

Cimellaro Gian Paolo

List of Publications by Year in descending order

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Version: 2024-02-01

146
papers

4,382
citations

136740

32
h-index

118652

62
g-index

160
all docs

160
docs citations

160
times ranked

2610
citing authors

#	ARTICLE	IF	CITATIONS
1	Framework for analytical quantification of disaster resilience. <i>Engineering Structures</i> , 2010, 32, 3639-3649.	2.6	976
2	Seismic resilience of a hospital system. <i>Structure and Infrastructure Engineering</i> , 2010, 6, 127-144.	2.0	438
3	PEOPLES: A Framework for Evaluating Resilience. <i>Journal of Structural Engineering</i> , 2016, 142, .	1.7	221
4	Probabilistic framework to evaluate the resilience of engineering systems using Bayesian and dynamic Bayesian networks. <i>Reliability Engineering and System Safety</i> , 2020, 198, 106813.	5.1	135
5	Physical infrastructure interdependency and regional resilience index after the 2011 Tohoku Earthquake in Japan. <i>Earthquake Engineering and Structural Dynamics</i> , 2014, 43, 1763-1784.	2.5	107
6	New Resilience Index for Urban Water Distribution Networks. <i>Journal of Structural Engineering</i> , 2016, 142, .	1.7	93
7	Retrofit of a hospital through strength reduction and enhanced damping. <i>Smart Structures and Systems</i> , 2006, 2, 339-355.	1.9	85
8	Simultaneous stiffness&dashrightarrow;damping optimization of structures with respect to acceleration, displacement and base shear. <i>Engineering Structures</i> , 2007, 29, 2853-2870.	2.6	78
9	Post-collapse analysis of Morandi®TM's Polcevera viaduct in Genoa Italy. <i>Journal of Civil Structural Health Monitoring</i> , 2020, 10, 69-85.	2.0	77
10	Performance-based metamodel for healthcare facilities. <i>Earthquake Engineering and Structural Dynamics</i> , 2011, 40, 1197-1217.	2.5	74
11	Seismic reliability of a cable-stayed bridge retrofitted with hysteretic devices. <i>Computers and Structures</i> , 2008, 86, 1769-1781.	2.4	72
12	Future directions in structural control. <i>Structural Control and Health Monitoring</i> , 2009, 16, 7-16.	1.9	64
13	Urban Resilience for Emergency Response and Recovery. <i>Geotechnical, Geological and Earthquake Engineering</i> , 2016, , .	0.1	62
14	Downtime estimation and analysis of lifelines after an earthquake. <i>Engineering Structures</i> , 2018, 173, 393-403.	2.6	58
15	Fragility Analysis and Seismic Record Selection. <i>Journal of Structural Engineering</i> , 2011, 137, 379-390.	1.7	56
16	Multidimensional Performance Limit State for Hazard Fragility Functions. <i>Journal of Engineering Mechanics - ASCE</i> , 2011, 137, 47-60.	1.6	53
17	Using Discrete Event Simulation Models to Evaluate Resilience of an Emergency Department. <i>Journal of Earthquake Engineering</i> , 2017, 21, 203-226.	1.4	51
18	Design of passive systems for control of inelastic structures. <i>Earthquake Engineering and Structural Dynamics</i> , 2009, 38, 783-804.	2.5	49

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19	Simulating earthquake evacuation using human behavior models. Earthquake Engineering and Structural Dynamics, 2017, 46, 985-1002.	2.5	48
20	Downtime estimation of building structures using fuzzy logic. International Journal of Disaster Risk Reduction, 2019, 34, 196-208.	1.8	48
21	Noniterative Optimization Procedure for Seismic Weakening and Damping of Inelastic Structures. Journal of Structural Engineering, 2008, 134, 1638-1648.	1.7	47
22	Three-Dimensional Base Isolation Using Vertical Negative Stiffness Devices. Journal of Earthquake Engineering, 2020, 24, 2004-2032.	1.4	47
23	Optimal softening and damping design for buildings. Structural Control and Health Monitoring, 2007, 14, 831-857.	1.9	46
24	Integrated platform to assess seismic resilience at the community level. Sustainable Cities and Society, 2021, 64, 102506.	5.1	46
25	Integrated Design of Controlled Linear Structural Systems. Journal of Structural Engineering, 2009, 135, 853-862.	1.7	44
26	Correlation in spectral accelerations for earthquakes in Europe. Earthquake Engineering and Structural Dynamics, 2013, 42, 623-633.	2.5	44
27	Pedestrian evacuation simulation under the scenario with earthquake-induced falling debris. Safety Science, 2019, 114, 61-71.	2.6	44
28	Resilience Assessment of Urban Communities. ASCE-ASME Journal of Risk and Uncertainty in Engineering Systems, Part A: Civil Engineering, 2019, 5, .	1.1	43
29	Output-Only Modal Identification of Ancient Aquila City Hall and Civic Tower. Journal of Structural Engineering, 2012, 138, 481-491.	1.7	42
30	Resilience of a hospital Emergency Department under seismic event. Advances in Structural Engineering, 2016, 19, 825-836.	1.2	42
31	Rapid building damage assessment system using mobile phone technology. Earthquake Engineering and Engineering Vibration, 2014, 13, 519-533.	1.1	37
32	Deterministic and fuzzy-based methods to evaluate community resilience. Earthquake Engineering and Engineering Vibration, 2018, 17, 261-275.	1.1	33
33	Integrating a Human Behavior Model within an Agent-Based Approach for Blasting Evacuation. Computer-Aided Civil and Infrastructure Engineering, 2019, 34, 3-20.	6.3	33
34	Integrated design of inelastic controlled structural systems. Structural Control and Health Monitoring, 2009, 16, 689-702.	1.9	31
35	System Dynamics Modeling-Based Approach for Assessing Seismic Resilience of Hospitals: Methodology and a Case in China. Journal of Management in Engineering - ASCE, 2020, 36, .	2.6	31
36	A New Resilience Rating System for Countries and States. Procedia Engineering, 2017, 198, 985-998.	1.2	29

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37	Design of controlled elastic and inelastic structures. Earthquake Engineering and Engineering Vibration, 2009, 8, 469-479.	1.1	28
38	Stability analysis of different types of steel scaffolds. Engineering Structures, 2017, 152, 535-548.	2.6	28
39	Disaster Resilience Assessment of Building and Transportation System. Journal of Earthquake Engineering, 2021, 25, 703-729.	1.4	27
40	Seismic Performance of Segmental Rocking Columns Connected with NiTi Martensitic SMA Bars. Advances in Structural Engineering, 2015, 18, 571-584.	1.2	26
41	Seismic Response of Adjacent Steel Structures Connected by Passive Device. Advances in Structural Engineering, 2011, 14, 499-517.	1.2	25
42	Factor Analysis to Evaluate Hospital Resilience. ASCE-ASME Journal of Risk and Uncertainty in Engineering Systems, Part A: Civil Engineering, 2018, 4, .	1.1	25
43	A simplified method to assess generation of seismic debris for masonry structures. Engineering Structures, 2019, 186, 306-320.	2.6	25
44	Quantifying restoration time of power and telecommunication lifelines after earthquakes using Bayesian belief network model. Reliability Engineering and System Safety, 2021, 208, 107320.	5.1	25
45	Algorithm for design of controlled motion of adjacent structures. Structural Control and Health Monitoring, 2011, 18, 140-148.	1.9	24
46	Modeling the interdependency between buildings and the electrical distribution system for seismic resilience assessment. International Journal of Disaster Risk Reduction, 2020, 42, 101315.	1.8	23
47	Utilizing Base-isolation Systems to Increase Earthquake Resiliency of Healthcare and School Buildings. Procedia Economics and Finance, 2014, 18, 969-976.	0.6	22
48	Quantitative Framework to Assess Resilience and Risk at the Country Level. ASCE-ASME Journal of Risk and Uncertainty in Engineering Systems, Part A: Civil Engineering, 2018, 4, .	1.1	22
49	Nondestructive Monitoring Techniques for Crack Detection and Localization in RC Elements. Applied Sciences (Switzerland), 2020, 10, 3248.	1.3	21
50	Considerations about the optimal period range to evaluate the weight coefficient of coupled resilience index. Engineering Structures, 2014, 69, 12-24.	2.6	20
51	Deteriorated seismic capacity assessment of <scp>reinforced concrete</scp> bridge piers in corrosive environment. Structural Concrete, 2020, 21, 1823-1838.	1.5	20
52	SERVICEABILITY OF NATURAL GAS DISTRIBUTION NETWORKS AFTER EARTHQUAKES. Journal of Earthquake and Tsunami, 2013, 07, 1350005.	0.7	19
53	A first order evaluation of the capacity of a healthcare network under emergency. Earthquake Engineering and Engineering Vibration, 2019, 18, 663-677.	1.1	19
54	IdealCity: A hybrid approach to seismic evacuation modeling. Advances in Engineering Software, 2021, 153, 102956.	1.8	19

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55	Disaster resilience quantification of communities: A risk-based approach. <i>International Journal of Disaster Risk Reduction</i> , 2022, 70, 102778.	1.8	18
56	Fire Emergency Evacuation from a School Building Using an Evolutionary Virtual Reality Platform. <i>Buildings</i> , 2022, 12, 223.	1.4	18
57	A Computer-Based Environment for Processing and Selection of Seismic Ground Motion Records: OPENSIGNAL. <i>Frontiers in Built Environment</i> , 2015, 1, .	1.2	17
58	Performance-based seismic design of multistory frame structures equipped with crescent-shaped brace. <i>Structural Control and Health Monitoring</i> , 2018, 25, e2079.	1.9	17
59	A computational framework for large-scale seismic simulations of residential building stock. <i>Engineering Structures</i> , 2021, 244, 112690.	2.6	17
60	Introspection on improper seismic retrofit of Basilica Santa Maria di Collemaggio after 2009 Italian earthquake. <i>Earthquake Engineering and Engineering Vibration</i> , 2011, 10, 153-161.	1.1	15
61	Multi-Hazard Resilience Assessment of a Coastal Community Due to Offshore Earthquakes. <i>Journal of Earthquake and Tsunami</i> , 2019, 13, .	0.7	15
62	Quantifying restoration time of pipelines after earthquakes: Comparison of Bayesian belief networks and fuzzy models. <i>International Journal of Disaster Risk Reduction</i> , 2021, 64, 102491.	1.8	15
63	Analysis of the failure mechanisms of the basilica of Santa Maria di Collemaggio during 2009 L'Aquila earthquake. <i>Engineering Structures</i> , 2015, 99, 502-516.	2.6	14
64	Cascading Hazard Analysis of a Hospital Building. <i>Journal of Structural Engineering</i> , 2017, 143, .	1.7	14
65	A new energy-based ground motion selection and modification method limiting the dynamic response dispersion and preserving the median demand. <i>Bulletin of Earthquake Engineering</i> , 2018, 16, 561-581.	2.3	14
66	Modeling interdependencies of critical infrastructures after hurricane Sandy. <i>International Journal of Disaster Risk Reduction</i> , 2019, 38, 101191.	1.8	13
67	Bridge and transport network resilience – a perspective. <i>Proceedings of the Institution of Civil Engineers: Bridge Engineering</i> , 2022, 175, 138-149.	0.3	13
68	Spectral and fragility evaluations of retrofitted structures through strength reduction and enhanced damping. <i>Earthquake Engineering and Engineering Vibration</i> , 2009, 8, 115-125.	1.1	12
69	Seismic Fragility Evaluation of RC Frame Structures Retrofitted with Controlled Concrete Rocking Column and Damping Technique. <i>Journal of Earthquake Engineering</i> , 2011, 15, 1069-1082.	1.4	12
70	Resilience-based design (RBD) modelling of civil infrastructure to assess seismic hazards. , 2013, , 268-303.		12
71	Resourcefulness quantification approach for resilient communities and countries. <i>International Journal of Disaster Risk Reduction</i> , 2020, 46, 101509.	1.8	12
72	Resilience assessment at the regional level using census data. <i>International Journal of Disaster Risk Reduction</i> , 2021, 55, 102059.	1.8	12

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73	Seismic vulnerability assessment indices for buildings: Proposals, comparisons and methodologies at collapse limit states. International Journal of Disaster Risk Reduction, 2021, 63, 102466.	1.8	12
74	Closure to "New Resilience Index for Urban Water Distribution Networks" by G. P. Cimellaro, A. Tinebra, C. Renschler, and M. Fragiadakis. Journal of Structural Engineering, 2017, 143, .	1.7	11
75	Measuring and improving community resilience: A fuzzy logic approach. International Journal of Disaster Risk Reduction, 2022, 78, 103118.	1.8	10
76	Integrated Design of Smart Structures. Advances in Science and Technology, 0, , .	0.2	9
77	Analysis of Economic Resiliency of Communities Affected by Natural Disasters: The Bay Area Case Study. Procedia Economics and Finance, 2014, 18, 959-968.	0.6	9
78	The Dynamic Behavior of the Basilica of San Francesco in Assisi Using Simplified Analytical Models. International Journal of Architectural Heritage, 2016, 10, 938-953.	1.7	8
79	Time-Dependent Probability of Exceeding a Target Level of Recovery. ASCE-ASME Journal of Risk and Uncertainty in Engineering Systems, Part A: Civil Engineering, 2019, 5, .	1.1	8
80	Evolutionary Polynomial Regression Algorithm Enhanced with a Robust Formulation: Application to Shear Strength Prediction of RC Beams without Stirrups. Journal of Computing in Civil Engineering, 2021, 35, .	2.5	8
81	Disproportionate collapse of a cable-stayed bridge. Proceedings of the Institution of Civil Engineers: Bridge Engineering, 2019, 172, 13-26.	0.3	7
82	A new evolutionary polynomial regression technique to assess the fundamental periods of irregular buildings. Earthquake Engineering and Structural Dynamics, 2021, 50, 2195-2211.	2.5	7
83	Ambient vibration tests of XV century Renaissance Palace after 2012 Emilia earthquake in Northern Italy. Structural Monitoring and Maintenance, 2014, 1, 231-247.	1.7	7
84	Seismic Response of Adjacent Buildings Connected by Nonlinear Viscous Dampers. , 2007, , 1.		6
85	Reply to "Discussion 1 on "Introspection on improper seismic retrofit of Basilica Santa Maria di Collemaggio after 2009 Italian earthquake" by G.P. Cimellaro, A.M. Reinhorn and A.De Stefano" by Vincenzo Ciampi. Earthquake Engineering and Engineering Vibration, 2012, 11, 283-288.	1.1	6
86	Introduction to Resilience-Based Design (RBD). Geotechnical, Geological and Earthquake Engineering, 2015, , 151-183.	0.1	6
87	Special Issue on Resilience-Based Analysis and Design of Structures and Infrastructure Systems. Journal of Structural Engineering, 2016, 142, .	1.7	6
88	Algorithm for Optimal Design of Adjacent Buildings Connected by Fluid Viscous Devices. , 2008, , .		5
89	Optimal weakening and damping using polynomial control for seismically excited nonlinear structures. Earthquake Engineering and Engineering Vibration, 2009, 8, 607-616.	1.1	5
90	Reply to "Discussion 2 on "Introspection on improper seismic retrofit of Basilica Santa Maria di Collemaggio after 2009 Italian earthquake" by G.P. Cimellaro, A.M. Reinhorn and A.De Stefano" by Enzo Cartapati. Earthquake Engineering and Engineering Vibration, 2012, 11, 291-292.	1.1	5

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91	Seismic Performance of Industrial Sheds and Liquefaction Effects During May 2012 Emilia Earthquakes Sequence in Northern Italy. <i>Journal of Earthquake and Tsunami</i> , 2014, 08, 1450009.	0.7	5
92	Introduction to Dynamics of Structures and Earthquake Engineering. <i>Geotechnical, Geological and Earthquake Engineering</i> , 2018, , .	0.1	5
93	Resilience assessment of dynamic engineering systems. <i>MATEC Web of Conferences</i> , 2019, 281, 01008.	0.1	5
94	RESILIENCE ASSESSMENT FOR THE BUILT ENVIRONMENT OF A VIRTUAL CITY. , 2017, , .		5
95	Development of Dynamic Laboratory Platform for Earthquake Engineering Courses. <i>Journal of Professional Issues in Engineering Education and Practice</i> , 2018, 144, .	0.9	4
96	Downtime and Recovery Models. <i>Geotechnical, Geological and Earthquake Engineering</i> , 2016, , 93-108.	0.1	4
97	Consideration of Resilience of Communities in Structural Design. <i>Geotechnical, Geological and Earthquake Engineering</i> , 2014, , 401-421.	0.1	4
98	A Comprehensive Methodology for the Evaluation of Infrastructure Interdependencies. <i>Geotechnical, Geological and Earthquake Engineering</i> , 2016, , 139-223.	0.1	3
99	PEOPLES Resilience Framework. <i>Geotechnical, Geological and Earthquake Engineering</i> , 2016, , 109-137.	0.1	3
100	Tuned-Mass Dampers. <i>Geotechnical, Geological and Earthquake Engineering</i> , 2018, , 421-438.	0.1	3
101	Masonry Structures. <i>Geotechnical, Geological and Earthquake Engineering</i> , 2018, , 475-532.	0.1	3
102	Quantifying Hospital Resilience to Earthquakes Based on System Dynamics Modeling. , 2019, , .		3
103	The role of reinforced concrete roofs in the seismic performance of masonry buildings. <i>Journal of Building Engineering</i> , 2020, 28, 101056.	1.6	3
104	Improving Distributed Fiber Optic Sensor Measures by Digital Image Correlation: Two-Stage Structural Health Monitoring. <i>ACI Structural Journal</i> , 2021, 118, .	0.3	3
105	Optimal Placement of Controller for Seismic Structures. , 0, , 1-33.		3
106	Evaluation of Hollow Core Composite Insulators. , 2009, , .		2
107	Modeling Combined Friction-Viscous Damping in Response of Hollow Core Composite Insulators. , 2010, , .		2
108	Integrated Design of Smart Structures. <i>Advances in Science and Technology</i> , 0, , 127-136.	0.2	2

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109	VIRTUAL CITY FOR WATER DISTRIBUTION RESEARCH IN CRISIS MANAGEMENT. , 2017, , .		2
110	Evolutionary polynomial regression algorithm combined with robust bayesian regression. Advances in Engineering Software, 2022, 167, 103101.	1.8	2
111	Soil-Structure Interaction for Integrated Design of Weakened and Damped Structures. Journal of Earthquake and Tsunami, 2017, 11, 1750013.	0.7	1
112	Earthquake Prediction. Geotechnical, Geological and Earthquake Engineering, 2018, , 263-280.	0.1	1
113	Base Isolation. Geotechnical, Geological and Earthquake Engineering, 2018, , 439-473.	0.1	1
114	Opensignal. Geotechnical, Geological and Earthquake Engineering, 2018, , 309-329.	0.1	1
115	Physical infrastructure interdependency and regional resilience index after the 2011 Tohoku Earthquake in Japan. , 2014, 43, 1763.		1
116	MODELING AIRPORT EVACUATION UNDER EMERGENCY USING AGENT-BASED MODELS. , 2017, , .		1
117	The Physical Infrastructure Dimension Taking into Account Interdependencies. Geotechnical, Geological and Earthquake Engineering, 2016, , 317-344.	0.1	1
118	A NEW DECISION MAKING METHOD TO SELECT PRIORITY INTERVENTIONS AFTER EXTREME EVENTS. , 2017, , .		1
119	Damage risk assessment of historical asset using laser scan and finite element approach. Procedia Structural Integrity, 2020, 29, 183-191.	0.3	1
120	A New Finite Elementâ€‘Based Methodology for Earthquake Simulation of Large-Scale Urban Areas. Journal of Structural Engineering, 2022, 148, .	1.7	1
121	Considerations Regarding the Retrofit Intervention of Santa Maria Di Collemaggio Basilica in L'Aquila Following 2009 Italian Earthquake. , 2010, , .		0
122	The dynamic behaviour of the roof interventions in the Basilica San Francesco in Assisi. , 2015, , .		0
123	Resilience-Based Design (RBD). Geotechnical, Geological and Earthquake Engineering, 2016, , 31-48.	0.1	0
124	Seismic Modeling of Infill Walls. Geotechnical, Geological and Earthquake Engineering, 2018, , 369-390.	0.1	0
125	Capacity Design. Geotechnical, Geological and Earthquake Engineering, 2018, , 355-367.	0.1	0
126	Modeling of Structures in Seismic Zone. Geotechnical, Geological and Earthquake Engineering, 2018, , 533-583.	0.1	0

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127	Passive Energy Dissipating Systems. Geotechnical, Geological and Earthquake Engineering, 2018, , 391-419.	0.1	0
128	Energy Dissipation. Geotechnical, Geological and Earthquake Engineering, 2018, , 161-172.	0.1	0
129	Generalized SDOF Systems. Geotechnical, Geological and Earthquake Engineering, 2018, , 179-190.	0.1	0
130	Seismic Input. Geotechnical, Geological and Earthquake Engineering, 2018, , 281-307.	0.1	0
131	Methods of Analysis. Geotechnical, Geological and Earthquake Engineering, 2018, , 331-351.	0.1	0
132	SDOF Systems. Geotechnical, Geological and Earthquake Engineering, 2018, , 17-55.	0.1	0
133	Distributed Mass and Elasticity Systems. Geotechnical, Geological and Earthquake Engineering, 2018, , 173-178.	0.1	0
134	Neodeterministic method to assess the seismic performance of water distribution networks. , 2022, , 255-266.		0
135	A Model to Evaluate Disaster Resilience of an Emergency Department. Geotechnical, Geological and Earthquake Engineering, 2016, , 361-387.	0.1	0
136	Damage Losses Assessment Models. Geotechnical, Geological and Earthquake Engineering, 2016, , 71-92.	0.1	0
137	Computational Tools and Software for Resilience Assessment. Geotechnical, Geological and Earthquake Engineering, 2016, , 463-507.	0.1	0
138	The Physical Infrastructure Dimension of Community Resilience Framework. Geotechnical, Geological and Earthquake Engineering, 2016, , 227-315.	0.1	0
139	Applications of Seismic Resilience for Health Care Facilities and School Buildings. Geotechnical, Geological and Earthquake Engineering, 2016, , 345-359.	0.1	0
140	EXPLORING SIMULATION TOOLS FOR URBAN SEISMIC ANALYSIS AND RESILIENCE ASSESSMENT. , 2017, , .		0
141	A SIMPLIFIED APPROACH FOR THE SEISMIC ASSESSMENT OF HOSPITAL COMPLEX NETWORKS. , 2017, , .		0
142	Fragility Curves of Restoration Processes for Resilience Analysis. Springer Series in Reliability Engineering, 2017, , 495-507.	0.3	0
143	GENERATING ARTIFICIAL TIME HISTORIES USING A NEW COMPUTER-BASED ENVIRONMENTAL PLATFORM: OPENSIGNAL. , 2017, , .		0
144	ANALYSIS OF A NUCLEAR POWER PLANT FAILURE USING TEMPORAL NETWORKS. , 2017, , .		0

#	ARTICLE	IF	CITATIONS
145	DOWNTIME ESTIMATION FOR RESILIENCE ASSESSMENT ACCOUNTING EXTERNAL FACTORS. , 2017, , .		0
146	Machine Learning: The Role of Machines for Resilient Communities. , 2022, , 231-251.		0