Wei Chai

List of Publications by Year
in descending order

35 papers	**445** citations	687363 **13** h-index	752698 **20** g-index
37 all docs	**37** docs citations	**37** times ranked	**246** citing authors

#	Article	IF	Citations
1	Environmental contours based on inverse SORM. Marine Structures, 2018, 60, 34-51.	3.8	62
2	A comparison of extreme structural responses and fatigue damage of semi-submersible type floating horizontal and vertical axis wind turbines. Renewable Energy, 2017, 108, 207-219.	8.9	54
3	Filter models for prediction of stochastic ship roll response. Probabilistic Engineering Mechanics, 2015, 41, 104-114.	2.7	33
4	Stochastic Dynamic Analysis and Reliability of a Vessel Rolling in Random Beam Seas. Journal of Ship Research, 2015, 59, 113-131.	1.1	32
5	Stochastic nonlinear ship rolling in random beam seas by the path integration method. Probabilistic Engineering Mechanics, 2016, 44, 43-52.	2.7	30
6	Probabilistic methods for estimation of the extreme value statistics of ship ice loads. Cold Regions Science and Technology, 2018, 146, 87-97.	3.5	29
7	A benchmarking exercise for environmental contours. Ocean Engineering, 2021, 236, 109504.	4.3	26
8	Short-term extreme ice loads prediction and fatigue damage evaluation for an icebreaker. Ships and Offshore Structures, 2018, 13, 127-137.	1.9	23
9	Stochastic dynamics of a nonlinear time-varying spur gear model using an adaptive time-stepping path integration method. Journal of Sound and Vibration, 2019, 447, 170-185.	3.9	20
10	Efficient Monte Carlo simulation and Grim effective wave model for predicting the extreme response of a vessel rolling in random head seas. Ocean Engineering, 2016, 123, 191-203.	4.3	19
11	Uncertainty assessments of structural loading due to first year ice based on the ISO standard by using Monte-Carlo simulation. Ocean Engineering, 2020, 198, 106935.	4.3	16
12	Simulation of the interaction between ship and ducted propeller with a modified body force method. Ocean Engineering, 2022, 249, 110950.	4.3	14
13	Comparative study of short-term extreme responses and fatigue damages of a floating wind turbine using two different blade models. Applied Ocean Research, 2020, 97, 102088.	4.1	13
14	Statistics of thickness and strength of first-year ice along the Northern Sea Route. Journal of Marine Science and Technology, 2021, 26, 331-343.	2.9	10
15	A comparative study of the stochastic averaging method and the path integration method for nonlinear ship roll motion in random beam seas. Journal of Marine Science and Technology, 2018, 23, 854-865.	2.9	9
16	Stochastic roll response for a vessel with nonlinear damping models and steady heeling angles in random beam seas. Ocean Engineering, 2016, 120, 202-211.	4.3	7
17	Organogelators based on p-alkoxylbenzamide and their self-assembling properties. Frontiers of Chemical Science and Engineering, 2015, 9, 488-493.	4.4	6
18	Reliability evaluation of the roll motion under the wind and irregular beam waves. Journal of Ocean Engineering and Science, 2016, 1, 149-156.	4.3	6

#	Article	IF	Citations
19	Development of environmental contours for first-year ice ridge statistics. Structural Safety, 2020, 87, 101996.	5.3	5
20	Assessment of methods for short-term analysis of riser collision probability. Ocean Engineering, 2021, 238, 109221.	4.3	5
21	Long-Term Extreme Response and Reliability of a Vessel Rolling in Random Beam Seas. Journal of Offshore Mechanics and Arctic Engineering, 2018, 140, .	1.2	4
22	Application of a sea surface roughness formula using joint statistics of significant wave height and spectral wave steepness. Journal of Ocean Engineering and Marine Energy, 2020, 6, 91-97.	1.7	4
23	On Characteristics of Ice Ridges and Icebergs for Design of Ship Hulls in Polar Regions Based on Environmental Design Contours. Applied Sciences (Switzerland), 2021, 11, 5749.	2.5	4
24	Short-term extreme mooring loads prediction and fatigue damage evaluation for station-keeping trials in ice. Ocean Engineering, 2021, 242, 109930.	4.3	4
25	Comparative Study of the Path Integration Method and the Stochastic Averaging Method for Nonlinear Roll Motion in Random Beam Seas. Procedia Engineering, 2017, 199, 1110-1121.	1.2	3
26	Numerical Prediction of Ship-Ice Interaction: A Project Presentation. , 2017, , .		3
27	Estimation of Ice Conditions Along the Northern Sea Route. Lecture Notes in Civil Engineering, 2021, , 397-408.	0.4	1
28	Extreme Value Estimation of Mooring Loads Based on Station-Keeping Trials in Ice. , 2020, , .		1
29	Extreme Value Estimation of Beaufort Sea Ice Dynamics Driven by Global Wind Effects. China Ocean Engineering, 0, , 1.	1.6	1
30	Stochastic dynamic analysis and reliability evaluation for a heeling vessel rolling in random beam seas. , 2015, , 1167-1175.		0
31	Long-Term Extreme Response of a Vessel Rolling in Random Seas. , 2016, , .		0
32	Probabilistic Fatigue Assessment of a Mooring Line Based on Station-Keeping Trials in Ice. , 2021, , .		0
33	FOUR-DIMENSIONAL PATH INTEGRATION METHOD FOR ESTIMATING THE STOCHASTIC ROLL RESPONSE. , 2016, , .		0
34	Stochastic Dynamic Analysis of Marine Structures. , 2018, , 76-131.		0
35	Probabilistic Aspects for Ice Loads on Ships. , 2022, , 1405-1411.		0