

JosÃ© D Silvestre

List of Publications by Year in descending order

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Version: 2024-02-01

103
papers

4,080
citations

101543

36
h-index

123424

61
g-index

106
all docs

106
docs citations

106
times ranked

2825
citing authors

#	ARTICLE	IF	CITATIONS
1	Effect of incorporation of high volume of recycled concrete aggregates and fly ash on the strength and global warming potential of concrete. <i>Journal of Cleaner Production</i> , 2017, 166, 485-502.	9.3	230
2	Water absorption and electrical resistivity of concrete with recycled concrete aggregates and fly ash. <i>Cement and Concrete Composites</i> , 2019, 95, 169-182.	10.7	204
3	Comparative environmental life cycle assessment of thermal insulation materials of buildings. <i>Energy and Buildings</i> , 2014, 82, 466-481.	6.7	192
4	Compared environmental and economic impact from cradle to gate of concrete with natural and recycled coarse aggregates. <i>Journal of Cleaner Production</i> , 2017, 162, 529-543.	9.3	177
5	Life cycle assessment of concrete made with high volume of recycled concrete aggregates and fly ash. <i>Resources, Conservation and Recycling</i> , 2018, 139, 407-417.	10.8	175
6	Integration of LCA and LCC analysis within a BIM-based environment. <i>Automation in Construction</i> , 2019, 103, 127-149.	9.8	170
7	Influence of recycled aggregates and high contents of fly ash on concrete fresh properties. <i>Cement and Concrete Composites</i> , 2017, 84, 198-213.	10.7	127
8	Environmental impacts and benefits of the end-of-life of building materials – calculation rules, results and contribution to a “cradle to cradle” life cycle. <i>Journal of Cleaner Production</i> , 2014, 66, 37-45.	9.3	118
9	Environmental life cycle assessment of coarse natural and recycled aggregates for concrete. <i>European Journal of Environmental and Civil Engineering</i> , 2018, 22, 429-449.	2.1	118
10	Informetric analysis and review of literature on the role of BIM in sustainable construction. <i>Automation in Construction</i> , 2019, 103, 221-234.	9.8	110
11	Combined influence of recycled concrete aggregates and high contents of fly ash on concrete properties. <i>Construction and Building Materials</i> , 2017, 157, 554-572.	7.2	105
12	Ceramic tiling inspection system. <i>Construction and Building Materials</i> , 2009, 23, 653-668.	7.2	94
13	BIM-based life cycle assessment and life cycle costing of an office building in Western Europe. <i>Building and Environment</i> , 2020, 169, 106568.	6.9	94
14	Ceramic tiling in building façades: Inspection and pathological characterization using an expert system. <i>Construction and Building Materials</i> , 2011, 25, 1560-1571.	7.2	79
15	Toxicity and environmental and economic performance of fly ash and recycled concrete aggregates use in concrete: A review. <i>Heliyon</i> , 2018, 4, e00611.	3.2	74
16	Optimizing recycled concrete containing high volume of fly ash in terms of the embodied energy and chloride ion resistance. <i>Journal of Cleaner Production</i> , 2018, 194, 735-750.	9.3	68
17	Development of a BIM-based Environmental and Economic Life Cycle Assessment tool. <i>Journal of Cleaner Production</i> , 2020, 265, 121705.	9.3	68
18	Carbonation of concrete made with high amount of fly ash and recycled concrete aggregates for utilization of CO ₂ . <i>Journal of CO₂ Utilization</i> , 2019, 29, 12-19.	6.8	64

#	ARTICLE	IF	CITATIONS
19	Transportation matters “ Does it? GIS-based comparative environmental assessment of concrete mixes with cement, fly ash, natural and recycled aggregates. Resources, Conservation and Recycling, 2018, 137, 1-10.	10.8	63
20	An Overview on the Improvement of Mechanical Properties of Ceramics Nanocomposites. Journal of Nanomaterials, 2015, 2015, 1-13.	2.7	62
21	From the new European Standards to an environmental, energy and economic assessment of building assemblies from cradle-to-cradle (3E-C2C). Energy and Buildings, 2013, 64, 199-208.	6.7	60
22	System of inspection, diagnosis and repair of external claddings of pitched roofs. Construction and Building Materials, 2012, 35, 1034-1044.	7.2	58
23	Contribution of humidity to the degradation of façade claddings in current buildings. Engineering Failure Analysis, 2018, 90, 103-115.	4.0	56
24	NativeLCA - a systematic approach for the selection of environmental datasets as generic data: application to construction products in a national context. International Journal of Life Cycle Assessment, 2015, 20, 731-750.	4.7	55
25	Insulation Cork Boards“Environmental Life Cycle Assessment of an Organic Construction Material. Materials, 2016, 9, 394.	2.9	53
26	Indirect evaluation of the compressive strength of recycled aggregate concrete with high fly ash ratios. Magazine of Concrete Research, 2018, 70, 204-216.	2.0	51
27	Combined Economic and Mechanical Performance Optimization of Recycled Aggregate Concrete with High Volume of Fly Ash. Applied Sciences (Switzerland), 2018, 8, 1189.	2.5	50
28	Assessment and communication of the environmental performance of construction products in Europe: Comparison between PEF and EN 15804 compliant EPD schemes. Resources, Conservation and Recycling, 2020, 156, 104703.	10.8	50
29	Inspection and Repair of Ceramic Tiling within a Building Management System. Journal of Materials in Civil Engineering, 2010, 22, 39-48.	2.9	49
30	Inspection and diagnosis system for gypsum plasters in partition walls and ceilings. Construction and Building Materials, 2011, 25, 2146-2156.	7.2	48
31	Polymer nanocomposites for structural applications: Recent trends and new perspectives. Mechanics of Advanced Materials and Structures, 2016, 23, 1263-1277.	2.6	47
32	A comparative study of the mechanical and life cycle assessment of high-content fly ash and recycled aggregates concrete. Journal of Building Engineering, 2020, 29, 101173.	3.4	46
33	CONCRETOP - A multi-criteria decision method for concrete optimization. Environmental Impact Assessment Review, 2019, 74, 73-85.	9.2	45
34	Characterization of eco-efficient acoustic insulation materials (traditional and innovative). Construction and Building Materials, 2017, 140, 221-228.	7.2	44
35	UNCERTAINTY MODELLING OF SERVICE LIFE AND ENVIRONMENTAL PERFORMANCE TO REDUCE RISK IN BUILDING DESIGN DECISIONS. Journal of Civil Engineering and Management, 2015, 21, 308-322.	3.5	42
36	Methodology for the Assessment of the Ecotoxicological Potential of Construction Materials. Materials, 2017, 10, 649.	2.9	40

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37	Inspection and Diagnosis of Gypsum Plasterboard Walls. Journal of Performance of Constructed Facilities, 2011, 25, 172-180.	2.0	36
38	Economic and Energy Life Cycle Assessment of aerogel-based thermal renders. Journal of Cleaner Production, 2017, 151, 537-545.	9.3	36
39	Using anticipatory life cycle assessment to enable future sustainable construction. Journal of Industrial Ecology, 2020, 24, 178-192.	5.5	35
40	State-of-the-Art Review of Building Inspection Systems. Journal of Performance of Constructed Facilities, 2016, 30, .	2.0	34
41	Dynamic Assessment of Construction Materials in Urban Building Stocks: A Critical Review. Environmental Science & Technology, 2019, 53, 9992-10006.	10.0	34
42	Economic assessment of the production of subcritically dried silica-based aerogels. Journal of Non-Crystalline Solids, 2019, 516, 26-34.	3.1	33
43	Inspection and Diagnosis System for Wood Flooring. Journal of Performance of Constructed Facilities, 2013, 27, 564-574.	2.0	32
44	CONCRETOP method: Optimization of concrete with various incorporation ratios of fly ash and recycled aggregates in terms of quality performance and life-cycle cost and environmental impacts. Journal of Cleaner Production, 2019, 226, 642-657.	9.3	31
45	Evaluation of the Ecotoxicological Potential of Fly Ash and Recycled Concrete Aggregates Use in Concrete. Applied Sciences (Switzerland), 2020, 10, 351.	2.5	28
46	Influence of material choice, renovation rate, and electricity grid to achieve a Paris Agreement-compatible building stock: A Portuguese case study. Building and Environment, 2021, 195, 107773.	6.9	26
47	Lifecycle Cost Analysis of Flat Roofs of Buildings. Journal of Construction Engineering and Management - ASCE, 2017, 143, .	3.8	25
48	Inspection, Diagnosis, and Repair System for Architectural Concrete Surfaces. Journal of Performance of Constructed Facilities, 2017, 31, .	2.0	24
49	Retrofitting a Building's Envelope: Sustainability Performance of ETICS with ICB or EPS. Applied Sciences (Switzerland), 2019, 9, 1285.	2.5	23
50	Environmental impact of the subcritical production of silica aerogels. Journal of Cleaner Production, 2020, 252, 119696.	9.3	23
51	Effect of Water on the Degradation of Gypsum Plaster Coatings: Inspection, Diagnosis, and Repair. Journal of Performance of Constructed Facilities, 2012, 26, 424-432.	2.0	22
52	Characterisation of a multilayer external wall thermal insulation system. Application in a Mediterranean climate. Journal of Building Engineering, 2020, 30, 101265.	3.4	22
53	Life Cycle Assessment of Mortars with Incorporation of Industrial Wastes. Fibers, 2019, 7, 59.	4.0	21
54	Characterization of walls with eco-efficient acoustic insulation materials (traditional and) Tj ETQq0 0 0 rgBT /Overlook 10 Tf 50 62 Td (in	7.2	19

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55	Statistical Survey on Inspection, Diagnosis, and Repair of Architectural Concrete Surfaces. Journal of Performance of Constructed Facilities, 2017, 31, .	2.0	18
56	Urgency of repair of building elements: Prediction and influencing factors in façade renders. Construction and Building Materials, 2020, 249, 118743.	7.2	18
57	Life cycle assessment of alternative building floor rehabilitation systems. Structures, 2020, 26, 237-246.	3.6	15
58	Attitudes matter: Measuring the intention-behaviour gap in built heritage conservation. Sustainable Cities and Society, 2021, 70, 102913.	10.4	15
59	On the sustainability of rubberized concrete filled square steel tubular columns. Journal of Cleaner Production, 2018, 170, 510-521.	9.3	14
60	Environmental and Economic Life Cycle Assessment of Recycled Coarse Aggregates: A Portuguese Case Study. Materials, 2021, 14, 5452.	2.9	14
61	Defect characterization, diagnosis and repair of wood flooring based on a field survey. Materiales De Construcción, 2018, 68, 149.	0.7	14
62	Influence of Design on the Service Life of Pitched Roofs™ Cladding. Journal of Performance of Constructed Facilities, 2015, 29, .	2.0	13
63	Invasive alien plants as an alternative resource for concrete production “ multi-scale optimization including carbon compensation, cleared land and saved water runoff in South Africa. Resources, Conservation and Recycling, 2021, 167, 105361.	10.8	13
64	Expert Knowledge-based Inspection Systems. , 2020, , .		13
65	Environmental and economic comparison of the life cycle of waterproofing solutions for flat roofs. Journal of Building Engineering, 2019, 24, 100710.	3.4	12
66	Harmonising the classification of diagnosis methods within a global building inspection system: Proposed methodology and analysis of fieldwork data. Engineering Failure Analysis, 2020, 115, 104627.	4.0	12
67	Comparison of the environmental and structural performance of solid and glued laminated timber products based on EPDs. Structures, 2020, 26, 128-138.	3.6	12
68	Toxicity of Recycled Concrete Aggregates: Review on Leaching Tests. Open Construction and Building Technology Journal, 2018, 12, 187-196.	0.7	12
69	Life-cycle impact “cradle to cradle”™ of building assemblies. Proceedings of the Institution of Civil Engineers: Engineering Sustainability, 2014, 167, 53-63.	0.7	11
70	Environmental life cycle assessment of the manufacture of EPS granulates, lightweight concrete with EPS and high-density EPS boards. Journal of Building Engineering, 2020, 28, 101031.	3.4	11
71	Environmental and Economic Comparison of Natural and Recycled Aggregates Using LCA. Recycling, 2022, 7, 43.	5.0	11
72	DIAGNOSIS AND REPAIR OF GYPSUM PLASTER COATINGS: STATISTICAL CHARACTERIZATION AND LESSONS LEARNED FROM A FIELD SURVEY. Journal of Civil Engineering and Management, 2014, 20, 485-496.	3.5	10

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73	Going beyond Good Intentions for the Sustainable Conservation of Built Heritage: A Systematic Literature Review. Sustainability, 2020, 12, 9649.	3.2	10
74	Nanomaterialsâ€™ Influence on the Performance of Thermal Insulating Mortarsâ€™ A Statistical Analysis. Applied Sciences (Switzerland), 2020, 10, 2219.	2.5	10
75	Environmental, economic and energy life cycle assessment â€œfrom cradle to cradleâ€•(3E-C2C) of flat roofs. Journal of Building Engineering, 2020, 32, 101436.	3.4	10
76	Gypsum plasterboard walls: inspection, pathological characterization and statistical survey using an expert system. Materiales De Construccion, 2012, 62, 285-297.	0.7	10
77	Environmental Life Cycle Assessment of Thermal Insulation Tiles for Flat Roofs. Materials, 2019, 12, 2595.	2.9	9
78	Equivalent functional unit in recycled aggregate concrete. , 2019, , 293-327.		9
79	Harmonised Classification of the Causes of Defects in a Global Inspection System: Proposed Methodology and Analysis of Fieldwork Data. Sustainability, 2020, 12, 5564.	3.2	9
80	Auto-responsive technologies for thermal renovation of opaque facades. Energy and Buildings, 2020, 217, 109968.	6.7	9
81	Uncertainty in Building Inspection and Diagnosis: A Probabilistic Model Quantification. Infrastructures, 2021, 6, 124.	2.8	9
82	Energy Retrofitting of a Buildingsâ€™ Envelope: Assessment of the Environmental, Economic and Energy (3E) Performance of a Cork-Based Thermal Insulating Rendering Mortar. Energies, 2020, 13, 143.	3.1	8
83	Life cycle assessment of a preservative treated wooden deck. Wood Material Science and Engineering, 2022, 17, 502-512.	2.3	7
84	Old Buildingsâ€™ Façades: Fieldwork and Discussion of Thermal Retrofitting Strategies in a Mediterranean Climate. Designs, 2020, 4, 45.	2.4	6
85	Selection of Core Indicators for the Sustainable Conservation of Built Heritage. International Journal of Architectural Heritage, 2022, 16, 1047-1062.	3.1	6
86	Current Opportunities and Challenges in the Incorporation of the LCA Method in BIM. Open Construction and Building Technology Journal, 2020, 14, 336-349.	0.7	6
87	Environmental Impacts and Benefits of the End-of-Life of Building Materials: Database to Support Decision Making and Contribute to Circularity. Sustainability, 2021, 13, 12659.	3.2	6
88	Harmonized Classification of Repair Techniques in a Global Inspection System: Proposed Methodology and Analysis of Fieldwork Data. Journal of Performance of Constructed Facilities, 2021, 35, 04020122.	2.0	5
89	Atlas of Defects within a Global Building Inspection System. Applied Sciences (Switzerland), 2020, 10, 5879.	2.5	4
90	Harmonising correlation matrices within a global building expert knowledge-based inspection system. Construction and Building Materials, 2021, 272, 121655.	7.2	3

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91	Toxicity of cement-based materials. IOP Conference Series: Earth and Environmental Science, 2020, 588, 042067.	0.3	2
92	Concrete with High Volume of Recycled Concrete Aggregates and Fly Ash: Shrinkage Behavior Modeling. ACI Materials Journal, 2019, 116, .	0.2	2
93	Building Inspection System Software Based on Expert Knowledge. Journal of Performance of Constructed Facilities, 2022, 36, .	2.0	2
94	Calculation of the environmental impact of the integration of industrial waste in concrete using LCA. , 2022, , 553-577.		2
95	Information Systematisation Towards Rational Building Maintenance Decisions. Lecture Notes in Civil Engineering, 2022, , 379-419.	0.4	2
96	Beyond Good Intentions: The Role of the Building Passport for the Sustainable Conservation of Built Heritage to Behavioural Change. Sustainability, 2021, 13, 8280.	3.2	1
97	Environmental datasets for cement and steel rebars to be used as generic for a national context. Journal of Cleaner Production, 2021, 316, 128003.	9.3	1
98	Buildings' Management. , 2020, , 1-13.		1
99	Repair Techniques. , 2020, , 301-355.		1
100	Environmental and Economic Optimisation of Buildings in Portugal and Hungary. Sustainability, 2021, 13, 13531.	3.2	1
101	Ecotoxicity of Recycled Aggregates: Application of a Prediction Methodology. Materials, 2022, 15, 3510.	2.9	1
102	Environmental performance of solid wood products: review of EPDs and environmentally-based structural design. IOP Conference Series: Earth and Environmental Science, 2020, 588, 022070.	0.3	0
103	Diagnosis Methods. , 2020, , 257-299.		0