AnÃ-bal Costa

List of Publications by Year
in descending order

121 papers	2,900 citations	172457 29 h-index	206112 48 g-index
125 all docs	125 docs citations	125 times ranked	1978 citing authors

#	ARTICLE	IF	CITATIONS
1	Mechanical properties of adobe bricks in ancient constructions. Construction and Building Materials, 2012, 28, 36-44.	7.2	143
2	Optical Fiber Accelerometer System for Structural Dynamic Monitoring. IEEE Sensors Journal, 2009, 9, 1347-1354.	4.7	126
3	Simplified Macro-Model for Infill Masonry Panels. Journal of Earthquake Engineering, 2010, 14, 390-416.	2.5	126
4	Field observations and interpretation of the structural performance of constructions after the 11 May 2011 Lorca earthquake. Engineering Failure Analysis, 2013, 34, 670-692.	4.0	114
5	Seismic vulnerability assessment of historical urban centres: case study of the old city centre in Seixal, Portugal. Bulletin of Earthquake Engineering, 2013, 11, 1753-1773.	4.1	111
6	Experimental evaluation of rectangular reinforced concrete column behaviour under biaxial cyclic loading. Earthquake Engineering and Structural Dynamics, 2013, 42, 239-259.	4.4	93
7	Performance of masonry enclosure walls: lessons learned from recent earthquakes. Earthquake Engineering and Engineering Vibration, 2012, 11, 23-34.	2.3	88
8	An empirical power comparison of univariate goodness-of-fit tests for normality. Journal of Statistical Computation and Simulation, 2010, 80, 545-591.	1.2	84
9	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
10	Seismic retrofitting solution of an adobe masonry wall. Materials and Structures/Materiaux Et Constructions, 2013, 46, 203-219.	3.1	77
11	Influence of the testing procedures in the mechanical characterization of adobe bricks. Construction and Building Materials, 2013, 40, 719-728.	7.2	74
12	Analysis of the Out-Of-Plane Seismic Behavior of Unreinforced Masonry: A Literature Review. International Journal of Architectural Heritage, 2015, 9, 949-972.	3.1	73
13	Structural Health Monitoring of the Church of Santa Casa da Misericõrdia of Aveiro Using FBG Sensors. IEEE Sensors Journal, 2008, 8, 1236-1242.	4.7	69
14	Numerical modelling of the cyclic behaviour of RC elements built with plain reinforcing bars. Engineering Structures, 2011, 33, 273-286.	5.3	60
15	Seismic vulnerability assessment and characterisation of the buildings on Faial Island, Azores. Bulletin of Earthquake Engineering, 2012, 10, 27-44.	4.1	58
16	Urban fire risk: Evaluation and emergency planning. Journal of Cultural Heritage, 2016, 20, 739-745.	3.3	55
17	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
18	Physical characterization and compression tests of one leaf stone masonry walls. Construction and Building Materials, 2012, 30, 188-197.	7.2	51

#	Article	IF	Citations
19	Sonic Impact Method â€" A new technique for characterization of stone masonry walls. Construction and Building Materials, 2012, 36, 27-35.	7.2	43
20	<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
21	Damage evolution in reinforced concrete columns subjected to biaxial loading. Bulletin of Earthquake Engineering, 2013, 11, 1517-1540.	4.1	40
22	Empirical Formulation for Estimating the Fundamental Frequency of Slender Masonry Structures. International Journal of Architectural Heritage, 2016, 10, 55-66.	3.1	38
23	Shear effects on hollow section piers under seismic actions: experimental and numerical analysis. Bulletin of Earthquake Engineering, 2009, 7, 377-389.	4.1	36
24	Behaviour of reinforced concrete column under biaxial cyclic loadingâ€"state of the art. International Journal of Advanced Structural Engineering, 2013, 5, 4.	1.3	36
25	Determination of mechanical properties of traditional masonry walls in dwellings of Faial Island, Azores. Earthquake Engineering and Structural Dynamics, 2002, 31, 1361-1382.	4.4	34
26	Mechanical Properties and Behavior of Traditional Adobe Wall Panels of the Aveiro District. Journal of Materials in Civil Engineering, 2015, 27, .	2.9	33
27	Behaviour Characterization and Rehabilitation of Adobe Construction. Procedia Engineering, 2015, 114, 714-721.	1.2	32
28	Updating Numerical Models of Masonry Arch Bridges by Operational Modal Analysis. International Journal of Architectural Heritage, 2015, 9, 760-774.	3.1	31
29	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
30	Weldable fibre Bragg grating sensors for steel bridge monitoring. Measurement Science and Technology, 2008, 19, 125305.	2.6	30
31	Structural Behaviour and Retrofitting of Adobe Masonry Buildings. Building Pathology and Rehabilitation, 2014, , 37-75.	0.2	30
32	Evaluation of different strengthening techniquesâ€™ efficiency for a soft storey building. European Journal of Environmental and Civil Engineering, 2017, 21, 371-388.	2.1	30
33	Out-of-plane behaviour of existing stone masonry buildings: experimental evaluation. Bulletin of Earthquake Engineering, 2012, 10, 93-111.	4.1	29
34	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
35	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
36	Seismic sensitivity analysis of the common structural components of Nepalese Pagoda temples. Bulletin of Earthquake Engineering, 2014, 12, 1679-1703.	4.1	27

#	Article	IF	Citations
37	Investigaciones realizadas en la Universidad de Aveiro sobre caracterización mecánica de las construcciones existentes en adobe en Portugal y propuestas de rehabilitación y refuerzo. Resultados alcanzados. Informes De La Construccion, 2011, 63, 127-142.	0.3	27
38	A non-linear masonry infill macro-model to represent the global behaviour of buildings under cyclic loading. International Journal of Mechanics and Materials in Design, 2008, 4, 123-135.	3.0	26
39	Importance of the bond–slip mechanism in the numerical simulation of the cyclic response of RC elements with plain reinforcing bars. Engineering Structures, 2013, 56, 396-406.	5.3	26
40	Simplified hysteretic model for the representation of the biaxial bending response of RC columns. Engineering Structures, 2012, 44, 146-158.	5.3	25
41	Seismic behavior of RC building structures designed according to current codes. Structures, 2016, 7, 1-13.	3.6	24
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	Applications of Sonic Tests to Masonry Elements: Influence of Joints on the Propagation Velocity of Elastic Waves. Journal of Materials in Civil Engineering, 2013, 25, 667-682.	2.9	20
44	Assessment of mechanical properties of full-scale masonry panels through sonic methods. Comparison with mechanical destructive tests. Structural Control and Health Monitoring, 2016, 23, 503-516.	4.0	20
45	Conservation level of residential buildings: Methodology evolution. Construction and Building Materials, 2018, 172, 781-786.	7.2	20
46	Seismic Vulnerability and Risk Assessment of Historic Masonry Buildings. Building Pathology and Rehabilitation, 2014, , 307-348.	0.2	20
47	Assessment of the Statistical Distributions of Structural Demand Under Earthquake Loading. Journal of Earthquake Engineering, 2011, 15, 724-753.	2.5	19
48	Retrofit of RC hollow piers with CFRP sheets. Composite Structures, 2012, 94, 1280-1287.	5.8	19
49	Strengthening of structures damaged by the Azores earthquake of 1998. Construction and Building Materials, 2006, 20, 252-268.	7.2	18
50	A comparative application of different EC8-3 procedures for the seismic safety assessment of existing structures. Bulletin of Earthquake Engineering, 2010, 8, 91-118.	4.1	18
51	Optical Sensors Based on Fiber Bragg Gratings for Structural Health Monitoring. Lecture Notes in Electrical Engineering, 2011, , 253-295.	0.4	18
52	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
53	Seismic vulnerability assessment methodology for slender masonry structures. International Journal of Architectural Heritage, 2018, 12, 1297-1326.	3.1	17
54	In-situ and lab tests for mechanical characterization of stone masonry historical structures. Construction and Building Materials, 2019, 220, 503-515.	7.2	17

#	Article	IF	Citations
55	CABLE TENSIONING CONTROL AND MODAL IDENTIFICATION OF A CIRCULAR CABLE-STAYED FOOTBRIDGE. Experimental Techniques, 2010, 34, 62-68.	1.5	16
56	Alternative closed‐form solutions for the mean rate of exceedance of structural limit states. Earthquake Engineering and Structural Dynamics, 2013, 42, 1827-1845.	4.4	16
57	<i>In situ</i> 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
58	Seismic vulnerability and loss assessment of the Nepalese Pagoda temples. Bulletin of Earthquake Engineering, 2015, 13, 2197-2223.	4.1	15
59	Geometric indices to quantify textures irregularity of stone masonry walls. Construction and Building Materials, 2016, 111, 199-208.	7.2	15
60	Ambient vibration testing and seismic analysis of a masonry chimney. Journal of Building Appraisal, 2009, 5, 101-121.	0.4	14
61	Evaluation of the EC8-3 confidence factors for the characterization of concrete strength in existing structures. Materials and Structures/Materiaux Et Constructions, 2012, 45, 1737-1758.	3.1	14
62	Out‐of‐plane behaviour of a full scale stone masonry faÃ§ade. Part 1: specimen and ground motion selection. Earthquake Engineering and Structural Dynamics, 2013, 42, 2081-2095.	4.4	14
63	Seismic retrofit of RC frames. Computers and Structures, 2004, 82, 1523-1534.	4.4	13
64	Efficiency of strengthening techniques assessed for existing masonry buildings. Engineering Structures, 2015, 101, 205-215.	5.3	13
65	Common Pathologies in Composite Adobe and Reinforced Concrete Constructions. Journal of Performance of Constructed Facilities, 2012, 26, 389-401.	2.0	12
66	Simulation of masonry out‐of‐plane failure modes by multi‐body dynamics. Earthquake Engineering and Structural Dynamics, 2015, 44, 2529-2549.	4.4	12
67	A methodology for the probabilistic assessment of behaviour factors. Bulletin of Earthquake Engineering, 2010, 8, 47-64.	4.1	11
68	Comparative structural response of two steel bridges constructed 100 years apart. Structure and Infrastructure Engineering, 2011, 7, 843-855.	3.7	11
69	Historic Appraisal Review and Geometric Characterization of Old Masonry Buildings in Lisbon for Seismic Risk Assessment. International Journal of Architectural Heritage, 2022, 16, 1921-1941.	3.1	11
70	Seismic behavior of two Portuguese adobe buildings: Part I - in-plane cyclic testing of a full-scale adobe wall. International Journal of Architectural Heritage, 2018, 12, 922-935.	3.1	9
71	Seismic vulnerability assessment and fragility analysis of pre-code masonry buildings in Portugal. Bulletin of Earthquake Engineering, 2022, 20, 6229-6265.	4.1	9
72	Numerical Simulations of RC Hollow Piers Under Horizontal Cyclic Loading. Journal of Earthquake Engineering, 2011, 15, 833-849.	2.5	8

#	ARTICLE	IF	CITATIONS
73	Adobe and Modernism in Ãlhavo, Portugal. International Journal of Architectural Heritage, 2012, 6, 525-541.	3.1	8
74	Statistical Characterization of Structural Demand under Earthquake Loading. Part 1: Robust Estimation of the Central Value of the Data. Journal of Earthquake Engineering, 2012, 16, 686-718.	2.5	8
75	Survey of the Facade Walls of Existing Adobe Buildings. International Journal of Architectural Heritage, 2016, 10, 867-886.	3.1	8
76	AnÃ¡lise comparativa do comportamento cÃclico de nÃ³s viga-pilar com armadura lisa e nervurada. Revista IBRACON De Estruturas E Materiais, 2011, 4, 147-172.	0.6	8
77	Cyclic behavior of a two-span RC beam built with plain reinforcing bars. Periodica Polytechnica: Civil Engineering, 2011, 55, 21.	0.6	8
78	Practical aspects of demand and capacity evaluation of RC members in the context of EC8â€3. Earthquake Engineering and Structural Dynamics, 2010, 39, 473-499.	4.4	7
79	Simplified models for assessment and optimal redesign of irregular planar frames. Engineering Structures, 2012, 42, 245-257.	5.3	7
80	BEHAVIOR OF RC BUILDING COLUMNS UNDER CYCLIC LOADING: EXPERIMENTAL STUDY. Journal of Earthquake and Tsunami, 2012, 06, 1250026.	1.3	6
81	Probabilistic Performance Analysis of Existing Buildings under Earthquake Loading. Journal of Earthquake Engineering, 2014, 18, 1241-1265.	2.5	6
82	Seismic Analysis of a Portuguese Vernacular Building. Journal of Architectural Engineering, 2018, 24, 05017010.	1.6	6
83	Is the use of traditional seismic strengthening strategies economically attractive in the renovation of urban cultural heritage assets in Portugal?. Bulletin of Earthquake Engineering, 2019, 17, 2307-2330.	4.1	6
84	Statistical Characterization of Structural Demand under Earthquake Loading. Part 2: Robust Estimation of the Dispersion of the Data. Journal of Earthquake Engineering, 2012, 16, 864-896.	2.5	5
85	Absorbent materials in waterproofing barriers, analysis of the role of diatomaceous earth. Construction and Building Materials, 2016, 102, 125-132.	7.2	5
86	Save the Tabique Construction. Building Pathology and Rehabilitation, 2014, , 157-185.	0.2	5
87	Rehabilitation of an important cultural and architectural heritage: the traditional adobe constructions in Aveiro district. WIT Transactions on Ecology and the Environment, 2007, , .	0.0	5
88	Analytical evaluation of structural component limit state probabilities. Bulletin of Earthquake Engineering, 2008, 6, 309-333.	4.1	4
89	Seismic analysis and strengthening of Pico Island Churches. Bulletin of Earthquake Engineering, 2012, 10, 181-209.	4.1	4
90	Load-carrying capacity test of a long-span timber truss. Proceedings of the Institution of Civil Engineers: Structures and Buildings, 2016, 169, 373-387.	0.8	4

#	Article	IF	Citations
91	Compressive behaviour of old one-leaf stone masonry walls; the influence of patterns' regularity and constructive process. Construction and Building Materials, 2021, 311, 125339.	7.2	4
92	Ambient vibration testing and seismic fragility analysis of masonry building aggregates. Bulletin of Earthquake Engineering, 2022, 20, 5047-5071.	4.1	4
93	Short term priming effect of brain-actuated muscle stimulation using bimanual movements in stroke. Clinical Neurophysiology, 2022, 138, 108-121.	1.5	4
94	Structural health monitoring of the church of Santa Casa da Misericordia of Aveiro using FBG sensors. Proceedings of SPIE, 2007, , .	0.8	3
95	Seismic analysis of a building block. Bulletin of Earthquake Engineering, 2012, 10, 235-267.	4.1	3
96	Guest editorial: old masonry under seismic loading. Bulletin of Earthquake Engineering, 2012, 10, 1-5.	4.1	3
97	Diagnosis of balance between Heritage, housing and tourism in historic centers: case studies from Porto (Portugal) and Salvador (Brazil). Conservar Patrimonio, 0, 28, 49-56.	0.4	3
98	Reflections on the Rehabilitation and the Retrofit of Historical Constructions. Geotechnical, Geological and Earthquake Engineering, 2010, , 199-221.	0.2	3
99	Seismic Vulnerability Assessment of Slender Masonry Structures. Advances in Civil and Industrial Engineering Book Series, 2015, , 313-330.	0.2	3
100	Residential building rehabilitation in Porto historic center: Case study analysis by using a simulation model. Energy Reports, 2022, 8, 437-441.	5.1	3
101	Ongoing research on seismic safety assessment. Bulletin of Earthquake Engineering, 2010, 8, 181-199.	4.1	2
102	Seismic Retrofit of RC Beam-Column Joints Using the MF-EBR Strengthening Technique. Advanced Materials Research, 0, 452-453, 1099-1104.	0.3	2
103	Carbonated structures in Paraguay: Durability strategies for maintenance planning. Procedia Structural Integrity, 2018, 11, 60-67.	0.8	2
104	Degradation of FaÃ§ades, Glazing, and Indoor Areas in Social Housing. Journal of Performance of Constructed Facilities, 2019, 33, 04018102.	2.0	2
105	LEVANTAMENTO E CARACTERIZAÃ‡ÃƒO DO PARQUE EDIFICADO EM ADOBE NA CIDADE DE AVEIRO. DigitAR - Revista Digital De Arqueologia Arquitectura E Artes, 2013, , .	0.0	2
106	Evolution of the constructive adobe system in the Porcelain Industrial Unit of Vista Alegre (1937-1945). Conservar Patrimonio, 0, 11, 49-69.	0.4	2
107	Construction Systems. Building Pathology and Rehabilitation, 2014, , 1-35.	0.2	2
108	Strengthening and load test of the upper-choir of the PÃ³pulo Church in Braga, Portugal. Journal of Building Appraisal, 2007, 3, 144-154.	0.4	1

#	ARTICLE	IF	CITATIONS
109	Guest editorial: Structural seismic safety assessment. Bulletin of Earthquake Engineering, 2010, 8, 1-3.	4.1	1
110	A simplified shear model for reinforced concrete elements subjected to reverse lateral loadings. Open Engineering, 2012, 2, 136-145.	1.6	1
111	Caracterização das técnicas construtivas em terra edificadas no século XVIII e XIX no centro histórico de São Luís (MA, Brasil). Arquiteturarevista, 2011, 7, 81-93.	0.2	1
112	São Luiz do Paraitinga: The Image of São Paulo State in the 18th Century. Protection of Cultural Heritage, 2022, , 87-105.	0.1	1
113	Development of expeditious methods for seismic assessment of pre‚Äêcode masonry buildings in Portugal. Earthquake Engineering and Structural Dynamics, 0, , .	4.4	1
114	Characterization of salts progression in walls of earthen architecture heritage. Mineralogical Magazine, 0, , 1-33.	1.4	1
115	Integrated Graphical Environment for Support Nonlinear Dynamic Software for the Analysis of Plane Frames. International Journal of Simulation Modelling, 2007, 6, 102-113.	1.3	0
116	Possible Precursors of Pombalino Cage. Lecture Notes in Civil Engineering, 2016, , 87-99.	0.4	0
117	Analysis and diagnosis of timber structures in Porto historical centre. , 2008, , 653-661.		0
118	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
119	Structural survey and diagnosis of historical constructions ‚Äì the experience of the Construction Institute. Vitruvio, 2016, 1, 49.	0.3	0
120	Contributions for experimental and numerical characterization of the structural behaviour of stone arch bridges. IABSE Symposium Report, 2019, , .	0.0	0
121	Strategies and Conservation Concepts in the Bridge of Arco in Marco de Canaveses. Structural Integrity, 2020, , 109-116.	1.4	0