Serena Cattari

List of Publications by Year
in descending order

80 papers	2,882 citations	218677 26 h-index	182427 51 g-index
87 all docs	87 docs citations	87 times ranked	1161 citing authors

#	Article	IF	Citations
1	TREMURI program: An equivalent frame model for the nonlinear seismic analysis of masonry buildings. Engineering Structures, 2013, 56, 1787-1799.	5.3	478
2	Modeling Strategies for the Computational Analysis of Unreinforced Masonry Structures: Review and Classification. Archives of Computational Methods in Engineering, 2020, 27, 1153-1185.	10.2	245
3	PERPETUATE guidelines for seismic performance-based assessment of cultural heritage masonry structures. Bulletin of Earthquake Engineering, 2015, 13, 13-47.	4.1	198
4	Seismic behaviour of ordinary masonry buildings during the 2016 central Italy earthquakes. Bulletin of Earthquake Engineering, 2019, 17, 5583-5607.	4.1	161
5	In‐plane strength of unreinforced masonry piers. Earthquake Engineering and Structural Dynamics, 2009, 38, 243-267.	4.4	137
6	The use of the diagonal compression test to identify the shear mechanical parameters of masonry. Construction and Building Materials, 2010, 24, 677-685.	7.2	99
7	The heuristic vulnerability model: fragility curves for masonry buildings. Bulletin of Earthquake Engineering, 2021, 19, 3129-3163.	4.1	88
8	Acquiring reference parameters of masonry for the structural performance analysis of historical buildings. Bulletin of Earthquake Engineering, 2015, 13, 203-236.	4.1	82
9	Damage assessment of fortresses after the 2012 Emilia earthquake (Italy). Bulletin of Earthquake Engineering, 2014, 12, 2333-2365.	4.1	80
10	Numerical simulation of the seismic response and soil–structure interaction for a monitored masonry school building damaged by the 2016 Central Italy earthquake. Bulletin of Earthquake Engineering, 2021, 19, 1181-1211.	4.1	68
11	Seismic assessment of interacting structural units in complex historic masonry constructions by nonlinear static analyses. Computers and Structures, 2019, 213, 51-71.	4.4	63
12	A hysteretic model for "frontal" walls in Pombalino buildings. Bulletin of Earthquake Engineering, 2012, 10, 1481-1502.	4.1	56
13	Masonry Italian Code-Conforming Buildings. Part 2: Nonlinear Modelling and Time-History Analysis. Journal of Earthquake Engineering, 2018, 22, 2010-2040.	2.5	54
14	Comparative analysis of the fragility curves for Italian residential masonry and RC buildings. Bulletin of Earthquake Engineering, 2021, 19, 3209-3252.	4.1	47
15	Fragility Functions of Masonry Buildings. Geotechnical, Geological and Earthquake Engineering, 2014, , 111-156.	0.2	45
16	Fragility curves for old masonry building types in Lisbon. Bulletin of Earthquake Engineering, 2015, 13, 3083-3105.	4.1	44
17	PERPETUATE Project: The Proposal of a Performance-Based Approach to Earthquake Protection of Cultural Heritage. Advanced Materials Research, 2010, 133-134, 1119-1124.	0.3	40
18	Seismic Performance of Historical Masonry Structures Through Pushover and Nonlinear Dynamic Analyses. Geotechnical, Geological and Earthquake Engineering, 2015, , 265-292.	0.2	38

#	ARTICLE	IF	CITATIONS
19	Seismic assessment of mixed masonry-reinforced concrete buildings by non-linear static analyses. Earthquake and Structures, 2013, 4, 241-264.	1.0	38
20	Nonlinear modeling of the seismic response of masonry structures: critical review and open issues towards engineering practice. Bulletin of Earthquake Engineering, 2022, 20, 1939-1997.	4.1	37
21	Benchmarking the seismic assessment of unreinforced masonry buildings from a blind prediction test. Structures, 2021, 31, 982-1005.	3.6	35
22	Benchmarking the software packages to model and assess the seismic response of unreinforced masonry existing buildings through nonlinear static analyses. Bulletin of Earthquake Engineering, 2022, 20, 1901-1936.	4.1	32
23	Seismic fragility assessment of existing masonry buildings in aggregate. Engineering Structures, 2021, 247, 113218.	5.3	32
24	Sensitivity analysis for setting up the investigation protocol and defining proper confidence factors for masonry buildings. Bulletin of Earthquake Engineering, 2015, 13, 129-151.	4.1	31
25	Classification of cultural heritage assets and seismic damage variables for the identification of performance levels. WIT Transactions on the Built Environment, 2011, , .	0.0	28
26	Seismic performance-based assessment of "Gaioleiro" buildings. Engineering Structures, 2014, 80, 486-500.	5.3	27
27	Performance-based assessment of the Great Mosque of Algiers. Bulletin of Earthquake Engineering, 2015, 13, 369-388.	4.1	26
28	Are the nonlinear static procedures feasible for the seismic assessment of irregular existing masonry buildings?. Engineering Structures, 2019, 200, 109700.	5.3	26
29	A comparative study on a complex URM building: part I—sensitivity of the seismic response to different modelling options in the equivalent frame models. Bulletin of Earthquake Engineering, 2022, 20, 2115-2158.	4.1	24
30	On the seismic response of buildings in aggregate: Analysis of a typical masonry building from Azores. Structures, 2017, 10, 184-196.	3.6	23
31	Earthquake damage assessment of masonry churches: proposal for rapid and detailed forms and derivation of empirical vulnerability curves. Bulletin of Earthquake Engineering, 2019, 17, 3327-3364.	4.1	21
32	Definition of fragility curves through nonlinear static analyses: procedure and application to a mixed masonry-RC building stock. Bulletin of Earthquake Engineering, 2020, 18, 513-545.	4.1	21
33	A review of numerical models for masonry structures. , 2019, , 3-53.		20
34	Seismic assessment of nineteenth and twentieth centuries URM buildings in Lisbon: structural features and derivation of fragility curves. Bulletin of Earthquake Engineering, 2020, 18, 645-672.	4.1	20
35	Modernist Unreinforced Masonry (URM) Buildings of Barcelona: Seismic Vulnerability and Risk Assessment. International Journal of Architectural Heritage, 2015, 9, 214-230.	3.1	19
36	Masonry Italian Code-Conforming Buildings. Part 1: Case Studies and Design Methods. Journal of Earthquake Engineering, 2018, 22, 54-73.	2.5	19

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37	Modelling and Seismic Response Analysis of Existing URM Structures. Part 2: Archetypes of Italian Historical Buildings. Journal of Earthquake Engineering, 2023, 27, 1849-1874.	2.5	19
38	A methodological framework to relate the earthquake-induced frequency reduction to structural damage in masonry buildings. Bulletin of Earthquake Engineering, 2022, 20, 4603-4638.	4.1	17
39	Vulnerability assessment of Hassan Bey's Mansion in Rhodes. Bulletin of Earthquake Engineering, 2015, 13, 347-368.	4.1	16
40	Dynamic calibration and seismic validation of numerical models of URM buildings through permanent monitoring data. Earthquake Engineering and Structural Dynamics, 2021, 50, 2690-2711.	4.4	16
41	On the use of continuum Finite Element and Equivalent Frame models for the seismic assessment of masonry walls. Journal of Building Engineering, 2021, 43, 102519.	3.4	16
42	Post-earthquake Damage Simulation of Two Colonial Unreinforced Clay Brick Masonry Buildings Using the Equivalent Frame Approach. Structures, 2019, 19, 212-226.	3.6	14
43	Site effects and soil-foundation-structure interaction: derivation of fragility curves and comparison with Codes-conforming approaches for a masonry school. Soil Dynamics and Earthquake Engineering, 2022, 154, 107125.	3.8	14
44	Seismic assessment and retrofitting of Pombalino buildings by pushover analyses. Earthquake and Structures, 2014, 7, 57-82.	1.0	13
45	On the reliability of the equivalent frame models: the case study of the permanently monitored Pizzoli's town hall. Bulletin of Earthquake Engineering, 2022, 20, 2187-2217.	4.1	13
46	Pombalino Constructions: Description and Seismic Assessment. Building Pathology and Rehabilitation, 2014, , 187-233.	0.2	13
47	Comparing the Observed and Numerically Simulated Seismic Damage: A Unified Procedure for Unreinforced Masonry and Reinforced Concrete Buildings. Journal of Earthquake Engineering, 2024, 28, 1157-1193.	2.5	13
48	Performance of Fiber Reinforced Mortar coating for irregular stone masonry: Experimental and analytical investigations. Construction and Building Materials, 2021, 294, 123508.	7.2	12
49	DISCUSSION ON DATA RECORDED BY THE ITALIAN STRUCTURAL SEISMIC MONITORING NETWORK ON THREE MASONRY STRUCTURES HIT BY THE 2016-2017 CENTRAL ITALY EARTHQUAKE. , 2019, , .		12
50	Cultural Heritage Monuments and Historical Buildings: Conservation Works and Structural Retrofitting. Building Pathology and Rehabilitation, 2018, , 25-57.	0.2	10
51	Use of the model parameter sensitivity analysis for the probabilistic-based seismic assessment of existing buildings. Bulletin of Earthquake Engineering, 2019, 17, 1983-2009.	4.1	10
52	Equivalent frame idealization of walls with irregular openings in masonry buildings. Engineering Structures, 2022, 256, 114055.	5.3	10
53	Sensitivity analysis of the seismic performance of ancient mixed masonry-RC buildings in Lisbon. International Journal of Masonry Research and Innovation, 2018, 3, 108.	0.4	9
54	Ambient vibration tools to validate the rigid diaphragm assumption in the seismic assessment of buildings. Earthquake Engineering and Structural Dynamics, 2020, 49, 194-211.	4.4	9

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55	Displacement-Based Simplified Seismic Loss Assessment of Masonry Buildings. Journal of Earthquake Engineering, 2020, 24, 23-59.	2.5	9
56	Validation of displacement-based procedures for rocking assessment of cantilever masonry elements. Structures, 2021, 33, 3397-3416.	3.6	9
57	Fragility Functions for Tall URM Buildings around Early 20th Century in Lisbon. Part 1: Methodology and Application at Building Level. International Journal of Architectural Heritage, 2021, 15, 349-372.	3.1	7
58	Fragility Functions for Tall URM Buildings around Early 20th Century in Lisbon, Part 2: Application to Different Classes of Buildings. International Journal of Architectural Heritage, 2021, 15, 373-389.	3.1	7
59	Linear static procedures for the seismic assessment of masonry buildings: Open issues in the new generation of European codes. Structures, 2020, 26, 427-440.	3.6	7
60	Investigating the combined role of the structural vulnerability and site effects on the seismic response of a URM school hit by the Central Italy 2016 earthquake. Structures, 2022, 40, 386-402.	3.6	7
61	Numerical Investigations On The Seismic Behaviour Of Confined Masonry Walls. AIP Conference Proceedings, 2008, , .	0.4	6
62	Seismic Behavior of Lisbon Mixed Masonry-RC Buildings With Historical Value: A Contribution for the Practical Assessment. Frontiers in Built Environment, 2018, 4, .	2.3	6
63	Seismic Assessment of Existing Irregular Masonry Buildings by Nonlinear Static and Dynamic Analyses. Geotechnical, Geological and Earthquake Engineering, 2018, , 123-151.	0.2	6
64	Modelling and Seismic Response Analysis of Existing URM Structures. Part: Archetypes of Italian Modern Buildings. Journal of Earthquake Engineering, 2024, 28, 1130-1156.	2.5	6
65	The Case Study of Santa Maria Paganica Church Damaged by 2009 Lâ€™Aquila Earthquake. Advanced Materials Research, 2010, 133-134, 163-168.	0.3	5
66	A Methodology for Approaching the Reconstruction of Historical Centres Heavily Damaged by 2009 Lâ€™Aquila Earthquake. Advanced Materials Research, 2010, 133-134, 1113-1118.	0.3	5
67	3DGIS representation for supporting seismic mitigation policies at urban scale: The case study of Lisbon. Journal of Cultural Heritage, 2020, 45, 265-278.	3.3	5
68	A Seismic Loss Assessment Procedure for Masonry Buildings. , 2015, , .		4
69	Integration of Modelling Approaches for the Seismic Assessment of Complex URM Buildings: The PodestÃ Palace in Mantua, Italy. Buildings, 2021, 11, 269.	3.1	4
70	Sensitivity and Preliminary Analyses for the Seismic Assessment of Ardinghelli Palace. RILEM Bookseries, 2019, , 2412-2421.	0.4	4
71	Seismic Out-of-Plane Assessment of PodestaÌ€ Palace in Mantua (Italy). Key Engineering Materials, 2014, 624, 88-96.	0.4	3
72	RINTC PROJECT: NONLINEAR DYNAMIC ANALYSES OF ITALIAN CODE-CONFORMING URM BUILDINGS FOR COLLAPSE RISK ASSESSMENT. , 2017, , .		3

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73	ON THE SOIL-STRUCTURE INTERACTION IN THE SEISMIC RESPONSE OF A MONITORED MASONRY SCHOOL BUILDING STRUCK BY THE 2016-2017 CENTRAL ITALY EARTHQUAKE. , 2019, , .		3
74	Buildings Behaviour in Urban Fabric: The Safety Assessment Issue in the Post Earthquake Reconstruction Plans. Key Engineering Materials, 2014, 628, 96-101.	0.4	2
75	SEISMIC ASSESSMENT OF COMPLEX ASSETS THROUGH NONLINEAR STATIC ANALYSES: THE FORTRESS IN SAN FELICE SUL PANARO HIT BY THE 2012 EARTHQUAKE IN ITALY. , 2017, , .		2
76	An Analytical Mechanical Model for the Seismic Assessment of Bell Towers. Key Engineering Materials, 0, 624, 97-105.	0.4	1
77	Displacement-Based Assessment of Cantilever Masonry Elements under Out-of-Plane Actions. , 2015, , .		0
78	Seismic Performance Based Assessment of the Arsenal de Milly of the Medieval City of Rhodes. Computational Methods in Applied Sciences (Springer), 2015, , 365-392.	0.3	0
79	Performance-based assessment of masonry churches: application to San Clemente Abbey in Castiglione a Casauria (Italy). , 2019, , 55-89.		0
80	Sensitivity analysis of the seismic performance of ancient mixed masonry-RC buildings in Lisbon. International Journal of Masonry Research and Innovation, 2018, 3, 108.	0.4	0