

# Longfei Xiao

## List of Publications by Year in descending order

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77  
papers

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citations

361413

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526287

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77  
docs citations

77  
times ranked

616  
citing authors

#	ARTICLE	IF	CITATIONS
1	Application of an adaptive bistable power capture mechanism to a point absorber wave energy converter. <i>Applied Energy</i> , 2018, 228, 450-467.	10.1	72
2	Comparative study on power capture performance of oscillating-body wave energy converters with three novel power take-off systems. <i>Renewable Energy</i> , 2017, 103, 94-105.	8.9	43
3	Freak wave forces on a vertical cylinder. <i>Coastal Engineering</i> , 2016, 114, 9-18.	4.0	36
4	Large-eddy simulation of the flow past both finite and infinite circular cylinders at $Re = 3900$ . <i>Journal of Hydrodynamics</i> , 2015, 27, 195-203.	3.2	34
5	Second-order responses of a conceptual semi-submersible 10MW wind turbine using full quadratic transfer functions. <i>Renewable Energy</i> , 2020, 153, 653-668.	8.9	34
6	Experimental investigation into the influences of pontoon and column configuration on vortex-induced motions of deep-draft semi-submersibles. <i>Ocean Engineering</i> , 2016, 123, 262-277.	4.3	32
7	Generalized analytical solution to wave interaction with submerged multi-layer horizontal porous plate breakwaters. <i>Journal of Engineering Mathematics</i> , 2017, 105, 117-135.	1.2	32
8	Experimental study of the wave-dissipating performance of a four-layer horizontal porous-plate breakwater. <i>Ocean Engineering</i> , 2018, 151, 222-233.	4.3	31
9	Experimental investigation of flow characteristics around four square-cylinder arrays at subcritical Reynolds numbers. <i>International Journal of Naval Architecture and Ocean Engineering</i> , 2015, 7, 906-919.	2.3	30
10	Operational and extreme responses of a new concept of 10MW semi-submersible wind turbine in intermediate water depth: An experimental study. <i>Ocean Engineering</i> , 2020, 217, 108003.	4.3	30
11	Numerical Simulation of Irregular Wave-Simulating Irregular Wave Train. <i>Journal of Hydrodynamics</i> , 2010, 22, 537-545.	3.2	28
12	An experimental study on deterministic freak waves: Generation, propagation and local energy. <i>Ocean Engineering</i> , 2016, 118, 83-92.	4.3	28
13	Comparative study of hydrodynamic performances of breakwaters with double-layered perforated walls attached to ring-shaped very large floating structures. <i>Ocean Engineering</i> , 2016, 111, 279-291.	4.3	26
14	Effects of wave excitation force prediction deviations on the discrete control performance of an oscillating wave energy converter. <i>Ships and Offshore Structures</i> , 2016, 11, 351-368.	1.9	25
15	Dynamic responses of a 10 MW semi-submersible wind turbine at an intermediate water depth: A comprehensive numerical and experimental comparison. <i>Ocean Engineering</i> , 2021, 232, 109138.	4.3	25
16	An oscillating wave energy converter with nonlinear snap-through Power-Take-Off systems in regular waves. <i>China Ocean Engineering</i> , 2016, 30, 565-580.	1.6	23
17	Four-level screening method for multi-variable truncation design of deepwater mooring system. <i>Marine Structures</i> , 2017, 51, 40-64.	3.8	23
18	Low-frequency drift forces and horizontal motions of a moored FPSO in bi-directional swell and wind-sea offshore West Africa. <i>Ships and Offshore Structures</i> , 2013, 8, 425-440.	1.9	21

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19	Hydrodynamics of a 2D vessel including internal sloshing flows. <i>Ocean Engineering</i> , 2014, 84, 45-53.	4.3	21
20	Mechanism and sensitivity for broadband energy harvesting of an adaptive bistable point absorber wave energy converter. <i>Energy</i> , 2019, 188, 115984.	8.8	21
21	Experimental study on mooring, towing and installing of immersed tunnel caissons. <i>Journal of Shanghai Jiaotong University (Science)</i> , 2010, 15, 103-107.	0.9	19
22	Flow around an oscillating circular disk at low to moderate Reynolds numbers. <i>Journal of Fluid Mechanics</i> , 2017, 812, 1119-1145.	3.4	19
23	An experimental investigation on wave runup along the broadside of a single point moored FPSO exposed to oblique waves. <i>Ocean Engineering</i> , 2014, 88, 81-90.	4.3	18
24	Experimental study on the hydrodynamic behaviour of an FPSO in a deepwater region of the Gulf of Mexico. <i>Ocean Engineering</i> , 2017, 129, 549-566.	4.3	18
25	Parametric study on the vortex-induced motions of semi-submersibles: Effect of rounded ratios of the column and pontoon. <i>Physics of Fluids</i> , 2017, 29, .	4.0	17
26	Experimental and numerical studies of the pontoon effect on vortex-induced motions of deep-draft semi-submersibles. <i>Journal of Fluids and Structures</i> , 2017, 72, 59-79.	3.4	16
27	Experimental and numerical study on vortex-induced motions of a deep-draft semi-submersible. <i>Applied Ocean Research</i> , 2017, 67, 169-187.	4.1	16
28	Hydrodynamic interactions of three barges in close proximity in a floatover installation. <i>China Ocean Engineering</i> , 2016, 30, 343-358.	1.6	15
29	A free surface interpolation approach for rapid simulation of short waves in meshless numerical wave tank based on the radial basis function. <i>Journal of Computational Physics</i> , 2016, 307, 203-224.	3.8	15
30	Experimental Research on Hydraulic Collecting Spherical Particles in Deep Sea Mining. <i>Energies</i> , 2018, 11, 1938.	3.1	15
31	Performance characteristics of nodule pick-up device based on spiral flow principle for deep-sea hydraulic collection. <i>Ocean Engineering</i> , 2021, 226, 108818.	4.3	15
32	A meshless numerical wave tank for simulation of nonlinear irregular waves in shallow water. <i>International Journal for Numerical Methods in Fluids</i> , 2009, 61, 165-184.	1.6	14
33	Experimental Investigation of Effects of Inner-Tank Sloshing on Hydrodynamics of an FLNG System. <i>Journal of Hydrodynamics</i> , 2012, 24, 107-115.	3.2	14
34	Frequency/time domain modeling of a direct drive point absorber wave energy converter. <i>Science China: Physics, Mechanics and Astronomy</i> , 2014, 57, 311-320.	5.1	14
35	Evaluation of long-term power capture performance of a bistable point absorber wave energy converter in South China Sea. <i>Ocean Engineering</i> , 2021, 237, 109338.	4.3	13
36	Full time-domain nonlinear coupled dynamic analysis of a truss spar and its mooring/riser system in irregular wave. <i>Science China: Physics, Mechanics and Astronomy</i> , 2014, 57, 152-165.	5.1	12

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37	Nonlinear coupling and instability of heave, roll and pitch motions of semi-submersibles with bracings. <i>Journal of Fluids and Structures</i> , 2018, 83, 171-193.	3.4	11
38	Severe wave run-ups on fixed surface-piercing square column under focused waves. <i>Physics of Fluids</i> , 2020, 32, .	4.0	11
39	Data-driven model and key features based on supervised learning for truncation design of mooring and riser system. <i>Ocean Engineering</i> , 2021, 224, 108743.	4.3	11
40	Feasibility studies of a novel spar-type floating wind turbine for moderate water depths: Hydrodynamic perspective with model test. <i>Ocean Engineering</i> , 2021, 233, 109070.	4.3	11
41	Experimental and numerical studies on the excitation loads and vortex structures of four circular section cylinders in a square configuration. <i>Ships and Offshore Structures</i> , 2016, 11, 734-746.	1.9	10
42	Experimental study on vortex-induced motions of a semi-submersible with square columns and pontoons at different draft conditions and current incidences. <i>International Journal of Naval Architecture and Ocean Engineering</i> , 2017, 9, 326-338.	2.3	10
43	Theoretical Research on Hydrodynamics of a Geometric Spar in Frequency-and Time-Domains. <i>Journal of Hydrodynamics</i> , 2008, 20, 30-38.	3.2	9
44	Probability Analysis of Wave Run-Ups and Air Gap Response of a Deepwater Semisubmersible Platform Using LH-Moments Estimation Method. <i>Journal of Waterway, Port, Coastal and Ocean Engineering</i> , 2016, 142, .	1.2	9
45	Experimental study on flow-induced motions of TLP focusing on effects of appendages and mass ratio. <i>Ocean Engineering</i> , 2020, 196, 106749.	4.3	9
46	Damping ratio identification using a continuous wavelet transform to vortex-induced motion of a Truss Spar. <i>Ships and Offshore Structures</i> , 2014, 9, 596-604.	1.9	8
47	Performance characteristics of a conceptual ring-shaped spar-type VLFS with double-layered perforated-wall breakwater. <i>Applied Ocean Research</i> , 2019, 86, 28-39.	4.1	8
48	Processing method and governing parameters for horizontal wave impact loads on a semi-submersible. <i>Marine Structures</i> , 2020, 69, 102673.	3.8	7
49	Experimental and numerical investigation of the roll motion behavior of a floating liquefied natural gas system. <i>Science China: Physics, Mechanics and Astronomy</i> , 2013, 56, 629-644.	5.1	6
50	Wave run-up on a fixed surface-piercing square column using multi-layer barrier. <i>Applied Ocean Research</i> , 2018, 71, 105-118.	4.1	6
51	Energy transformation on flow-induced motions of multiple cylindrical structures with various corner shapes. <i>Physics of Fluids</i> , 2020, 32, 027105.	4.0	6
52	Surge motion of a semi-submersible in freak waves. <i>Ships and Offshore Structures</i> , 2017, 12, 443-451.	1.9	5
53	Parametric study on power capture performance of an adaptive bistable point absorber wave energy converter in irregular waves. <i>Journal of Ocean Engineering and Science</i> , 2022, 7, 383-398.	4.3	5
54	Model Test Verification of a Cell Truss Spar Using Hybrid Model Testing Technique. , 2007, , 141.		4

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55	Study on added mass coefficient and oscillation frequency for a Truss Spar subjected to Vortex-Induced Motions. <i>Ships and Offshore Structures</i> , 2014, 9, 54-63.	1.9	4
56	An efficient focusing model of freak wave generation considering wave reflection effects. <i>Ocean Engineering</i> , 2015, 105, 125-135.	4.3	4
57	Shallow water effects on high order statistics and probability distributions of wave run-ups along FPSO broadside. <i>Marine Structures</i> , 2015, 41, 1-19.	3.8	4
58	Study on the effects of mooring system stiffness on air gap response. <i>Ocean Engineering</i> , 2021, 239, 109798.	4.3	4
59	Probability analysis and parameter estimation for nonlinear relative wave motions on a semi-submersible using the method of LH-moments. <i>Ships and Offshore Structures</i> , 2016, 11, 720-733.	1.9	3
60	LH-moment estimation for statistical analysis on the wave crest distributions of a deepwater spar platform model test. <i>Marine Structures</i> , 2017, 52, 15-33.	3.8	3
61	Spatial distribution and interference of wave impact loads among structural components of a semi-submersible. <i>Ocean Engineering</i> , 2020, 212, 107671.	4.3	3
62	Effects of the position of pipe-type appendages on the flow induced motions, energy transformation, and drag force of a TLP. <i>Applied Ocean Research</i> , 2021, 106, 102464.	4.1	3
63	Research on Collision Mechanism for a Ship Colliding With a Spar Platform. , 2007, , .		3
64	Experimental and Numerical Study on Large Truncation of Deepwater Mooring Line. , 2009, , .		2
65	Hybrid model testing using pre-offset and asymmetric truncation design for deepwater semi-submersible with highly compliant mooring system. <i>Journal of Marine Science and Technology</i> , 2018, 23, 536-556.	2.9	2
66	Effects of column shape and configuration on the vortex-induced motions of semi-submersibles. <i>Marine Structures</i> , 2020, 72, 102773.	3.8	2
67	Numerical studies on flow-induced motions of a semi-submersible with three circular columns. <i>International Journal of Naval Architecture and Ocean Engineering</i> , 2021, 13, 599-616.	2.3	2
68	Low Frequency Wave Forces and Wave Induced Motions of a FPSO in Shallow Water. , 2007, , 37.		1
69	Analysis on Low Frequency Heave, Roll and Pitch Motions of a Deepwater Semisubmersible. , 2009, , .		1
70	Numerical Study of Air Gap Response and Wave Impact Load on a Moored Semi-Submersible Platform in Predetermined Irregular Wave Train. , 2010, , .		1
71	Experimental and Numerical Study on Flow Past Four Rectangular Columns in Diamond Configuration. , 2016, , .		1
72	Influence of the Draft Condition on Vortex-Induced Motions of a Semi-Submersible Platform With Four Square Columns. , 2016, , .		1

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73	Influence of Wave Group Characteristics on the Motion of a Semisubmersible in Freak Waves. , 2014, , .		1
74	Parametric study of wave impact pressure impulse and characteristic pressure on a square column with overhanging deck. Ocean Engineering, 2022, 258, 111722.	4.3	1
75	Global Strength Assessment for Semi-Submersible Column After Supply Vessel Collision Accident. , 2009, , .		0
76	Numerical Study on Vortex-Induced Motions of Semi-Submersibles With Various Types of Columns. , 2017, , .		0
77	Experimental Study on Wet Tow and Upending of a Truss Spar. , 2011, , .		0