

Jj Del Coz-DÃ-az

List of Publications by Year in descending order

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134
papers

2,595
citations

186265
28
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docs citations

134
times ranked

1954
citing authors

#	ARTICLE	IF	CITATIONS
1	Directional characterisation of annual and temporary exposure to rainwater penetration on building façades throughout Mexico. <i>Building and Environment</i> , 2022, 212, 108837.	6.9	2
2	An alternative approach to estimate any subdaily extreme of rainfall and wind from usually available records. <i>Stochastic Environmental Research and Risk Assessment</i> , 2022, 36, 1819-1833.	4.0	3
3	Experimental and numerical analyses of rounded dovetail timber connections (RDC) under fire conditions. <i>Engineering Structures</i> , 2021, 228, 111535.	5.3	2
4	Thermal Performance Optimization of Lightweight Concrete/EPS Layered Composite Building Blocks. <i>International Journal of Thermophysics</i> , 2021, 42, 1.	2.1	12
5	Thermal Inertia Characterization of Multilayer Lightweight Walls: Numerical Analysis and Experimental Validation. <i>Applied Sciences (Switzerland)</i> , 2021, 11, 5008.	2.5	7
6	Assessment of Lightweight Concrete Thermal Properties at Elevated Temperatures. <i>Applied Sciences (Switzerland)</i> , 2021, 11, 10023.	2.5	7
7	Lamellae of waste beverage packaging (Tetra Pak) and gamma radiation as tools for improvement of concrete. <i>Case Studies in Construction Materials</i> , 2020, 12, e00315.	1.7	4
8	Waste tire rubber particles modified by gamma radiation and their use as modifiers of concrete. <i>Case Studies in Construction Materials</i> , 2020, 12, e00321.	1.7	23
9	A New Methodology to Design Sustainable Archimedean Screw Turbines as Green Energy Generators. <i>International Journal of Environmental Research and Public Health</i> , 2020, 17, 9236.	2.6	7
10	Equivalence between the methods established by ISO 15927-3 to determine wind-driven rain exposure: Reanalysis and improvement proposal. <i>Building and Environment</i> , 2020, 174, 106777.	6.9	6
11	Avoiding the need to directionally determine the exposure to rainwater penetration for façade designs. <i>Building and Environment</i> , 2020, 176, 106850.	6.9	4
12	Improvement of a functional method to determine the design thermal transmittance of building façades. Implementation in southern Spain. <i>Journal of Building Engineering</i> , 2020, 30, 101231.	3.4	2
13	Comparative study of Lightweight and Normal Concrete composite slabs behaviour under fire conditions. <i>Engineering Structures</i> , 2020, 207, 110196.	5.3	17
14	Recovery and Reuse of Waste Tetra Pak Packages by Using a Novel Treatment. , 2019, , 303-341.		5
15	Waste polymers and gamma radiation on the mechanical improvement of polymer mortars: Experimental and calculated results. <i>Case Studies in Construction Materials</i> , 2019, 11, e00273.	1.7	4
16	Modified recycled tire fibers by gamma radiation and their use on the improvement of polymer concrete. <i>Construction and Building Materials</i> , 2019, 204, 327-334.	7.2	13
17	Frequency domain characterization of torque in tumbling ball mills using DEM modelling: Application to filling level monitoring. <i>Powder Technology</i> , 2018, 323, 433-444.	4.2	21
18	On the significance of the climate-dataset time resolution in characterising wind-driven rain and simultaneous wind pressure. Part I: scalar approach. <i>Stochastic Environmental Research and Risk Assessment</i> , 2018, 32, 1783-1797.	4.0	5

#	ARTICLE	IF	CITATIONS
19	On the significance of the climate-dataset time resolution in characterising wind-driven rain and simultaneous wind pressure. Part II: directional analysis. Stochastic Environmental Research and Risk Assessment, 2018, 32, 1799-1815.	4.0	10
20	Finite Element Analysis of Composite Laminated Timber (CLT). Proceedings (mdpi), 2018, 2, .	0.2	3
21	Polymer waste materials as fillers in polymer mortars: experimental and finite elements simulation. Case Studies in Construction Materials, 2018, 9, e00178.	1.7	7
22	Assessment of water penetration risk in building facades throughout Brazil. Building Research and Information, 2017, 45, 492-507.	3.9	13
23	Performance analysis of wind fence models when used for truck protection under crosswind through numerical modeling. Journal of Wind Engineering and Industrial Aerodynamics, 2017, 168, 20-31.	3.9	9
24	Recycled cellulose from Tetra Pak packaging as reinforcement of polyester based composites. Construction and Building Materials, 2017, 157, 1018-1023.	7.2	21
25	Numerical simulation of bus aerodynamics on several classes of bridge decks. Engineering Applications of Computational Fluid Mechanics, 2017, 11, 435-449.	3.1	9
26	Novel Technologies and Applications for Construction Materials 2016. Advances in Materials Science and Engineering, 2017, 2017, 1-2.	1.8	0
27	AJUSTE DE LA CONDUCTIVIDAD TÉRMICA DE DISEÑO FIJADA POR EL CÁLCULO TÉCNICO DE LA EDIFICACIÓN PARA MATERIALES DE FACHADA. Dyna (Spain), 2017, 92, 195-201.	0.2	1
28	A novel lightweight gypsum composite with diatomite and polypropylene fibers. Construction and Building Materials, 2016, 113, 732-740.	7.2	89
29	Flexible membranes anchored to the ground for slope stabilisation: Numerical modelling of soil slopes using SPH. Computers and Geotechnics, 2016, 78, 1-10.	4.7	13
30	Nuevo método de lanzamiento y sistema de empuje de puentes metálicos. Bases conceptuales. Hormigon Y Acero, 2015, 66, 151-163.	0.2	0
31	Quantitative analysis of the divergence in energy losses allowed through building envelopes. Renewable and Sustainable Energy Reviews, 2015, 49, 1000-1008.	16.4	14
32	Improvement alternatives for determining the watertightness performance of building facades. Building Research and Information, 2015, 43, 723-736.	3.9	7
33	Detailed territorial estimation of design thermal conductivity for façade materials in North-Eastern Spain. Energy and Buildings, 2015, 102, 266-276.	6.7	20
34	A correction factor to approximate the design thermal conductivity of building materials. Application to Spanish façades. Energy and Buildings, 2015, 88, 153-164.	6.7	30
35	Patch loading in slender and high depth steel panels: FEM-DOE analyses and bridge launching application. Engineering Structures, 2015, 83, 74-85.	5.3	10
36	Revisión y mejora de la caracterización del grado de impermeabilidad requerido por el CTE DB-HS1 para fachadas de edificación. Informes De La Construcción, 2015, 67, e059.	0.3	2

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37	Novel Technologies and Applications for Construction Materials. <i>Advances in Materials Science and Engineering</i> , 2014, 2014, 1-2.	1.8	3
38	Improvement of a System for Catchment, Pretreatment, and Treatment of Runoff Water Using PIV Tests and Numerical Simulation. <i>Journal of Irrigation and Drainage Engineering - ASCE</i> , 2014, 140, 04014028.	1.0	3
39	A comparison of methods for determining watertightness test parameters of building façades. <i>Building and Environment</i> , 2014, 78, 145-154.	6.9	12
40	Review of international regulations governing the thermal insulation requirements of residential buildings and the harmonization of envelope energy loss. <i>Renewable and Sustainable Energy Reviews</i> , 2014, 34, 78-90.	16.4	60
41	A comparative modeling study to estimate wear of concrete. <i>Neural Computing and Applications</i> , 2014, 24, 649-662.	5.6	2
42	New mechanism for continuous and bidirectional displacement of heavy structures: Design and analysis. <i>Automation in Construction</i> , 2014, 44, 47-55.	9.8	4
43	Properties of gypsum composites containing vermiculite and polypropylene fibers: Numerical and experimental results. <i>Energy and Buildings</i> , 2014, 70, 135-144.	6.7	105
44	Procedure for a detailed territorial assessment of wind-driven rain and driving-rain wind pressure and its implementation to three Spanish regions. <i>Journal of Wind Engineering and Industrial Aerodynamics</i> , 2014, 128, 76-89.	3.9	10
45	Hygrothermal study of lightweight concrete hollow bricks: A new proposed experimental numerical method. <i>Energy and Buildings</i> , 2014, 70, 194-206.	6.7	32
46	The use of response surface methodology to improve the thermal transmittance of lightweight concrete hollow bricks by FEM. <i>Construction and Building Materials</i> , 2014, 52, 331-344.	7.2	50
47	Thermal performance optimization of hollow clay bricks made up of paper waste. <i>Energy and Buildings</i> , 2014, 75, 96-108.	6.7	119
48	Bridge structure interaction analysis of a new bidirectional and continuous launching bridge mechanism. <i>Engineering Structures</i> , 2014, 59, 298-307.	5.3	6
49	New launching method for steel bridges based on a self-supporting deck system: FEM and DOE analyses. <i>Automation in Construction</i> , 2014, 44, 183-196.	9.8	11
50	APLICACIÓN AL CÁLCULO TÉCNICO DE LA EDIFICACIÓN DE AVANCES EN EL ESTUDIO DE LA EXPOSICIÓN A LA HUMEDAD DE FACHADAS. <i>Dyna (Spain)</i> , 2014, 89, 440-448.	0.2	0
51	Global analysis of building façade exposure to water penetration in Chile. <i>Building and Environment</i> , 2013, 70, 284-297.	6.9	16
52	Nonlinear analysis of the pressure field in industrial buildings with curved metallic roofs due to the wind effect by FEM. <i>Applied Mathematics and Computation</i> , 2013, 221, 202-213.	2.2	2
53	Static behavior of compressed braces in RHS K-joints of hot-dip galvanized trusses. <i>Journal of Constructional Steel Research</i> , 2013, 89, 307-316.	3.9	5
54	Hygrothermal properties of lightweight concrete: Experiments and numerical fitting study. <i>Construction and Building Materials</i> , 2013, 40, 543-555.	7.2	49

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55	Combined use of wind-driven rain and wind pressure to define water penetration risk into building facades: The Spanish case. <i>Building and Environment</i> , 2013, 64, 46-56.	6.9	42
56	A SVM-based regression model to study the air quality at local scale in Oviedo urban area (Northern) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5	2.2	90
57	Optimised method for estimating directional driving rain from synoptic observation data. <i>Journal of Wind Engineering and Industrial Aerodynamics</i> , 2013, 113, 1-11.	3.9	13
58	Field measurements of anchored flexible systems for slope stabilisation: Evidence of passive behaviour. <i>Engineering Geology</i> , 2013, 153, 95-104.	6.3	16
59	Non-linear numerical analysis of plywood board timber connections by DOE-FEM and full-scale experimental validation. <i>Engineering Structures</i> , 2013, 49, 76-90.	5.3	18
60	Study of different grouting materials used in vertical geothermal closed-loop heat exchangers. <i>Applied Thermal Engineering</i> , 2013, 50, 159-167.	6.0	60
61	A new method for determining the water tightness of building facades. <i>Building Research and Information</i> , 2013, 41, 401-414.	3.9	16
62	An extended method for comparing watertightness tests for facades. <i>Building Research and Information</i> , 2013, 41, 706-721.	3.9	12
63	Collapse of a Masonry Wall in an Industrial Building: Diagnosis by Numerical Modeling. <i>Journal of Performance of Constructed Facilities</i> , 2013, 27, 65-76.	2.0	11
64	Education for Sustainable Development: Methodology and Application within a Construction Course. <i>Journal of Professional Issues in Engineering Education and Practice</i> , 2013, 139, 72-79.	0.9	4
65	Effects of elevated temperatures on mechanical properties of concrete containing haematite evaluated using fuzzy logic model. <i>Materials Research Innovations</i> , 2013, 17, 382-391.	2.3	8
66	Experimental and numerical analysis of new bricks made up of polymer modified-cement using expanded vermiculite. <i>Computers and Concrete</i> , 2013, 12, 319-335.	0.7	15
67	Optimization Based on Design of Experiments (DOE) Using Finite Element Model (FEM) Analysis Applied to Retrofitting the Church of Baldornon, Spain. <i>International Journal of Architectural Heritage</i> , 2012, 6, 436-451.	3.1	3
68	Non-linear thermal analysis of the efficiency of light concrete big-holed bricks by FEM. , 2012, , .		0
69	Non-linear analysis and calculation of the performance of a shelving protection system by FEM. , 2012, , .		0
70	Estimation of the exposure of buildings to driving rain in Spain from daily wind and rain data. <i>Building and Environment</i> , 2012, 57, 259-270.	6.9	42
71	Numerical and experimental study of a new type of clip for joining cables. <i>Engineering Structures</i> , 2012, 44, 107-121.	5.3	4
72	Nonlinear buckling and failure analysis of a self-weighted metallic roof with and without skylights by FEM. <i>Engineering Failure Analysis</i> , 2012, 26, 65-80.	4.0	14

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73	Non-linear thermal analysis of the efficiency of light concrete multi-holed bricks with large recesses by FEM. Applied Mathematics and Computation, 2012, 218, 10040-10049.	2.2	19
74	Effect of the vent hole geometry and welding on the static strength of galvanized RHS K-joints by FEM and DOE. Engineering Structures, 2012, 41, 218-233.	5.3	12
75	CALIDAD DE AIRE INTERIOR Y EFICIENCIA ENERGÉTICA. Dyna (Spain), 2012, 87, 74-79.	0.2	1
76	Stabilization of sludge from earth pressure balance for use in earth embankments. Applied Clay Science, 2011, 53, 533-537.	5.2	3
77	Flexible systems anchored to the ground for slope stabilisation: Critical review of existing design methods. Engineering Geology, 2011, 122, 129-145.	6.3	27
78	Non-linear analysis and calculation of the performance of a shelving protection system by FEM. Applied Mathematics and Computation, 2011, 218, 2365-2376.	2.2	1
79	Application of an SVM-based regression model to the air quality study at local scale in the Avilés urban area (Spain). Mathematical and Computer Modelling, 2011, 54, 1453-1466.	2.0	118
80	Nonlinear thermal analysis of multi-holed lightweight concrete blocks used in external and non-habitable floors by FEM. International Journal of Heat and Mass Transfer, 2011, 54, 533-548.	4.8	31
81	Non-linear hygrothermal failure analysis of an external clay brick wall by FEM – A case study. Construction and Building Materials, 2011, 25, 4454-4464.	7.2	18
82	Steady state numerical simulation of the particle collection efficiency of a new urban sustainable gravity settler using design of experiments by FVM. Applied Mathematics and Computation, 2011, 217, 8166-8178.	2.2	4
83	Design and shape optimization of a new type of hollow concrete masonry block using the finite element method. Engineering Structures, 2011, 33, 1-9.	5.3	39
84	Stiffness of the component –lateral faces of RHS™ at high temperature. Journal of Constructional Steel Research, 2011, 67, 1835-1842.	3.9	13
85	Classification and Comparison of Snow Fences for the Protection of Transport Infrastructures. Journal of Cold Regions Engineering - ASCE, 2011, 25, 162-181.	1.1	10
86	Analysis and thermal optimization of an ecological ventilated self-weighted wood panel for roofs by FVM. Meccanica, 2010, 45, 619-634.	2.0	1
87	Optimization of an acoustic test chamber involving the fluid-structure interaction by FEM and experimental validation. Meccanica, 2010, 45, 705-722.	2.0	2
88	A FEM comparative analysis of the thermal efficiency among floors made up of clay, concrete and lightweight concrete hollow blocks. Applied Thermal Engineering, 2010, 30, 2822-2826.	6.0	34
89	Non-linear buckling analysis of a self-weighted metallic roof by FEM. Mathematical and Computer Modelling, 2010, 51, 216-228.	2.0	21
90	The use of design of experiments to improve a neural network model in order to predict the thickness of the chromium layer in a hard chromium plating process. Mathematical and Computer Modelling, 2010, 52, 1169-1176.	2.0	52

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91	Nonlinear explicit analysis and study of the behaviour of a new ring-type brake energy dissipator by FEM and experimental comparison. Applied Mathematics and Computation, 2010, 216, 1571-1582.	2.2	11
92	Comparative analysis of TIG welding distortions between austenitic and duplex stainless steels by FEM. Applied Thermal Engineering, 2010, 30, 2448-2459.	6.0	47
93	Sound transmission loss analysis through a multilayer lightweight concrete hollow brick wall by FEM and experimental validation. Building and Environment, 2010, 45, 2373-2386.	6.9	25
94	Numerical simulation of the performance of a snow fence with airfoil snow plates by FVM. Journal of Computational and Applied Mathematics, 2010, 234, 1200-1210.	2.0	23
95	A study of the collapse of a WWII communications antenna using numerical simulations based on design of experiments by FEM. Engineering Structures, 2010, 32, 1792-1800.	5.3	32
96	A data-driven manufacturing support system for rubber extrusion lines. International Journal of Production Research, 2010, 48, 2219-2231.	7.5	3
97	Numerical Study of Pressure Field in Laterally Closed Industrial Buildings with Curved Metallic Roofs due to the Wind Effect by FEM and European Rule Comparison. , 2009, , .		0
98	Non-linear analysis of cable networks by FEM and experimental validation. International Journal of Computer Mathematics, 2009, 86, 301-313.	1.8	13
99	Analysis and study of an automobile rear seat by FEM. International Journal of Computer Mathematics, 2009, 86, 640-664.	1.8	1
100	Comparative Analysis of Mechanical Tensile Tests and the Explicit Simulation of a Brake Energy Dissipater by FEM. International Journal of Nonlinear Sciences and Numerical Simulation, 2009, 10, .	1.0	9
101	Numerical analysis of the pressure field on curved and open self-weighted metallic roofs due to the wind effect by the finite volume method. Applied Mathematics and Computation, 2009, 209, 31-41.	2.2	6
102	Thermal design optimization of lightweight concrete blocks for internal one-way spanning slabs floors by FEM. Energy and Buildings, 2009, 41, 1276-1287.	6.7	58
103	Nonlinear analysis of residual stresses in a rail manufacturing process by FEM. Applied Mathematical Modelling, 2009, 33, 34-53.	4.2	39
104	Estudio comparativo experimental del comportamiento de uniones de cumbrera en cubiertas de madera laminada encolada con placas interiores de acero o tablero contrachapado de abedul. Materiales De Construccion, 2009, 59, 45-59.	0.7	2
105	Evaluation of the resistant capacity of cable nets using the finite element method and experimental validation. Engineering Geology, 2008, 100, 1-10.	6.3	46
106	Finite element analysis of thin-walled composite two-span wood-based loadbearing stressed skin roof panels and experimental validation. Thin-Walled Structures, 2008, 46, 276-289.	5.3	8
107	Non-linear thermal optimization and design improvement of a new internal light concrete multi-holed brick walls by FEM. Applied Thermal Engineering, 2008, 28, 1090-1100.	6.0	59
108	Numerical analysis of the influence of material mismatching in the transition curve of welded joints. Engineering Fracture Mechanics, 2008, 75, 3464-3482.	4.3	12

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109	Nonlinear thermal optimization of external light concrete multi-holed brick walls by the finite element method. <i>International Journal of Heat and Mass Transfer</i> , 2008, 51, 1530-1541.	4.8	63
110	Finite element analysis of the hyper-elastic contact problem in automotive door sealing. <i>Journal of Non-Crystalline Solids</i> , 2008, 354, 5331-5333.	3.1	9
111	Finite volume modeling of the non-isothermal flow of a non-Newtonian fluid in a rubber's extrusion die. <i>Journal of Non-Crystalline Solids</i> , 2008, 354, 5334-5336.	3.1	12
112	Implementation of an elastic-viscoplastic ductile model for the numerical simulation of the ductile crack growth in notched tensile and Charpy impact tests. <i>International Journal of Computer Mathematics</i> , 2008, 85, 587-601.	1.8	0
113	Mathematical study of the selective removal of different classes of atmospheric aerosols by coagulation, condensation, and gravitational settling, and the health impact. <i>International Journal of Computer Mathematics</i> , 2008, 85, 447-460.	1.8	0
114	A model for defining evacuation policies for emergency escape from buildings. <i>International Journal for Simulation and Multidisciplinary Design Optimization</i> , 2008, 2, 237-244.	1.1	1
115	Evaluation of the damage in the vault and portico of the pre-Romanesque chapel of San Salvador de Valdediá's using frictional contacts and the finite-element method. <i>International Journal of Computer Mathematics</i> , 2007, 84, 377-393.	1.8	10
116	Acoustic Analysis of a Sandwich Non Metallic Panel for Roofs by FEM and Experimental Validation. <i>AIP Conference Proceedings</i> , 2007, . .	0.4	2
117	Computer simulation of the laminar nozzle flow of a non-Newtonian fluid in a rubber extrusion process by the finite volume method and experimental comparison. <i>Journal of Non-Crystalline Solids</i> , 2007, 353, 981-983.	3.1	18
118	Non-linear analysis of a reinforced concrete sheet cover (umbrella) of 40m diameter by the finite element method. <i>Applied Mathematics and Computation</i> , 2007, 184, 37-51.	2.2	7
119	Non-linear analysis and warping of tubular pipe conveyors by the finite element method. <i>Mathematical and Computer Modelling</i> , 2007, 46, 95-108.	2.0	22
120	Non-linear analysis of the tubular 'heart' joint by FEM and experimental validation. <i>Journal of Constructional Steel Research</i> , 2007, 63, 1077-1090.	3.9	25
121	Analysis and optimization of the heat-insulating light concrete hollow brick walls design by the finite element method. <i>Applied Thermal Engineering</i> , 2007, 27, 1445-1456.	6.0	113
122	A Mathematical Approach to Selective Scavenging of the Different Classes of Typical Atmospheric Aerosols by Rainout and Health Impact. <i>Environmental Technology (United Kingdom)</i> , 2006, 27, 337-348.	2.2	6
123	Numerical analysis of pressure field on curved self-weighted metallic roofs due to the wind effect by the finite element method. <i>Journal of Computational and Applied Mathematics</i> , 2006, 192, 40-50.	2.0	10
124	Non-linear thermal analysis of light concrete hollow brick walls by the finite element method and experimental validation. <i>Applied Thermal Engineering</i> , 2006, 26, 777-786.	6.0	63
125	Implicit integration procedure for viscoplastic Gurson materials. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2006, 195, 6146-6157.	6.6	14
126	Design optimization of 3D steel structures: Genetic algorithms vs. classical techniques. <i>Journal of Constructional Steel Research</i> , 2006, 62, 1303-1309.	3.9	54

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127	Non-linear analysis of unbolted base plates by the FEM and experimental validation. Thin-Walled Structures, 2006, 44, 529-541.	5.3	28
128	A modified elitist genetic algorithm applied to the design optimization of complex steel structures. Journal of Constructional Steel Research, 2005, 61, 265-280.	3.9	41
129	Numerical Analysis of the Behaviour of Tooth Intrarradial Posts by the Finite Element Method. Mathematical Modelling and Algorithms, 2005, 4, 275-287.	0.5	3
130	Design and finite element analysis of a wet cycle cement rotary kiln. Finite Elements in Analysis and Design, 2002, 39, 17-42.	3.2	29
131	Aprendizaje interactivo mediante programa de análisis estructural avanzado. Journal of Constructional Steel Research, 1998, 46, 273-274.	3.9	5
132	Assessment of the Resistance of Steel K-joints between Rectangular Hollow Sections with Galvanizing Holes using the Finite Element Method. , 0, , .		1
133	Non-linear Analysis of the Soil-Structure Interaction of Baldornon's Church, Spain using the Finite Element Method. , 0, , .		0
134	Damage Assessment of a Self-Weight Metallic Roof with Skylights using the Finite Element Method. , 0, , .		0