

Bozidar Stojadinovic

List of Publications by Year in descending order

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Version: 2024-02-01

123
papers

3,062
citations

172386
29
h-index

189801
50
g-index

146
all docs

146
docs citations

146
times ranked

1814
citing authors

#	ARTICLE	IF	CITATIONS
1	Seismic Performance Evaluation of Facilities: Methodology and Implementation. Journal of Structural Engineering, 2009, 135, 1146-1154.	1.7	209
2	Probabilistic Seismic Demand Model for California Highway Bridges. Journal of Bridge Engineering, 2001, 6, 468-481.	1.4	173
3	Toward Performance-Based Seismic Design of Structures. Earthquake Spectra, 1999, 15, 435-461.	1.6	130
4	Energy-based Seismic Design of Structures using Yield Mechanism and Target Drift. Journal of Structural Engineering, 2002, 128, 1046-1054.	1.7	96
5	Performance-based seismic bridge design for damage and loss limit states. Earthquake Engineering and Structural Dynamics, 2007, 36, 1953-1971.	2.5	85
6	Parametric Tests on Unreinforced Steel Moment Connections. Journal of Structural Engineering, 2000, 126, 40-49.	1.7	80
7	Effect of abutment modeling on the seismic response of bridge structures. Earthquake Engineering and Engineering Vibration, 2008, 7, 395-402.	1.1	80
8	Is rocking motion predictable?. Earthquake Engineering and Structural Dynamics, 2018, 47, 535-552.	2.5	80
9	A review on resilience assessment of energy systems. Sustainable and Resilient Infrastructure, 2021, 6, 273-299.	1.7	76
10	Dynamic response analysis of solitary flexible rocking bodies: modeling and behavior under pulse-like ground excitation. Earthquake Engineering and Structural Dynamics, 2014, 43, 1463-1481.	2.5	75
11	Post-earthquake functionality of highway overpass bridges. Earthquake Engineering and Structural Dynamics, 2006, 35, 77-93.	2.5	74
12	A Framework for Linking Community-Resilience Goals to Specific Performance Targets for the Built Environment. Earthquake Spectra, 2015, 31, 1267-1283.	1.6	71
13	Probabilistic seismic demand model for curved reinforced concrete bridges. Bulletin of Earthquake Engineering, 2012, 10, 1455-1479.	2.3	67
14	An analytical model of a deformable cantilever structure rocking on a rigid surface: development and verification. Earthquake Engineering and Structural Dynamics, 2015, 44, 2775-2794.	2.5	65
15	A finite element model for seismic response analysis of deformable rocking frames. Earthquake Engineering and Structural Dynamics, 2017, 46, 447-466.	2.5	64
16	Dynamics of rocking podium structures. Earthquake Engineering and Structural Dynamics, 2017, 46, 2499-2517.	2.5	63
17	Real-Time Error Monitoring for Hybrid Simulation. Part I: Methodology and Experimental Verification. Journal of Structural Engineering, 2007, 133, 1100-1108.	1.7	61
18	Real-Time Error Monitoring for Hybrid Simulation. Part II: Structural Response Modification due to Errors. Journal of Structural Engineering, 2007, 133, 1109-1117.	1.7	51

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19	Seismic behavior of slender reinforced concrete walls. <i>Engineering Structures</i> , 2014, 80, 377-388.	2.6	51
20	The three-dimensional behavior of inverted pendulum cylindrical structures during earthquakes. <i>Earthquake Engineering and Structural Dynamics</i> , 2017, 46, 2261-2280.	2.5	49
21	A compositional demand/supply framework to quantify the resilience of civil infrastructure systems (Re-CoDeS). <i>Sustainable and Resilient Infrastructure</i> , 2018, 3, 86-102.	1.7	48
22	Event-Driven Control System for Geographically Distributed Hybrid Simulation. <i>Journal of Structural Engineering</i> , 2006, 132, 68-77.	1.7	47
23	Comparison of Incremental Dynamic, Cloud, and Stripe Methods for Computing Probabilistic Seismic Demand Models. , 2005, , 1.		46
24	An analytical model of a deformable cantilever structure rocking on a rigid surface: experimental validation. <i>Earthquake Engineering and Structural Dynamics</i> , 2015, 44, 2795-2815.	2.5	46
25	Comparative Assessment of Two Rocking Isolation Techniques for a Motorway Overpass Bridge. <i>Frontiers in Built Environment</i> , 2017, 3, .	1.2	46
26	R-Factor Parameterized Bridge Damage Fragility Curves. <i>Journal of Bridge Engineering</i> , 2007, 12, 500-510.	1.4	43
27	Comprehensive resilience assessment of electricity supply security for 140 countries. <i>Ecological Indicators</i> , 2020, 110, 105731.	2.6	40
28	Shake table testing of a rocking podium: Results of a blind prediction contest. <i>Earthquake Engineering and Structural Dynamics</i> , 2021, 50, 1043-1062.	2.5	38
29	Hierarchical Bayesian Modeling of Fluid-Induced Seismicity. <i>Geophysical Research Letters</i> , 2017, 44, 11,357.	1.5	36
30	Hybrid Simulation of Thermomechanical Structural Response. <i>Journal of Structural Engineering</i> , 2016, 142, .	1.7	33
31	Hybrid simulation of a zipper-braced steel frame under earthquake excitation. <i>Earthquake Engineering and Structural Dynamics</i> , 2009, 38, 95-113.	2.5	32
32	Rotation capacities of reduced beam section with bolted web (RBS-B) connections. <i>Journal of Constructional Steel Research</i> , 2012, 70, 256-263.	1.7	30
33	Resilience Evaluation Framework for Integrated Civil Infrastructure-Community Systems under Seismic Hazard. <i>Journal of Infrastructure Systems</i> , 2019, 25, .	1.0	30
34	Locally Resonant Metasurfaces for Shear Waves in Granular Media. <i>Physical Review Applied</i> , 2020, 13, .	1.5	30
35	Post-earthquake bridge repair cost and repair time estimation methodology. <i>Earthquake Engineering and Structural Dynamics</i> , 2010, 39, 281-301.	2.5	28
36	Rolling and rocking of rigid uplifting structures. <i>Earthquake Engineering and Structural Dynamics</i> , 2019, 48, 1556-1574.	2.5	27

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37	A global sensitivity analysis framework for hybrid simulation. Mechanical Systems and Signal Processing, 2021, 146, 106997.	4.4	27
38	Dynamics of inelastic base-isolated structures subjected to analytical pulse ground motions. Earthquake Engineering and Structural Dynamics, 2013, 42, 2043-2060.	2.5	26
39	Seismic Performance of Pre-Northridge Welded Steel Moment Connections to Built-Up Box Columns. Journal of Structural Engineering, 2008, 134, 289-299.	1.7	25
40	Design equations for moment strength of RBS-B connections. Journal of Constructional Steel Research, 2009, 65, 1087-1095.	1.7	25
41	Seismic Resilience of Water Distribution and Cellular Communication Systems after the 2015 Gorkha Earthquake. Journal of Structural Engineering, 2018, 144, .	1.7	25
42	Agent-Based Recovery Model for Seismic Resilience Evaluation of Electrified Communities. Risk Analysis, 2019, 39, 1597-1614.	1.5	24
43	Rapid earthquake loss assessment based on machine learning and representative sampling. Earthquake Spectra, 2022, 38, 152-177.	1.6	24
44	Hybrid Simulation of Bridge Response to Three-Dimensional Earthquake Excitation Followed by Truck Load. Journal of Structural Engineering, 2014, 140, .	1.7	23
45	Dynamics of inelastic base-isolated structures subjected to recorded ground motions. Bulletin of Earthquake Engineering, 2017, 15, 1807-1830.	2.3	23
46	Fast Hybrid Simulation with Geographically Distributed Substructures. , 2006, , .		22
47	Hybrid Seismic Response Simulation on a Geographically Distributed Bridge Model. Journal of Structural Engineering, 2008, 134, 535-543.	1.7	22
48	Risk-Based Multilevel Methodology to Stress Test Critical Infrastructure Systems. Journal of Infrastructure Systems, 2020, 26, 04019035.	1.0	21
49	Effect of Ground Motion Sequence on Response of Squat Reinforced Concrete Shear Walls. Journal of Structural Engineering, 2014, 140, .	1.7	19
50	Bridge Damage and Loss Scenarios Calibrated by Schematic Design and Cost Estimation of Repairs. Earthquake Spectra, 2011, 27, 1127-1145.	1.6	18
51	Assessing the Performance of the European Natural Gas Network for Selected Supply Disruption Scenarios Using Open-Source Information. Energies, 2019, 12, 4685.	1.6	16
52	Constant yield displacement procedure for seismic evaluation of existing structures. Bulletin of Earthquake Engineering, 2019, 17, 2137-2164.	2.3	16
53	A Real-Time Hybrid Fire Simulation Method Based on Dynamic Relaxation and Partitioned Time Integration. Journal of Engineering Mechanics - ASCE, 2020, 146, .	1.6	16
54	Quantifying disaster resilience of a community with interdependent civil infrastructure systems. Structure and Infrastructure Engineering, 2023, 19, 1696-1710.	2.0	15

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55	Fourway: Graphical Tool for Performance-Based Earthquake Engineering. Journal of Structural Engineering, 2006, 132, 1274-1283.	1.7	14
56	A demand-supply framework for evaluating the effect of resource and service constraints on community disaster resilience. , 2022, 1, 13-32.		14
57	Evaluation of Post-Earthquake Axial Load Capacity of Circular Bridge Columns. ACI Structural Journal, 2015, 112, .	0.3	13
58	A Framework to Evaluate the Benefit of Seismic Upgrading. Earthquake Spectra, 2018, 34, 527-548.	1.6	13
59	Behavior of Bridge Outrigger Knee Joint Systems. Earthquake Spectra, 1995, 11, 477-509.	1.6	12
60	Masonry wallettes with a soft layer bed joint: Behaviour under static-cyclic loading. Engineering Structures, 2015, 86, 16-32.	2.6	12
61	POST-EARTHQUAKE RECOVERY OF A COMMUNITY AND ITS ELECTRICAL POWER SUPPLY SYSTEM. , 2015, , .		12
62	Stability and low-cycle fatigue limits of moment connection rotation capacity. Engineering Structures, 2003, 25, 691-700.	2.6	11
63	Masonry walls with a multi-layer bed joint subjected to in-plane cyclic loading: An experimental investigation. Engineering Structures, 2017, 143, 189-203.	2.6	11
64	Shaking table investigation of inelastic deformation demand for a structure isolated using friction-pendulum sliding bearings. Structures, 2021, 31, 1041-1052.	1.7	11
65	Compliance-based estimation of seismic collapse risk of an existing reinforced concrete frame building. Bulletin of Earthquake Engineering, 2021, 19, 6027-6048.	2.3	10
66	A modelâ€order reduction framework for hybrid simulation based on componentâ€mode synthesis. Earthquake Engineering and Structural Dynamics, 2020, 49, 737-753.	2.5	9
67	Data set from shake table tests of free-standing rocking bodies. Earthquake Spectra, 2021, 37, 2971-2987.	1.6	9
68	AN ANALYTICAL MODEL FOR DYNAMIC RESPONSE OF AN ELASTIC SDOF SYSTEM FIXED ON TOP OF A ROCKING SINGLE-STORY FRAME STRUCTURE: EXPERIMENTAL VALIDATION. , 2016, , .		9
69	EXPERIMENTAL INVESTIGATION OF THE SEISMIC RESPONSE OF A COLUMN ROCKING AND ROLLING ON A CONCAVE BASE. , 2016, , .		9
70	Dataset from the shake table tests of a rocking podium structure. Earthquake Spectra, 2021, 37, 2107-2125.	1.6	8
71	Adaptive model predictive control for actuation dynamics compensation in real-time hybrid simulation. Mechanism and Machine Theory, 2022, 172, 104817.	2.7	8
72	Review of selected recent research on US seismic design and retrofit strategies for steel structures. Structural Control and Health Monitoring, 2005, 7, 103-114.	0.7	7

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73	Calibration and Validation of Analytical Models for Predicting the Seismic and Axial-Load Response of Circular Bridge Columns. <i>Journal of Bridge Engineering</i> , 2015, 20, .	1.4	7
74	Experimental and analytical investigation of the inelastic behavior of structures isolated using friction pendulum bearings. <i>Procedia Engineering</i> , 2017, 199, 465-470.	1.2	7
75	Cyclic loading behaviors of novel RC beams with kinked rebar configuration. <i>Engineering Structures</i> , 2019, 200, 109689.	2.6	7
76	Quantifying Electricity Supply Resilience of Countries with Robust Efficiency Analysis. <i>Energies</i> , 2020, 13, 1535.	1.6	7
77	Seismic fragility analysis of a coupled tank-piping system based on artificial ground motions and surrogate modeling. <i>Journal of Loss Prevention in the Process Industries</i> , 2021, 72, 104575.	1.7	7
78	A plastic collapse method for evaluating rotation capacity of full-restrained steel moment connections. <i>Theoretical and Applied Mechanics</i> , 2008, 35, 191-214.	0.1	7
79	A Global Sensitivity Analysis Framework for Hybrid Simulation with Stochastic Substructures. <i>Frontiers in Built Environment</i> , 2021, 7, .	1.2	7
80	Multi-layer masonry bed joint subjected to shear: Analytical modelling. <i>Construction and Building Materials</i> , 2019, 205, 602-610.	3.2	6
81	The role of risk measures in making seismic upgrading decisions. <i>Earthquake Spectra</i> , 2020, 36, 1802-1822.	1.6	6
82	In-situ retrofit strategy for transmission tower structure members using light-weight steel casings. <i>Engineering Structures</i> , 2020, 206, 110171.	2.6	6
83	Probabilistic resilience assessment of civil systems: Analysis and validity of the PEER framework. , 2015, , 331-339.		6
84	Simulating the role of transportation infrastructure for community disaster recovery. <i>Proceedings of the Institution of Civil Engineers: Bridge Engineering</i> , 2022, 175, 150-159.	0.3	6
85	Hybrid simulation of a post-tensioned timber frame and validation of numerical models for seismic design. <i>Engineering Structures</i> , 2022, 265, 114415.	2.6	5
86	Shaking table investigation of a low-cost and sustainable timber-based energy dissipation system with recentering ability. <i>Bulletin of Earthquake Engineering</i> , 2023, 21, 3949-3968.	2.3	5
87	Stable Reinforcedâ€Concrete Sectionâ€™Analysis Procedure. <i>Journal of Structural Engineering</i> , 1994, 120, 3012-3024.	1.7	4
88	Comparison of Post-Earthquake Highway Bridge Repair Costs. , 2007, , 1.		4
89	Demonstration of a Practical Method for Seismic Performance Assessment of Structural Systems. <i>Earthquake Spectra</i> , 2012, 28, 811-829.	1.6	4
90	Seismic Performance Evaluation of Intermediate Moment Frames with Reduced Beam Section and Bolted Web Connections. <i>Earthquake Spectra</i> , 2015, 31, 895-919.	1.6	4

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91	I-Shaped Unreinforced Masonry Wallettes with a Soft-Layer Bed Joint: Behavior under Static-Cyclic Shear. Journal of Structural Engineering, 2017, 143, .	1.7	4
92	Robust Model Predictive Control for Dynamics Compensation in Real-Time Hybrid Simulation. Frontiers in Built Environment, 2020, 6, .	1.2	4
93	Study of seismic recovery and resilience of Electric Power Supply System. , 2015, , 4389-4397.		4
94	RY-Î¼-Î¼ RELATIONS FOR SEISMICALLY ISOLATED STRUCTURES. , 2014, , .		4
95	<title>Wireless sensor seismic response monitoring system implemented on top of NEESgrid</title> . , 2005, , .		3
96	Performance of Benchmark Bridge Structures. , 2007, , 1.		3
97	Assessment of Uncertainty Propagation in the Dynamic Response of Single-Degree-of-Freedom Structures Using Reachability Analysis. Journal of Engineering Mechanics - ASCE, 2014, 140, 04014038.	1.6	3
98	Multi-axial hybrid fire testing based on dynamic relaxation. Fire Safety Journal, 2021, 126, 103468.	1.4	3
99	Verification of Hybrid Simulation through On-Line Monitoring of Experimental Errors. , 2008, , .		2
100	Use of a High-Precision Digital Displacement Encoder for Hybrid Simulation of Seismic Response of Stiff Specimens. Experimental Techniques, 2016, 40, 677-688.	0.9	2
101	Seismic isolation of historic towers: Feasibility study on a simplified model of the Tower of Pisa. , 2016, , 1598-1604.		2
102	Indices under the Spotlight: An Approach to Unveil and Manage the Implicit Trade-offs between Indicators. , 2019, , .		2
103	A PROBABILISTIC APPROACH TOWARDS AN EVALUATION OF EXISTING CODE PROVISIONS FOR SEISMICALLY ISOLATED STRUCTURES. , 2016, , .		2
104	A static solver for hybrid fire simulation based on model reduction and dynamic relaxation. , 2020, , .		2
105	Conceptual Design of a Haptic Interface for Structural Analysis Software. , 2000, , 1.		1
106	Rotation Capacity of Pre-Qualified Moment Connections: A Yield Line Approach. , 2007, , .		1
107	Seismic Risk Evaluation for the Baseline PEER Bridge Testbed. , 2009, , .		1
108	New Frontiers and Innovative Methods for Hybrid Simulation. Experimental Techniques, 2020, 44, 667-668.	0.9	1

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109	Potential impacts of selected natural hazards and technical failures on the natural gas transmission network in Europe. , 2017, , .		1
110	DYNAMIC RESPONSE OF A RIGID SLAB SUPPORTED BY FOUR RIGID CYLINRICAL ROCKING AND WOBBLING COLUMNS. , 2017, , .		1
111	Security of electricity supply indicators in a resilience context. , 2017, , .		1
112	Sliding in Compression Zones of Reinforced Concrete Shear Walls: Behavior and Modeling. ACI Structural Journal, 2019, 116, .	0.3	1
113	Training of a Classifier for Structural Component Failure Based on Hybrid Simulation and Kriging. Journal of Engineering Mechanics - ASCE, 2022, 148, .	1.6	1
114	A Comparison of Surrogate Modeling Techniques for Global Sensitivity Analysis in Hybrid Simulation. Machine Learning and Knowledge Extraction, 2022, 4, 1-21.	3.2	1
115	Metadata and network API aspects of a framework for storing and retrieving civil infrastructure monitoring data. , 2005, , .		0
116	Communication and process simulation of set-based design for concrete reinforcement. , 2007, , .		0
117	Seismic Protection of Small Modular Reactors. , 2011, , .		0
118	Framework for Design of Next-Generation Base-Isolated Nuclear Structures. , 2013, , 63-75.		0
119	A procedure for the approximated response history analysis of linear thermoelastic structures. Journal of Thermal Stresses, 2017, 40, 879-898.	1.1	0
120	Editorial: Special Issue of ESREL 2015. Proceedings of the Institution of Mechanical Engineers, Part O: Journal of Risk and Reliability, 2017, 231, 337-338.	0.6	0
121	Using regional earthquake risk models as priors to dynamically assess the impact on residential buildings after an event. , 2021, , .		0
122	Preliminary performance-based design of a post-tensioned glue-laminated timber frame. , 2015, , .		0
123	PROBABILISTIC VALIDATION OF THE HOUSNER ROCKING MODEL. , 2017, , .		0