

Tomoaki Utsunomiya

List of Publications by Year in descending order

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Version: 2024-02-01

100
papers

1,348
citations

430754

18
h-index

377752

34
g-index

101
all docs

101
docs citations

101
times ranked

671
citing authors

#	ARTICLE	IF	CITATIONS
1	Hydroelastic analysis of pontoon-type VLFS: a literature survey. <i>Engineering Structures</i> , 2004, 26, 245-256.	2.6	272
2	Review of recent research and developments on floating breakwaters. <i>Ocean Engineering</i> , 2018, 158, 132-151.	1.9	137
3	An eigenfunction expansion-matching method for analyzing the wave-induced responses of an elastic floating plate. <i>Applied Ocean Research</i> , 1995, 17, 301-310.	1.8	118
4	Research on floating wind turbines: a literature survey. <i>IES Journal Part A: Civil and Structural Engineering</i> , 2010, 3, 267-277.	0.4	53
5	Benchmark hydroelastic responses of a circular VLFS under wave action. <i>Engineering Structures</i> , 2006, 28, 423-430.	2.6	42
6	Hydroelastic responses and interactions of floating fuel storage modules placed side-by-side with floating breakwaters. <i>Marine Structures</i> , 2009, 22, 633-658.	1.6	39
7	Trapped modes around a row of circular cylinders in a channel. <i>Journal of Fluid Mechanics</i> , 1999, 386, 259-279.	1.4	36
8	Analysis and design of floating bridges. <i>Structural Control and Health Monitoring</i> , 2003, 5, 127-144.	0.7	36
9	Stability based approach to design cold-water pipe (CWP) for ocean thermal energy conversion (OTEC). <i>Applied Ocean Research</i> , 2019, 92, 101921.	1.8	34
10	Experimental Validation for Motion of a SPAR-Type Floating Offshore Wind Turbine Using 1/22.5 Scale Model. , 2009, , .		33
11	At Sea Experiment of a Hybrid Spar for Floating Offshore Wind Turbine Using 1/10-Scale Model. <i>Journal of Offshore Mechanics and Arctic Engineering</i> , 2013, 135, .	0.6	33
12	Reformulation of XFEM based on PUFEM for solving problem caused by blending elements. <i>Finite Elements in Analysis and Design</i> , 2009, 45, 806-816.	1.7	32
13	Preliminary design of a 100MW-net ocean thermal energy conversion (OTEC) power plant study case: Mentawai island, Indonesia. <i>Journal of Marine Science and Technology</i> , 2020, 25, 48-68.	1.3	32
14	Evaluation of modal stress resultants in freely vibrating plates. <i>International Journal of Solids and Structures</i> , 2001, 38, 6525-6558.	1.3	25
15	Hydroelastic analysis of pontoon-type circular VLFS with an attached submerged plate. <i>Applied Ocean Research</i> , 2008, 30, 287-296.	1.8	24
16	Validation of dynamic response of a 2-MW hybrid-spar floating wind turbine during typhoon using full-scale field data. <i>Ocean Engineering</i> , 2020, 218, 108262.	1.9	21
17	SHEAR BUCKLING OF CORRUGATED PLATES WITH EDGES ELASTICALLY RESTRAINED AGAINST ROTATION. <i>International Journal of Structural Stability and Dynamics</i> , 2004, 04, 89-104.	1.5	20
18	Hydrodynamic forces on a rolling barge with bilge keels. <i>Applied Ocean Research</i> , 2010, 32, 219-232.	1.8	20

#	ARTICLE	IF	CITATIONS
19	Dynamic Analysis of a Floating Offshore Wind Turbine Under Extreme Environmental Conditions. Journal of Offshore Mechanics and Arctic Engineering, 2014, 136, .	0.6	20
20	DEVELOPMENT OF 3D ELASTODYNAMIC INFINITE ELEMENTS FOR SOIL-STRUCTURE INTERACTION PROBLEMS. International Journal of Structural Stability and Dynamics, 2004, 04, 423-441.	1.5	18
21	Mode shapes and stress-resultants of circular Mindlin plates with free edges. Journal of Sound and Vibration, 2004, 276, 511-525.	2.1	18
22	ANALYSIS OF CORRUGATED STEEL WEB GIRDERS BY AN EFFICIENT BEAM BENDING THEORY. Structural Engineering/Earthquake Engineering, 2004, 21, 131S-142S.	0.3	18
23	Dynamic Response Analysis of a Floating Offshore Wind Turbine During Severe Typhoon Event. , 2013, , .		16
24	Linear vs non-linear analysis on self-induced vibration of OTEC cold water pipe due to internal flow. Applied Ocean Research, 2021, 110, 102610.	1.8	16
25	Motion analysis of a floating offshore wind turbine considering rotor-rotation. IES Journal Part A: Civil and Structural Engineering, 2008, 1, 268-279.	0.4	14
26	On Sea Experiment of a Hybrid SPAR for Floating Offshore Wind Turbine Using 1/10 Scale Model. , 2010, , .		14
27	Analysis of wave-drift damping of a VLFS with shallow draft. Marine Structures, 2000, 13, 383-397.	1.6	12
28	At-Sea Experiment of a Hybrid SPAR Type Offshore Wind Turbine. , 2013, , .		12
29	VIBRATION-BASED DAMAGE DETECTION IN FLEXIBLE RISERS USING TIME SERIES ANALYSIS. Doboku Gakkai Ronbunshuu A, 2007, 63, 423-433.	0.3	9
30	Evaluation on reproduction of priori knowledge in XFEM. Finite Elements in Analysis and Design, 2011, 47, 424-433.	1.7	9
31	Model Experiment of a SPAR Type Offshore Wind Turbine in Storm Condition. , 2012, , .		9
32	Design and Installation of a Hybrid-Spar Floating Wind Turbine Platform. , 2015, , .		8
33	HARMONIC WAVE RESPONSE ANALYSIS OF ELASTIC FLOATING PLATES BY MODAL SUPERPOSITION METHOD. Doboku Gakkai Ronbunshu, 1997, 1997, 43-52.	0.2	7
34	RESONANCES IN WAVE DIFFRACTION/RADIATION FOR ARRAYS OF ELASTICALLY CONNECTED CYLINDERS. Journal of Fluids and Structures, 2000, 14, 1035-1051.	1.5	7
35	LSFD method for accurate vibration modes and modal stress-resultants of freely vibrating plates that model VLFS. Computers and Structures, 2006, 84, 2329-2339.	2.4	7
36	Floating offshore wind turbine demonstration project at Goto Islands, Japan. , 2014, , .		7

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37	Dynamic Response of a Spar-Type Floating Wind Turbine at Power Generation. , 2014, , .		7
38	Experimental results of floating platform vibration control with mode change function using full-scale spar-type floating offshore wind turbine. Wind Engineering, 2018, 42, 230-242.	1.1	7
39	ELASTO-PLASTIC ANALYSIS OF PC GIRDER WITH CORRUGATED STEEL WEB BY AN EFFICIENT BEAM THEORY. Structural Engineering/Earthquake Engineering, 2006, 23, 257s-268s.	0.3	6
40	Response prediction of long flexible risers subject to forced harmonic vibration. Journal of Marine Science and Technology, 2010, 15, 44-53.	1.3	6
41	An explicit application of partition of unity approach to XFEM approximation for precise reproduction of <i>a priori</i> knowledge of solution. International Journal for Numerical Methods in Engineering, 2014, 97, 551-581.	1.5	6
42	Numerical Modeling and Analysis of a Hybrid-Spar Floating Wind Turbine. Journal of Offshore Mechanics and Arctic Engineering, 2019, 141, .	0.6	6
43	Development of interlink wear estimation method for mooring chain of floating structures: Validation and new approach using three-dimensional contact response. Marine Structures, 2021, 77, 102927.	1.6	6
44	Coupled response characteristics of cold water pipe and moored ship for floating OTEC plant. Applied Ocean Research, 2022, 123, 103151.	1.8	6
45	CURVED-CRACK MODELING BY X-FEM AND ITS APPLICATION FOR SIMULATION OF CRACK GROWTH. Doboku Gakkai Ronbunshuu A, 2007, 63, 108-121.	0.3	5
46	PROPOSAL ON APPROXIMATION OF PATH-INDEPENDENT M-INTEGRAL BY MAPPING AND ANALYSES OF KINKED OR CURVED CRACK USING X-FEM. Doboku Gakkai Ronbunshuu A, 2008, 64, 303-316.	0.3	5
47	Effect of stress on the law of approach to saturation magnetization in carbon steels. IEEE Transactions on Magnetics, 1991, 27, 3420-3425.	1.2	4
48	Analysis of the slowly varying drift force on a very large floating structure in multidirectional random seas. Journal of Marine Science and Technology, 2006, 11, 229-236.	1.3	3
49	Title is missing!. Proceedings of Civil Engineering in the Ocean, 2008, 24, 135-140.	0.0	3
50	EVALUATION OF BLENDING ELEMENTS IN XFEM ON CRACK ANALYSIS AND PROPOSAL FOR IMPROVEMENT OF ANALYTICAL ACCURACY. Doboku Gakkai Ronbunshuu A, 2008, 64, 970-981.	0.3	3
51	Dynamic Analysis of a Floating Offshore Wind Turbine Under Extreme Environmental Conditions. , 2012, , .		3
52	A study on the platform-pitching vibration of floating offshore wind turbines based on classical control theory. Wind Engineering, 2020, 44, 610-630.	1.1	3
53	State-of-the-Art. Green Energy and Technology, 2016, , 271-331.	0.4	3
54	EXPERIMENT ON MOTIONS OF ELASTIC FLOATING BRIDGE IN WINDS AND WAVES. Doboku Gakkai Ronbunshuu A, 2007, 63, 206-219.	0.3	3

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55	At-Sea Experiment on Durability and Residual Strength of Polyester Rope for Mooring of Floating Wind Turbine. , 2019, , .		3
56	ANALYSIS OF CORRUGATED STEEL WEB GIRDERS BY AN EFFICIENT BEAM BENDING THEORY. Doboku Gakkai Ronbunshu, 2004, 2004, 19-30.	0.2	2
57	Evaluation of Viscous Forces Acting on A Moving Body by Navier-Stokes Solver. , 2008, , .		2
58	Heaving response of a large floating platform. IES Journal Part A: Civil and Structural Engineering, 2008, 1, 97-105.	0.4	2
59	FORMULATION OF XFEM BASED ON PUFEM FOR AVOIDING PROBLEM CAUSED BY BLENDING ELEMENTS. Doboku Gakkai Ronbunshuu A, 2009, 65, 228-242.	0.3	2
60	Demonstration Test for Using Suction Anchor and Polyester Rope in Floating Offshore Wind Turbine. , 2017, , .		2
61	Effect of Tensile Force for Wear Performance of Mooring Chain. , 2018, , .		2
62	Experimental Study on Specific Wear of Mooring Chain for Floating Structure. Journal of the Japan Society of Naval Architects and Ocean Engineers, 2018, 28, 145-154.	0.2	2
63	Proposal for a lower limit control of a generator's torque based on the nacelle wind speed and demonstration results using a full-scale spar-type floating offshore wind turbine. Wind Engineering, 2020, 44, 645-660.	1.1	2
64	Irregular Frequency Removal and Convergence in Higher-Order BEM for Wave Diffraction/Radiation Analysis. , 2019, , .		2
65	Non-destructive measurement of stress in steel by magnetic sensor acting under high biasing field.. Zairyo/Journal of the Society of Materials Science, Japan, 1988, 37, 626-630.	0.1	2
66	Biaxial stress measurement using a magnetic probe based on the law of approach to saturation magnetization. NDT and E International, 1991, 24, 91-94.	1.7	1
67	WAVE RESPONSE ANALYSIS OF A FLEXIBLE FLOATING STRUCTURE BY A SIMPLE BEAM MODEL. Doboku Gakkai Ronbunshu, 1995, 1995, 309-317.	0.2	1
68	Development of Higher Order BEM Program for Wave Response Analysis of Very Large Floating Structures. Proceedings of Civil Engineering in the Ocean, 1997, 13, 201-206.	0.0	1
69	Wave Response Analysis of a Very Large Floating Structure Close to a Breakwater. Proceedings of Civil Engineering in the Ocean, 1998, 14, 149-154.	0.0	1
70	DEVELOPMENT OF A PROGRAM FOR DYNAMIC RESPONSE SIMULATION OF A FLOATING BRIDGE SUBJECTED TO BOTH WINDS AND WAVES. Doboku Gakkai Ronbunshuu A, 2006, 62, 729-739.	0.3	1
71	Effectiveness of GMRES-DR and OSP-ILUC for wave diffraction analysis of a very large floating structure (VLFS). Engineering Analysis With Boundary Elements, 2006, 30, 49-58.	2.0	1
72	Design Optimization of Floating Structure for a 100 MW-Net Ocean Thermal Energy Conversion (OTEC) Power Plant. , 2018, , .		1

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73	Effects of Carbon and Plastic Strain on Stress Measurement of Steel Based on the Law of Approach to Saturation Magnetization.. Zairyo/Journal of the Society of Materials Science, Japan, 1991, 40, 832-836.	0.1	1
74	Title is missing!. Proceedings of Civil Engineering in the Ocean, 2007, 23, 919-924.	0.0	1
75	Stability Analysis of Free Hanging Riser Conveying Fluid for Ocean Thermal Energy Conversion (OTEC) Utilization. , 2019, , .		1
76	Experiment and Analysis of Wave Response of a Large Flexible Floating Structure. Proceedings of Civil Engineering in the Ocean, 1995, 11, 363-368.	0.0	0
77	Shape Effect of Floating Foundations to Wave Response of a Floating Bridge. Proceedings of Civil Engineering in the Ocean, 1995, 11, 333-338.	0.0	0
78	Wave Equation under Elastic Floating Body. Proceedings of Civil Engineering in the Ocean, 1995, 11, 357-361.	0.0	0
79	Wave Response of Bridges with Independent Column-type Floating Foundations. Proceedings of Civil Engineering in the Ocean, 1996, 12, 157-160.	0.0	0
80	Wave Response Analysis of a Full Scale Floating Bridge Considering Fender Nonlinearity and Elastic Deformation of Structural System. Proceedings of Civil Engineering in the Ocean, 1997, 13, 207-212.	0.0	0
81	Wave response analysis of a floating bridge for strait crossing. Proceedings of Civil Engineering in the Ocean, 1998, 14, 155-160.	0.0	0
82	ELASTO-PLASTIC ANALYSIS OF PC GIRDER WITH CORRUGATED STEEL WEB BY AN EFFICIENT BEAM THEORY. Doboku Gakkai Ronbunshuu A, 2006, 62, 393-404.	0.3	0
83	IMPROVEMENT OF CALCULATION ACCURACY OF WAVE DRIFT FORCES ACTING ON A MARINE STRUCTURE. Proceedings of Civil Engineering in the Ocean, 2006, 22, 673-678.	0.0	0
84	Hydroelastic Analysis of a Hybrid-Type VLFS in Water of Variable Depth. , 2008, , .		0
85	Experimental Validation of Hydroelastic Analysis of Pontoon-, Semisubmersible- and Hybrid-Type VLFS. , 2008, , .		0
86	MOTION ANALYSIS OF A FLOATING OFFSHORE WIND TURBINE DURING THE ROTOR-ROTATION UNDER WIND LOADS. Proceedings of Civil Engineering in the Ocean, 2008, 24, 141-146.	0.0	0
87	Study on Parametric Excitation of a Spar Platform. Journal of Japan Society of Civil Engineers Ser A2 (Applied Mechanics (AM)), 2012, 68, I_813-I_822.	0.1	0
88	Numerical Modelling and Analysis of a Hybrid-Spar Floating Wind Turbine. , 2017, , .		0
89	On-Site Measurement and Numerical Modelling of a Lifting Operation for Caissons Using Floating Crane. , 2018, , .		0
90	Quantitative Wear Estimation for Mooring Chain of Floating Structures and Its Validation. Journal of the Japan Society of Naval Architects and Ocean Engineers, 2019, 30, 131-141.	0.2	0

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91	WAVE DIFFRACTION ANALYSIS FOR A VERY LARGE FLOATING STRUCTURE BY ACCELERATED GREEN'S FUNCTION METHOD IN INFINITE WATER DEPTH. Doboku Gakkai Ronbunshuu A, 2006, 62, 143-152.	0.3	0
92	VIBRATION-BASED DAMAGE DETECTION IN FLEXIBLE RISERS USING TIME SERIES ANALYSIS. Structural Engineering/Earthquake Engineering, 2007, 24, 62s-72s.	0.3	0
93	A STUDY ON REPRODUCIBILITY OF PRIORI KNOWLEDGE IN CRACK ANNALISIS BY THE XFEM. Doboku Gakkai Ronbunshuu A, 2009, 65, 955-960.	0.3	0
94	A magnetic method for measuring stress based on law of approach to saturation magnetization.. Journal of Advanced Science, 1989, 1, 79-81.	0.1	0
95	Comparison of Dynamic Response in a 2MW Floating Offshore Wind Turbine During Typhoon Approaches. , 2019, , .		0
96	Quantitative Wear Estimation for Mooring Chain of Floating Structures and its Validation. , 2019, , .		0
97	Wear Performance of Mooring Chain in Wet Environment With Substitute Ocean Water. , 2019, , .		0
98	A Study on Coupled Behavior Analysis and Position Keeping System for OTEC Plantship and Cold Water Pipe. Journal of the Japan Society of Naval Architects and Ocean Engineers, 2020, 32, 193-207.	0.2	0
99	Floating Offshore Wind Turbines in Goto Islands, Nagasaki, Japan. Lecture Notes in Civil Engineering, 2020, , 103-113.	0.3	0
100	Experimental Study on Wear Coefficient of Mooring Chain for Floating Offshore Structures. Journal of the Japan Society of Naval Architects and Ocean Engineers, 2021, 34, 63-71.	0.2	0