Miguel Gomez-Heras

List of Publications by Year
in descending order

51	1,712	304743 22	289244 40
papers	citations	h-index	g-index

54	54	54	1364
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Non-linear decay of building stones during freezeâ€“thaw weathering processes. Construction and Building Materials, 2013, 38, 443-454.	7.2	172
2	Surface temperature differences between minerals in crystalline rocks: Implications for granular disaggregation of granites through thermal fatigue. Geomorphology, 2006, 78, 236-249.	2.6	133
3	Influence of mineralogy on granite decay induced by temperature increase: Experimental observations and stress simulation. Engineering Geology, 2015, 189, 58-67.	6.3	114
4	Understanding the decay of stone-built cultural heritage. Progress in Physical Geography, 2008, 32, 439-461.	3.2	109
5	Improved correlation between the static and dynamic elastic modulus of different types of rocks. Materials and Structures/Materiaux Et Constructions, 2016, 49, 3021-3037.	3.1	90
6	The combined influence of mineralogical, hygric and thermal properties on the durability of porous building stones. European Journal of Mineralogy, 2008, 20, 673-685.	1.3	72
7	Impacts of Fire on Stone-Built Heritage. Journal of Architectural Conservation, 2009, 15, 47-58.	0.9	63
8	Influence of surface heterogeneities of building granite on its thermal response and its potential for the generation of thermoclasty. Environmental Geology, 2008, 56, 547-560.	1.2	60
9	Patterns of halite (NaCl) crystallisation in building stone conditioned by laboratory heating regimes. Environmental Geology, 2007, 52, 259-267.	1.2	58
10	Soluble salt minerals from pigeon droppings as potential contributors to the decay of stone based Cultural Heritage. European Journal of Mineralogy, 2004, 16, 505-509.	1.3	55
11	Evolution of surface properties of ornamental granitoids exposed to high temperatures. Construction and Building Materials, 2016, 104, 263-275.	7.2	52
12	Near-surface temperature cycling of stone and its implications for scales of surface deterioration. Geomorphology, 2011, 130, 76-82.	2.6	51
13	Sandstone alterations triggered by fire-related temperatures. Environmental Earth Sciences, 2014, 72, 2569-2581.	2.7	50
14	Evolution in the use of natural building stone in Madrid, Spain. Quarterly Journal of Engineering Geology and Hydrogeology, 2013, 46, 421-429.	1.4	46
15	Multiscale structural and lithologic controls in the development of stream potholes on granite bedrock rivers. Geomorphology, 2014, 204, 588-598.	2.6	43
16	Ultrasonic pulse velocity as a way of improving uniaxial compressive strength estimations from Leeb hardness measurements. Construction and Building Materials, 2020, 261, 119996.	7.2	41
17	A comprehensive study for moisture control in cultural heritage using non-destructive techniques. Journal of Applied Geophysics, 2018, 155, 36-52.	2.1	39
18	Weathering of stone-built heritage: A lens through which to read the Anthropocene. Anthropocene, 2015, 11, 1-13.	3.3	33

#	Article	IF	Citations
19	Preservation strategies for avoidance of salt crystallisation in El Paular Monastery cloister, Madrid, Spain. Environmental Earth Sciences, 2011, 63, 1487-1509.	2.7	30
20	Possibilities of monitoring the polymerization process of silicon-based water repellents and consolidants in stones through infrared and Raman spectroscopy. Progress in Organic Coatings, 2008, 63, 5-12.	3.9	26
21	Accessible Geoparks in Iberia: a Challenge to Promote Geotourism and Education for Sustainable Development. Geoheritage, 2019, 11, 471-484.	2.8	26
22	An urban geomonumental route focusing on the petrological and decay features of traditional building stones used in Madrid, Spain. Environmental Earth Sciences, 2013, 69, 1071-1084.	2.7	25
23	The influence of temperature in a capillary imbibition salt weathering simulation test on Mokattam limestone. Materiales De Construccion, 2015, 65, e044.	0.7	24
24	Laser removal of water repellent treatments on limestone. Applied Surface Science, 2003, 219, 290-299.	6.1	22
25	Geomaterials in construction and their sustainability: understanding their role in modern society. Geological Society Special Publication, 2016, 416, 1-22.	1.3	22
26	Changing climate, changing process: implications for salt transportation and weathering within building sandstones in the UK. Environmental Earth Sciences, 2013, 69, 1225-1235.	2.7	21
27	Contributions of scanning electron microscopy to the assessment of the effectiveness of stone conservation treatments. Scanning, 2004, 26, 41-47.	1.5	16
28	Building sandstone surface modification by biofilm and iron precipitation: emerging blockâ€scale heterogeneity and system response. Earth Surface Processes and Landforms, 2015, 40, 112-122.	2.5	16
29	Dating fires and estimating the temperature attained on stone surfaces. The case of Ciudad de Vascos (Spain). Microchemical Journal, 2016, 127, 247-255.	4.5	16
30	The benefit of a tough skin: bullet holes, weathering and the preservation of heritage. Royal Society Open Science, 2017, 4, 160335.	2.4	16
31	Comparative assessment of stainedâ€glass windows materials by infrared thermography. International Journal of Applied Glass Science, 2018, 9, 530-539.	2.0	16
32	Improving uniaxial compressive strength estimation of carbonate sedimentary rocks by combining minimally invasive and non-destructive techniques. International Journal of Rock Mechanics and Minings Sciences, 2021, 147, 104915.	5.8	14
33	Localizacion de canteras de materiales no tradicionales en la arquitectura de Madrid: la Cripta de la Catedral de Santa MarÃa la Real de la Almudena. Materiales De Construccion, 2004, 54, 33-50.	0.7	14
34	Oxford stone revisited: causes and consequences of diversity in building limestone used in the historic centre of Oxford, England. Geological Society Special Publication, 2010, 333, 101-110.	1.3	12
35	Underlying issues on the selection, use and conservation of building limestone. Geological Society Special Publication, 2010, 331, 1-11.	1.3	12
36	Evaporative moisture loss from heterogeneous stone: Material-environment interactions during drying. Geomorphology, 2016, 273, 308-322.	2.6	12

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37	How does anisotropy in bedrock river granitic outcrops influence pothole genesis and development?. Earth Surface Processes and Landforms, 2017, 42, 956-968.	2.5	11
38	A 4D GIS methodology to study variations in evaporation points on a heritage building. Environmental Earth Sciences, 2016, 75, 1.	2.7	10
39	Mineralogical Transformations in Granitoids during Heating at Fire-Related Temperatures. Applied Sciences (Switzerland), 2022, 12, 188.	2.5	10
40	Dynamical instability in surface permeability characteristics of building sandstones in response to salt accumulation over time. Geomorphology, 2011, 130, 65-75.	2.6	9
41	Morphometric measurements of bedrock rivers at different spatial scales and applications to geomorphological heritage research. Progress in Earth and Planetary Science, 2019, 6, .	3.0	9
42	Assessment of an underfloor heating system in a restored chapel: Balancing thermal comfort and historic heritage conservation. Energy and Buildings, 2021, 251, 111361.	6.7	8
43	Evaluation of Portable Raman for the Characterization of Salt Efflorescences at Petra, Jordan. Spectroscopy Letters, 2011, 44, 505-510.	1.0	7
44	A new high-resolution 3-D quantitative method for analysing small morphological features: an example using a Cambrian trilobite. Scientific Reports, 2018, 8, 2868.	3.3	7
45	Thermal Stresses. , 2006, , 427-437.		5
46	Polygonal cracking in granite and considerations for a morphological classification (La Pedriza de) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	1.3	4
47	Use of Fiber Optic and Electrical Resistance Sensors for Monitoring Moisture Movement in Building Stones Subjected to Simulated Climatic Conditions. Journal of ASTM International, 2010, 7, 1-11.	0.2	4
48	Student Learning Styles. Developments in Earth Surface Processes, 2014, , 93-116.	2.8	3
49	Sierra de Guadarrama (Madrid, Spain): bridging the gap between geology and architecture. Geological Society Special Publication, 2016, 416, 101-112.	1.3	2
50	New experimental method to study the combined effect of temperature and salt weathering. Geological Society Special Publication, 2016, 416, 229-237.	1.3	1
51	Changes in Petrophysical Properties of the Stone Surface due to Past Conservation Treatments in Archaeological Sites of Merida (Spain). , 2015, , 521-524.		0