Antonio Arede

List of Publications by Year
in descending order

138 papers	2,409 citations	186265 28 h-index	254184 43 g-index
145 all docs	145 docs citations	145 times ranked	1440 citing authors

#	Article	IF	Citations
1	Experimental evaluation of out-of-plane capacity of masonry infill walls. Engineering Structures, 2016, 111, 48-63.	5.3	148
2	Simplified macro‐model for infill masonry walls considering the out‐of‐plane behaviour. Earthquake Engineering and Structural Dynamics, 2016, 45, 507-524.	4.4	111
3	Experimental evaluation of rectangular reinforced concrete column behaviour under biaxial cyclic loading. Earthquake Engineering and Structural Dynamics, 2013, 42, 239-259.	4.4	93
4	A comparative analysis of energy dissipation and equivalent viscous damping of RC columns subjected to uniaxial and biaxial loading. Engineering Structures, 2012, 35, 149-164.	5.3	78
5	Modelling of masonry infill walls participation in the seismic behaviour of RC buildings using OpenSees. International Journal of Advanced Structural Engineering, 2015, 7, 117-127.	1.3	62
6	Calibration of the numerical model of a stone masonry railway bridge based on experimentally identified modal parameters. Engineering Structures, 2016, 123, 354-371.	5.3	61
7	Seismic performance of the infill masonry walls and ambient vibration tests after the Ghorka 2015, Nepal earthquake. Bulletin of Earthquake Engineering, 2017, 15, 1185-1212.	4.1	61
8	Numerical modelling of the cyclic behaviour of RC elements built with plain reinforcing bars. Engineering Structures, 2011, 33, 273-286.	5.3	60
9	Comparative efficiency analysis of different nonlinear modelling strategies to simulate the biaxial response of RC columns. Earthquake Engineering and Engineering Vibration, 2012, 11, 553-566.	2.3	53
10	Out-of-plane behavior of masonry infilled RC frames based on the experimental tests available: A systematic review. Construction and Building Materials, 2018, 168, 831-848.	7.2	52
11	Physical characterization and compression tests of one leaf stone masonry walls. Construction and Building Materials, 2012, 30, 188-197.	7.2	51
12	Global overview on advances in structural health monitoring platforms. Journal of Civil Structural Health Monitoring, 2016, 6, 461-475.	3.9	49
13	Mainshock-aftershock damage assessment of infilled RC structures. Engineering Structures, 2018, 175, 645-660.	5.3	49
14	Behavior of Rectangular Reinforced-Concrete Columns under Biaxial Cyclic Loading and Variable Axial Loads. Journal of Structural Engineering, 2016, 142, .	3.4	46
15	<i>In situ</i> cyclic tests on existing stone masonry walls and strengthening solutions. Earthquake Engineering and Structural Dynamics, 2011, 40, 449-471.	4.4	42
16	2D and 3D Digital Image Correlation in Civil Engineering â€" Measurements in a Masonry Wall. Procedia Engineering, 2015, 114, 215-222.	1.2	41
17	Damage evolution in reinforced concrete columns subjected to biaxial loading. Bulletin of Earthquake Engineering, 2013, 11, 1517-1540.	4.1	40
18	On the use of under sleeper pads in transition zones at railway underpasses: experimental field testing. Structure and Infrastructure Engineering, 2015, 11, 112-128.	3.7	37

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19	Experimental tests on strengthening strategies for masonry infill walls: A literature review. Construction and Building Materials, 2020, 263, 120520.	7.2	37
20	Shear effects on hollow section piers under seismic actions: experimental and numerical analysis. Bulletin of Earthquake Engineering, 2009, 7, 377-389.	4.1	36
21	Behaviour of reinforced concrete column under biaxial cyclic loading—state of the art. International Journal of Advanced Structural Engineering, 2013, 5, 4.	1.3	36
22	Geometric characterisation of Portuguese RC buildings with masonry infill walls. European Journal of Environmental and Civil Engineering, 2016, 20, 396-411.	2.1	34
23	Effect of the Panel Width Support and Columns Axial Load on the Infill Masonry Walls Out-Of-Plane Behavior. Journal of Earthquake Engineering, 2020, 24, 653-681.	2.5	34
24	Experimental study of repaired RC columns subjected to uniaxial and biaxial horizontal loading and variable axial load with longitudinal reinforcement welded steel bars solutions. Engineering Structures, 2018, 155, 371-386.	5.3	33
25	Prediction of the earthquake response of a three-storey infilled RC structure. Engineering Structures, 2018, 171, 214-235.	5.3	32
26	Updating Numerical Models of Masonry Arch Bridges by Operational Modal Analysis. International Journal of Architectural Heritage, 2015, 9, 760-774.	3.1	31
27	Experimental characterization of the out-of-plane performance of regular stone masonry walls, including test setups and axial load influence. Bulletin of Earthquake Engineering, 2015, 13, 2667-2692.	4.1	31
28	Study of the Seismic Response on the Infill Masonry Walls of a 15-Storey Reinforced Concrete Structure in Nepal. Buildings, 2019, 9, 39.	3.1	30
29	Out-of-plane behaviour of existing stone masonry buildings: experimental evaluation. Bulletin of Earthquake Engineering, 2012, 10, 93-111.	4.1	29
30	Free rocking response of a regular stone masonry wall with equivalent block approach: experimental and analytical evaluation. Earthquake Engineering and Structural Dynamics, 2013, 42, 2297-2319.	4.4	29
31	Experimental characterization of the mechanical behaviour of components and materials of stone masonry railway bridges. Construction and Building Materials, 2017, 153, 663-681.	7.2	28
32	Experimental testing, numerical modelling and seismic strengthening of traditional stone masonry: comprehensive study of a real Azorian pier. Bulletin of Earthquake Engineering, 2012, 10, 135-159.	4.1	27
33	Modal identification of infill masonry walls with different characteristics. Engineering Structures, 2017, 145, 118-134.	5.3	27
34	Long-term monitoring of a damaged historic structure using a wireless sensor network. Engineering Structures, 2018, 161, 108-117.	5.3	27
35	Seismic behavior of strengthened RC columns under biaxial loading: An experimental characterization. Construction and Building Materials, 2015, 95, 393-405.	7.2	26
36	Experimental evaluation of energy dissipation and viscous damping of repaired and strengthened RC columns with CFRP jacketing under biaxial load. Engineering Structures, 2017, 145, 162-175.	5.3	26

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37	Simplified hysteretic model for the representation of the biaxial bending response of RC columns. Engineering Structures, 2012, 44, 146-158.	5.3	25
38	Seismic behavior of RC building structures designed according to current codes. Structures, 2016, 7, 1-13.	3.6	24
39	Influence of the in Plane and Out-of-Plane Masonry Infill Walls' Interaction in the Structural Response of RC Buildings. Procedia Engineering, 2015, 114, 722-729.	1.2	23
40	The use of textile-reinforced mortar as a strengthening technique for the infill walls out-of-plane behaviour. Composite Structures, 2021, 255, 113029.	5.8	22
41	Seismic Rehabilitation of RC Columns Under Biaxial Loading: An Experimental Characterization. Structures, 2015, 3, 43-56.	3.6	21
42	Out‐of‐plane behaviour of a full scale stone masonry façade. Part 2: shaking table tests. Earthquake Engineering and Structural Dynamics, 2013, 42, 2097-2111.	4.4	20
43	Mechanical properties characterization of different types of masonry infill walls. Frontiers of Structural and Civil Engineering, 2020, 14, 411-434.	2.9	20
44	Retrofit of RC hollow piers with CFRP sheets. Composite Structures, 2012, 94, 1280-1287.	5.8	19
45	Strengthening of structures damaged by the Azores earthquake of 1998. Construction and Building Materials, 2006, 20, 252-268.	7.2	18
46	Calibration and application of a continuum damage model on the simulation of stone masonry structures: Gondar church as a case study. Bulletin of Earthquake Engineering, 2012, 10, 211-234.	4.1	17
47	Calibration of the Numerical Model of a Short-span Masonry Railway Bridge Based on Experimental Modal Parameters. Procedia Engineering, 2015, 114, 846-853.	1.2	17
48	Calibration of a simplified macro-model for infilled frames with openings. Advances in Structural Engineering, 2018, 21, 157-170.	2.4	17
49	In-situ and lab tests for mechanical characterization of stone masonry historical structures. Construction and Building Materials, 2019, 220, 503-515.	7.2	17
50	A Review of the Performance of Infilled RC Structures in Recent Earthquakes. Applied Sciences (Switzerland), 2021, 11, 5889.	2.5	17
51	*In situ* Out-of-Plane Cyclic Testing of Original and Strengthened Traditional Stone Masonry Walls Using Airbags. Journal of Earthquake Engineering, 2016, 20, 749-772.	2.5	16
52	Experimental and numerical assessment of confined infill walls with openings and textile-reinforced mortar. Soil Dynamics and Earthquake Engineering, 2021, 151, 106960.	3.8	16
53	Double-Leaf Infill Masonry Walls Cyclic In-Plane Behaviour: Experimental and Numerical Investigation. Open Construction and Building Technology Journal, 2018, 12, 35-48.	0.7	16
54	Detailed FE and DE Modelling of Stone Masonry Arch Bridges for the Assessment of Load-carrying Capacity. Procedia Engineering, 2015, 114, 854-861.	1.2	15

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55	Geometric indices to quantify textures irregularity of stone masonry walls. Construction and Building Materials, 2016, 111, 199-208.	7.2	15
56	Ambient vibration testing and seismic analysis of a masonry chimney. Journal of Building Appraisal, 2009, 5, 101-121.	0.4	14
57	Out-of-plane behaviour of a full scale stone masonry façade. Part 1: specimen and ground motion selection. Earthquake Engineering and Structural Dynamics, 2013, 42, 2081-2095.	4.4	14
58	Advances on the use of non-destructive techniques for mechanical characterization of stone masonry: GPR and sonic tests. Procedia Structural Integrity, 2017, 5, 1108-1115.	0.8	14
59	Structural health monitoring of the retrofitting process, characterization and reliability analysis of a masonry heritage construction. Journal of Civil Structural Health Monitoring, 2017, 7, 405-428.	3.9	14
60	Model Updating of a Freight Wagon Based on Dynamic Tests under Different Loading Scenarios. Applied Sciences (Switzerland), 2021, 11, 10691.	2.5	14
61	Simulation of masonry out-of-plane failure modes by multi-body dynamics. Earthquake Engineering and Structural Dynamics, 2015, 44, 2529-2549.	4.4	12
62	Experimental Characterization of the In-plane and Out-of-Plane Behaviour of Infill Masonry Walls. Procedia Engineering, 2015, 114, 862-869.	1.2	12
63	Numerical methodologies for the analysis of stone arch bridges with damage under railway loading. Structures, 2022, 39, 573-592.	3.6	12
64	Experimental and numerical investigation of the cyclic response of stainless steel reinforced concrete columns. Engineering Structures, 2022, 252, 113607.	5.3	11
65	Influence of textile reinforced mortars strengthening on the in-plane/out-of-plane response of masonry infill walls in RC frames. Engineering Structures, 2022, 254, 113887.	5.3	11
66	Experimental Investigation on the Possible Effect of Previous Damage, Workmanship and Test Setup on the Out-of-plane Behaviour of Masonry Infill Walls. Journal of Earthquake Engineering, 2022, 26, 5647-5678.	2.5	10
67	Strengthening of Stone and Brick Masonry Buildings. Building Pathology and Rehabilitation, 2018, , 59-84.	0.2	10
68	Comparative Analysis of RC Irregular Buildings Designed According to Different Seismic Design Codes. Open Construction and Building Technology Journal, 2013, 7, 221-229.	0.7	10
69	Assessment of the mainshock-aftershock collapse vulnerability of RC structures considering the infills in-plane and out-of-plane behaviour. Procedia Engineering, 2017, 199, 619-624.	1.2	9
70	Experimental characterization of the out-of-plane behaviour of masonry infill walls made of lightweight concrete blocks. Engineering Structures, 2021, 244, 112755.	5.3	9
71	Numerical Simulations of RC Hollow Piers Under Horizontal Cyclic Loading. Journal of Earthquake Engineering, 2011, 15, 833-849.	2.5	8
72	In-plane Response of Masonry Infill Walls: Experimental Study using Digital Image Correlation. Procedia Engineering, 2015, 114, 870-876.	1.2	8

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73	Evaluation of the contribution of masonry infill panels on the seismic behaviour of two existing reinforced concrete buildings. KSCE Journal of Civil Engineering, 2016, 20, 1365-1374.	1.9	8
74	Cost-effective analysis of textile-reinforced mortar solutions used to reduce masonry infill walls collapse probability under seismic loads. Structures, 2020, 28, 141-157.	3.6	8
75	Load Path Effect on the Response of Slender Lightly Reinforced Square RC Columns under Biaxial Bending. Journal of Structural Engineering, 2022, 148, .	3.4	8
76	Calibration of the numerical model of a freight railway vehicle based on experimental modal parameters. Structures, 2022, 38, 108-122.	3.6	8
77	Seismic behavior of coupled column bridge RC piers: Experimental campaign. Engineering Structures, 2017, 132, 399-412.	5.3	7
78	Cantilever flexural strength tests of masonry infill walls strengthened with textile-reinforced mortar. Journal of Building Engineering, 2021, 33, 101611.	3.4	7
79	Non-destructive Method of the Assessment of Stone Masonry by Artificial Neural Networks. Open Construction and Building Technology Journal, 2020, 14, 84-97.	0.7	7
80	Cyclic behaviour of as-built and strengthened existing reinforced concrete columns previously damaged by fire. Engineering Structures, 2022, 266, 114584.	5.3	7
81	BEHAVIOR OF RC BUILDING COLUMNS UNDER CYCLIC LOADING: EXPERIMENTAL STUDY. Journal of Earthquake and Tsunami, 2012, 06, 1250026.	1.3	6
82	Load-Path Influence in the Response of RC Buildings Subjected to Biaxial Horizontal Loadings: Numerical Study. International Journal of Civil Engineering, 2018, 16, 739-755.	2.0	6
83	Correlation Between Sonic and Mechanical Test Results on Stone Masonry Walls. RILEM Bookseries, 2019, , 456-464.	0.4	6
84	The role of the openings in the out-of-plane behaviour of masonry infill walls. Engineering Structures, 2021, 244, 112793.	5.3	6
85	Impact of the Textile Mesh on the Efficiency of TRM Strengthening Solutions to Improve the Infill Walls Out-of-Plane Behaviour. Applied Sciences (Switzerland), 2020, 10, 8745.	2.5	5
86	Validation of nondestructive methods for assessing stone masonry using artificial neural networks. Journal of Building Engineering, 2021, 42, 102469.	3.4	5
87	Effect of the infill panels in the floor response spectra of an 8-storey RC building. Structures, 2021, 34, 2476-2498.	3.6	5
88	Interactions between Seismic Safety and Energy Efficiency for Masonry Infill Walls: A Shift of the Paradigm. Energies, 2022, 15, 3269.	3.1	5
89	Seismic analysis and strengthening of Pico Island Churches. Bulletin of Earthquake Engineering, 2012, 10, 181-209.	4.1	4
90	Mechanical characterization of concrete block used on infill masonry panels. International Journal of Structural Integrity, 2018, 9, 281-295.	3.3	4

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91	Overstrength factors of RC bridges supported on single and multiâ€column RC piers in Mexico. Earthquake Engineering and Structural Dynamics, 2021, 50, 3695-3712.	4.4	4
92	Compressive behaviour of old one-leaf stone masonry walls; the influence of patternsâ€™ regularity and constructive process. Construction and Building Materials, 2021, 311, 125339.	7.2	4
93	Seismic analysis of a building block. Bulletin of Earthquake Engineering, 2012, 10, 235-267.	4.1	3
94	Numerical modelling of RC strengthened columns under biaxial loading. Innovative Infrastructure Solutions, 2016, 1, 1.	2.2	3
95	Structural reliability assessment based on optical monitoring system: case study. Revista IBRACON De Estruturas E Materiais, 2016, 9, 297-305.	0.6	3
96	Numerical Modelling of RC Columns Subjected to Biaxial Horizontal Loading and Variable Axial Load. American Journal of Civil Engineering and Architecture, 2015, 3, 28-38.	0.2	3
97	Cyclic behaviour of precast beamâ€toâ€column connections with low seismic detailing. Earthquake Engineering and Structural Dynamics, 2022, 51, 1096-1114.	4.4	3
98	Discrete Element Modeling of a Post-Tensioned Masonry Arch. , 0, , .		3
99	Ongoing research on seismic safety assessment. Bulletin of Earthquake Engineering, 2010, 8, 181-199.	4.1	2
100	Modelling of Bridges for Inelastic Analysis. Geotechnical, Geological and Earthquake Engineering, 2012, , 5-84.	0.2	2
101	PERFORMANCE ASSESSMENT OF INFILLED RC STRUCTURES CONSIDERING THE INFILL MASONRY WALLS OUT-OF-PLANE BEHAVIOUR. , 2017, , .		2
102	EXPERIMENTAL ASSESSMENT OF STRENGTHENING STRATEGY TO IMPROVE THE MASONRY INFILLS OUT-OF-PLANE BEHAVIOUR THROUGH TEXTILE REINFORCED MORTAR. , 2019, , .		2
103	Experimental Characterization of Mechanical Behaviour of Existing Tabique Walls Under Compressive and Shear Loading. RILEM Bookseries, 2019, , 568-576.	0.4	2
104	Contributions on Refined Modelling of Stone Arch Bridges. Structural Integrity, 2020, , 128-135.	1.4	2
105	The Effect of a Textile-Reinforced Mortar on the Flexural Response of Energy-Improved Infill Walls. Journal of Composites for Construction, 2022, 26, .	3.2	2
106	Employment of optical fibers for RC bond-slip characterization. Procedia Structural Integrity, 2018, 11, 138-144.	0.8	1
107	Influence of seismic loading on axial load variation in reinforced concrete columns. E-GFOS, 2018, , 37-49.	0.3	1
108	Perspectives and Approaches for the Out-of-Plane Testing of Masonry Infill Walls. Experimental Techniques, 2021, 45, 457-469.	1.5	1

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109	The infilled RC structures performance in the 25th April, 2015 Gorkha Nepal earthquake: Observations and dynamic characterization tests. , 2016, , 2517-2524.		1
110	Improvement of sonic tests methodology for the characterization of stone masonry. First Break, 2018, 36, 59-63.	0.4	1
111	EXPERIMENTAL AND NUMERICAL STUDY OF RC COLUMNS UNDER BIAXIAL LOADING: AS BUILT. , 2014, , .		1
112	EFFICIENCY OF DIFFERENT RETROFITTING TECHNICHS FOR RC COLUMNS UNDER BIAXIAL LOADING: EXPERIMENTAL STUDY. , 2015, , .		1
113	EXPERIMENTAL AND NUMERICAL ANALYSIS ON THE CYCLIC BEHAVIOR OF BRIDGE PIERS WITH AND WITHOUT CFRP RETROFIT. , 2015, , .		1
114	EVALUATION OF DAMAGE IN REINFORCED CONCRETE COLUMNS UNDER BIAXIAL LOADING. , 2014, , .		1
115	Multiple fiber optic twin-sensor-array based on Michelson optical low-coherence reflectometer. , 2015, , 1009-1010.		1
116	Experimental study of the out-of-plane behaviour of masonry infill walls with and without previous in-plane damage. , 2016, , 1201-1208.		1
117	Train-bridge dynamic interaction on a stone masonry railway bridge. , 2016, , 357-357.		1
118	Experimental assessment of the components and materials of stone arch railway bridges. , 2016, , 358-358.		1
119	Structural analysis of a stone arch bridge under incremental railway static loading. IABSE Symposium Report, 2019, , .	0.0	1
120	A Novel Approach to the in situ Compression Testing of Stone Masonry Walls. RILEM Bookseries, 2019, , 741-750.	0.4	1
121	Dynamic and Quasi-static Load Tests in a Railway Stone Multispan Masonry Arch Bridge. Structural Integrity, 2020, , 516-524.	1.4	1
122	Tabique walls, a light timber structure â€" constructive details and material characterization. Architecture, Structures and Construction, 2021, 1, 107-123.	1.5	1
123	Damage index model and hysteretic viscous damping of masonry infill walls subjected to out-of-plane loadings. Journal of Building Engineering, 2022, 50, 104196.	3.4	1
124	Influence of Infill Masonry Walls in the Seismic Response of Buildings: From Field Observations to Laboratory Research. Springer Natural Hazards, 2018, , 451-466.	0.3	0
125	Analysis and diagnosis of timber structures in Porto historical centre. , 2008, , 653-661.		0
126	The importance of knowledge on the vernacular heritage preservation. , 2013, , 377-382.		0

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127	EXPERIMENTAL CYCLIC TESTS OF HOLLOW PIERS WITH DIFFERENT RETROFIT STRATEGIES. , 2014, , .		0
128	NUMERICAL SEISMIC SAFETY ASSESSMENT OF RC BRIDGES WITH HOLLOW PIERS. , 2015, , .		0
129	Numerical Modeling of RC Bridges for Seismic Risk Analysis. Advances in Systems Analysis, Software Engineering, and High Performance Computing Book Series, 2016, , 457-481.	0.5	0
130	Structural survey and diagnosis of historical constructions â€" the experience of the Construction Institute. Vitruvio, 2016, 1, 49.	0.3	0
131	COST OF REPAIR AND RETROFIT OF SEISMIC DAMAGE OF RC HOLLOW-PIERS. , 2017, , .		0
132	Grillage Modeling Approach Applied to Simple-span Slab-girder Skewed Bridges for Dynamic Analysis. U Porto Journal of Engineering, 2017, 2, 53-65.	0.4	0
133	EXPERIMENTAL ASSESSMENT OF STRENGTHENING STRATEGIES AGAINST THE OUT-OF-PLANE COLLAPSE OF MASONRY INFILLS IN EXISTING RC STRUCTURES. , 2019, , .		0
134	SEISMIC ANALYSIS OF A MEXICAN VIADUCT WITH NONLINEAR MODELLING OF SOIL-STRUCTURE INTERACTION. , 2019, , .		0
135	Contributions for experimental and numerical characterization of the structural behaviour of stone arch bridges. IABSE Symposium Report, 2019, , .	0.0	0
136	Survey Methodologies and Intervention in Stone Masonry Arch Bridges: The Case Study of Esmoriz Bridge. Structural Integrity, 2020, , 901-908.	1.4	0
137	Conception and Justification of a New Test Setup for Assessment of the Fatigue Strength of Connections Between Precast Railway Bridge Girders. U Porto Journal of Engineering, 2020, 6, 22-34.	0.4	0
138	Earthquake source effect and impact of the applied methodology to assess the overstrength factors of RC bridges. Soil Dynamics and Earthquake Engineering, 2022, 157, 107273.	3.8	0