Interaction between sulfate and chloride solution attack fly ash

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Citation Report

#	Article	IF	CITATIONS
1	Variation of flexural strength of cement mortar attacked by sulfate ions. Engineering Fracture Mechanics, 2008, 75, 4948-4957.	2.0	28
2	Study on the Sulfate Corrosion of Concrete under the Action of Loading. Key Engineering Materials, 2008, 400-402, 175-180.	0.4	1
3	Stress Corrosion of High Performance Hybrid Fibers Reinforced Expansive Concrete Exposed to Magnesium Sulfate Solution. Advanced Materials Research, 2009, 79-82, 115-118.	0.3	1
4	Durability of sustainable concrete materials. , 2009, , 239-253.		4
5	Deterioration of High Performance Hybrid Fibers Reinforced Expansive Concrete Exposed to Magnesium Sulfate Solution. , 2009, , .		2
6	Utilization of ceramic waste as fine aggregate within Portland cement and fly ash concretes. Cement and Concrete Composites, 2010, 32, 440-449.	4.6	172
7	Compressive strength and microstructure of carbon nanotubes–fly ash cement composites. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2010, 527, 1063-1067.	2.6	259
8	Experimental and numerical investigations on fatigue damage propagation and life prediction of high-performance concrete containing reactive mineral admixtures. International Journal of Fatigue, 2010, 32, 227-237.	2.8	23
9	The Effect of Chlorides on the Thaumasite Form of Sulfate Attack in Limestone Cement Concrete. Materials Science Forum, 2010, 636-637, 1349-1354.	0.3	1
10	Determination of Sulfate Concentration of Soil Used for Assessment of the Sulfate Attack to Concrete. Advanced Materials Research, 0, 168-170, 307-311.	0.3	0
11	Use of recycled concrete aggregate in fly-ash concrete. Construction and Building Materials, 2011, 27, 439-439.	3.2	94
12	Inhibiting Sulphate Attack on Concrete by Hydrophobic Green Plant Extract. Advanced Materials Research, 2011, 250-253, 3837-3843.	0.3	5
13	Damage and Chloride Penetration of Cement Mortar under Conventional Triaxial Compression. Applied Mechanics and Materials, 0, 71-78, 744-747.	0.2	0
14	Research on the Anti-Sulfate and Chlorine Corrosion Property of Concrete. Advanced Materials Research, 0, 243-249, 5727-5732.	0.3	1
15	Experimental Investigation and Numerical Modeling Fracture Processes under Mode II in Concrete Composites Containing Fly-Ash Additive at early Age. Solid State Phenomena, 0, 188, 158-163.	0.3	45
16	Sulfate resistance of limestone cement concrete exposed to combined chloride and sulfate environment at low temperature. Cement and Concrete Composites, 2012, 34, 903-910.	4.6	122
17	SFRC subjected to domestic sewage and sustained load. Journal Wuhan University of Technology, Materials Science Edition, 2012, 27, 797-804.	0.4	1
18	Chloride binding related to hydration products. Cement and Concrete Research, 2012, 42, 282-290.	4.6	286

#	Article	IF	CITATIONS
19	Chloride ion penetration into concrete under hydraulic pressure. Journal of Central South University, 2013, 20, 3723-3728.	1.2	18
20	The effect of chlorides on the thaumasite form of sulfate attack of limestone cement concrete containing mineral admixtures at low temperature. Construction and Building Materials, 2013, 43, 156-164.	3.2	49
21	Study on the expansion of concrete under attack of sulfate and sulfate–chloride ions. Construction and Building Materials, 2013, 39, 26-32.	3.2	158
22	Durability of concrete exposed to sulfate attack under flexural loading and drying–wetting cycles. Construction and Building Materials, 2013, 39, 33-38.	3.2	131
23	Long Term Behaviour of Portland Limestone Cement Concrete Exposed to Combined Chloride and Sulfate Environment. The Effect of Limestone Content and Mineral Admixtures. Advanced Materials Research, 2013, 688, 185-192.	0.3	0
24	Effect of Fly Ash on Resistance to Sulfate Attack of Cement-Based Materials. Key Engineering Materials, 2013, 539, 124-129.	0.4	8
25	A Review on Nanomaterial Dispersion, Microstructure, and Mechanical Properties of Carbon Nanotube and Nanofiber Reinforced Cementitious Composites. Journal of Nanomaterials, 2013, 2013, 1-19.	1.5	283
26	Ultrasonic testing and microscopic analysis on concrete under sulfate attack and cyclic environment. Journal of Central South University, 2014, 21, 4723-4731.	1.2	24
27	Corrosion Resistance of 50 Years Concrete Exposed to Saline Areas. Applied Mechanics and Materials, 2014, 584-586, 1165-1171.	0.2	0
28	The Experimental Research on the Anti-Corrosion Performance of Concrete with Different Mineral Admixtures under Sulfate and Chloride Environment. Applied Mechanics and Materials, 0, 638-640, 1431-1435.	0.2	1
29	Formula Design of Corrosion-Resistant Concrete under Sulfate-Chloride Compound Attack. Advanced Materials Research, 0, 918, 47-53.	0.3	0
30	Strength and microstructure analysis of concrete containing rice husk ash under seawater attack by wetting and drying cycles. Advances in Cement Research, 2014, 26, 145-154.	0.7	34
31	Corrosion behavior of steel reinforcement in concrete exposed to composite chloride–sulfate environment. Construction and Building Materials, 2014, 72, 398-410.	3.2	124
32	Resistance of concrete and mortar against combined attack of chloride and sodium sulphate. Cement and Concrete Composites, 2014, 53, 59-72.	4.6	210
33	Non-destructive methods for measuring chloride ingress into concrete: State-of-the-art and future challenges. Construction and Building Materials, 2014, 68, 68-81.	3.2	129
34	Sulphate ion migration of cement concrete under the coupling action of corrosion solution and alternating loading. Materials Research Innovations, 2015, 19, S10-110-S10-113.	1.0	0
35	CT study on meso-crack propagation of gradient composite concrete subjected to sulfate erosion. Magazine of Concrete Research, 2015, 67, 1127-1134.	0.9	13
38	Fresh Water Savings Through the Use of Municipal Effluents in Concrete Pavement. American Journal of Environmental Sciences, 2015, 11, 293-312.	0.3	2

ARTICLE IF CITATIONS The effect of chloride on cement mortar subjected to sulfate exposure at low temperature. 39 3.2 23 Construction and Building Materials, 2015, 78, 102-111. Durability of concrete under sulfate attack exposed to freeze–thaw cycles. Cold Regions Science and 1.6 Technology, 2015, 112, 112-117. Study on crack density of concrete exposed to stress corrosion. Construction and Building 41 3.2 5 Materials, 2015, 82, 264-273. Degradation model of bond performance between deteriorated concrete and corroded deformed 3.2 steel bars. Construction and Building Materials, 2016, 119, 89-95. Study of deterioration of concrete exposed to different types of sulfate solutions under 43 3.2 109 drying-wetting cycles. Construction and Building Materials, 2016, 117, 88-98. Corrosion behavior of steel submitted to chloride and sulphate ions in simulated concrete pore solution. Construction and Building Materials, 2016, 115, 1-5. 3.2 109 Deterioration of pastes exposed to leaching, external sulfate attack and the dual actions. 45 3.2 43 Construction and Building Materials, 2016, 116, 52-62. Durability evaluation of cement exposed to combined action of chloride and sulphate ions at elevated 3.2 46 temperature: The role of limestone filler. Construction and Building Materials, 2016, 124, 558-565. Influences of exposure condition and sulfate salt type on deterioration of paste with and without fly 47 3.2 33 ash. Construction and Building Materials, 2016, 113, 951-963. Chloride penetration of RHA concrete under marine environment. Proceedings of the Institution of 1.4 Civil Engineers: Maritime Engineering, 2016, 169, 76-85. Durability of sustainable construction materials., 2016, , 397-414. 49 5 Corrosion Behavior of Steel Bar and Corrosive Cracking of Concrete Induced by 0.8 Magnesium-Sulfate-Chloride Ions. Journal of Advanced Concrete Technology, 2016, 14, 172-182. Properties of high-volume limestone powder concrete under standard curing and steam-curing 51 2.176 conditions. Powder Technology, 2016, 301, 16-25. Sodium sulfate and alternative combined sulfate/chloride action on ordinary and self-consolidating 3.2 23 PLC-based concretes. Construction and Building Materials, 2016, 106, 342-348. Physico-mechanical properties and thermal behavior of firebrick-based mortars in superplasticizer 53 3.2 8 presence. Construction and Building Materials, 2016, 104, 311-321. Resistance of concrete against combined attack of chloride and sulfate under drying–wetting cycles. 147 Construction and Building Materials, 2016, 106, 650-658. Utilization of coal bottom ash to improve thermal insulation of construction material. Journal of 55 1.6 50 Material Cycles and Waste Management, 2017, 19, 305-317. Inhibitory effects of chloride ions on concrete sulfate attack in the marine adsorption environment. 1.2 Marine Georesources and Geotechnology, 2017, 35, 371-375.

#	Article	IF	CITATIONS
57	Statistical modelling of the influential factors on chloride penetration in concrete. Magazine of Concrete Research, 2017, 69, 255-270.	0.9	16
58	The influence of sodium and magnesium sulphate on the penetration of chlorides in mortar. Materials and Structures/Materiaux Et Constructions, 2017, 50, 1.	1.3	17
59	Degradation progress of concrete subject to combined sulfate-chloride attack under drying-wetting cycles and flexural loading. Construction and Building Materials, 2017, 151, 164-171.	3.2	52
60	Influence of Sulfates on Chloride Diffusion and Chloride-Induced Reinforcement Corrosion in Limestone Cement Materials at Low Temperature. Journal of Materials in Civil Engineering, 2017, 29, .	1.3	14
61	The fracture toughness the KIIIc of concretes with F fly ash (FA) additive. Construction and Building Materials, 2017, 143, 444-454.	3.2	57
62	Long-term durability testing on the MgO-activated slag cured in brine. Construction and Building Materials, 2017, 144, 271-278.	3.2	10
63	Durability study on engineered cementitious composites (ECC) under sulfate and chloride environment. Construction and Building Materials, 2017, 133, 171-181.	3.2	148
64	Influence of chlorides on magnesium sulphate attack for mortars with Portland cement and slag based binders. Construction and Building Materials, 2017, 155, 630-642.	3.2	38
65	Corrosion behaviour of steel rebar in mortars subjected to magnesium sulfate and sodium chloride mixtures at 5 and 20 ŰC. Construction and Building Materials, 2017, 153, 358-363.	3.2	6
66	Self-healing of microcracks in Engineered Cementitious Composites under sulfate and chloride environment. Construction and Building Materials, 2017, 153, 948-956.	3.2	90
67	Long-term behavior of fiber reinforced concrete exposed to sulfate solution cycling in drying-immersion. Journal Wuhan University of Technology, Materials Science Edition, 2017, 32, 875-881.	0.4	7
68	Deterioration mechanism of plain and blended cement mortars partially exposed to sulfate attack. Construction and Building Materials, 2017, 154, 849-856.	3.2	73
69	Influence of sulfate ion and associated cation type on steel reinforcement corrosion in concrete powder aqueous solution in the presence of chloride ions. Cement and Concrete Research, 2017, 91, 73-86.	4.6	103
70	Effect of Ca(OH)2, NaCl, and Na2SO4 on the corrosion and electrochemical behavior of rebar. Chinese Journal of Oceanology and Limnology, 2017, 35, 681-692.	0.7	5
71	Effect of polymer-based grinding aid on sulfate attacking resistance of concrete. Journal Wuhan University of Technology, Materials Science Edition, 2017, 32, 1095-1100.	0.4	0
72	Experiment Analysis of Concrete's Mechanical Property Deterioration Suffered Sulfate Attack and Drying-Wetting Cycles. Advances in Materials Science and Engineering, 2017, 2017, 1-13.	1.0	20
74	The permeability of SO42â^' and Clâ^' in concrete under the effect of seepage flow and stress fields. Construction and Building Materials, 2018, 162, 697-703.	3.2	15
75	Performance of limestone cement concretes in chloride–sulfate environments at low temperature. Magazine of Concrete Research, 2018, 70, 1039-1051.	0.9	6

#	Article	IF	CITATIONS
76	Bearing capacity of stabilized soil with expansive component confined by polyvinyl chloride pipe. Construction and Building Materials, 2018, 175, 307-320.	3.2	6
77	Ground granulated blast furnace slag effect on the durability of ternary cementitious system exposed to combined attack of chloride and sulfate. Construction and Building Materials, 2018, 158, 640-648.	3.2	58
78	Removal and Breakthrough of Lead, Cadmium, and Zinc in Permeable Reactive Concrete. Environmental Engineering Science, 2018, 35, 408-419.	0.8	12
79	Performance of plain and slag-blended cements and mortars exposed to combined chloride–sulfate solution. Advances in Cement Research, 2018, 30, 371-386.	0.7	10
80	Basic mechanical behaviours and deterioration mechanism of RC beams under chloride-sulphate environment. Construction and Building Materials, 2018, 160, 450-461.	3.2	17
81	Electrochemical Analysis of Carbon Steel Corrosion Induced by Chloride and Sulfate Ions in Simulated Concrete Pore Solution. International Journal of Electrochemical Science, 2018, 13, 6248-6258.	0.5	16
82	Transport Properties of Sulfate and Chloride Ions Confined between Calcium Silicate Hydrate Surfaces: A Molecular Dynamics Study. Journal of Physical Chemistry C, 2018, 122, 28021-28032.	1.5	60
83	Damage evolution of blended cement concrete under sodium sulfate attack in relation to ITZ volume content. Construction and Building Materials, 2018, 190, 452-465.	3.2	20
84	Characterization of building derived materials for partial replacement of pavement subgrade layer. Innovative Infrastructure Solutions, 2018, 3, 1.	1.1	6
85	Effects of sulphate ions on the corrosion resistance of Montmorillonite-modified dense concretes. Australian Journal of Structural Engineering, 2018, 19, 248-255.	0.4	1
86	Electrochemical chloride extraction (ECE) based on the high performance conductive cement-based composite anode. Construction and Building Materials, 2018, 173, 149-159.	3.2	29
87	The Influence of Ground Fly Ash on Cement Hydration and Mechanical Property of Mortar. Advances in Civil Engineering, 2018, 2018, 1-7.	0.4	22
88	Effect of mixed chlorides on the degradation and sulfate diffusion of cast-in-situ concrete due to sulfate attack. Construction and Building Materials, 2018, 181, 49-58.	3.2	39
89	Innovative utilization of foundry sand waste obtained from the manufacture of automobile engine parts as a cement replacement material in concrete production. Journal of Cleaner Production, 2018, 199, 305-320.	4.6	21
90	Experimental Investigations on Building Derived Materials in Chemically Aggressive Environment as a Partial Replacement of Soil in Geotechnical Applications. Geotechnical and Geological Engineering, 2019, 37, 947-963.	0.8	8
91	Investigating the influence of fly ash on the hydration behavior of cement using an electrochemical method. Construction and Building Materials, 2019, 222, 41-48.	3.2	15
92	Key inhibitory mechanism of external chloride ions on concrete sulfate attack. Construction and Building Materials, 2019, 225, 611-619.	3.2	56
93	Characterization and performance of high volume recycled waste glass and ground granulated blast furnace slag or fly ash blended mortars. Journal of Cleaner Production, 2019, 235, 461-472.	4.6	39

#	Article	IF	CITATIONS
94	Corrosion Behavior of Galvanized Steel Embedded in Concrete Exposed to Soil Type MH Contaminated With Chlorides. Frontiers in Materials, 2019, 6, .	1.2	16
95	Decrease of Cement Production Environmental Burden – LCA. IOP Conference Series: Earth and Environmental Science, 2019, 290, 012048.	0.2	0
96	Synergistic effects of sulfate and magnesium ions on chloride diffusion behaviors of Portland cement mortar. Construction and Building Materials, 2019, 229, 116878.	3.2	13
97	Compressive strength and hydration process of wet-grinded granulated blast-furnace slag activated by sodium sulfate and sodium carbonate. Cement and Concrete Composites, 2019, 97, 387-398.	4.6	125
98	Sulfate attack resistance of sustainable concrete incorporating various industrial solid wastes. Journal of Cleaner Production, 2019, 218, 810-822.	4.6	119
99	Durability of ettringite-based composite reinforced with polypropylene fibers under combined chemical and physical attack. Cement and Concrete Composites, 2019, 102, 157-168.	4.6	24
100	An effective transport model of sulfate attack in concrete. Construction and Building Materials, 2019, 216, 365-378.	3.2	31
102	Experimental study on degradation behaviors of rock bolt under the coupled effect of stress and corrosion. Construction and Building Materials, 2019, 214, 37-48.	3.2	22
103	Degradation behavior of concrete under corrosive coal mine environment. International Journal of Mining Science and Technology, 2019, 29, 307-312.	4.6	22
104	Compressive strength and hydration of high-volume wet-grinded coal fly ash cementitious materials. Construction and Building Materials, 2019, 206, 248-260.	3.2	62
105	Effects of sulfate and magnesium ion on the chloride transportation behavior and binding capacity of Portland cement mortar. Construction and Building Materials, 2019, 204, 265-275.	3.2	41
106	Physicochemical Performance of Portland-Rice Husk Ash-Calcined Clay-Dried Acetylene Lime Sludge Cement in Sulphate and Chloride Media. Advances in Materials Science and Engineering, 2019, 2019, 1-12.	1.0	7
107	Effects of nano-SiO2 on early strength and microstructure of steam-cured high volume fly ash cement system. Construction and Building Materials, 2019, 194, 350-359.	3.2	173
108	Study on corrosion effect of high-performance concrete under the action of sulfate and chlorine. International Journal of Modern Physics B, 2019, 33, 1940054.	1.0	4
109	Influence of sulfate on the chloride diffusion mechanism in mortar. Construction and Building Materials, 2019, 197, 398-405.	3.2	40
110	RSM-based assessment of pavement concrete mechanical properties under joint action of corrosion, fatigue, and fiber content. Construction and Building Materials, 2019, 197, 406-420.	3.2	23
111	Sand particle erosion of cement mortar under sulfate and chloride attack and exposure to freeze–thaw cycles. Advances in Cement Research, 2020, 32, 158-168.	0.7	5
112	Role of swelling agent and set-controlling admixtures on chloride binding and diffusion in cement matrix. Construction and Building Materials, 2020, 230, 117009.	3.2	8

#	Article	IF	CITATIONS
113	Effects of Waste Ceramic as Cement and Fine Aggregate on Durability Performance of Sustainable Mortar. Arabian Journal for Science and Engineering, 2020, 45, 3623-3634.	1.7	37
114	The effects on durability and mechanical properties of multiple nano and micro additive OPC mortar exposed to combined chloride and sulfate attack. Materials Science in Semiconductor Processing, 2020, 106, 104772.	1.9	18
115	Performance change of shaft lining concrete under simulated coastal ultra-deep mine environments. Construction and Building Materials, 2020, 230, 116909.	3.2	8
116	Electrochemical investigation on the influence of sulfates on chloride-induced corrosion of steel bar in cement-based materials. Journal of Sustainable Cement-Based Materials, 2020, 9, 112-126.	1.7	9
117	PIXE data analysis by twoâ€dimensional correlation mapping techniques: Analysis of chloride and sulfate ions attack in homemade mortar samples. X-Ray Spectrometry, 2020, 49, 379-389.	0.9	8
118	Impact of phosphate corrosion inhibitors on chloride binding and release in cement pastes. Construction and Building Materials, 2020, 236, 117469.	3.2	21
119	Experimental investigation on the effect of sulfate attack on chloride diffusivity of cracked concrete subjected to composite solution. Construction and Building Materials, 2020, 237, 117643.	3.2	36
120	Experimental investigations on potential of brick-based building-derived materials for geotechnical applications. Innovative Infrastructure Solutions, 2020, 5, 1.	1.1	2
121	Investigation on surface sulfate attack of nanoparticle-modified fly ash concrete. Environmental Science and Pollution Research, 2020, 27, 41372-41380.	2.7	10
122	Influence of Sulfate Ions on Chloride Attack in Concrete Mortars Containing Silica Fume and Jajrood Trass. Iranian Journal of Science and Technology - Transactions of Civil Engineering, 2020, 44, 1135-1144.	1.0	6
123	An overview of the properties of sustainable concrete using fly ash as replacement for cement. International Journal of Sustainable Materials and Structural Systems, 2020, 4, 47.	0.2	1
124	Reactive ultra-fine fly ash as an additive for cement-based materials. Materials Today Communications, 2020, 25, 101466.	0.9	11
125	Enhanced Performance of Concrete Composites Comprising Waste Metalised Polypropylene Fibres Exposed to Aggressive Environments. Crystals, 2020, 10, 696.	1.0	14
126	The Effects of Temperature Curing on the Strength Development, Transport Properties, and Freeze-Thaw Resistance of Blast Furnace Slag Cement Mortars Modified with Nanosilica. Materials, 2020, 13, 5800.	1.3	9
127	Concrete Durability and Service Life Planning. RILEM Bookseries, 2020, , .	0.2	2
129	Life Prediction and Long-Term Durability of Coated Steel Bars in Magnesium Oxychloride Concrete. KSCE Journal of Civil Engineering, 2020, 24, 2120-2131.	0.9	8
130	Role of ITZ in the Degradation Process of Blended Cement Concrete under Magnesium Sulfate Attack. Journal of Materials in Civil Engineering, 2020, 32, 04020235.	1.3	4
131	Electrochemical study on steel corrosion in coral aggregate seawater concrete. Emerging Materials Research, 2020, 9, 642-654.	0.4	2

#	Article	IF	CITATIONS
132	Degradation progress of Portland cement mortar under the coupled effects of multiple corrosive ions and drying-wetting cycles. Cement and Concrete Composites, 2020, 111, 103629.	4.6	30
133	Role of Chloride Ion and Cation Type Accompanied by Sulfate Ion on Durability Performance of Concrete in Conjoint Chloride–Sulfate Environment. Journal of Materials in Civil Engineering, 2020, 32, .	1.3	17
134	Coupled models to describe the combined diffusion-reaction behaviour of chloride and sulphate ions in cement-based systems. Construction and Building Materials, 2020, 243, 118232.	3.2	40
135	Service life prediction of coral aggregate concrete structure under island reef environment. Construction and Building Materials, 2020, 246, 118390.	3.2	39
136	Thermodynamic modelling and experimental investigation on chloride binding in cement exposed to chloride and chloride-sulfate solution. Construction and Building Materials, 2020, 246, 118398.	3.2	33
137	Degradation of cast-in-situ concrete subjected to sulphate-chloride combined attack. Construction and Building Materials, 2020, 241, 117995.	3.2	30
138	External sulfate attack on concrete under combined effects of flexural fatigue loading and drying-wetting cycles. Construction and Building Materials, 2020, 249, 118224.	3.2	36
139	The influence of multiple combined chemical attack on cast-in-situ concrete: Deformation, mechanical development and mechanisms. Construction and Building Materials, 2020, 251, 118988.	3.2	16
140	Effect of Nanosilica on Impermeability of Cement-Fly Ash System. Advances in Civil Engineering, 2020, 2020, 1-13.	0.4	3
141	Research on internal monitoring of reinforced concrete under accelerated corrosion, using XCT and DIC technology. Construction and Building Materials, 2021, 266, 121018.	3.2	32
142	RSM-based evaluation of mechanical and durability properties of recycled aggregate concrete contraining GGBFS and silica fume. Construction and Building Materials, 2021, 270, 121431.	3.2	51
143	Nano-CSH modified high volume fly ash concrete: Early-age properties and environmental impact analysis. Journal of Cleaner Production, 2021, 286, 124924.	4.6	44
144	Effect of chloride ingress on self-healing recovery of smart cementitious composite incorporating crystalline admixture and MgO expansive agent. Cement and Concrete Research, 2021, 139, 106252.	4.6	53
145	Prediction of corrosion products of iron at a lowâ€level radioactive waste disposal facility in Japan. Materials and Corrosion - Werkstoffe Und Korrosion, 2021, 72, 235-244.	0.8	0
146	Effects of calcium formate on early-age strength and microstructure of high-volume fly ash cement systems. Magazine of Concrete Research, 2021, 73, 1283-1295.	0.9	3
147	Comprehensive resistance of fair-faced concrete suffering from sulfate attack under marine environments. Construction and Building Materials, 2021, 277, 122312.	3.2	22
148	Chemical attack and corrosion resistance of concrete prepared with electrolyzed water. Journal of Materials Research and Technology, 2021, 11, 1193-1205.	2.6	14
149	The microstructure and nano-mechanical performance of concrete in coastal ultra-deep mine engineering environments. Construction and Building Materials, 2021, 279, 122504.	3.2	2

#	Article	IF	CITATIONS
150	Hydration and pore-structure characteristics of high-volume fly ash cement pastes. Construction and Building Materials, 2021, 278, 122390.	3.2	56
151	Corrosion mechanism of reinforced bars inside concrete and relevant monitoring or detection apparatus: A review. Construction and Building Materials, 2021, 279, 122432.	3.2	34
152	Effect of SO42â^', Clâ^' and Mg2+ on the system of C-S-H and Ca(OH)2. Construction and Building Materials, 2021, 285, 122955.	3.2	18
153	Numerical investigation of external sulfate attack and its effect on chloride binding and diffusion in concrete. Construction and Building Materials, 2021, 285, 122806.	3.2	70
154	On the competitive antagonism effect in combined chloride-sulfate attack: A numerical exploration. Cement and Concrete Research, 2021, 144, 106406.	4.6	29
155	Effect of New Hardening Accelerator on the Strength of Segment Concrete. Journal Wuhan University of Technology, Materials Science Edition, 2021, 36, 387-391.	0.4	3
156	Degradation mechanism of cement mortar exposed to combined sulfate–chloride attack under cyclic wetting–drying condition. Materials and Structures/Materiaux Et Constructions, 2021, 54, 1.	1.3	9
157	Chloride binding by calcined layered double hydroxides and alumina-rich cementitious materials in mortar mixed with seawater and sea sand. Construction and Building Materials, 2021, 293, 123493.	3.2	24
158	An ancient battle between environment and concrete. Nature Reviews Chemistry, 2021, 5, 513-514.	13.8	8
159	Utilization of biochar from unwashed peanut shell in cementitious building materials – Effect on early age properties and environmental benefits. Fuel Processing Technology, 2021, 218, 106841.	3.7	38
160	Experimental investigations on the durability and degradation mechanism of cast-in-situ recycled aggregate concrete under chemical sulfate attack. Construction and Building Materials, 2021, 297, 123771.	3.2	28
161	Molecular dynamics study on coupled ion transport in aluminum-doped cement-based materials. Construction and Building Materials, 2021, 295, 123645.	3.2	15
162	The Effect of Chloride Ions on the Resistance of Concretes Containing Aerogel Under Sodium Sulfate Attack. International Journal of Civil Engineering, 0, , 1.	0.9	0
163	Combined effects of sulfate attack under drying–wetting cycles and loading on the fatigue behavior of concrete. Advances in Structural Engineering, 2021, 24, 3825-3836.	1.2	3
164	Monitoring of steel corrosion and cracking in cement paste exposed to combined sulfate–chloride attack with X-ray microtomography. Construction and Building Materials, 2021, 302, 124345.	3.2	20
165	Green reaction-type nucleation seed accelerator prepared from coal fly ash ground in water environment. Construction and Building Materials, 2021, 306, 124840.	3.2	14
166	A chemo-thermo-damage-transport model for concrete subjected to combined chloride-sulfate attack considering the effect of calcium leaching. Construction and Building Materials, 2021, 306, 124918.	3.2	18
167	Thermal Analysis and X-Ray Diffraction of Rice Husk Ash Blended Cement Under Sodium Sulfate with Wetting and Drying Cycles. Lecture Notes in Civil Engineering, 2021, , 165-173.	0.3	0

#	Article	IF	CITATIONS
169	Influence of SAP on the chloride penetration and corrosion behavior of steel bar in concrete. Corrosion Science, 2020, 171, 108714.	3.0	70
170	Acción externa acelerada de sulfatos y cloruros en el estudio de la corrosión del acero en tracción en el hormigón armado. Materiales De Construccion, 2017, 67, 141.	0.2	1
171	Compressive and Flexural Behaviour of Unstressed Concrete Substructure in Cassava Effluent Contaminated Soils. Open Journal of Civil Engineering, 2015, 05, 239-248.	0.2	2
172	Strength Properties and Durability of Concrete Prepared From Sugarcane Bagasse Ash and Stone Dust. Sugar Tech, 0, , 1.	0.9	0
173	Real-time strain monitoring of reinforced concrete under the attacks of sulphate and chloride ions based on XCT and DIC methods. Cement and Concrete Composites, 2022, 125, 104314.	4.6	23
174	Vickers hardness distribution and prediction model of cement pastes corroded by sulfate under the coexistence of electric field and chloride. Construction and Building Materials, 2021, 309, 125119.	3.2	9
175	Damage Evolution of Concrete Exposed to Sulfate Attack Under Drying-Wetting Cycles. Open Construction and Building Technology Journal, 2014, 8, 444-449.	0.3	1
176	The Effects of Varying Water-Cement Ratio on the Degradation of Concrete by Sulphate Salts. FUOYE Journal of Engineering and Technology, 2018, 3, .	0.1	0
177	THE DETERIORATION OF ADMIXTURE CONCRETE IN A SULPHATE ENVIRONMENT. Ceramics - Silikaty, 2019, , 149-156.	0.2	0
178	Potential Reuse of Treated Textile Effluent in Fly Ash Concrete. Journal of Testing and Evaluation, 2019, 47, 20180029.	0.4	0
179	Effect of lead sulfate on chloride ion transport properties in cementitious material. Journal of Ceramic Processing Research, 2019, 20, 36-45.	0.4	1
180	Microstructure and Mechanical Properties of Polymer-Phosphazene Mortar Exposed to Sulfate Attack. ACI Materials Journal, 2019, 116, .	0.3	1
181	Chloride-Related Phenomena in Limestone Cement Materials: Effect of Mineral Admixtures and Sulfates. ACI Materials Journal, 2019, 116, .	0.3	1
182	Chloride Diffusion and Induced Reinforcement Corrosion in Concrete with Fly Ash and Ground-Granulated Blast-Furnace Slag Exposed to Marine Submerged Zone. Advances in Materials Science and Engineering, 2020, 2020, 1-17.	1.0	2
183	Combined Freeze-Thaw and Chloride Attack Resistance of Concrete Made with Recycled Brick-Concrete Aggregate. Materials, 2021, 14, 7267.	1.3	7
184	Durability of UHPFRC functionalised with nanoadditives due to synergies in the action of sulphate and chloride in cracked and uncracked states. Materiales De Construccion, 2021, 71, e264.	0.2	4
185	Physicochemical Characteristics and Pore Structure of Cement-Based Materials Subjected to External Multi-Ions Attacks and Drying-Wetting Cycles. SSRN Electronic Journal, 0, , .	0.4	0
186	Waste Incineration Bottom Ash as a Fine Aggregate in Green Mortar: An Assessment of Engineering Properties, Durability, and Microstructure. SSRN Electronic Journal, 0, , .	0.4	0

#	Article	IF	CITATIONS
187	Mechanism of Concrete Deterioration Subjected to Compound Corrosion of Chlorine Salt, Magnesium Salt, and Sulfate. SSRN Electronic Journal, 0, , .	0.4	0
188	Effect of Carbonation and Drying-Wetting Cycles on Chloride Diffusion Behavior of Coral Aggregate Seawater Concrete. Journal of Ocean University of China, 2022, 21, 113-123.	0.6	3
189	Enhancing concrete sulfate resistance by adding NaCl. Construction and Building Materials, 2022, 322, 126370.	3.2	9
190	Time and spatially dependent transient competitive antagonism during the 2-D diffusion-reaction of combined chloride-sulphate attack upon concrete. Cement and Concrete Research, 2022, 154, 106724.	4.6	11
191	Behavior of Apparent Chloride Diffusion Coefficient of Fly Ash Concrete Under Long-Term Marine Exposure. SSRN Electronic Journal, 0, , .	0.4	0
192	Effect of Chlorine Salt on Durability of Mineral Admixture Concrete under Different Conditions. Journal of Renewable Materials, 2022, 10, 1-20.	1.1	0
193	Variation of Critical Water Pressure for Hydraulic Fracturing in Cement Mortar under Sulfate Attack. Materials, 2022, 15, 1595.	1.3	1
194	Correlation Analyses on Physical and Mechanical Parameters of Concrete in Marine Environments. Materials, 2022, 15, 1812.	1.3	2
195	Effect of Curing Time on the Surface Permeability of Concrete with a Large Amount of Mineral Admixtures. Advances in Civil Engineering, 2022, 2022, 1-8.	0.4	1
196	Durability of coral aggregate concrete under coupling action of sulfate, chloride and drying-wetting cycles. Case Studies in Construction Materials, 2022, 16, e01003.	0.8	4
197	Early-age mechanical properties and microstructures of Portland cement mortars containing different admixtures exposed to seawater. Case Studies in Construction Materials, 2022, 16, e01041.	0.8	2
198	Waste incineration bottom ash as a fine aggregate in mortar: An assessment of engineering properties, durability, and microstructure. Journal of Building Engineering, 2022, 52, 104446.	1.6	11
199	Corrosion Propagation of Steel Reinforcement in Pre-Cracked Mortar Attacked by Seawater Using Wire Beam Electrode. SSRN Electronic Journal, 0, , .	0.4	0
200	Chloride – induced delayed ettringite formation in Portland cement mortars. Construction and Building Materials, 2022, 340, 127654.	3.2	9
201	Degradation characteristics of Portland cement mortar incorporating supplementary cementitious materials under multi-ions attacks and drying-wetting cycles. Journal of Cleaner Production, 2022, 363, 132378.	4.6	9
202	Reliability of the Damage Rating Index to Assess Condition of Concrete Affected by External Sulfate Attack. Magazine of Concrete Research, 0, , 1-35.	0.9	1
203	Behaviour of cement binder exposed to semi-immersion in chloride-rich salt solutions and seawater with different RH levels. Cement and Concrete Composites, 2022, 131, 104606.	4.6	8
204	Compressive strength and permeability of steam-cured mortar incorporating high volume fly ash with different activation degrees by wet milling. Journal of Building Engineering, 2022, 56, 104767.	1.6	0

ARTICLE IF CITATIONS Determination of the effectiveness of various mineral additives against sodium and magnesium sulfate 205 1.6 7 attack in concrete by Taguchi method. Journal of Building Engineering, 2022, 57, 104849. Molecular dynamics study on coupled ion transport in aluminium-doped cement-based materials: 206 effect of concentration. Ádvances in Cement Research, 2023, 35, 81-95. Long term effect of chloride and sulfates concentration, and cation allied with sulfates on 207 corrosion performance of steel-reinforced in concrete. Journal of Building Engineering, 2022, 56, 1.6 5 104813. Reduction of SO42â[°] and Clâ[°] migration rates and degradation of silica nanoparticles incorporated cement pastes exposed to co-existence of sulfate, chloride and electric fields. Construction and 208 Building Materials, 2022, 344, 128234. Deterioration of Mechanical Properties at the Anchor-Mortar Interface Considering the Effect of 209 0.4 0 Two-Phase Corrosion. SSRN Electronic Journal, 0, , . Combined Effects of Sulfate and Chloride Attack on Steel Reinforced Mortar under Drying–Immersion 1.4 Cycles. Buildings, 2022, 12, 1252. Degradation mechanism of cement-based materials under the effects of stray current, chloride and 211 1.8 9 sulfate. Engineering Failure Analysis, 2022, 142, 106746. Durability performance of an RC beam under real marine all corrosion zones exposure for 7 years. 0.8 Case Studies in Construction Materials, 2022, 17, e01516. Effect of Nano-MgO on the Durability of Cement-Based Materials. Journal of Testing and Evaluation, 213 0.4 0 2023, 51, 1181-1192. Corrosion propagation of steel reinforcement in pre-cracked mortar attacked by seawater using wire 214 beam electrode. Corrosion Science, 2022, 208, 110655. Fracture Mechanical Properties of Steel Fiber Reinforced Self-Compacting Concrete under Dry–Wet 215 1.4 6 Cycle Sulfate Attack. Buildings, 2022, 12, 1623. Degradation of Concrete Structures in Nuclear Power Plants: A Review of the Major Causes and 1.6 Possible Preventive Measures. Energies, 2022, 15, 8011. Self-healing of high-performance engineered cementitious materials with crystalline admixture in the 217 1.6 4 seawater environment. Journal of Building Engineering, 2023, 63, 105472. Influence of Chloride Transport Modes and Hydrated Cement Chemistry on Chloride Profile and 1.3 Binding Mechanisms in Concrete. Journal of Materials in Civil Engineering, 2022, 34, . Erosion behavior of ions in lining concrete incorporating fly ash and silica fume under the combined 219 action of load and flowing groundwater containing composite salt. Case Studies in Construction 0.8 3 Materials, 2022, 17, e01659. Understanding the impact of main seawater ions and leaching on the chloride transport in alkali-activated slag and Portland cement. Cement and Concrete Research, 2023, 164, 107063. Progress and research challenges in concrete durability: ionic transport, electrochemical 221 0.0 11 rehabilitation and service life prediction. RILEM Technical Letters, 0, 7, 98-111. EFFECT OF SULFATE ON THE CHLORIDE DIFFUSION BEHAVIOR OF CORAL AGGREGATE CONCRETE IN THE MARINE TIDE ZONE. Ceramics - Silikaty, 2022, , 37-46.

#	Article	IF	CITATIONS
223	Numerical Simulation of Concrete Attacked by Sulfate under Drying–Wetting Cycles Coupled with Alternating Loads. Buildings, 2023, 13, 82.	1.4	0
224	Resistance of Concretes to External Chlorides in the Presence and Absence of Sulphates: A Review. Applied Sciences (Switzerland), 2023, 13, 182.	1.3	3
225	A review on the deterioration of mechanical and durability performance of marine-concrete under the scouring action. Journal of Building Engineering, 2023, 66, 105924.	1.6	6
226	Effect of hoop restraint on the degradation behavior of cement paste exposed to sodium sulfate solution. Journal of Materials Research and Technology, 2023, 24, 3067-3085.	2.6	0
227	Determination of the chloride ion content in concrete under simultaneous chloride and sulphate ion attack. Journal of Building Engineering, 2023, 72, 106579.	1.6	2
228	Using ensemble model to predict isothermal hydration heat of fly ash cement paste considering fly ash content, water to binder ratio and curing temperature. Case Studies in Construction Materials, 2023, 18, e01984.	0.8	1
229	Pore crystallization and expansion of cement pastes in sulfate solutions with and without chlorides. Cement and Concrete Research, 2023, 166, 107099.	4.6	10
230	Deterioration of mechanical properties at the anchor-mortar interface considering the effect of two-phase corrosion. Construction and Building Materials, 2023, 370, 130664.	3.2	0
231	Novel agricultural waste based hardening accelerator for early strength development of fly ash-based concrete. Materials Today: Proceedings, 2023, , .	0.9	0
232	A review on FRP bars and supplementary cementitious materials for the next generation of sustainable and durable construction materials. Construction and Building Materials, 2023, 383, 131403.	3.2	7
244	Chloride Penetration in Low-Carbon Concrete with High Volume of SCM: A Review Study. Lecture Notes in Civil Engineering, 2023, , 141-149.	0.3	0