

Enrico Quagliarini

List of Publications by Year in descending order

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Version: 2024-02-01

103
papers

2,829
citations

172386

29
h-index

197736

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106
all docs

106
docs citations

106
times ranked

2126
citing authors

#	ARTICLE	IF	CITATIONS
1	TiO ₂ -based nanocoatings for preserving architectural stone surfaces: An overview. <i>Construction and Building Materials</i> , 2015, 84, 201-218.	3.2	162
2	Self-cleaning and de-polluting stone surfaces: TiO ₂ nanoparticles for limestone. <i>Construction and Building Materials</i> , 2012, 37, 51-57.	3.2	158
3	The influence of natural stabilizers and natural fibres on the mechanical properties of ancient Roman adobe bricks. <i>Journal of Cultural Heritage</i> , 2010, 11, 309-314.	1.5	133
4	Durability of self-cleaning TiO ₂ coatings on fired clay brick façades: Effects of UV exposure and wet & dry cycles. <i>Building and Environment</i> , 2014, 71, 193-203.	3.0	120
5	Agent-based model for earthquake pedestrians'™ evacuation in urban outdoor scenarios: Behavioural patterns definition and evacuation paths choice. <i>Safety Science</i> , 2014, 62, 450-465.	2.6	116
6	Self-cleaning materials on Architectural Heritage: Compatibility of photo-induced hydrophilicity of TiO ₂ coatings on stone surfaces. <i>Journal of Cultural Heritage</i> , 2013, 14, 1-7.	1.5	111
7	Experimental analysis and modelling of the mechanical behaviour of earthen bricks. <i>Construction and Building Materials</i> , 2011, 25, 2067-2075.	3.2	100
8	Evaluation of inhibitory effect of TiO ₂ nanocoatings against microalgal growth on clay brick façades under weak UV exposure conditions. <i>Building and Environment</i> , 2013, 64, 38-45.	3.0	95
9	Smart surfaces for architectural heritage: Preliminary results about the application of TiO ₂ -based coatings on travertine. <i>Journal of Cultural Heritage</i> , 2012, 13, 204-209.	1.5	87
10	Towards creating a combined database for earthquake pedestrians'™ evacuation models. <i>Safety Science</i> , 2016, 82, 77-94.	2.6	80
11	Durability of nano-engineered TiO ₂ self-cleaning treatments on limestone. <i>Construction and Building Materials</i> , 2014, 65, 218-231.	3.2	78
12	Towards a "behavioural design" approach for seismic risk reduction strategies of buildings and their environment. <i>Safety Science</i> , 2016, 86, 273-294.	2.6	78
13	Tensile characterization of basalt fiber rods and ropes: A first contribution. <i>Construction and Building Materials</i> , 2012, 34, 372-380.	3.2	70
14	The role of roughness and porosity on the self-cleaning and anti-biofouling efficiency of TiO ₂ -Cu and TiO ₂ -Ag nanocoatings applied on fired bricks. <i>Construction and Building Materials</i> , 2016, 129, 116-124.	3.2	62
15	EPES " Earthquake pedestrians'™ evacuation simulator: A tool for predicting earthquake pedestrians'™ evacuation in urban outdoor scenarios. <i>International Journal of Disaster Risk Reduction</i> , 2014, 10, 153-177.	1.8	56
16	Basalt fiber ropes and rods: Durability tests for their use in building engineering. <i>Journal of Building Engineering</i> , 2016, 5, 142-150.	1.6	51
17	A preliminary combined simulation tool for the risk assessment of pedestrians'™ flood-induced evacuation. <i>Environmental Modelling and Software</i> , 2017, 96, 14-29.	1.9	51
18	Mechanical properties of adobe walls in a Roman Republican domus at Suasa. <i>Journal of Cultural Heritage</i> , 2010, 11, 130-137.	1.5	48

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19	Fast, low cost and safe methodology for the assessment of the state of conservation of historical buildings from 3D laser scanning: The case study of Santa Maria in Portonovo (Italy). <i>Journal of Cultural Heritage</i> , 2017, 24, 175-183.	1.5	48
20	Proposing behavior-oriented strategies for earthquake emergency evacuation: A behavioral data analysis from New Zealand, Italy and Japan. <i>Safety Science</i> , 2019, 116, 295-309.	2.6	47
21	Cultural Heritage and Earthquake: The Case Study of "Santa Maria Della Carità" in Ascoli Piceno. <i>Open Civil Engineering Journal</i> , 2017, 11, 1079-1105.	0.4	44
22	Intelligent evacuation guidance systems for improving fire safety of Italian-style historical theatres without altering their architectural characteristics. <i>Journal of Cultural Heritage</i> , 2016, 22, 1006-1018.	1.5	42
23	TRM reinforced tuff and fired clay brick masonry: Experimental and analytical investigation on their in-plane and out-of-plane behavior. <i>Construction and Building Materials</i> , 2021, 272, 121643.	3.2	39
24	Towards the simulation of flood evacuation in urban scenarios: Experiments to estimate human motion speed in floodwaters. <i>Safety Science</i> , 2020, 123, 104563.	2.6	38
25	The influence of clay brick substratum on the inhibitory efficiency of TiO ₂ nanocoating against biofouling. <i>Building and Environment</i> , 2014, 82, 128-134.	3.0	36
26	Is nano-TiO ₂ alone an effective strategy for the maintenance of stones in Cultural Heritage?. <i>Journal of Cultural Heritage</i> , 2018, 30, 81-91.	1.5	34
27	Earthquake building debris estimation in historic city centres: From real world data to experimental-based criteria. <i>International Journal of Disaster Risk Reduction</i> , 2018, 31, 281-291.	1.8	33
28	An Agent-based Model for Earthquake Pedestrians'™ Evacuation Simulation in Urban Scenarios. <i>Transportation Research Procedia</i> , 2014, 2, 255-263.	0.8	32
29	Dynamic guidance tool for a safer earthquake pedestrian evacuation in urban systems. <i>Computers, Environment and Urban Systems</i> , 2017, 65, 150-161.	3.3	32
30	Dynamics and failure mechanisms of ancient masonry churches subjected to seismic actions by using the NSCD method: The case of the medieval church of S. Maria in Portuno. <i>Engineering Structures</i> , 2013, 56, 1527-1546.	2.6	31
31	Fire safety in Italian-style historical theatres: How photoluminescent wayfinding can improve occupants'™ evacuation with no architecture modifications. <i>Journal of Cultural Heritage</i> , 2016, 19, 492-501.	1.5	31
32	Flooding risk in existing urban environment: from human behavioral patterns to a microscopic simulation model. <i>Energy Procedia</i> , 2017, 134, 131-140.	1.8	31
33	A probabilistic model to evaluate the effectiveness of main solutions to COVID-19 spreading in university buildings according to proximity and time-based consolidated criteria. <i>Building Simulation</i> , 2021, 14, 1795-1809.	3.0	31
34	Cob Construction in Italy: Some Lessons from the Past. <i>Sustainability</i> , 2010, 2, 3291-3308.	1.6	29
35	Thermoplastic Disks Used for Commercial Orthodontic Aligners: Complete Physicochemical and Mechanical Characterization. <i>Materials</i> , 2020, 13, 2386.	1.3	29
36	Effect of temperature and relative humidity on algae biofouling on different fired brick surfaces. <i>Construction and Building Materials</i> , 2019, 199, 396-405.	3.2	25

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37	How urban layout and pedestrian evacuation behaviours can influence flood risk assessment in riverine historic built environments. <i>Sustainable Cities and Society</i> , 2021, 70, 102876.	5.1	24
38	Seismic vulnerability of ancient stone arches by using a numerical model based on the Non-Smooth Contact Dynamics method. <i>Engineering Structures</i> , 2016, 119, 110-121.	2.6	23
39	Evacuation paths in historic city centres: A holistic methodology for assessing their seismic risk. <i>International Journal of Disaster Risk Reduction</i> , 2018, 31, 698-710.	1.8	23
40	TiO ₂ -treated different fired brick surfaces for biofouling prevention: Experimental and modelling results. <i>Ceramics International</i> , 2016, 42, 4002-4010.	2.3	22
41	Dry Masonry Strengthening through Basalt Fibre Ropes: Experimental Results against Out-of-Plane Actions. <i>Key Engineering Materials</i> , 0, 624, 584-594.	0.4	20
42	Urban scenarios modifications due to the earthquake: ruins formation criteria and interactions with pedestrians'™ evacuation. <i>Bulletin of Earthquake Engineering</i> , 2016, 14, 1071-1101.	2.3	20
43	Terrorist acts and pedestrians'™ behaviours: First insights on European contexts for evacuation modelling. <i>Safety Science</i> , 2021, 143, 105405.	2.6	20
44	Built Environment Typologies Prone to Risk: A Cluster Analysis of Open Spaces in Italian Cities. <i>Sustainability</i> , 2021, 13, 9457.	1.6	15
45	Experimental assessment of concrete compressive strength in old existing RC buildings: A possible way to reduce the dispersion of DT results. <i>Journal of Building Engineering</i> , 2016, 8, 162-171.	1.6	14
46	New Indices for the Existing City-Centers Streets Network Reliability and Availability Assessment in Earthquake Emergency. <i>International Journal of Architectural Heritage</i> , 2018, 12, 153-168.	1.7	14
47	Rapid tools for assessing building heritage's seismic vulnerability: a preliminary reliability analysis. <i>Journal of Cultural Heritage</i> , 2019, 39, 130-139.	1.5	13
48	Sustainable and resilient strategies for touristic cities against COVID-19: An agent-based approach. <i>Safety Science</i> , 2021, 142, 105399.	2.6	13
49	Rehabilitation and consolidation of high-value camorcanna vaults with FRP. <i>Journal of Cultural Heritage</i> , 2006, 7, 13-22.	1.5	12
50	Historical plasters on light thin vaults: State of conservation assessment by a Hybrid ultrasonic method. <i>Journal of Cultural Heritage</i> , 2014, 15, 104-111.	1.5	12
51	On the Modelling of Algal Biofouling Growth on Nano-TiO ₂ Coated and Uncoated Limestones and Sandstones. <i>Coatings</i> , 2018, 8, 54.	1.2	12
52	Risk Reduction Strategies against Terrorist Acts in Urban Built Environments: Towards Sustainable and Human-Centred Challenges. <i>Sustainability</i> , 2021, 13, 901.	1.6	12
53	How to create seismic risk scenarios in historic built environment using rapid data collection and managing. <i>Journal of Cultural Heritage</i> , 2021, 48, 93-105.	1.5	12
54	In-life prediction of hygrometric behaviour of buildings materials: an application of fractal geometry to the determination of adsorption and suction properties. <i>Building and Environment</i> , 2002, 37, 733-739.	3.0	11

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55	On the damage of frescoes and stuccoes on the lower surface of historical flat suspended light vaults. <i>Journal of Cultural Heritage</i> , 2012, 13, 293-303.	1.5	11
56	Experimental and FEM Investigation of Cob Walls under Compression. <i>Advances in Civil Engineering</i> , 2018, 2018, 1-13.	0.4	11
57	A New Approach to Assess the Built Environment Risk under the Conjunct Effect of Critical Slow Onset Disasters: A Case Study in Milan, Italy. <i>Applied Sciences (Switzerland)</i> , 2021, 11, 1186.	1.3	10
58	Seismic risk of Open Spaces in Historic Built Environments: A matrix-based approach for emergency management and disaster response. <i>International Journal of Disaster Risk Reduction</i> , 2021, 65, 102552.	1.8	10
59	Experimental Analysis of Romanesque Masonries Made by Tile and Brick Fragments Found at the Archaeological Site of S. Maria in Portuno. <i>International Journal of Architectural Heritage</i> , 2014, 8, 161-184.	1.7	9
60	Flexible repointing of historical facing-masonry column-type specimens with basalt fibers: A first insight. <i>Journal of Cultural Heritage</i> , 2017, 24, 165-170.	1.5	9
61	A Novel and Sustainable Application of Basalt Fibers for Strengthening Unreinforced Masonry Walls. <i>Journal of Natural Fibers</i> , 2017, 14, 97-111.	1.7	9
62	Sustainable planning of seismic emergency in historic centres through semeiotic tools: Comparison of different existing methods through real case studies. <i>Sustainable Cities and Society</i> , 2020, 52, 101834.	5.1	9
63	Human stability during floods: Experimental tests on a physical model simulating human body. <i>Safety Science</i> , 2021, 137, 105153.	2.6	9
64	Assessing the flood risk to evacuees in outdoor built environments and relative risk reduction strategies. <i>International Journal of Disaster Risk Reduction</i> , 2021, 64, 102493.	1.8	9
65	The combined use of IRT and LDV for the investigation of historical thin vaults. <i>Journal of Cultural Heritage</i> , 2013, 14, 122-128.	1.5	8
66	A More Sustainable Way for Producing RC Sandwich Panels On-Site and in Developing Countries. <i>Sustainability</i> , 2017, 9, 472.	1.6	8
67	Nondestructive Evaluation of Plasters on Historical Thin Vaults by Scanning Laser Doppler Vibrometers. <i>Research in Nondestructive Evaluation</i> , 2014, 25, 218-234.	0.5	7
68	Preliminary study of the influence of different modelling choices and materials properties uncertainties on the seismic assessment of an existing RC school building. <i>AIP Conference Proceedings</i> , 2017, , .	0.3	7
69	Design of a smart system for indoor climate control in historic underground built environment. <i>Energy Procedia</i> , 2017, 134, 518-527.	1.8	7
70	SLow Onset Disaster Events Factors in Italian Built Environment Archetypes. <i>Smart Innovation, Systems and Technologies</i> , 2021, , 333-343.	0.5	7
71	SEISMIC ASSESSMENT OF CULTURAL HERITAGE: NONLINEAR 3D ANALYSES OF "SANTA MARIA DELLA CARITÀ" IN ASCOLI PICENO. , 2017, , .		7
72	Flooding Pedestrians™ Evacuation in Historical Urban Scenario: A Tool for Risk Assessment Including Human Behaviors. <i>RILEM Bookseries</i> , 2019, , 1152-1161.	0.2	6

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73	Sustainable fruition as a preventive conservation strategy for hypogeum artefacts. <i>Journal of Cultural Heritage</i> , 2020, 46, 235-243.	1.5	6
74	How to Account for the Human Motion to Improve Flood Risk Assessment in Urban Areas. <i>Water (Switzerland)</i> , 2020, 12, 1316.	1.2	6
75	Resilient and User-Centered Solutions for a Safer Built Environment Against Sudden and Slow Onset Disasters: The BE S2ECURe Project. <i>Smart Innovation, Systems and Technologies</i> , 2021, , 309-319.	0.5	6
76	Morphological Systems of Open Spaces in Built Environment Prone to Sudden-Onset Disasters. <i>Smart Innovation, Systems and Technologies</i> , 2021, , 321-331.	0.5	6
77	Factors Influencing the Intrinsic Seismic Risk of Open Spaces in Existing Built Environments: A Systematic Review. <i>Sustainability</i> , 2022, 14, 42.	1.6	6
78	Study on some sorption properties of treated bentonites for their potential use as a moisture regulating system for the preservation of historical wooden elements. <i>Journal of Cultural Heritage</i> , 2010, 11, 185-195.	1.5	5
79	Multi-Agent Simulation Model for Evacuation of Care Homes and Hospitals for Elderly and People with Disabilities in Motion. , 2014, , 197-204.		5
80	How to Help Elderly in Indoor Evacuation Wayfinding: Design and Test of a Not-Invasive Solution for Reducing Fire Egress Time in Building Heritage Scenarios. <i>Lecture Notes in Electrical Engineering</i> , 2017, , 209-222.	0.3	5
81	Urban morphology parameters towards multi-risk scenarios for squares in the historical centers: Analyses and definition of square typologies and application to the Italian context. <i>Journal of Cultural Heritage</i> , 2022, 56, 167-182.	1.5	5
82	Light Vaults With Frescoes or Stuccoes Strengthened by Glass Fiber-Reinforced Polymer (GFRP) – the Role of the Reinforcement on Intrados Strains: First Experimental Data. <i>International Journal of Architectural Heritage</i> , 2010, 4, 320-336.	1.7	4
83	TiO ₂ nanocoatings for architectural heritage: Self-cleaning treatments on historical stone surfaces. <i>Proceedings of the Institution of Mechanical Engineers, Part N: Journal of Nanoengineering and Nanosystems</i> , 2014, 228, 2-10.	0.1	4
84	Investigating Exposure in Historical Scenarios: How People Behave in Fires, Earthquakes and Floods. <i>RILEM Bookseries</i> , 2019, , 1138-1151.	0.2	4
85	Flexible Workflow for Determining Critical Hazard and Exposure Scenarios for Assessing SLODs Risk in Urban Built Environments. <i>Sustainability</i> , 2021, 13, 4538.	1.6	4
86	Simplified flood evacuation simulation in outdoor built environments. Preliminary comparison between setup-based generic software and custom simulator. <i>Sustainable Cities and Society</i> , 2022, 81, 103848.	5.1	4
87	Strengthening three-leaf masonry with basalt fibre: Experimental and numerical data. <i>AIP Conference Proceedings</i> , 2017, , .	0.3	3
88	Can Textile Reinforced Mortar (TRM) Systems Be Really Effective to Increase Compressive Strength of Masonry Panels?. <i>Key Engineering Materials</i> , 2019, 817, 435-441.	0.4	2
89	Built Environments Prone to Sudden and Slow Onset Disasters: From Taxonomy Towards Approaches for Pervasive Training of Users. <i>Lecture Notes in Computer Science</i> , 2021, , 125-139.	1.0	2
90	Leaving or Sheltering? a Simulation-Based Comparison of Flood Evacuation Strategies in Urban Built Environments. <i>Smart Innovation, Systems and Technologies</i> , 2022, , 113-123.	0.5	2

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91	The Lossetti Tower in Beura-Cardezza (Italy): Structural Assessment and Rehabilitation of a Historical Dry Stone Masonry Building. RILEM Bookseries, 2019, , 2323-2331.	0.2	2
92	Combining Conservation and Visitorsâ€™ Fruition for Sustainable Building Heritage Use: Application to a Hypogeum. Smart Innovation, Systems and Technologies, 2020, , 269-279.	0.5	2
93	Modelling microalgae biofouling on porous buildings materials: a novel approach. Materials and Structures/Materiaux Et Constructions, 2022, 55, .	1.3	2
94	Photocatalytic TiO2 Nano-Coating for Biofouling Prevention of Clay Façades. Building Pathology and Rehabilitation, 2016, , 159-175.	0.1	1
95	Pre-Tensioned Basalt Fibers Ropes Stitching for Masonry Strengthening against Vertical Bending: A First Experimental Insight. Key Engineering Materials, 0, 747, 119-127.	0.4	1
96	How to simulate pedestrian behaviors in seismic evacuation for vulnerability reduction of existing buildings. AIP Conference Proceedings, 2017, , .	0.3	1
97	Cognitive Buildings for Increasing Elderly Fire Safety in Public Buildings: Design and First Evaluation of a Low-Impact Dynamic Wayfinding System. Lecture Notes in Electrical Engineering, 2021, , 101-119.	0.3	1
98	Occupantsâ€™ Behavioral Analysis for the Optimization of Building Operation and Maintenance: A Case Study to Improve the Use of Elevators in a University Building. Smart Innovation, Systems and Technologies, 2021, , 207-217.	0.5	1
99	Diagnosis and Structural Assessment of the Assumption of the Virgin Mary Chapel in Prague (CZ). Key Engineering Materials, 2019, 817, 571-578.	0.4	0
100	An empirical failure model to predict biofouling growth on fired bricks due to microalgae. Journal of Building Engineering, 2021, 44, 102965.	1.6	0
101	Sustainable Engineering for Resilient Built and Natural Environments. , 2019, , 297-310.		0
102	Rethinking Buildings Design, Construction and Management Through Sustainable Technologies and Digitization. , 2019, , 341-356.		0
103	Understanding Human Behaviors in Earthquakes to Improve Safety in Built Environment: A State of the Art on Sustainable and Validated Investigation Tools. Smart Innovation, Systems and Technologies, 2021, , 297-307.	0.5	0