A Critical Review of the Physiological, Ecological, Physi
Influencing the Microbial Degradation of Concrete by F

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Citation Report

#	Article	IF	Citations
1	Evaluation of VOCs From Fungal Strains, Building Insulation Materials and Indoor Air by Solid Phase Microextraction Arrow, Thermal Desorption–Gas Chromatography-Mass Spectrometry and Machine Learning Approaches. Environmental Research, 2023, 224, 115494.	8.6	12
2	Microbiologically Induced Concrete Corrosion in the Cracked Sewer Pipe Under Sustained Load. Construction and Building Materials, 2023, 369, 130521.	8.7	28
3	Eco-Friendly Biocontrol of Moniliasis in Ecuadorian Cocoa Using Biplot Techniques. Sustainability, 2023, 15, 4223.	5.0	19
4	A Comprehensive Review of Building Materials Modified With Metal and Metal Oxide Nanoparticles Against Microbial Multiplication and Growth. Chemical Engineering Journal, 2023, 466, 143276.	11.8	62
5	Review on Microbially Influenced Concrete Corrosion. Microorganisms, 2023, 11, 2076.	5.1	42
6	Biodeterioration and Chemical Corrosion of Concrete in the Marine Environment: Too Complex for Prediction. Microorganisms, 2023, 11, 2438.	5.1	39
7	Fungal Drops: A Novel Approach for Macro- and Microscopic Analyses of Fungal Mycelial Growth. MicroLife, 2023, 4, uqad042.	3.9	13
8	The Effectiveness of Spraying nTiO2 on Coating Mortars in Historical Buildings Aimed at Reducing Fungal Growth. Buildings, 2023, 13, 2751.	3.7	2
9	Inhibitory Effect of UV and Gamma Radiation for Fungal Biodeterioration of Concrete: A Short-Term Study for Sustainable Conservation. Journal of Cultural Heritage, 2024, 66, 316-325.	4.1	6
10	Eco-Sustainable Approaches to Prevent And/Or Eradicate Fungal Biodeterioration on Easel Painting. Coatings, 2024, 14, 124.	3.4	6
11	Effect of Filtering Method on the pH Measurement of Cement Mortar in Ex-Situ Leaching. Heliyon, 2024, 10, e25859.	4.8	8
12	Advanced and Smart Technology for Sustainable Management of Microfiber Waste. Environmental Science and Engineering, 2024, .	0.0	1
13	Investigation of the Interface of Fungal Mycelium Composite Building Materials by Means of Low-Vacuum Scanning Electron Microscopy. Journal of Microscopy, 2024, 294, 203-214.	2.0	8
14	Bioproduct Advances: Insight Into Failure Factors in Mycelium Composite Fabrication. Biofuels, Bioproducts and Biorefining, 2024, 18, 1739-1754.	4.2	22
15	Use of Bacteria in the Carbonation and Self-Healing of Portland Cement and Reactive Magnesia Mixes. , 2024, .		2
16	A Review on Application of Microwave in Cement Life Cycle. Renewable and Sustainable Energy Reviews, 2024, 199, 114498.	20.4	23
17	Fungal Colonization and Penetration of Mortar as a Suitable Simulant for Concrete: Implications for Fungal Biodeterioration in the Built Environment. Fungal Biology, 2024, 128, 1899-1906.	3.1	13
18	Application of Thermal Spraying Technology in Concrete Surface Ceramic-Based Coating. Coatings, 2024, 14, 885.	3.4	2

#	Article	IF	Citations
19	Systematic Assessment of Mechanisms, Developments, Innovative Solutions, and Future Perspectives of Microplastics and Ecotoxicity – A Review. Advanced Sustainable Systems, 2024, 8, 2400294.	5.4	30
20	Stress Analysis on the Under-Ground Hydrogen Storage by Finite Element Analysis. , 2024, .		2
21	Correlating Surface Mold Contamination With Airborne Pollution Under Mild Indoor Air Disturbance: A Case Study of Aspergillus Niger. Building and Environment, 2024, 266, 112107.	8.7	12
22	Assemblies of Leaf and Root Mycobiomes in a Temperate Grassland: Dispersal Limitation Overpowers Selection. Journal of Ecology, 2025, 113, 824-841.	6.1	9
23	Occurrence of Psychrophilomyces Antarcticus in the Arctic. Fungal Ecology, 2025, 74, 101408.	3.4	4
24	Factors Shaping Fungal Contamination Emissions From Cooling Coils: An Experimental Study Across Hot-Humid and Hot-Dry Climates in Shanghai. Building and Environment, 2025, 275, 112820.	8.7	2
25	Microbial Degradation of Soil Organic Pollutants: Mechanisms, Challenges, and Advances in Forest Ecosystem Management. Processes, 2025, 13, 916.	3.7	73
26	Towards Sustainability: Upcycling Bypass Dust for Production of TiO2-Grafting Alkali-Activated Cement as Cleaner Building Materials. Journal of Building Engineering, 2025, 107, 112795.	4.1	5
27	Mechanical and Carbonation Properties of Construction Waste Soil Solidified With Cement, Desulfurized Gypsum, and Silica Fume. Geotechnical and Geological Engineering, 2025, 43, 1-22.	2.9	4
28	The Rare-Earth Metals Bio-Exaction From Bayan Obo Mine by a Newly Isolated Bioleaching Functional Fugus of Talaromyces Pseudofuniculosus. Journal of Environmental Chemical Engineering, 2025, 13, 117989.	6.6	2
29	Comparative Assessment of Concrete Degradation in Sewage Pipelines: Biogenic vs. Mineral Sulfuric Acid and Sewage Liquid. Case Studies in Construction Materials, 2025, 23, e05169.	3.6	4
30	Biocontrol of the Zearalenone-Producer Fusarium ipomoeae on Soybean Pods Using an Avirulent Lasiodiplodia theobromae Isolate. Pest Management Science, 2025, 81, 8462-8476.	4.4	3
31	Enhancing Preservation of Kale Leaves (Brassica oleracea var. Acephala) Using Cryo-Osmotic Processing Combined With Radio Frequency Radiation. European Food Research and Technology, 2025, 251, 4065-4077.	4.6	4
32	Biophilic Façades: The Potentiality of Bioreceptive Concrete. Buildings, 2025, 15, 3646.	3.7	6
33	Challenges and Advancements in Self-Healing Concrete: Mechanisms, Applications, and Scalability in Sustainable Construction. Journal of Building Engineering, 2026, 119, 115097.	4.1	4
34	Microbial Community Profiling of Concrete. Microorganisms, 2026, 14, 131.	5.1	2
35	Microbial Innovations for Sustainable Construction: Improving Durability and Environmental Impact Through the Collaboration of Civil Engineering and Microbiology. Archives of Microbiology, 2026, 208, 140.	3.8	0
36	Coupled Acid–Salt Erosion Mechanism of Solid Waste–Based Grouting Materials for Submarine Tunnels. Marine Georesources and Geotechnology, 2026, 44, 2750-2764.	2.6	0

#	Article	IF	Citations
37	Microbial Colonization on Biocide-Treated and Untreated Façades: The Impact of Surface Orientation. International Biodeterioration and Biodegradation, 2026, 210, 106311.	5.0	1
38	Applications of Fungi in Waste Water Treatment in Community-Based Fungal Bioremediation Projects. Springer Water, 2026, .	0.0	0
39	Microbial Processes in Concrete as Anthropogenic Biogeochemical Ecosystems: Biodeterioration Mechanisms and Biotechnological Strategies. Reviews in Environmental Science and Biotechnology, 2026, 25, 30.	16.2	4
40	The Intersection of Microbiology and Climate Change. , 2026, .		0
41	Evaluating Performance of Polydimethylsiloxane (PDMS) Brushes to Control Microbial Growth on Drywall. Journal of Building Engineering, 2026, 128, 116536.	4.1	0
42	Microbiologically Induced Concrete Corrosion: Mechanisms, Key Microorganisms, and Protection Strategies. Microorganisms, 2026, 14, 1425.	5.1	0
43	Indoor Relative Humidity and Air Mycobiome in Eastern Taiwan Residences: Associations With Aspergillus and Wallemia. Building and Environment, 2026, 303, 114944.	8.7	0
44	Comparative Effects of Tannic Acid and ZnO Nanoparticles on Hydration, Microstructure, and Antimicrobial Performance of Portland Cement. RSC Advances, 2026, 16, 36091-36113.	6.2	0
45	Effects of Coated Infiltrating Organic Silicone in Preventing Microbial Corrosion of Concrete. Buildings, 2026, 16, 3011.	3.7	0
46	Silica Fume-Superplasticiser Synergy Mitigates Concrete Bioreceptivity to Aspergillus Spp. Proceedings of Institution of Civil Engineers: Construction Materials, 2026, .	1.3	0
47	Bio-Based Fiber–Reinforced Cementitious Composites: Durability Mechanisms, Fungal Susceptibility and Research Gaps. Frontiers in Built Environment, 2026, 12, 1903429.	3.3	1
48	Toward Resilient and Sustainable Concrete Infrastructure: A Review of Durability Mechanisms and Design Strategies. Reviews on Advanced Materials Science, 2026, .	3.6	1
49	Development of Material Monitoring Protocols for Nature-Inclusive Designed Concrete Units in Harbor-Fronts. Materials and Structures/Materiaux Et Constructions, 2026, 59, 337.	3.9	0
50	Multifunctional ZnO/SiO2/CuO Nanocomposite Coatings for Simultaneous Control of Moisture Transport and Biofouling in Cement Mortar. Construction and Building Materials, 2026, 541, 147903.	8.7	1
51	Durability Investigation of Fully Waste-Based Self-Compacting Solidified Soil Under Wet–Dry and Salt–Wet–Dry Cycles. Acta Geotechnica, 2026, .	6.3	0
52	Insight Into Surface Acidification of Hydrated Portland Cement Under Organic Acid Attack: A Precondition for Microbially Induced Corrosion. Journal of Industrial and Engineering Chemistry, 2026, .	7.3	0
53	Cultivable Bacteria From Concrete Raw Materials and Their Potential for Self-Healing Concrete Applications. Data in Brief, 2026, 69, 113373.	2.3	0
54	Multifunctional One-Part GBFS Geopolymer Foams With CDW Aggregates and Nano-ZnO: Mechanical Properties, Durability, and Antimicrobial Performance. Construction and Building Materials, 2026, 547, 148581.	8.7	0