Multiple-Hazard Fragility and Restoration Models of Hi and Resilience Assessment in the United States: State-o

Journal of Structural Engineering 143, DOI: 10.1061/(asce)st.1943-541x.0001672

Citation Report

		Ίτλτιονι Ρε		
#	Article		IF	Citations
1	Functionalityâ€fragility surfaces. Earthquake Engineering and Structural Dynamics, 2017, 46, 1687-	1709.	2.5	34
2	Recent Advances in Assessment and Mitigation of Multiple Hazards. Journal of Structural Engineerin 2017, 143, 02017001.	g,	1.7	3
3	Probabilistic Seismic and Tsunami Hazard Analysis Conditioned on a Megathrust Rupture of the Cascadia Subduction Zone. Frontiers in Built Environment, 2017, 3, .		1.2	27
4	Optimal intensity measures for probabilistic seismic demand modeling of extended pile-shaft-supported bridges in liquefied and laterally spreading ground. Bulletin of Earthquake Engineering, 2018, 16, 229-257.		2.3	116
5	Analytical Model for Multi-Hazard Resilient Prefabricated Concrete Frame Considering Earthquake and Column Removal Scenarios. Frontiers in Built Environment, 2018, 4, .		1.2	1
6	Framework for improving the resilience and recovery of transportation networks under geohazard risks. International Journal of Disaster Risk Reduction, 2018, 31, 832-843.		1.8	88
7	Seismic Fragility Functions via Nonlinear Response History Analysis. Journal of Structural Engineering, 2018, 144, .		1.7	112
8	Multihazard resilience of highway bridges and bridge networks: a review. Structure and Infrastructure Engineering, 2019, 15, 1694-1714.		2.0	42
9	Fragility of transport assets exposed to multiple hazards: State-of-the-art review toward infrastructural resilience. Reliability Engineering and System Safety, 2019, 191, 106567.		5.1	137
10	A new methodology to assess indirect losses in bridges subjected to multiple hazards. Innovative Infrastructure Solutions, 2019, 4, 1.		1.1	25
11	Fractional order optimal intensity measures for probabilistic seismic demand modeling of extended pile-shaft-supported bridges in liquefiable and laterally spreading ground. Soil Dynamics and Earthquake Engineering, 2019, 120, 301-315.		1.9	22
12	Review of resilience assessment of coastal bridges to extreme wave-induced loads. Engineering Structures, 2019, 185, 332-352.		2.6	29
13	Performance-based seismic design of bridges: a global perspective and critical review of past, presen and future directions. Structure and Infrastructure Engineering, 2019, 15, 539-554.	t	2.0	13
14	Climate Change and Natural Hazard Risk Assessment Framework for Coastal Cable-Stayed Bridges. Frontiers in Built Environment, 2019, 5, .		1.2	10
15	Life-cycle management of deteriorating civil infrastructure considering resilience to lifetime hazards: A general approach based on renewal-reward processes. Reliability Engineering and System Safety, 2019, 183, 197-212.		5.1	60
16	Multihazard Earthquake and Tsunami Effects on Soil–Foundation–Bridge Systems. Journal of Bri Engineering, 2019, 24, .	dge	1.4	32
17	State-of-the-art review of bridges under rail transit loading. Proceedings of the Institution of Civil Engineers: Structures and Buildings, 2019, 172, 451-466.		0.4	5
18	Scour-dependent empirical fragility modelling of bridge structures under earthquakes. Advances in Structural Engineering, 2019, 22, 1384-1398.		1.2	12

#	Article	IF	CITATIONS
19	Toward life-cycle reliability-, risk- and resilience-based design and assessment of bridges and bridge networks under independent and interacting hazards: emphasis on earthquake, tsunami and corrosion. Structure and Infrastructure Engineering, 2020, 16, 26-50.	2.0	122
20	An integrated and dynamic framework for assessing sustainable resilience in complex adaptive systems. Sustainable and Resilient Infrastructure, 2020, 5, 311-329.	1.7	20
21	Series of semi-Markov processes to model infrastructure resilience under multihazards. Reliability Engineering and System Safety, 2020, 193, 106659.	5.1	30
22	Long-term resilience and loss assessment of highway bridges under multiple natural hazards. Structure and Infrastructure Engineering, 2020, 16, 626-641.	2.0	67
23	Seismic fragility analysis of irregular bridges with non-circular tall piers considering ground motion directionality. Bulletin of Earthquake Engineering, 2020, 18, 1723-1753.	2.3	18
24	DIN II: incorporation of multi-level interdependencies and uncertaintiesÂfor infrastructure systemÂrecovery modeling. Structure and Infrastructure Engineering, 2021, 17, 1566-1581.	2.0	8
25	Parameterized fragility analysis of steel frame structure subjected to blast loads using Bayesian logistic regression method. Structural Safety, 2020, 87, 102000.	2.8	14
26	Monitoring of transport infrastructure exposed to multiple hazards: a roadmap for building resilience. Science of the Total Environment, 2020, 746, 141001.	3.9	52
27	Probabilistic Seismic Resilience-Based Cost–Benefit Analysis for Bridge Retrofit Assessment. Arabian Journal for Science and Engineering, 2020, 45, 8457-8474.	1.7	5
28	Copula-Based Vulnerability Analysis of Civil Infrastructure Subjected to Hurricanes. Frontiers in Built Environment, 2020, 6, .	1.2	6
29	A Resilience-Based Methodology to Assess Soil Structure Interaction on a Benchmark Bridge. Infrastructures, 2020, 5, 90.	1.4	26
30	Mainshock-Integrated Aftershock Vulnerability Assessment of Bridge Structures. Applied Sciences (Switzerland), 2020, 10, 6843.	1.3	3
31	An expert opinion survey on post-hazard restoration of roadways and bridges: Data and key insights. Earthquake Spectra, 2020, 36, 983-1004.	1.6	18
32	Bayesian Approach for Typhoon-Induced Fragility Analysis of Real Overhead Transmission Lines. Journal of Engineering Mechanics - ASCE, 2020, 146, .	1.6	11
33	Parameterized fragility models for multi-bridge classes subjected to hurricane loads. Engineering Structures, 2020, 208, 110213.	2.6	33
34	Seismic vulnerability of circular tunnels in soft soil deposits: The case of Shanghai metropolitan system. Tunnelling and Underground Space Technology, 2020, 98, 103341.	3.0	66
35	Resilience assessment framework for critical infrastructure in a multi-hazard environment: Case study on transport assets. Science of the Total Environment, 2020, 714, 136854.	3.9	153
36	Probabilistic seismic fragility and loss analysis of concrete bridge piers with superelastic shape memory alloy-steel coupled reinforcing bars. Engineering Structures, 2020, 207, 110229.	2.6	83

	Сітат	CITATION REPORT	
#	Article	IF	CITATIONS
37	Barriers to gauging built environment climate vulnerability. Nature Climate Change, 2020, 10, 482-485.	8.1	12
38	Seismic fragility analysis of shear-critical concrete columns considering corrosion induced deterioration effects. Soil Dynamics and Earthquake Engineering, 2020, 134, 106165.	1.9	25
39	Assessment of the historic seismic performance of the New Zealand highway bridge stock. Structure and Infrastructure Engineering, 2021, 17, 689-701.	2.0	4
40	Integrated Framework for Assessment of Time-Variant Flood Fragility of Bridges Using Deep Learning Neural Networks. Journal of Infrastructure Systems, 2021, 27, .	1.0	20
41	Multiple hazard fragility analysis for granular highway embankments: Moisture ingress and scour. Transportation Geotechnics, 2021, 26, 100431.	2.0	17
42	Seismic assessment of tall pier bridges with double-column bents retrofitted with buckling restrained braces subjected to near-fault motions. Engineering Structures, 2021, 226, 111390.	2.6	26
43	Seismic design of a curved bridge as per performance based criteria. Materials Today: Proceedings, 2021, 38, 3014-3018.	0.9	2
44	A review of multihazard risk assessment: Progress, potential, and challenges in the application to nuclear power plants. International Journal of Disaster Risk Reduction, 2021, 53, 101933.	1.8	21
45	Classifying bridges for the risk of fire hazard via competitive machine learning. Advances in Bridge Engineering, 2021, 2, .	0.8	10
46	Policy-based disaster recovery planning model for interdependent infrastructure systems under uncertainty. Structure and Infrastructure Engineering, 2021, 17, 555-578.	2.0	12
47	Seismic fragility analysis using nonlinear autoregressive neural networks with exogenous input. Structure and Infrastructure Engineering, 2022, 18, 1251-1265.	2.0	8
48	FOSID: a fractional order spectrum intensity for probabilistic seismic demand modeling of extended pile-shaft-supported highway bridges under liquefaction and transverse spreading. Bulletin of Earthquake Engineering, 2021, 19, 2531-2559.	2.3	12
49	Cloud-IDA-MSA Conversion of Fragility Curves for Efficient and High-Fidelity Resilience Assessment. Journal of Structural Engineering, 2021, 147, .	1.7	87
50	Multihazard Damage and Loss Assessment of Bridges in a Highway Network Subjected to Earthquake and Tsunami Hazards. Natural Hazards Review, 2021, 22, .	0.8	12
51	Vulnerability of bridges to individual and multiple hazards- floods and earthquakes. Reliability Engineering and System Safety, 2021, 210, 107564.	5.1	65
52	Introductory Chapter: An Overview of Reliability and Risk Analysis. , 0, , .		0
53	Innovations in earthquake risk reduction for resilience: Recent advances and challenges. International Journal of Disaster Risk Reduction, 2021, 60, 102267.	1.8	72
54	Life-Cycle Performance Assessment of Aging Bridges Subjected to Tsunami Hazards. Journal of Bridge Engineering, 2021, 26, .	1.4	7

#	Article	IF	CITATIONS
55	Dysfunctionality Hazard Curve: Risk-Based Tool to Support the Resilient Design of Systems Subjected to Multihazards. ASCE-ASME Journal of Risk and Uncertainty in Engineering Systems, Part A: Civil Engineering, 2021, 7, .	1.1	4
56	Multi-Damage Identification of Multi-Span Bridges Based on Influence Lines. Coatings, 2021, 11, 905.	1.2	3
57	Restoration models for quantifying flood resilience of bridges. Engineering Structures, 2021, 238, 112180.	2.6	58
58	A Markov framework for generalized post-event systems recovery modeling: From single to multihazards. Structural Safety, 2021, 91, 102091.	2.8	15
59	Probabilistic multi-hazard fragility analysis of RC bridges under earthquake-tsunami sequential events. Engineering Structures, 2021, 238, 112250.	2.6	30
60	Road transportation network hazard sustainability and resilience: correlations and comparisons. Structure and Infrastructure Engineering, 2023, 19, 345-365.	2.0	9
61	A Resilience-Based Model for the Seismic Assessment of the Functionality of Road Networks Affected by Bridge Damage and Restoration. Infrastructures, 2021, 6, 112.	1.4	12
62	Enhanced endurance-time-method (EETM) for efficient seismic fragility, risk and resilience assessment of structures. Soil Dynamics and Earthquake Engineering, 2021, 147, 106731.	1.9	24
63	Artificial Intelligence Based Structural Assessment for Regional Short- and Medium-Span Concrete Beam Bridges with Inspection Information. Remote Sensing, 2021, 13, 3687.	1.8	14
64	Lifetime Resilience Measurement of River-Crossing Bridges with Scour Countermeasures under Multiple Hazards. Journal of Engineering Mechanics - ASCE, 2021, 147, .	1.6	9
65	A spatially explicit decision support framework for parcel- and community-level resilience assessment using Bayesian networks. Sustainable and Resilient Infrastructure, 2022, 7, 531-551.	1.7	3
66	Time-Dependent Reliability of Aging Structures: Overview of Assessment Methods. ASCE-ASME Journal of Risk and Uncertainty in Engineering Systems, Part A: Civil Engineering, 2021, 7, .	1.1	19
67	Performance Assessment of Oil Supply Chain Infrastructure Subjected to Hurricanes. Journal of Infrastructure Systems, 2021, 27, .	1.0	2
68	RAI: Rapid, Autonomous and Intelligent machine learning approach to identify fire-vulnerable bridges. Applied Soft Computing Journal, 2021, 113, 107896.	4.1	14
70	Risk and resilience of bridgeworks exposed to hydraulic hazards. , 2019, , .		1
71	Multi-hazard analysis and design of structures: status and research trends. Structure and Infrastructure Engineering, 2023, 19, 845-874.	2.0	11
72	A computational framework for selecting the optimal combination of seismic retrofit and insurance coverage. Computer-Aided Civil and Infrastructure Engineering, 2022, 37, 956-975.	6.3	10
73	Optimal ground motion intensity measure selection for probabilistic seismic demand modeling of fixed pile-founded offshore platforms. Ocean Engineering, 2021, 242, 110116.	1.9	7

#	Article	IF	CITATIONS
75	Seismic fragility analysis of steel building portfolios based on mathematical models. , 2022, , 185-204.		0
76	Resilience metrics for transport networks: a review and practical examples for bridges. Proceedings of the Institution of Civil Engineers: Bridge Engineering, 2022, 175, 179-192.	0.3	8
77	Seismic resilience for recovery investments of bridges methodology. Proceedings of the Institution of Civil Engineers: Bridge Engineering, 0, , 1-13.	0.3	4
78	A probabilistic approach for performance-based assessment of highway bridges under post-earthquake induced landslides. Soil Dynamics and Earthquake Engineering, 2022, 155, 107207.	1.9	10
79	Bridge seismic hazard resilience assessment with ensemble machine learning. Structures, 2022, 38, 719-732.	1.7	10
80	Investigating the Impacts of Economic Factors on Recovery to Further Develop Hurricane Resilience Model for Residential Homes. ASCE-ASME Journal of Risk and Uncertainty in Engineering Systems, Part A: Civil Engineering, 2022, 8, .	1.1	1
81	Assessment of lifetime seismic resilience of a long-span cable-stayed bridge exposed to structural corrosion. Soil Dynamics and Earthquake Engineering, 2022, 157, 107275.	1.9	29
82	A PFEM Background Mesh for Simulating Fluid and Frame Structure Interaction. Journal of Structural Engineering, 2022, 148, .	1.7	2
83	Bayesian-based seismic resilience assessment for high-rise buildings with the uncertainty in various variables. Journal of Building Engineering, 2022, 51, 104321.	1.6	4
84	A dataâ€driven approach for regional bridge condition assessment using inspection reports. Structural Control and Health Monitoring, 2022, 29, .	1.9	17
85	A Fragility-Weighted Topological Network for Resilient Assessment of Overhead Power Distribution System Subjected to Hurricane Winds. ASCE-ASME Journal of Risk and Uncertainty in Engineering Systems, Part A: Civil Engineering, 2022, 8, .	1.1	2
86	Effect of Seismic Isolation on Fragility of Bridges with Scoured Foundations. Journal of Structural Engineering, 2022, 148, .	1.7	4
87	Comparison of vulnerabilities in typical bridges using macroseismic intensity scales. Case Studies in Construction Materials, 2022, 16, e01094.	0.8	6
90	State-of-the-Art Review on Probabilistic Seismic Demand Models of Bridges: Machine-Learning Application. Infrastructures, 2022, 7, 64.	1.4	4
91	Time-dependent seismic reliability of isolated bridges considering ageing deterioration of lead rubber bearings. Structure and Infrastructure Engineering, 2022, 18, 1526-1541.	2.0	2
92	Resilience Evaluation of Shallow Circular Tunnels Subjected to Earthquakes Using Fragility Functions. Applied Sciences (Switzerland), 2022, 12, 4728.	1.3	2
93	Assessing flooding impact to riverine bridges: an integrated analysis. Natural Hazards and Earth System Sciences, 2022, 22, 1559-1576.	1.5	8
94	Investigation of Barrier Island Highway and Marsh Vulnerability to Bay-Side Flooding and Erosion. Journal of Marine Science and Engineering, 2022, 10, 734.	1.2	2

CITATION REPORT

CITATION REPORT

#	Article	IF	CITATIONS
95	Recent Advancement in Assessment and Control of Structures under Multi-Hazard. Applied Sciences (Switzerland), 2022, 12, 5118.	1.3	4
96	Damage Assessment of Road Bridges Caused by Extreme Streamflow in Montenegro: Reconstruction and Structural Upgrading. Buildings, 2022, 12, 810.	1.4	4
97	Machine Learning for Risk and Resilience Assessment in Structural Engineering: Progress and Future Trends. Journal of Structural Engineering, 2022, 148, .	1.7	48
98	Modeling Regional and Local Resilience of Infrastructure Networks Following Disruptions from Natural Hazards. Journal of Infrastructure Systems, 2022, 28, .	1.0	5
99	Resilience of aging structures and infrastructure systems with emphasis on seismic resilience of bridges and road networks: Review. , 2022, 1, 23-41.		16
100	Multi-level time-variant vulnerability assessment of deteriorating bridge networks with structural condition records. Engineering Structures, 2022, 266, 114581.	2.6	18
101	Life-cycle seismic fragility and resilience assessment of aging bridges using the endurance time method. Soil Dynamics and Earthquake Engineering, 2023, 164, 107524.	1.9	10
102	SRRI Methodology to Quantify the Seismic Resilience of Road Infrastructures. Applied Sciences (Switzerland), 2022, 12, 8945.	1.3	1
103	Dynamic performance of simply supported girder bridges subjected to successive earthquake-tsunami events. Advances in Bridge Engineering, 2022, 3, .	0.8	2
104	Assessing Direct and Indirect Long-Term Economic Impacts from Earthquakes to the US National Bridge Inventory. , 2022, , .		0
105	Seismic response of a motorway bridge founded in an active landslide: a case study. Bulletin of Earthquake Engineering, 2023, 21, 605-632.	2.3	2
106	Probability of failure estimation for highway bridges under combined effects of uncorrelated multiple hazards. , 2022, 1, 79-93.		2
107	Seismic fragility and resilience assessment of bridge columns with dual-replaceable composite link beam under near-fault GMs. Structures, 2023, 47, 412-424.	1.7	17
108	Identification of Resilience Dimensions in Critical Transportation Infrastructure Networks. Journal of Legal Affairs and Dispute Resolution in Engineering and Construction, 2023, 15, .	0.9	5
109	Probabilistic Seismic Assessment for Reinforced Concrete Bridges. International Journal of Structural Stability and Dynamics, 0, , .	1.5	0
110	Development of Performance-Based Fragility Curves of Coastal Bridges Subjected to Extreme Wave-Induced Loads. Journal of Bridge Engineering, 2023, 28, .	1.4	0
111	Probabilistic framework for evaluating the seismic resilience of transportation systems during emergency medical response. Reliability Engineering and System Safety, 2023, 236, 109255.	5.1	11
112	A review of seismic resilience of shield tunnels. Tunnelling and Underground Space Technology, 2023, 136, 105075.	3.0	9

CITATION REPORT

#	Article	IF	CITATIONS
113	Seismic performance of double-column tall pier bents using fusing connections. Soil Dynamics and Earthquake Engineering, 2023, 170, 107924.	1.9	5
114	The resilience of health care systems following major disruptive events: Current practice and a path forward. Reliability Engineering and System Safety, 2023, 235, 109264.	5.1	4
115	Experimental Studies on the Seismic Performance of Prefabricated Circular Hollow Bridge Piers Constructed with PVA Fiber Concrete. Materials, 2023, 16, 1981.	1.3	1
116	Comparison of risk-based methods for bridge scour management. Sustainable and Resilient Infrastructure, 2023, 8, 514-531.	1.7	3
117	Fragility framework for corroded steel moment-resisting frame buildings subjected to mainshock-aftershock sequences. Soil Dynamics and Earthquake Engineering, 2023, 171, 107975.	1.9	7
122	Toward Community Resilience Assessment. , 2022, , 1-18.		0