Umberto Alibrandi

List of Publications by Year
in descending order

27 papers	510 citations	759233 12 h-index	713466 21 g-index
28 all docs	28 docs citations	28 times ranked	417 citing authors

#	Article	IF	Citations
1	Seismic metamaterials based on isochronous mechanical oscillators. Applied Physics Letters, 2014, 104, .	3.3	87
2	A new sampling strategy for SVM-based response surface for structural reliability analysis. Probabilistic Engineering Mechanics, 2015, 41, 1-12.	2.7	66
3	A gradient-free method for determining the design point in nonlinear stochastic dynamic analysis. Probabilistic Engineering Mechanics, 2012, 28, 2-10.	2.7	47
4	Performance-based engineering and multi-criteria decision analysis for sustainable and resilient building design. Structural Safety, 2018, 74, 1-13.	5.3	43
5	Probabilistic eigenvalue buckling analysis solved through the ratio of polynomial response surface. Computer Methods in Applied Mechanics and Engineering, 2010, 199, 450-464.	6.6	37
6	Kernel density maximum entropy method with generalized moments for evaluating probability distributions, including tails, from a small sample of data. International Journal for Numerical Methods in Engineering, 2018, 113, 1904-1928.	2.8	31
7	A response surface method for stochastic dynamic analysis. Reliability Engineering and System Safety, 2014, 126, 44-53.	8.9	28
8	Stochastic dynamic analysis of floating production systems using the First Order Reliability Method and the Secant Hyperplane Method. Ocean Engineering, 2017, 137, 68-77.	4.3	27
9	Efficient evaluation of the pdf of a random variable through the kernel density maximum entropy approach. International Journal for Numerical Methods in Engineering, 2008, 75, 1511-1548.	2.8	19
10	First-Order Reliability Method for Structural Reliability Analysis in the Presence of Random and Interval Variables. ASCE-ASME Journal of Risk and Uncertainty in Engineering Systems, Part B: Mechanical Engineering, 2015, 1, .	1.1	16
11	Secant Hyperplane Method for Structural Reliability Analysis. Journal of Engineering Mechanics - ASCE, 2016, 142, .	2.9	16
12	Equivalent Linearization Methods for Stochastic Dynamic Analysis Using Linear Response Surfaces. Journal of Engineering Mechanics - ASCE, 2017, 143, .	2.9	14
13	Implications of High-Dimensional Geometry for Structural Reliability Analysis and a Novel Linear Response Surface Method Based on SVM. International Journal of Computational Methods, 2015, 12, 1540016.	1.3	12
14	The use of stochastic stresses in the static approach of probabilistic limit analysis. International Journal for Numerical Methods in Engineering, 2008, 73, 747-782.	2.8	11
15	Risk-Informed Digital Twin of Buildings and Infrastructures for Sustainable and Resilient Urban Communities. ASCE-ASME Journal of Risk and Uncertainty in Engineering Systems, Part A: Civil Engineering, 2022, 8, .	1.7	10
16	Optimal design of dampers in seismic excited structures by the Expected value of the stochastic Dissipated Power. Probabilistic Engineering Mechanics, 2015, 41, 129-138.	2.7	9
17	A Decision Support Tool for Sustainable and Resilient Building Design. Springer Series in Reliability Engineering, 2017, , 509-536.	0.5	8
18	The Tail Equivalent Linearization Method for Nonlinear Stochastic Processes, Genesis and Developments. Springer Series in Reliability Engineering, 2017, , 109-142.	0.5	5

#	Article	IF	Citations
19	Response Spectrum Code-Conforming PEER PBEE using Stochastic Dynamic Analysis and Information Theory. KSCE Journal of Civil Engineering, 2018, 22, 1002-1015.	1.9	4
20	Data-Driven Disruption Response Planning for a Mass Rapid Transit System. Smart Innovation, Systems and Technologies, 2019, , 205-213.	0.6	4
21	TAIL EQUIVALENT LINEARIZATION METHODS FOR SEISMIC RESPONSE SPECTRUM ANALYSIS. , 2015, , .		4
22	Information Theory for data-driven Risk Analysis: The Informational Coefficient of Correlation as a Measure of Dependency. , 2019, , .		3
23	Stochastic Methods in Nonlinear Structural Dynamics. , 2012, , 3-60.		2
24	Model Correction Factor Method for Non-linear Stochastic Dynamic Analysis. , 2011, , .		2
25	Hierarchical Decision making by Leveraging Utility Theory and Game Theoretic Analysis towards Sustainability in Building Design Operation. , 2018, , .		2
26	Multicriteria Lifecycle Analyses for Sustainable and Resilient Building Design. , 2018, , .		2
27	Toward Responsible Design of Low-Carbon Buildings: From Concept to Engineering. ASCE-ASME Journal of Risk and Uncertainty in Engineering Systems, Part A: Civil Engineering, 2022, 8, .	1.7	1