

Paolo Bocchini

List of Publications by Year in descending order

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Version: 2024-02-01

52
papers

2,453
citations

318942

23
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286692

43
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54
all docs

54
docs citations

54
times ranked

1803
citing authors

#	ARTICLE	IF	CITATIONS
1	Framework for probabilistic simulation of power transmission network performance under hurricanes. Reliability Engineering and System Safety, 2022, 217, 108072.	5.1	23
2	Classification Protocol and Comprehensive Database of Vertically Correlated Longitudinal Wind Velocities for Structural Analysis and Risk Assessment. Journal of Structural Engineering, 2022, 148, .	1.7	1
3	Overview of Interdependency Models of Critical Infrastructure for Resilience Assessment. Natural Hazards Review, 2022, 23, .	0.8	14
4	Optimal Generation of Multivariate Seismic Intensity Maps Using Hazard Quantization. ASCE-ASME Journal of Risk and Uncertainty in Engineering Systems, Part A: Civil Engineering, 2022, 8, .	1.1	1
5	Restrictions and obstructions detection in pipe networks using incomplete and noisy flow and pressure steady-state measurements. Structural Control and Health Monitoring, 2022, 29, e2854.	1.9	1
6	Quantitative Models for Interdependent Functionality and Recovery of Critical Infrastructure Systems. , 2022, , 127-229.		2
7	Policy-based disaster recovery planning model for interdependent infrastructure systems under uncertainty. Structure and Infrastructure Engineering, 2021, 17, 555-578.	2.0	12
8	Component-based fragility analysis of transmission towers subjected to hurricane wind load. Engineering Structures, 2021, 242, 112586.	2.6	27
9	Effect of the interaction of corrosion pits among multiple tensile rebars on the reliability of RC structures: Experimental and numerical investigation. Structural Safety, 2021, 93, 102115.	2.8	23
10	Resilience metrics and measurement methods for transportation infrastructure: the state of the art. Sustainable and Resilient Infrastructure, 2020, 5, 168-199.	1.7	148
11	Fragility models of electrical conductors in power transmission networks subjected to hurricanes. Structural Safety, 2020, 82, 101890.	2.8	23
12	Chloride migration characteristics and reliability of reinforced concrete highway structures in Pennsylvania. Construction and Building Materials, 2020, 231, 117045.	3.2	19
13	Applications of artificial intelligence for disaster management. Natural Hazards, 2020, 103, 2631-2689.	1.6	138
14	Model for Estimating the Impact of Interdependencies on System Recovery. Journal of Infrastructure Systems, 2020, 26, .	1.0	11
15	Hysteretic Model of Single-Bolted Angle Connections for Lattice Steel Towers. Journal of Engineering Mechanics - ASCE, 2019, 145, .	1.6	8
16	Material characteristics of binder jet 3D printed hydrated CSA cement with the addition of fine aggregates. Construction and Building Materials, 2019, 206, 494-503.	3.2	50
17	Effective Sampling of Spatially Correlated Intensity Maps Using Hazard Quantization: Application to Seismic Events. ASCE-ASME Journal of Risk and Uncertainty in Engineering Systems, Part A: Civil Engineering, 2018, 4, .	1.1	9
18	A Predictive Spatial Distribution Framework for Filovirus-Infected Bats. Scientific Reports, 2018, 8, 7970.	1.6	7

#	ARTICLE	IF	CITATIONS
19	Functionality–fragility surfaces. Earthquake Engineering and Structural Dynamics, 2017, 46, 1687-1709.	2.5	34
20	From Component Damage to System-Level Probabilistic Restoration Functions for a Damaged Bridge. Journal of Infrastructure Systems, 2017, 23, .	1.0	32
21	Fragility analysis for ballistic design. Structure and Infrastructure Engineering, 2017, 13, 1105-1116.	2.0	4
22	Optimal representation of multi-dimensional random fields with a moderate number of samples: Application to stochastic mechanics. Probabilistic Engineering Mechanics, 2016, 44, 53-65.	1.3	7
23	Sequencing algorithm with multiple-input genetic operators: Application to disaster resilience. Engineering Structures, 2016, 117, 591-602.	2.6	32
24	Discussion of Feng et al. (2014). “Statistical reconstruction of two-phase random media“[Comput. Struct. 137 (2014) 78–92]. Computers and Structures, 2016, 163, 83-85.	2.4	4
25	Correlated Maps for Regional Multi-Hazard Analysis: Ideas for a Novel Approach. , 2016, , 15-39.		4
26	Computation of bridge seismic fragility by large–scale simulation for probabilistic resilience analysis. Earthquake Engineering and Structural Dynamics, 2015, 44, 1959-1978.	2.5	63
27	A versatile technique for the optimal approximation of random processes by Functional Quantization. Applied Mathematics and Computation, 2015, 271, 935-958.	1.4	7
28	An Efficient Methodology That Simulates a Multi-Dimensional Non-Gaussian Field to Evaluate the Effect of the Spatial Distribution of Corrosion in a Steel Beam. , 2014, , .		6
29	Blockage Detection in Pipeline Networks for Gas and Oil. , 2014, , .		1
30	Optimal Bridge Restoration Sequence for Resilient Transportation Networks. , 2014, , .		13
31	Resilience and Sustainability of Civil Infrastructure: Toward a Unified Approach. Journal of Infrastructure Systems, 2014, 20, .	1.0	340
32	Quantification of the Approximations Introduced by Assumptions on the Marginal Distribution of the Demand for Highway Bridge Fragility Analysis. , 2014, , .		3
33	A probabilistic approach for the prediction of seismic resilience of bridges. Earthquake Engineering and Structural Dynamics, 2013, 42, 1469-1487.	2.5	185
34	Time-dependent risk associated with deterioration of highway bridge networks. Engineering Structures, 2013, 54, 221-233.	2.6	37
35	Non-destructive parametric system identification and damage detection in truss structures by static tests. Structure and Infrastructure Engineering, 2013, 9, 384-402.	2.0	17
36	Efficient, accurate, and simple Markov chain model for the life-cycle analysis of bridge groups. Structural Safety, 2013, 40, 51-64.	2.8	55

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37	Connectivity-Based Optimal Scheduling for Maintenance of Bridge Networks. Journal of Engineering Mechanics - ASCE, 2013, 139, 760-769.	1.6	41
38	Bridge network performance, maintenance and optimisation under uncertainty: accomplishments and challenges. Structure and Infrastructure Engineering, 2012, 8, 341-356.	2.0	78
39	Probabilistic functionality recovery model for resilience analysis. Bridge Maintenance, Safety and Management, 2012, , 1920-1927.	0.1	27
40	Restoration of Bridge Networks after an Earthquake: Multicriteria Intervention Optimization. Earthquake Spectra, 2012, 28, 427-455.	1.6	157
41	Optimal Resilience- and Cost-Based Postdisaster Intervention Prioritization for Bridges along a Highway Segment. Journal of Bridge Engineering, 2012, 17, 117-129.	1.4	152
42	Resilience As Optimization Criterion for the Rehabilitation of Bridges Belonging to a Transportation Network Subject to Earthquake. , 2011, , .		46
43	Graphical User Interface for Guided Acoustic Waves. Journal of Computing in Civil Engineering, 2011, 25, 202-210.	2.5	107
44	Uncertainty Modeling in Bridge Network Maintenance Optimization. , 2011, , .		1
45	A simple and efficient methodology to approximate a general non-Gaussian stationary stochastic process by a translation process. Probabilistic Engineering Mechanics, 2011, 26, 511-519.	1.3	132
46	A random field based technique for the efficiency enhancement of bridge network life-cycle analysis under uncertainty. Engineering Structures, 2011, 33, 3208-3217.	2.6	19
47	A stochastic computational framework for the joint transportation network fragility analysis and traffic flow distribution under extreme events. Probabilistic Engineering Mechanics, 2011, 26, 182-193.	1.3	95
48	A probabilistic computational framework for bridge network optimal maintenance scheduling. Reliability Engineering and System Safety, 2011, 96, 332-349.	5.1	92
49	Generalized bridge network performance analysis with correlation and time-variant reliability. Structural Safety, 2011, 33, 155-164.	2.8	45
50	Computationally Efficient Simulation Techniques for Bridge Network Maintenance Optimization under Uncertainty. , 2011, , .		2
51	Critical review and latest developments of a class of simulation algorithms for strongly non-Gaussian random fields. Probabilistic Engineering Mechanics, 2008, 23, 393-407.	1.3	94
52	Identification of Damaged Bars in Three-Dimensional Redundant Truss Structures by Means of Genetic Algorithms. Key Engineering Materials, 2007, 348-349, 229-232.	0.4	3