Monica Ãlvarez De Buergo

List of Publications by Year
in descending order

61 papers	1,549 citations	331670 21 h-index	315739 38 g-index
62 all docs	62 docs citations	62 times ranked	1417 citing authors

#	Article	IF	Citations
1	Influence of relative humidity on the carbonation of calcium hydroxide nanoparticles and the formation of calcium carbonate polymorphs. Powder Technology, 2011, 205, 263-269.	4.2	165
2	Influence of porosity and relative humidity on consolidation of dolostone with calcium hydroxide nanoparticles: Effectiveness assessment with non-destructive techniques. Materials Characterization, 2010, 61, 168-184.	4.4	120
3	Nano-TiO2 coatings for cultural heritage protection: The role of the binder on hydrophobic and self-cleaning efficacy. Progress in Organic Coatings, 2016, 91, 1-8.	3.9	108
4	Non-destructive testing for the assessment of granite decay in heritage structures compared to quarry stone. International Journal of Rock Mechanics and Minings Sciences, 2013, 61, 296-305.	5.8	71
5	Natural cement as the precursor of Portland cement: Methodology for its identification. Cement and Concrete Research, 2005, 35, 2055-2065.	11.0	68
6	Characterizing the Microbial Colonization of a Dolostone Quarry: Implications for Stone Biodeterioration and Response to Biocide Treatments. Microbial Ecology, 2011, 62, 299-313.	2.8	68
7	Determination of anisotropy to enhance the durability of natural stone. Journal of Geophysics and Engineering, 2011, 8, S132-S144.	1.4	63
8	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
9	Structural stability of a colloidal solution of Ca(OH)2 nanocrystals exposed to high relative humidity conditions. Applied Physics A: Materials Science and Processing, 2011, 104, 1249-1254.	2.3	50
10	Artificial weathering of Spanish granites subjected to salt crystallization tests: Surface roughness quantification. Catena, 2010, 83, 170-185.	5.0	49
11	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
12	Protective patinas applied on stony faÃ§ades of historical buildings in the past. Construction and Building Materials, 2003, 17, 83-89.	7.2	41
13	Atomic Defects and Their Relationship to Aragoniteâ€“Calcite Transformation in Portlandite Nanocrystal Carbonation. Crystal Growth and Design, 2012, 12, 4844-4852.	3.0	39
14	Characterization of patinas by means of microscopic techniques. Materials Characterization, 2007, 58, 1119-1132.	4.4	38
15	Characterisation of monzogranitic batholiths as a supply source for heritage construction in the northwest of Madrid. Engineering Geology, 2010, 115, 149-157.	6.3	31
16	The conservation state of the Sassi of Matera site (Southern Italy) and its correlation with the environmental conditions analysed through spatial analysis techniques. Journal of Cultural Heritage, 2016, 17, 61-74.	3.3	29
17	The measurement of surface roughness to determine the suitability of different methods for stone cleaning. Journal of Geophysics and Engineering, 2012, 9, S108-S117.	1.4	28
18	Influencia de la anisotropÃa en la durabilidad de las dolomÃas CretÃ¡cicas de la Comunidad de Madrid frente a la cristalizaciÃ³n de sales. Materiales De Construccion, 2008, 58, 161-178.	0.7	27

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19	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
20	Biodeterioration of marble in an underwater environment. Science of the Total Environment, 2017, 609, 109-122.	8.0	26
21	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
22	Laser removal of water repellent treatments on limestone. Applied Surface Science, 2003, 219, 290-299.	6.1	22
23	Multi-analytical approach applied to the provenance study of marbles used as covering slabs in the archaeological submerged site of Baia (Naples, Italy): The case of the â€œVilla con ingresso a protiroâ€• Applied Surface Science, 2015, 357, 1369-1379.	6.1	21
24	Stone decay in 18th century monuments due to iron corrosion. The Royal Palace, Madrid (Spain). Building and Environment, 2004, 39, 357-364.	6.9	20
25	Laser-induced fluorescence and FT-Raman spectroscopy for characterizing patinas on stone substrates. Analytical and Bioanalytical Chemistry, 2012, 402, 1433-1441.	3.7	18
26	Assessment of Different Methods for Cleaning the Limestone FaÃ§ades of the Former Workers Hospital of Madrid, Spain. Studies in Conservation, 2011, 56, 298-313.	1.1	17
27	Archaeological ceramic amphorae from underwater marine environments: Influence of firing temperature on salt crystallization decay. Journal of the European Ceramic Society, 2013, 33, 2031-2042.	5.7	17
28	The environmental impact of air pollution on the built heritage of historic Cairo (Egypt). Science of the Total Environment, 2021, 764, 142905.	8.0	17
29	Contributions of scanning electron microscopy to the assessment of the effectiveness of stone conservation treatments. Scanning, 2004, 26, 41-47.	1.5	16
30	Decay of the restoration render mortar of the church of San Manuel and San Benito, Madrid, Spain: Results from optical and electron microscopy. Materials Characterization, 2008, 59, 1531-1540.	4.4	16
31	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
32	The Influence of Past Protective Treatments on the Deterioration of Historic Stone FaÃ§ades A Case Study. Studies in Conservation, 2007, 52, 110-124.	1.1	14
33	The use of a portable energy dispersive x-ray fluorescence spectrometer for the characterization of patinas from the architectural heritage of the Iberian peninsula. X-Ray Spectrometry, 2008, 37, 399-409.	1.4	13
34	Colmenar Limestone, Madrid, Spain: considerations for its nomination as a Global Heritage Stone Resource due to its long term durability. Geological Society Special Publication, 2015, 407, 121-135.	1.3	13
35	Black Layers of Decay and Color Patterns on Heritage Limestone as Markers of Environmental Change. Geosciences (Switzerland), 2016, 6, 4.	2.2	13
36	Effect of manufacturing methods on the decay of ceramic materials: A case study of bricks in modern architecture of Madrid (Spain). Applied Clay Science, 2017, 135, 136-149.	5.2	13

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37	The Use of Portable Raman Spectroscopy to Identify Conservation Treatments Applied to Heritage Stone. Spectroscopy Letters, 2012, 45, 146-150.	1.0	12
38	Characterization of concrete from Roman buildings for public spectacles in Emerita Augusta (MÃ©rida,) Tj ETQq0 0 0 rgBT /Overlock 10	1.8	11
39	Definition of analytical cleaning procedures for archaeological pottery from underwater environments: The case study of samples from Baia (Naples, South Italy). Materials and Design, 2021, 197, 109278.	7.0	10
40	Contribution of analytical techniques to determine the technologies used in the ceramic materials from the Former Workers Hospital of Maudes, Madrid (Spain). Journal of the European Ceramic Society, 2013, 33, 479-491.	5.7	9
41	Effects of potassium ferrocyanide used for desalination on lime composite performances in different curing regimes. Construction and Building Materials, 2020, 259, 120409.	7.2	9
42	Addition of ferrocyanide-based compounds to repairing joint lime mortars as a protective method for porous building materials against sodium chloride damage. Materials and Structures/Materiaux Et Constructions, 2021, 54, 1.	3.1	9
43	EvaluaciÃ³n del tratamiento de consolidaciÃ³n de dolomÃas mediante nanopartÃculas de hidrÃ³xido de calcio en condiciones de alta humedad relativa. Boletin De La Sociedad Espanola De Ceramica Y Vidrio, 2011, 50, 85-92.	1.9	9
44	Overview of recent knowledge of patinas on stone monuments: the Spanish experience. Geological Society Special Publication, 2007, 271, 295-307.	1.3	8
45	The origin and development of natural cements: The Spanish experience. Construction and Building Materials, 2007, 21, 436-445.	7.2	7
46	Evaluation of Portable Raman for the Characterization of Salt Efflorescences at Petra, Jordan. Spectroscopy Letters, 2011, 44, 505-510.	1.0	7
47	Assessment of protection treatments for carbonatic stone using nanocomposite coatings. Progress in Organic Coatings, 2020, 141, 105515.	3.9	7
48	Effects of Conservation Interventions on the Archaeological Roman Site of Merida (Spain). Advance of Research. Procedia Chemistry, 2013, 8, 269-278.	0.7	5
49	Thermal Stresses. , 2006, , 427-437.		5
50	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
51	Provenance analysis of the granitic ashlars used in the construction of the Roman theatre in Emerita Augusta (Merida, Spain). Archaeological and Anthropological Sciences, 2020, 12, 1.	1.8	4
52	Los ladrillos del recinto amurallado de Talamanca de Jarama, Madrid: criterios para su diferenciaciÃ³n. Boletin De La Sociedad Espanola De Ceramica Y Vidrio, 2007, 46, 145-152.	1.9	4
53	Detection of calcium phosphates in calcium oxalate patinas. European Journal of Mineralogy, 2012, 24, 1031-1045.	1.3	3
54	Efficacy of acid treatments used in archaeological ceramics for the removal of calcareous deposits. European Physical Journal Plus, 2021, 136, 1.	2.6	3

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55	Limestone on the â€˜Don Pedro Iâ€™ facade in the Real AlcÃ¡zar compound, Seville, Spain. Geological Society Special Publication, 2010, 331, 171-182.	1.3	2
56	Cultural heritage and civil engineering. Journal of Geophysics and Engineering, 2012, 9, .	1.4	1
57	Petrophysical-mechanical behavior of Grisolia stone found in the architectural heritage of southern Italy. Materiales De Construccion, 2019, 69, 188.	0.7	1
58	Safety issues in cultural heritage management and critical infrastructures management. Journal of Geophysics and Engineering, 2013, 10, 060201.	1.4	0
59	Ultrasonic Analysis of the Spanish Cultural Heritage: Six Case Studies. Geotechnologies and the Environment, 2017, , 469-484.	0.3	0
60	Evaluation of Multi-Functional Silica-Based Nano-Products for Consolidating and Protecting Stone Material from Archaeological Sites. Solid State Phenomena, 2019, 286, 95-104.	0.3	0
61	Analytical characterisation of the granitic rocks used in the vomitoria of the Roman amphitheatre in Emerita Augusta. Rendiconti Lincei, 2022, 33, 57-70.	2.2	0