Breno Jacob

List of Publications by Year
in descending order

75 papers	808 citations	471371 17 h-index	552653 26 g-index
76 all docs	76 docs citations	76 times ranked	358 citing authors

#	Article	IF	Citations
1	Optimization of mooring systems in the context of an integrated design methodology. Marine Structures, 2021, 75, 102874.	1.6	10
2	An Enhanced Semi-Coupled Methodology for the Analysis and Design of Floating Production Systems. Journal of Offshore Mechanics and Arctic Engineering, 2021, 143, .	0.6	2
3	Numerical evaluation of a subsea equipment installation method designed to avoid resonant responses. Applied Ocean Research, 2019, 88, 288-305.	1.8	13
4	A semi-coupled methodology for the motion analysis of floating production systems. Ships and Offshore Structures, 2019, 14, 363-370.	0.9	2
5	Studies on Meta-Modeling for Lazy-Wave Steel Catenary Risers. , 2018, , .		0
6	Optimal Design of Submarine Pipelines by a Genetic Algorithm with Embedded On-Bottom Stability Criteria. Mathematical Problems in Engineering, 2018, 2018, 1-21.	0.6	13
7	A rank-based constraint handling technique for engineering design optimization problems solved by genetic algorithms. Computers and Structures, 2017, 187, 77-87.	2.4	54
8	OTIMROTA-Multiline: Computational Tool for the Conceptual Design of Subsea Production Systems. , 2017, , .		3
9	Optimization of Mooring Systems for Floating Offshore Platforms Considering Seabed Obstacles. , 2017, , .		0
10	Multi-Objective Optimization of Subsea Pipeline Routes in Shallow Waters. , 2017, , .		4
11	Toward a methodology for the optimal design of mooring systems for floating offshore platforms using evolutionary algorithms. Marine Systems and Ocean Technology, 2016, 11, 55-67.	0.5	13
12	Artificial Neural Networks for the analysis of spread¿¿mooring configurations for floating production systems. Applied Ocean Research, 2016, 59, 254-264.	1.8	20
13	Development of Operational Limit Diagrams for Offshore Lifting Procedures. , 2015, , .		1
14	Optimization of Submarine Pipeline Routes Considering Slope Stability. , 2015, , .		6
15	A reduced integration method for the coupled analysis of floating production systems. Ocean Engineering, 2015, 104, 422-436.	1.9	7
16	An integrated methodology for the design of mooring systems and risers. Marine Structures, 2014, 39, 395-423.	1.6	37
17	Optimal design of submarine pipeline routes by genetic algorithm with different constraint handling techniques. Advances in Engineering Software, 2014, 76, 110-124.	1.8	53
18	ANN and wavelet network meta-models for the coupled analysis of floating production systems. Applied Ocean Research, 2014, 48, 21-32.	1.8	20

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19	Wavelet network meta-models for the analysis of slender offshore structures. Engineering Structures, 2014, 68, 71-84.	2.6	23
20	Incorporating Engineering Criteria to the Synthesis and Optimization of Submarine Pipeline Routes: On-Bottom Stability, VIV-Induced Fatigue and Multiphase Flow. , 2014, , .		7
21	An Evaluation of the Semi-Coupled Scheme for the Analysis of Floating Production Systems. , 2014, , .		1
22	ANN-based surrogate models for the analysis of mooring lines and risers. Applied Ocean Research, 2013, 41, 76-86.	1.8	64
23	Numerical Tool for Automatic Identification of Free Spans on Submarine Pipelines. , 2013, , .		1
24	Synthesis and Optimization of Submarine Pipeline Routes Considering VIV-Induced Fatigue on Free Spans. , 2013, , .		3
25	Semi-Coupled Scheme for the Analysis of Floating Production Systems. , 2013, , .		2
26	Mooring Optimization of Offshore Floating Systems Using an Improved Particle Swarm Optimization Method. , 2013, , .		0
27	Evaluation of Safe and Failure Zones of Risers and Mooring Lines of Floating Production Systems. , 2013, , .		3
28	Parallel implementations of coupled formulations for the analysis of floating production systems, part I: Coupling formulations. Ocean Engineering, 2012, 55, 206-218.	1.9	34
29	Parallel implementations of coupled formulations for the analysis of floating production systems, Part II: Domain decomposition strategies. Ocean Engineering, 2012, 55, 219-234.	1.9	21
30	Bioâ€inspired algorithms for the optimization of offshore oil production systems. International Journal for Numerical Methods in Engineering, 2012, 91, 1023-1044.	1.5	26
31	Application of Parametric Surfaces in Contact Assessment Between Two Floaters in Side by Side Operations. , 2012, , .		0
32	An Integrated Methodology for the Design of Mooring Systems and Risers of Floating Production Platforms. , 2012, , .		3
33	Synthesis and Optimization of Submarine Pipeline Routes Considering On-Bottom Stability Criteria. , 2011, , .		7
34	An Efficient Time-Frequency Domain Solution Procedure for the Analysis of Offshore System. , 2011, , .		0
35	Tailoring the particle swarm optimization algorithm forÂtheÂdesign of offshore oil production risers. Optimization and Engineering, 2011, 12, 215-235.	1.3	39
36	Procedures for the strain based assessment of pipeline dents. International Journal of Pressure Vessels and Piping, 2010, 87, 254-265.	1.2	36

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37	Formulation of an efficient hybrid time–frequency domain solution procedure for linear structural dynamic problems. Computers and Structures, 2010, 88, 331-346.	2.4	21
38	Numerical Simulation of the 'Floating Spiral' Pipeline Installation Procedure: First Stage, Spiral Assembly. , 2008, , .		1
39	Pipeline-Laybarge Interaction Model for the Simulation of S-Lay Installation Procedures. , 2008, , .		0
40	Some Remarks on the Strain Based Assessment of Pipeline Dents. , 2008, , .		3
41	Subsea Pipelaying Simulation by the "Situa-Petropipe"Software: A User Friendly Alternative. , 2008, , .		0
42	Numerical Simulation of the "Floating Spiral"Pipeline Installation Procedure: Second Stage, Spiral Transportation, Behavior Under Waves. , 2008, , .		1
43	Risers Clashing Induced by the Wake Interference. , 2008, , .		2
44	Numerical Simulation of a Pipeline Installation Procedure at the Negro River. , 2008, , .		0
45	Probabilistic and Fuzzy Arithmetic Approaches for the Treatment of Uncertainties in the Installation of Torpedo Piles. Mathematical Problems in Engineering, 2008, 2008, 1-26.	0.6	4
46	Numerical Simulation of Offshore Pipeline Installation by Lateral Deflection Procedure. , 2007, , .		2
47	Comparison of Coupled and Uncoupled Analysis Methodologies in Towing Pipeline Installation Modeling. , 2007, , .		2
48	Implicit domain decomposition methods for coupled analysis of offshore platforms. Communications in Numerical Methods in Engineering, 2006, 23, 599-621.	1.3	23
49	Failure Behavior of Colonies of Corrosion Defects Composed of Symmetrically Arranged Defects. , 2006, , 417.		4
50	Finite Element Modeling of the Failure Behavior of Pipelines Containing Interacting Corrosion Defects. , 2006, , 315.		27
51	Implicit and Explicit Implementation of the Dynamic Relaxation Method for the Definition of Initial Equilibrium Configurations of Flexible Lines. , 2006, , 131.		2
52	Implementation and Application of Modal Analysis During Time Domain Dynamic Simulation of Floating Offshore Systems. , 2006, , .		0
53	A Generalized Contact Model for Nonlinear Dynamic Analysis of Floating Offshore Systems. , 2006, , .		2
54	Collapse analysis of steel jacket structures for offshore oil exploitation. Journal of Constructional Steel Research, 2005, 61, 1147-1171.	1.7	13

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55	A hybrid fuzzy/genetic algorithm for the design of offshore oil production risers. International Journal for Numerical Methods in Engineering, 2005, 64, 1459-1482.	1.5	38
56	An Analytical/Numerical Procedure for Structural Analysis of Hybrid Riser Systems. , 2005, , .		0
57	Coupled Motion Analysis of a Semisubmersible Platform in Campos Basin. , 2004, , .		1
58	Numerical Simulation of the Mooring Procedures of the BGL-1 Pipeline Launching Barge. , 2004, , .		4
59	Numerical Offshore Tank: Development of Numerical Offshore Tank for Ultra Deep Water Oil Production Systems. , 2003, , 575.		7
60	Application of Genetic Algorithms to the Synthesis of Riser Configurations. , 2003, , .		8
61	Sub-Surface Buoy Hybrid Riser System for Deepwater Application. , 2003, , .		1
62	Computational Systems for Offshore Pipeline Launching Simulations. , 2003, , .		0
63	Towards the Integration of Analysis and Design of Mooring Systems and Risers: Part I â€" Studies on a Semisubmersible Platform. , 2002, , 41.		8
64	Application of a Modified Truss Element to the Analysis of Flexible Risers. , 2002, , 49.		0
65	Studies on VIV Fatigue Behavior in SCRS of Hybrid Riser Systems. , 2002, , 33.		0
66	Towards the Integration of Analysis and Design of Mooring Systems and Risers: Part II â€" Studies on a DICAS System. , 2002, , 291.		9
67	Alternative Design of Flexible Jumpers for Deepwater Hybrid Riser Configurations. Journal of Offshore Mechanics and Arctic Engineering, 2001, 123, 57-64.	0.6	5
68	Structural design of process decks for floating production, storage and offloading units. Marine Structures, 1998, 11, 403-412.	1.6	4
69	Numerical simulation of the â€˜pull-inâ€™ operation in submarine pipelines. Engineering Structures, 1997, 19, 868-876.	2.6	0
70	Portable FORTRAN programming tools in the development of a structural analysis program. Computers and Structures, 1995, 57, 1109-1125.	2.4	1
71	An optimized implementation of the Newmark/Newton-Raphson algorithm for the time integration of non-linear problems. Communications in Numerical Methods in Engineering, 1994, 10, 983-992.	1.3	36
72	Towards an adaptive â€˜semi-implicitâ€™ solution scheme for nonlinear structural dynamic problems. Computers and Structures, 1994, 52, 495-504.	2.4	17

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73	Computation of crack-growth in axisymmetric shells with local irregularities. Advances in Engineering Software, 1992, 14, 47-54.	1.8	0
74	Adaptive reduced integration method for nonlinear structural dynamic analysis. Computers and Structures, 1992, 45, 333-347.	2.4	28
75	Investigation of roll damping effects on deep water FPSOs with riser balcony through global coupled analysis. Ships and Offshore Structures, 0, , 1-8.	0.9	1