23.	3.2	9
29	Self-similar gravity wave spectra resulting from the modulation of bound waves. Physical Review Fluids, 2018, 3, .	2.5	8
30	Comparison of Simulation and Tank Test Results of a Semi-Submersible Floating Wind Turbine Under Wind and Wave Loads. , 2013, , .		7
31	Deterministic Reconstruction and Prediction of a Non-Linear Wave Field Using Probe Data. , 2008, , .		5
32	Towards quantitative evaluation of wall shear stress from 4D flow imaging. Magnetic Resonance Imaging, 2020, 74, 232-243.	1.8	4
33	Observation expÃ©rimentale en bassin Ã vagues des interactions rÃ©sonantes Ã quatre ondes. Houille Blanche, 2017, 103, 56-63.	0.3	3
34	Statistics of rogue waves in isotropic wave fields. Journal of Fluid Mechanics, 2022, 943, .	3.4	3
35	Nonlinear dispersion relation in integrable turbulence. Scientific Reports, 2022, 12, .	3.3	3
36	Generation of Large Angle Bimodal Sea States Using One-Side Segmented Wavemaker. Journal of Offshore Mechanics and Arctic Engineering, 2008, 130, .	1.2	2

#	Article	IF	Citations
37	Experimental and Numerical Comparative Investigation of Pressure Fields Under Steep 2D Waves. , 2006, , 579.		0
38	GÃ©nÃ©ration de houles multidirectionnelles complexes dans le bassin de Centrale Nantes. European Journal of Environmental and Civil Engineering, 2008, 12, 601-614.	2.1	0
39	Non-Linear Initialization in Three-Dimensional High Order Spectra Deterministic Sea State Modeling. , 2010, , .		0
40	Microwave scattering experiment on a wave tank: Bistatic setup. , 2012, , .		0
41	Using a Nonlinear Spectral Model for Preparing Three-Dimensional Wave Experiments. , 2004, , .		0
42	Generation of Large Angle Bimodal Sea States Using a Single Segmented Wavemaker. , 2007, , .		0