Microbially induced deterioration of architectural herit involved

Environmental Sciences Europe

24,

DOI: 10.1186/2190-4715-24-36

Citation Report

#	Article	IF	Citations
1	The influence of biotic and abiotic factors on the rate of degradation of poly(lactic) acid (PLA) coupons buried in compost and soil. Polymer Degradation and Stability, 2013, 98, 2063-2071.	2.7	185
2	Lichens as bioindicators of atmospheric heavy metal deposition in Valencia, Spain. Journal of Atmospheric Chemistry, 2013, 70, 373-388.	1.4	14
3	Calcium carbonate precipitation by heterotrophic bacteria isolated from biofilms formed on deteriorated ignimbrite stones: influence of calcium on EPS production and biofilm formation by these isolates. Biofouling, 2014, 30, 547-560.	0.8	42
4	Composition of weathering crusts on sandstones from natural outcrops and architectonic elements in an urban environment. Environmental Science and Pollution Research, 2014, 21, 14023-14036.	2.7	44
5	Application of calcifying bacteria for remediation of stones and cultural heritages. Frontiers in Microbiology, 2014, 5, 304.	1.5	100
6	Distribution of secondary minerals in crusts developed on sandstone exposures. Earth Surface Processes and Landforms, 2014, 39, 320-335.	1.2	16
7	Development of a Laboratory Model of a Phototroph-Heterotroph Mixed-Species Biofilm at the Stone/Air Interface. Frontiers in Microbiology, 2015, 6, 1251.	1.5	42
8	Heritage materials and biofouling mitigation through UV-C irradiation in show caves: state-of-the-art practices and future challenges. Environmental Science and Pollution Research, 2015, 22, 4144-4172.	2.7	31
9	Controlling biofilms on cultural materials: the role of 3-(dodecane-1-thiyl)-4-(hydroxymethyl)-2,2,5,5-tetramethyl-1-pyrrolinoxyl. Chemical Communications, 2015, 51, 3355-3358.	2.2	10
10	Suitability of hyperspectral imaging technique to evaluate the effectiveness of the cleaning of a crustose lichen developed on granite. Applied Physics A: Materials Science and Processing, 2016, 122, 1.	1.1	14
11	Diversity and biodeteriorative potential of fungal dwellers on ancient stone stela. International Biodeterioration and Biodegradation, 2016, 115, 212-223.	1.9	42
12	Identification of secondary salts and their sources in deteriorated stone monuments using microâ€Raman spectroscopy, SEMâ€EDS and XRD. Journal of Raman Spectroscopy, 2016, 47, 1473-1485.	1.2	11
13	Profile of microbial communities on carbonate stones of the medieval church of San Leonardo di Siponto (Italy) by Illumina-based deep sequencing. Applied Microbiology and Biotechnology, 2016, 100, 8537-8548.	1.7	47
14	Subaerial Biofilms on Outdoor Stone Monuments: Changing the Perspective Toward an Ecological Framework. BioScience, 2016, 66, 285-294.	2.2	38
15	Development of Stone Monuments Monitoring System Using Computer Technology. Lecture Notes in Earth System Sciences, 2016, , 415-421.	0.5	2
16	A first report of biodeterioration caused by cyanobacterial biofilms of exposed fossil bones: A case study of the middle Pleistocene site of La Polledrara di Cecanibbio (Rome, Italy). International Biodeterioration and Biodegradation, 2016, 106, 67-74.	1.9	14
17	Biodeterioration. , 2017, , 1-30.		5
18	Stone-Eating Fungi. Advances in Applied Microbiology, 2017, 99, 83-101.	1.3	14

#	Article	IF	Citations
19	Evaluation of hydroxyapatite effects for the consolidation of a Hellenistic-Roman rock-cut chamber tomb at Athienou-Malloura in Cyprus. Construction and Building Materials, 2017, 150, 333-344.	3.2	33
20	Pink discoloration on frescoes from Hurezi Monastery, Romania. Journal of Cultural Heritage, 2017, 23, 157-161.	1.5	2
21	Polyphasic insights into the microbiomes of the Takamatsuzuka Tumulus and Kitora Tumulus. Journal of General and Applied Microbiology, 2017, 63, 63-113.	0.4	22
22	Diversity of Terrestrial Cyanobacteria Colonizing Selected Stone Monuments in Serbia. Studies in Conservation, 2018, 63, 292-302.	0.6	5
23	Calcium oxalates in biofilms on limestone walls of Maya buildings in ChichÃ©n ItzÃ¡, Mexico. Environmental Earth Sciences, 2018, 77, 1.	1.3	18
24	Biodeterioration of buildings and public health implications caused by indoor air pollution. Indoor and Built Environment, 2018, 27, 752-765.	1.5	16
25	Tales from the tomb: the microbial ecology of exposed rock surfaces. Environmental Microbiology, 2018, 20, 958-970.	1.8	63
26	Density functional theory modelling of protective agents for carbonate stones: a case study of oxalate and oxamate inorganic salts. New Journal of Chemistry, 2018, 42, 11593-11600.	1.4	7
27	Bacterial and Fungal Diversity Inside the Medieval Building Constructed with Sandstone Plates and Lime Mortar as an Example of the Microbial Colonization of a Nutrient-Limited Extreme Environment (Wawel Royal Castle, Krakow, Poland). Microorganisms, 2019, 7, 416.	1.6	15
28	Origin and Control Strategies of Biofilms in the Cultural Heritage. , 2019, , .		8
29	Fungal diversity and distribution across distinct biodeterioration phenomena in limestone walls of the old cathedral of Coimbra, UNESCO World Heritage Site. International Biodeterioration and Biodegradation, 2019, 142, 91-102.	1.9	51
30	Microbial Biodeterioration of Cultural Heritage: Events, Colonization, and Analyses. Microbial Ecology, 2019, 78, 1014-1029.	1.4	75
32	Structural diversity of photoautotrophic populations within the UNESCO site â€˜Old Cathedral of Coimbraâ€™ (Portugal), using a combined approach. International Biodeterioration and Biodegradation, 2019, 140, 9-20.	1.9	25
33	In vitro biodegradation potential of airborne Aspergilli and Penicillia. Die Naturwissenschaften, 2019, 106, 8.	0.6	35
34	Bioreceptivity of archaeological ceramics in an arid region of northern Argentina. International Biodeterioration and Biodegradation, 2019, 141, 2-9.	1.9	6
35	A change in composition, a change in colour: The case of limestone sculptures from the Portuguese National Museum of Ancient Art. Journal of Cultural Heritage, 2020, 42, 255-262.	1.5	14
36	Indoor air fungal pollution of a historical museum, Egypt: a case study. Aerobiologia, 2020, 36, 197-209.	0.7	22
37	A comprehensive study of biofilms growing on the built heritage of a Caribbean industrial city in correlation with construction materials. International Biodeterioration and Biodegradation, 2020, 147, 104874.	1.9	28

#	Article	IF	Citations
38	In vitro analyses of fungi and dolomitic limestone interactions: Bioreceptivity and biodeterioration assessment. International Biodeterioration and Biodegradation, 2020, 155, 105107.	1.9	16
39	Enzymatic Activity as a Measure of Total Microbial Activity on Historical Stone. Heritage, 2020, 3, 671-681.	0.9	5
40	Parengyodontium album, a frequently reported fungal species in the cultural heritage environment. Fungal Biology Reviews, 2020, 34, 126-135.	1.9	28
41	Diversity and structure of soil microbiota of the Jinsha earthen relic. PLoS ONE, 2020, 15, e0236165.	1.1	6
42	Preliminary Studies on Fungal Contamination of Two Rupestrian Churches from Matera (Southern) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	1.6	14
43	Identification of timber material defect using VIA on selected traditional Malay house: Case study on Tuan Hj Hashim Itam (Kerani) historical house at Penang, Malaysia. AIP Conference Proceedings, 2020, , .	0.3	1
44	Nanopore Sequencing and Bioinformatics for Rapidly Identifying Cultural Heritage Spoilage Microorganisms. Frontiers in Materials, 2020, 7, .	1.2	22
45	Entomogenous Fungi and the Conservation of the Cultural Heritage. , 2020, , 41-69.		0
46	Microbiological Tools for Cultural Heritage Conservation. , 2020, , 137-149.		0
47	Analysis of fungal deterioration phenomena in the first Portuguese King tomb using a multi-analytical approach. International Biodeterioration and Biodegradation, 2020, 149, 104933.	1.9	28
48	Antibacterial Effect of Zinc Oxide-Based Nanomaterials on Environmental Biodeteriogens Affecting Historical Buildings. Nanomaterials, 2020, 10, 335.	1.9	28
49	Essential Oils as Natural Biocides in Conservation of Cultural Heritage. Molecules, 2020, 25, 730.	1.7	84
50	Effects of the Ionizing Radiation Disinfection Treatment on Historical Leather. Frontiers in Materials, 2020, 7, .	1.2	14
51	Involvement of Streptomyces in the Deterioration of Cultural Heritage Materials Through Biomineralization and Bio-Pigment Production Pathways: A Review. Geomicrobiology Journal, 2020, 37, 653-662.	1.0	18
52	Changes of Granite Rapakivi under the Biofouling Influence. , 0, , .		1
53	Bacterial and Archaeal Structural Diversity in Several Biodeterioration Patterns on the Limestone Walls of the Old Cathedral of Coimbra. Microorganisms, 2021, 9, 709.	1.6	20
54	Polyoxometalate-Ionic Liquids (ILs) and Polyvinyl Alcohol/Chitosan/ILs Hydrogels for Inhibiting Bacteria Colonising Wall Paintings. Carbohydrate Polymers, 2021, 256, 117592.	5.1	9
55	Accumulation and Phytotoxicity of Two Commercial Biocides in the Lichen Evernia prunastri and the Moss Brachythecium sp.. Stresses, 2021, 1, 69-77.	1.8	1

#	Article	IF	Citations
56	Anti-fouling nano-Ag/SiO2 ormosil treatments for building materials: The role of cell-surface interactions on toxicity and bioreceptivity. Progress in Organic Coatings, 2021, 153, 106120.	1.9	13
57	Current Knowledge on the Fungal Degradation Abilities Profiled through Biodeteriorative Plate Essays. Applied Sciences (Switzerland), 2021, 11, 4196.	1.3	17
58	A contribution to understand the Portuguese emblematic AnÃ§Ã£ limestone bioreceptivity to fungal colonization and biodeterioration. Journal of Cultural Heritage, 2021, 49, 305-312.	1.5	9
59	Antifungal properties of poly[2-(dimethylamino)ethyl methacrylate] (PDMAEMA) and quaternized derivatives. Reactive and Functional Polymers, 2021, 163, 104887.	2.0	6
60	Rare Biogeochemical Phenomenon Associated to Manganese Patinas on Mural Painting and Granite Ashlars. Coatings, 2021, 11, 917.	1.2	6
61	Black on White: Microbial Growth Darkens the External Marble of Florence Cathedral. Applied Sciences (Switzerland), 2021, 11, 6163.	1.3	21
62	Spatial and temporal distributions of microbial diversity under natural conditions on the sandstone stelae of the Beishiku Temple in China. International Biodeterioration and Biodegradation, 2021, 163, 105279.	1.9	21
63	Thymus vulgaris Essential Oil and Hydro-Alcoholic Solutions to Counteract Wooden Artwork Microbial Colonization. Applied Sciences (Switzerland), 2021, 11, 8704.	1.3	13
64	Seasonal structural characteristics of indoor airborne fungi in library rooms by culturing and high-throughput sequencing. Building and Environment, 2021, 206, 108368.	3.0	6
65	Characterization and assessment of stone deterioration on Heritage Buildings. Case Studies in Construction Materials, 2021, 15, e00696.	0.8	15
66	Towards understanding the link between the deterioration of building materials and the nature of aerophytic green algae. Science of the Total Environment, 2022, 802, 149856.	3.9	19
67	The Bad and the Goodâ€"Microorganisms in Cultural Heritage Environmentsâ€"An Update on Biodeterioration and Biotreatment Approaches. Materials, 2021, 14, 177.	1.3	50
68	Microbial Causes of Art Damage and Their Enzyme Profiles. International Journal of Scientific Research in Environmental Sciences, 2016, 4, 78-85.	0.1	1
69	Abiotic Determinants of the Historical Buildings Biodeterioration in the Former Auschwitz II â€“ Birkenau Concentration and Extermination Camp. PLoS ONE, 2014, 9, e109402.	1.1	24
70	Biodegradative potential of fungal isolates from sacral ambient: In vitro study as risk assessment implication for the conservation of wall paintings. PLoS ONE, 2018, 13, e0190922.	1.1	38
71	Biodeterioration of Stone Monuments a Worldwide Issue. The Open Conference Proceedings Journal, 2016, 7, 29-38.	0.6	27
72	Bioremediation of Cultural Heritage: Removal of Organic Substances. , 2020, , 87-101.		2
73	Potential Use of Carrageenans against the Limestone Proliferation of the Cyanobacterium Parakomarekiella sesnandensis. Applied Sciences (Switzerland), 2021, 11, 10589.	1.3	2

#	Article	IF	Citations
74	Demonstration of Allium sativum Extract Inhibitory Effect on Biodeteriogenic Microbial Strain Growth, Biofilm Development, and Enzymatic and Organic Acid Production. Molecules, 2021, 26, 7195.	1.7	16
75	A Simple Method for Optimal DNA Extraction from Different Filamentous Fungi Species Growing on Earthen Walls of â€˜Vale HistÃ³rico Paulistaâ€™, SÃ£o Paulo, Brazil. Studies in Conservation, 2023, 68, 380-387.	0.6	1
76	Microbial Diversity on the Surface of Historical Monuments in Lingyan Temple, Jinan, China. Microbial Ecology, 2023, 85, 76-86.	1.4	7
77	Air and wall mycobiota interactionsâ€”A case study in the Old Cathedral of Coimbra. , 2022, , 101-125.		0
79	A metagenomic analysis of the bacterial microbiome of limestone, and the role of associated biofilms in the biodeterioration of heritage stone surfaces. Scientific Reports, 2022, 12, 4877.	1.6	12
80	Characterization of Natural Stone from the Archaeological Site of Pella, Macedonia, Northern Greece. Heritage, 2021, 4, 4665-4677.	0.9	4
81	Green chitosan: thiourea dioxide cleaning gel for manganese stains on granite and glass substrates. Heritage Science, 2021, 9, .	1.0	2
82	Biocontamination and diversity of epilithic bacteria and fungi colonising outdoor stone and mortar sculptures. Applied Microbiology and Biotechnology, 2022, 106, 3811-3828.	1.7	8
83	Facile Two-Step Deposition of Calcium Oxalate Film on Dolomite to Improve Acid Rain Resistance. Crystals, 2022, 12, 734.	1.0	2
85	Assessment of Biofilm Inhabitants of Deteriorated Surfaces of Heritage Sites. Geomicrobiology Journal, 0, , 1-10.	1.0	1
86	Legal Regime for the Protection of Heritage Stone Monuments in India: a Study with Special Reference to Taj Mahal and Lotus Temple. Geoheritage, 2022, 14, .	1.5	3
87	A Review of Biodeterioration in Iranian Historical Monuments with Emphasis on Porous Architectural Materials. Journal of Research on Archaeometry, 2021, 7, 159-182.	0.1	0
88	Insight on bacteria communities in outdoor bronze and marble artefacts in a changing environment. Science of the Total Environment, 2022, 850, 157804.	3.9	3
89	Bacterial Deterioration in the Limestone Minaret of Prince Muhammad and Suggested Treatment Methods, Akhmim, Egypt. Geomaterials, 2022, 12, 37-58.	0.4	1
90	Resistance to frost action and microbiological corrosion of novel ceramic composites. Chemical Industry and Chemical Engineering Quarterly, 2023, 29, 99-109.	0.4	0
91	Assessment of the potential effects of plants with their secreted biochemicals on the biodeterioration of archaeological stones. Biomass Conversion and Biorefinery, 0, , .	2.9	1
92	An indigenous inland genotype of the black yeast Hortaea werneckii inhabiting the great pyramid of Giza, Egypt. Frontiers in Microbiology, 0, 13, .	1.5	3
93	A Lichens-Mediated Mechanism for Environmental Biodeterioration. Air, Soil and Water Research, 2022, 15, 117862212211310.	1.2	0

#	Article	IF	Citations
94	Uncovering the Fungal Diversity Colonizing Limestone Walls of a Forgotten Monument in the Central Region of Portugal by High-Throughput Sequencing and Culture-Based Methods. Applied Sciences (Switzerland), 2022, 12, 10650.	1.3	10
95	Review of the untapped potentials of antimicrobial materials in the construction sector. Progress in Materials Science, 2023, 133, 101065.	16.0	13
96	Mycobiome Diversity of the Cave Church of Sts. Peter and Paul in Serbiaâ€"Risk Assessment Implication for the Conservation of Rare Cavern Habitat Housing a Peculiar Fresco Painting. Journal of Fungi (Basel, Switzerland), 2022, 8, 1263.	1.5	6
97	Temperature and Moisture Gradients Drive the Shifts of the Bacterial Microbiomes in 1000-Year-Old Mausoleums. Atmosphere, 2023, 14, 14.	1.0	3
98	Diversity and Composition of Culturable Microorganisms and Their Biodeterioration Potentials in the Sandstone of Beishiku Temple, China. Microorganisms, 2023, 11, 429.	1.6	10
99	Granite Weathering Under Urban Condition. Volcanic Tourist Destinations, 2023, , 211-223.	0.2	0
100	Phototrophic Colonization in Dolomitic Limestone: Comparison between Single vs Artificial Multispecies. Geomicrobiology Journal, 2023, 40, 434-445.	1.0	1
101	Exploring Differences in Culturable Fungal Diversity Using Standard Freezing Incubationâ€"A Case Study in the Limestones of Lemos Pantheon (Portugal). Journal of Fungi (Basel, Switzerland), 2023, 9, 501.	1.5	5
112	Unravelling Phase Transitions in Minerals at Extreme Temperatures: Using Terahertz and Infrared Spectroscopy. , 2023, , .		0