

Wengang Mao

List of Publications by Year in descending order

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papers

566
citations

687363

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45
all docs

45
docs citations

45
times ranked

276
citing authors

#	ARTICLE	IF	CITATIONS
1	A Three-Dimensional Dijkstra's algorithm for multi-objective ship voyage optimization. Ocean Engineering, 2019, 186, 106131.	4.3	85
2	Data-driven ship energy efficiency analysis and optimization model for route planning in ice-covered Arctic waters. Ocean Engineering, 2019, 186, 106071.	4.3	60
3	Statistical models for the speed prediction of a container ship. Ocean Engineering, 2016, 126, 152-162.	4.3	49
4	Analysis of uncertainties in the prediction of ships' fuel consumption " from early design to operation conditions. Ships and Offshore Structures, 2018, 13, 13-24.	1.9	42
5	An integrated risk assessment model for safe Arctic navigation. Transportation Research, Part A: Policy and Practice, 2020, 142, 101-114.	4.2	32
6	Two-phase energy efficiency optimisation for ships using parallel hybrid electric propulsion system. Ocean Engineering, 2021, 238, 109733.	4.3	31
7	Development of a Fatigue Model Useful in Ship Routing Design. Journal of Ship Research, 2010, 54, 281-293.	1.1	28
8	Voyage optimization combining genetic algorithm and dynamic programming for fuel/emissions reduction. Transportation Research, Part D: Transport and Environment, 2021, 90, 102670.	6.8	27
9	A comparative study of fatigue assessments of container ship structures using various direct calculation approaches. Ocean Engineering, 2014, 82, 65-74.	4.3	26
10	Comparison of supervised machine learning methods to predict ship propulsion power at sea. Ocean Engineering, 2022, 245, 110387.	4.3	26
11	A semi-empirical model for ship speed loss prediction at head sea and its validation by full-scale measurements. Ocean Engineering, 2020, 209, 107494.	4.3	25
12	Effectiveness of 2D optimization algorithms considering voluntary speed reduction under uncertain metocean conditions. Ocean Engineering, 2020, 200, 107063.	4.3	14
13	Comparison of two statistical wave models for fatigue and fracture analysis of ship structures. Ocean Engineering, 2019, 187, 106161.	4.3	13
14	Development of a Spectral Method and a Statistical Wave Model for Crack Propagation Prediction in Ship Structures. Journal of Ship Research, 2014, 58, 106-116.	1.1	11
15	A Practical Speed Loss Prediction Model at Arbitrary Wave Heading for Ship Voyage Optimization. Journal of Marine Science and Application, 2021, 20, 410-425.	1.7	10
16	Benchmark Study of Five Optimization Algorithms for Weather Routing., 2017, , .		9
17	Estimation of Weibull distribution for wind speeds along ship routes. Proceedings of the Institution of Mechanical Engineers Part M: Journal of Engineering for the Maritime Environment, 2017, 231, 464-480.	0.5	9
18	Theoretical development and validation of a fatigue model for ship routing. Ships and Offshore Structures, 2012, 7, 399-415.	1.9	8

#	ARTICLE	IF	CITATIONS
19	Estimation of Extreme Ship Response. Journal of Ship Research, 2012, 56, 23-34.	1.1	7
20	A regression and beam theory based approach for fatigue assessment of containership structures including bending and torsion contributions. Marine Structures, 2015, 41, 244-266.	3.8	7
21	A comparison of ship manoeuvrability models to approximate ship navigation trajectories. Ships and Offshore Structures, 2023, 18, 550-557.	1.9	6
22	Application of a ship-routing fatigue model to case studies of 2800 TEU and 4400 TEU container vessels. Proceedings of the Institution of Mechanical Engineers Part M: Journal of Engineering for the Maritime Environment, 2012, 226, 222-234.	0.5	5
23	Stochastic spatio-temporal model for wind speed variation in the Arctic. Ocean Engineering, 2018, 165, 237-251.	4.3	4
24	Spatio-temporal modelling of wind speed variations and extremes in the Caribbean and the Gulf of Mexico. Theoretical and Applied Climatology, 2019, 135, 921-944.	2.8	4
25	The Effect of Whipping/Springing on Fatigue Damage and Extreme Response of Ship Structures. , 2010, , .		3
26	Ship heading control based on backstepping and Least squares support vector machine. , 2017, , .		3
27	Impact of ship operations aided by voyage optimization on a ship's fatigue assessment. Journal of Marine Science and Technology, 2020, 26, 750.	2.9	3
28	Comparison Between a Fatigue Model for Voyage Planning and Measurements of a Container Vessel. , 2009, , .		3
29	A Comparison of Two Wave Models and Their Influence on Fatigue Damage in Ship Structures. , 2013, , .		3
30	Uncertainty in Stress Concentration Factor Computation for Ship Fatigue Design. , 2014, , .		2
31	Analysis of roll damping model scale data. Ships and Offshore Structures, 2021, 16, 85-92.	1.9	2
32	Probabilistic Model for Wind Speed Variability Encountered by a Vessel. Natural Resources, 2014, 05, 837-855.	0.4	2
33	Estimation of Wave Loading Induced Fatigue Accumulation and Extreme Response of a Container Ship in Severe Seas. , 2010, , .		2
34	Assessment of Full-Scale Measurements With Regard to Extreme Hogging and Sagging Condition of Container Ships. , 2011, , .		1
35	Fatigue Variation in Ships due to the Variability of Environmental Loads. , 2012, , .		1
36	Notes on the Prediction of Extreme Ship Response. Journal of Offshore Mechanics and Arctic Engineering, 2013, 135, .	1.2	1

#	ARTICLE	IF	CITATIONS
37	Influence of Different Wave Load Sequence Models on Fatigue Life Prediction of Ship Structures Based on Fracture Mechanics Approach. , 2016, , .		1
38	Voyage optimization for mitigating ship structural failure due to crack propagation. Proceedings of the Institution of Mechanical Engineers, Part O: Journal of Risk and Reliability, 2019, 233, 5-17.	0.7	1
39	A Comparison of Direct Calculation Approaches Applied on the Fatigue Strength Assessment of a Panamax Container Ship. , 2012, , .		0
40	An Efficient Direct Calculation Approach for Fatigue Assessment of Container Ships Concerning Bending and Warping Stresses. , 2014, , .		0
41	Uncertainties of Crack Propagation Analysis in Ship Structures. , 2016, , .		0
42	EONav - Copernicus Data in Support of Maritime Route Optimization. , 2018, , .		0
43	Fatigue Damage Assessment of Container Ships Concerning Wave-Induced Torsion. , 2010, , .		0
44	Ship Operational Environment. , 2020, , 1-11.		0
45	Ship Operational Environment. , 2022, , 1628-1639.		0