## Carlos Chastre

List of Publications by Year in descending order

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81 2,451 30 46
papers citations h-index g-index

82 82 82 1440 all docs docs citations times ranked citing authors

#	Article	IF	Citations
1	Experimental investigation on the variability of the main mechanical properties of concrete produced with coarse recycled concrete aggregates. Construction and Building Materials, 2019, 201, 110-120.	7.2	160
2	Experimental and numerical modeling of basalt textile reinforced mortar behavior under uniaxial tensile stress. Materials & Design, 2014, 55, 66-74.	5.1	144
3	Monotonic axial behavior and modelling of RC circular columns confined with CFRP. Engineering Structures, 2010, 32, 2268-2277.	5.3	120
4	Size and Relative Stiffness Effects on Compressive Failure of Concrete Columns Wrapped with Glass FRP. Journal of Materials in Civil Engineering, 2006, 18, 334-342.	2.9	99
5	Carbonation service life modelling of RC structures for concrete with Portland and blended cements. Cement and Concrete Composites, 2013, 37, 171-184.	10.7	84
6	Linear and nonlinear analysis of bond-slip models for interfaces between FRP composites and concrete. Composites Part B: Engineering, 2013, 45, 1554-1568.	12.0	84
7	Non-linear analytical model of composites based on basalt textile reinforced mortar under uniaxial tension. Composites Part B: Engineering, 2013, 55, 518-527.	12.0	65
8	Bond-slip model for FRP-to-concrete bonded joints under external compression. Composites Part B: Engineering, 2015, 80, 246-259.	12.0	63
9	Modelling the compressive mechanical behaviour of granite and sandstone historical building stones. Construction and Building Materials, 2012, 28, 372-381.	7.2	60
10	Nonlinear numerical analysis of the debonding failure process of FRP-to-concrete interfaces. Composites Part B: Engineering, 2013, 50, 210-223.	12.0	60
11	Bond characteristics of CFRP-to-steel joints. Journal of Constructional Steel Research, 2017, 138, 401-419.	3.9	60
12	Experimental Evaluation of Bonding between CFRP Laminates and Different Structural Materials. Journal of Composites for Construction, 2016, 20, .	3.2	56
13	Design model for square RC columns under compression confined with CFRP. Composites Part B: Engineering, 2014, 57, 187-198.	12.0	55
14	Development of an injectable grout for concrete repair and strengthening. Cement and Concrete Composites, 2013, 37, 185-195.	10.7	54
15	Prediction of the interfacial performance of CFRP laminates and old timber bonded joints with different strengthening techniques. Composites Part B: Engineering, 2017, 108, 1-17.	12.0	46
16	An experimental study of GFRP-to-concrete interfaces submitted to humidity cycles. Composite Structures, 2014, 110, 354-368.	5.8	45
17	Effect of salt crystallization ageing on the compressive behavior of sandstone blocks in historical buildings. Engineering Failure Analysis, 2012, 26, 247-257.	4.0	44
18	CFRP-to-steel bonded joints subjected to cyclic loading: An experimental study. Composites Part B: Engineering, 2018, 146, 28-41.	12.0	42

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19	Numerical modelling of the effects of elevated service temperatures on the debonding process of FRP-to-concrete bonded joints. Composites Part B: Engineering, 2015, 70, 64-79.	12.0	41
20	A nonlinear analytical model to predict the full-range debonding process of FRP-to-parent material interfaces free of any mechanical anchorage devices. Composite Structures, 2016, 138, 52-63.	5.8	41
21	Analysis of the debonding process of CFRP-to-timber interfaces. Construction and Building Materials, 2016, 113, 96-112.	7.2	41
22	Bond durability of CFRP laminates-to-steel joints subjected to freeze-thaw. Composite Structures, 2019, 212, 243-258.	5.8	39
23	Double shear tests to evaluate the bond strength between GFRP/concrete elements. Composite Structures, 2012, 94, 681-694.	5.8	38
24	Probabilistic Conversion of the Compressive Strength of Cubes to Cylinders of Natural and Recycled Aggregate Concrete Specimens. Materials, 2019, 12, 280.	2.9	35
25	Prediction of shear behavior of steel fiber-reinforced rubberized concrete beams reinforced with glass fiber-reinforced polymer (GFRP) bars. Composite Structures, 2021, 256, 113010.	5.8	35
26	Factors influencing the performance of externally bonded reinforcement systems of GFRP-to-concrete interfaces. Materials and Structures/Materiaux Et Constructions, 2015, 48, 2961-2981.	3.1	34
27	A new discrete method to model unidirectional FRP-to-parent material bonded joints subjected to mechanical loads. Composite Structures, 2015, 121, 280-295.	5.8	33
28	Theoretical analysis of fracture in double overlap bonded joints with FRP composites and thin steel plates. Engineering Fracture Mechanics, 2018, 190, 435-460.	4.3	33
29	Mechanical response of anchored FRP bonded joints: A nonlinear analytical approach. Mechanics of Advanced Materials and Structures, 2018, 25, 238-252.	2.6	33
30	Flexural Strengthening of Old Timber Floors with Laminated Carbon Fiber–Reinforced Polymers. Journal of Composites for Construction, 2017, 21, .	3.2	32
31	Modelling GFRP-to-concrete joints with interface finite elements with rupture based on the Mohr-Coulomb criterion. Construction and Building Materials, 2013, 47, 261-273.	7.2	31
32	Design method and verification of steel plate anchorages for FRP-to-concrete bonded interfaces. Composite Structures, 2018, 192, 52-66.	5.8	31
33	Numerical analysis of FRP anchorage zones with variable width. Composites Part B: Engineering, 2014, 67, 410-426.	12.0	29
34	Delamination process analysis of FRP-to-parent material bonded joints with and without anchorage systems using the Distinct Element Method. Composite Structures, 2014, 116, 104-119.	5.8	28
35	Uncertainty Models of Reinforced Concrete Beams in Bending: Code Comparison and Recycled Aggregate Incorporation. Journal of Structural Engineering, 2019, 145, .	3.4	28
36	Monotonic and quasi-static cyclic bond response of CFRP-to-steel joints after salt fog exposure. Composites Part B: Engineering, 2019, 168, 532-549.	12.0	28

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37	Uncertainty of shear resistance models: Influence of recycled concrete aggregate on beams with and without shear reinforcement. Engineering Structures, 2020, 204, 109905.	5.3	27
38	Analytical model with uncoupled adhesion laws for the bond failure prediction of curved FRP-concrete joints subjected to temperature. Theoretical and Applied Fracture Mechanics, 2017, 89, 63-78.	4.7	26
39	Assessing the behaviour of RC beams subject to significant gravity loads under cyclic loads. Engineering Structures, 2014, 59, 512-521.	5.3	22
40	Determination of weathering degree of the Persepolis stone under laboratory and natural conditions using fuzzy inference system. Construction and Building Materials, 2017, 145, 28-41.	7.2	22
41	Stainless Steel Bonded to Concrete: An Experimental Assessment using the DIC Technique. International Journal of Concrete Structures and Materials, 2018, 12, .	3.2	22
42	A smeared crack analysis of reinforced concrete T-beams strengthened with GFRP composites. Engineering Structures, 2013, 56, 1346-1361.	5.3	21
43	Effect of consolidation treatments on mechanical behaviour of sandstone. Construction and Building Materials, 2014, 70, 473-482.	7.2	19
44	Analysis of load–strain models for RC square columns confined with CFRP. Composites Part B: Engineering, 2015, 74, 23-41.	12.0	19
45	Experimental and numerical analyses of flexurally-strengthened concrete T-beams with stainless steel. Engineering Structures, 2018, 172, 981-996.	5.3	18
46	Performance analysis of load–strain models for circular columns confined with FRP composites. Composite Structures, 2012, 94, 3115-3131.	5.8	16
47	Inâ€Plane Displacement and Strain Image Analysis. Computer-Aided Civil and Infrastructure Engineering, 2016, 31, 292-304.	9.8	16
48	Effect of mechanical anchorage on the bond performance of double overlapped CFRP-to-steel joints. Composite Structures, 2021, 267, 113902.	5.8	16
49	Application of fuzzy inference system for determining weathering degree of some monument stones in Iran. Journal of Cultural Heritage, 2017, 25, 41-55.	3.3	14
50	Bond of recycled coarse aggregate concrete: Model uncertainty and reliability-based calibration of design equations. Engineering Structures, 2021, 239, 112290.	<b>5.</b> 3	14
51	Nondestructive testing methodology to assess the conservation of historic stone buildings and monuments., 2018,, 255-294.		13
52	Development of a simple bond-slip model for joints monitored with the DIC technique. Archives of Civil and Mechanical Engineering, 2018, 18, 1535-1546.	3.8	13
53	Flexural Strengthening of Columns with CFRP Composites and Stainless Steel: Cyclic Behavior. Journal of Structural Engineering, 2016, 142, .	3.4	12
54	Estimations of the debonding process of aged joints through a new analytical method. Composite Structures, 2019, 211, 577-595.	5.8	12

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55	Lateral Cyclic Behaviour of RC Columns Confined With Carbon Fibres. Structures, 2016, 5, 196-206.	3.6	11
56	Influence of External Compressive Stresses on the Performance of GFRP-to-Concrete Interfaces Subjected to Aggressive Environments: An Experimental Analysis. Journal of Composites for Construction, 2016, 20, .	3.2	11
57	Characterisation of unidirectional fibre reinforced grout as a strengthening material for RC structures. Construction and Building Materials, 2017, 137, 272-287.	7.2	11
58	Strengthening RC Beams Using Stainless Steel Continuous Reinforcement Embedded at Ends. Journal of Structural Engineering, 2020, 146, .	3.4	11
59	Compression behaviour of short columns made from cement-bonded particle board. Construction and Building Materials, 2013, 40, 60-69.	7.2	10
60	A Simple Method for the Determination of the Bond-Slip Model of Artificially Aged Joints. Journal of Composites for Construction, 2019, 23, 04019028.	3.2	10
61	Scatter of Constitutive Models of the Mechanical Properties of Concrete: Comparison of Major International Codes. Journal of Advanced Concrete Technology, 2019, 17, 102-125.	1.8	10
62	Lifetime modelling of chloride-induced corrosion in concrete structures with Portland and blended cements. Structure and Infrastructure Engineering, 2016, 12, 1013-1023.	3.7	9
63	Thermal wear of epoxy composite modified with rutile titanium dioxide. Composite Structures, 2022, 282, 115127.	5.8	9
64	Statistical analysis of Portuguese ready-mixed concrete production. Construction and Building Materials, 2019, 209, 283-294.	7.2	8
65	Characterization and correlation of engineering properties of basalts. Bulletin of Engineering Geology and the Environment, 2021, 80, 2889-2910.	3.5	8
66	Eurocode Shear Design of Coarse Recycled Aggregate Concrete: Reliability Analysis and Partial Factor Calibration. Materials, 2021, 14, 4081.	2.9	8
67	Effect of artificial accelerated salt weathering on physical and mechanical behavior of sandstone samples from surface reservoirs., 2016,, 215-233.		7
68	Damage Effect on Concrete Columns Confined with Carbon Composites. ACI Structural Journal, 2016, 113, .	0.2	7
69	Gravity load effects on the behaviour of reinforced concrete beam critical zones subjected to cyclic loads. Engineering Structures, 2019, 181, 503-518.	5.3	6
70	Numerical study on the flexural behaviour of normal- and high-strength concrete beams reinforced with GFRP bar, using different amounts of transverse reinforcement. Structures, 2021, 34, 3113-3124.	3.6	6
71	Consideration of Critical Parameters for Improving the Efficiency of Concrete Structures Reinforced with FRP. Materials, 2022, 15, 2774.	2.9	6
72	A Finite Element Based Analysis of Double Strap Bonded Joints with CFRP and Aluminium. Key Engineering Materials, 0, 754, 237-240.	0.4	5

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73	Cyclic performance of adhesively bonded joints using the Distinct Element Method: Damage and parametric analysis. Composites Part B: Engineering, 2019, 178, 107468.	12.0	5
74	Low-grade RC beams strengthened with TRM composite based on basalt, carbon and steel textiles: Experimental and analytical study. Case Studies in Construction Materials, 2022, 16, e00906.	1.7	4
75	Old Suspended Timber Floors Flexurally-Strengthened with Different Structural Materials. Key Engineering Materials, 0, 713, 78-81.	0.4	3
76	A Simple Analytical Approach for Creep Analysis of EB-FRP Systems. Key Engineering Materials, 2018, 774, 42-47.	0.4	3
77	Prediction of Stress–Strain Curves Based on Hydric Non-Destructive Tests on Sandstones. Materials, 2019, 12, 3366.	2.9	3
78	CYCLIC COMPRESSION BEHAVIOUR OF POLYMER CONCRETE. Journal of Polymer Engineering, 2007, 27, .	1.4	2
79	Consolidation works on sandstone monuments: A new approach. , 2018, , 235-254.		2
80	Cyclic Loading Behaviour of Double Strap Bonded Joints with CFRP and Aluminium. Key Engineering Materials, 0, 774, 36-41.	0.4	1
81	Influence of Temperature Cycles on Bond between Glass Fiber-Reinforced Polymer and Concrete. ACI Structural Journal, 2013, 110, .	0.2	1