

Magnesia-Based Cements: A Journey of 150 Years, and C

Chemical Reviews

116, 4170-4204

DOI: [10.1021/acs.chemrev.5b00463](https://doi.org/10.1021/acs.chemrev.5b00463)

Citation Report

#	ARTICLE	IF	CITATIONS
1	Evaluation of GHG emissions from the production of magnesia refractory raw materials in Dashiqiao, China. <i>Journal of Cleaner Production</i> , 2016, 135, 214-222.	4.6	19
2	Influence of acid-base properties of Mg-based catalysts on transesterification: role of magnesium silicate hydrate formation. <i>Catalysis Science and Technology</i> , 2017, 7, 1701-1712.	2.1	25
3	Influence of fly ash on compressive strength and micro-characteristics of magnesium potassium phosphate cement mortars. <i>Cement and Concrete Research</i> , 2017, 99, 86-94.	4.6	155
4	Hydration behavior of magnesium potassium phosphate cement and stability analysis of its hydration products through thermodynamic modeling. <i>Cement and Concrete Research</i> , 2017, 98, 101-110.	4.6	82
5	In situ Raman studies on cement paste prepared with natural pozzolanic volcanic ash and Ordinary Portland Cement. <i>Construction and Building Materials</i> , 2017, 148, 444-454.	3.2	32
6	Effect of 5-phase seed crystal on the mechanical properties and microstructure of magnesium oxychloride cement. <i>Construction and Building Materials</i> , 2017, 150, 409-417.	3.2	53
7	The effect of low temperature phase change material of hydrated salt on the performance of magnesium phosphate cement. <i>Construction and Building Materials</i> , 2017, 149, 272-278.	3.2	28
8	Kinetic study of the magnesium oxychloride cement cure reaction. <i>Journal of Materials Science</i> , 2017, 52, 7637-7646.	1.7	28
9	The hydration mechanism and performance of Modified magnesium oxysulfate cement by tartaric acid. <i>Construction and Building Materials</i> , 2017, 144, 516-524.	3.2	142
10	On the influence of Mg/P ratio on the properties and durability of magnesium potassium phosphate cement pastes. <i>Cement and Concrete Research</i> , 2017, 96, 27-41.	4.6	141
11	Models of Aged Magnesium-Silicate Hydrate Cements Based on the Lizardite and Talc Crystals: A Periodic DFT-GIPAW Investigation. <i>Journal of Physical Chemistry C</i> , 2017, 121, 7319-7330.	1.5	21
12	Hydration of MgO/SiO ₂ and Portland cement mixtures: A structural investigation of the hydrated phases by means of X-ray diffraction and solid state NMR spectroscopy. <i>Cement and Concrete Research</i> , 2017, 102, 60-67.	4.6	24
13	Review on carbonation curing of cement-based materials. <i>Journal of CO₂ Utilization</i> , 2017, 21, 119-131.	3.3	398
14	Conversion of magnesium oxychloride to chlorartinite and resulting increased water resistance. <i>Materials Letters</i> , 2017, 207, 1-3.	1.3	13
15	Thermally treated phlogopite as magnesium-rich precursor for alkali activation purpose. <i>Minerals Engineering</i> , 2017, 113, 47-54.	1.8	22
16	Hydration of MgO-Based Cement: Water Dynamics by 1H Fast Field-Cycling NMR Relaxometry. <i>Journal of Physical Chemistry C</i> , 2017, 121, 26851-26859.	1.5	10
17	Cement industry of China: Driving force, environment impact and sustainable development. <i>Renewable and Sustainable Energy Reviews</i> , 2017, 75, 618-628.	8.2	168
18	11. New CO ₂ -reduced cementitious systems. , 2017, , 333-352.		1

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19	CO ₂ Absorption and Magnesium Carbonate Precipitation in MgCl ₂ –NH ₃ –NH ₄ Cl Solutions: Implications for Carbon Capture and Storage. <i>Minerals</i> (Basel, Switzerland), 2017, 7, 172.	0.8	15
20	Reaction mechanism of magnesium potassium phosphate cement with high magnesium-to-phosphate ratio. <i>Cement and Concrete Research</i> , 2018, 108, 140-151.	4.6	135
21	Effect of fineness and components of CFBC ash on performance of basic magnesium sulfate cement. <i>Construction and Building Materials</i> , 2018, 170, 801-811.	3.2	23
22	Bone regeneration capacity of magnesium phosphate cements in a large animal model. <i>Acta Biomaterialia</i> , 2018, 69, 352-361.	4.1	91
23	Phase Formation and Evolution in Mg(OH) ₂ –Zeolite Cements. <i>Industrial & Engineering Chemistry Research</i> , 2018, 57, 2105-2113.	1.8	12
24	Formation of magnesium silicate hydrate cement in nature. <i>Journal of the Geological Society</i> , 2018, 175, 308-320.	0.9	15
25	Effects of sodium citrate and citric acid on the properties of magnesium oxysulfate cement. <i>Construction and Building Materials</i> , 2018, 169, 697-704.	3.2	121
26	Alternative cement clinkers. <i>Cement and Concrete Research</i> , 2018, 114, 27-39.	4.6	281
27	Monitoring the hydration of MgO-based cement and its mixtures with Portland cement by ¹ H NMR relaxometry. <i>Microporous and Mesoporous Materials</i> , 2018, 269, 26-30.	2.2	19
28	Water as a Probe of the Colloidal Properties of Cement. <i>Langmuir</i> , 2018, 34, 2205-2218.	1.6	9
29	Magnesium-based bioceramics in orthopedic applications. <i>Acta Biomaterialia</i> , 2018, 66, 23-43.	4.1	239
30	Effect of boric acid and lithium chloride on magnesium oxysulfate cement. <i>IOP Conference Series: Earth and Environmental Science</i> , 2018, 186, 012064.	0.2	0
31	Performance of a Magnesia Silica Cement for Martian Construction. , 2018, , .		4
32	CO ₂ Uptake of Carbonation-Cured Cement Blended with Ground Volcanic Ash. <i>Materials</i> , 2018, 11, 2187.	1.3	23
33	Characterization of Mg components in reactive MgO – Portland cement blends during hydration and carbonation. <i>Journal of CO₂ Utilization</i> , 2018, 27, 518-527.	3.3	46
34	Preparation and characterization of one-part magnesium oxychloride cement. <i>Construction and Building Materials</i> , 2018, 189, 745-750.	3.2	15
35	Combined impact of silicate-amorphicity and MgO-reactivity on the performance of Mg-silicate cement. <i>Construction and Building Materials</i> , 2018, 189, 78-85.	3.2	45
36	Identification of Magnesium Oxychloride Cement Biomaterial Heterogeneity using Raman Chemical Mapping and NIR Hyperspectral Chemical Imaging. <i>Scientific Reports</i> , 2018, 8, 13034.	1.6	16

#	ARTICLE	IF	CITATIONS
37	Chemical phases and microstructural analysis of pastes based on magnesia cement. <i>Construction and Building Materials</i> , 2018, 188, 615-620.	3.2	26
38	Properties of fly ash blended magnesium potassium phosphate mortars: Effect of the ratio between fly ash and magnesia. <i>Cement and Concrete Composites</i> , 2018, 90, 169-177.	4.6	105
39	Tuning the phase structure and mechanical performance of magnesium oxychloride cements by curing temperature and H ₂ O/MgCl ₂ ratio. <i>Construction and Building Materials</i> , 2018, 179, 413-419.	3.2	40
40	Modification of Magnesium Oxysulfate Cement by Incorporating Weak Acids. <i>Journal of Materials in Civil Engineering</i> , 2018, 30, .	1.3	57
41	Recent development in magnesium oxychloride cement. <i>Structural Concrete</i> , 2018, 19, 1290-1300.	1.5	49
42	Carbonation activated binders from pure calcium silicates: Reaction kinetics and performance controlling factors. <i>Cement and Concrete Composites</i> , 2018, 93, 85-98.	4.6	78
43	Investigations of addition of low fractions of nanoclay/latex nanocomposite on mechanical and morphological properties of cementitious materials. <i>Arabian Journal of Chemistry</i> , 2018, 11, 970-980.	2.3	2
44	Preparation of magnesium oxysulfate cement using magnesium-rich byproducts from the production of lithium carbonate from salt lakes. <i>Construction and Building Materials</i> , 2018, 172, 597-607.	3.2	43
45	Thermal treatment of asbestos containing materials (ACM) by mixing with Na ₂ CO ₃ and special clays for partial vitrification of waste. <i>Materials Letters</i> , 2018, 232, 29-32.	1.3	5
46	A solid state NMR and in-situ infrared spectroscopy study on the setting reaction of magnesium sodium phosphate cement. <i>Journal of Non-Crystalline Solids</i> , 2018, 498, 49-59.	1.5	31
47	CO ₂ capture performance and mechanical properties of Ca(OH) ₂ -based sorbent modified with MgO and (NH ₄) ₂ HPO ₄ for Calcium Looping cycle. <i>Fuel</i> , 2019, 256, 115924.	3.4	5
48	Hydration Behavior of Magnesium Oxysulfate Cement with Fly Ash via Electrochemical Impedance Spectroscopy. <i>Journal of Materials in Civil Engineering</i> , 2019, 31, .	1.3	25
49	Magnesite-rich mining tailings as a raw material for refractory ceramics – microstructural and thermal analysis. <i>Proceedings of the Estonian Academy of Sciences</i> , 2019, 68, 145.	0.9	3
50	Thermodynamic data for magnesium (potassium) phosphates. <i>Applied Geochemistry</i> , 2019, 111, 104450.	1.4	66
51	Properties of magnesium oxide boards used as sheathing in exterior walls. <i>MATEC Web of Conferences</i> , 2019, 282, 02091.	0.1	3
52	Resonant semiconductor laser absorption of atomic Rb in a pulsed Nd:YAG laser-induced plasma. <i>Journal of Modern Optics</i> , 2019, 66, 1717-1723.	0.6	0
53	Hydration characteristics and microstructure of magnesium phosphate cement in presence of Cu ²⁺ . <i>Construction and Building Materials</i> , 2019, 225, 234-242.	3.2	22
54	Properties and Reaction Mechanisms of Magnesium Phosphate Cement Mixed with Ferroaluminate Cement. <i>Materials</i> , 2019, 12, 2561.	1.3	11

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55	Sulfate resistance of carbonated ternary mortar blends: Portland cement, reactive MgO and supplementary cementitious materials. <i>Journal of Cleaner Production</i> , 2019, 238, 117933.	4.6	16
56	Combined effects of biochar and MgO expansive additive on the autogenous shrinkage, internal relative humidity and compressive strength of cement pastes. <i>Construction and Building Materials</i> , 2019, 229, 116877.	3.2	61
57	Effect of phosphate additives on the hydration process of magnesium silicate cements. <i>Journal of Thermal Analysis and Calorimetry</i> , 2019, 138, 3311-3321.	2.0	22
58	Modeling of phase relations and thermodynamics in the Mg(OH) ₂ + MgSO ₄ + H ₂ O system with implications on magnesium hydroxide sulfate cement. <i>Calphad: Computer Coupling of Phase Diagrams and Thermochemistry</i> , 2019, 67, 101675.	0.7	16
59	The role of phosphoric acid in improving the strength of magnesium oxychloride cement pastes with large molar ratios of H ₂ O/MgCl ₂ . <i>Cement and Concrete Composites</i> , 2019, 97, 379-386.	4.6	56
60	Influence of magnesium-to-phosphate ratio and water-to-cement ratio on hydration and properties of magnesium potassium phosphate cements. <i>Cement and Concrete Research</i> , 2019, 123, 105781.	4.6	120
61	Mechanical properties and reaction products of reactive magnesia and CFB slag/silica fume pastes. <i>Advances in Cement Research</i> , 2019, 31, 297-307.	0.7	3
62	Recent progress in low-carbon binders. <i>Cement and Concrete Research</i> , 2019, 122, 227-250.	4.6	391
63	Microstructural evolution/durability of magnesium phosphate cement paste over time in neutral and basic environments. <i>Cement and Concrete Research</i> , 2019, 122, 42-58.	4.6	45
64	Sustainable Calcination of Magnesium Hydroxide for Magnesium Oxychloride Cement Production. <i>Journal of Materials in Civil Engineering</i> , 2019, 31, 04019110.	1.3	12
65	Assessing variability in the hygrothermal performance of magnesium oxide (MgO) cladding products of the Australian market. <i>Construction and Building Materials</i> , 2019, 203, 491-500.	3.2	10
66	Effects of low- and high-calcium fly ash on magnesium oxysulfate cement. <i>Construction and Building Materials</i> , 2019, 215, 162-170.	3.2	47
67	Converting CO ₂ from biogas and MgCl ₂ residues into valuable magnesium carbonate: A novel strategy for renewable energy production. <i>Energy</i> , 2019, 180, 457-464.	4.5	32
68	Solid-state nuclear magnetic resonance spectroscopy of cements. <i>Materials Today Advances</i> , 2019, 1, 100007.	2.5	110
69	Research on the preparation and properties of a novel grouting material based on magnesium phosphate cement. <i>Construction and Building Materials</i> , 2019, 214, 516-526.	3.2	75
70	Silico-Aluminophosphate and Alkali-Aluminosilicate Geopolymers: A Comparative Review. <i>Frontiers in Materials</i> , 2019, 6, .	1.2	125
71	Special Cements. , 2019, , 585-640.		8
72	Direct Observations of the Coupling between Quartz Dissolution and Mg-Silicate Formation. <i>ACS Earth and Space Chemistry</i> , 2019, 3, 617-625.	1.2	2

#	ARTICLE	IF	CITATIONS
73	Rapid Dilapidation of Alcohol Using Magnesium Oxide and Magnesium Aspartate based Nanostructures: A Raman Spectroscopic and Molecular Simulation Approach. <i>Journal of Inorganic and Organometallic Polymers and Materials</i> , 2019, 29, 1390-1399.	1.9	7
74	Research progresses on magnesium phosphate cement: A review. <i>Construction and Building Materials</i> , 2019, 211, 885-898.	3.2	174
75	Air purification behavior of magnesium oxychloride cement combined with Ag/AgBr particle under visible light. <i>Construction and Building Materials</i> , 2019, 211, 1034-1041.	3.2	13
76	Properties of magnesium potassium phosphate cement pastes exposed to water curing: A comparison study on the influences of fly ash and metakaolin. <i>Construction and Building Materials</i> , 2019, 203, 589-600.	3.2	63
77	Modeling on the hydration and leaching of eco-friendly magnesium oxychloride cement paste at the micro-scale. <i>Construction and Building Materials</i> , 2019, 204, 684-690.	3.2	39
78	Magnesium Phosphate Cements/GNPs Composites by Combustion Synthesis and Acid-Base Reaction. <i>IOP Conference Series: Materials Science and Engineering</i> , 2019, 678, 012104.	0.3	0
79	Effects of fly ash and slag on the properties of magnesium oxysulfate cement. <i>Emerging Materials Research</i> , 2019, 8, 472-482.	0.4	13
80	Utilization of mineral carbonation products: current state and potential. , 2019, 9, 1096-1113.		65
81	Study on properties of citric acid to magnesium oxysulfide cement. <i>IOP Conference Series: Earth and Environmental Science</i> , 2019, 358, 052035.	0.2	1
82	Influence of Waste Plastic Aggregate and Water-Repellent Additive on the Properties of Lightweight Magnesium Oxychloride Cement Composite. <i>Applied Sciences (Switzerland)</i> , 2019, 9, 5463.	1.3	20
83	Effects of 5â€¢1â€¢7 Phase Seed Crystal on Performance of Magnesium Oxysulfate Cement. <i>Journal of Advanced Concrete Technology</i> , 2019, 17, 603-615.	0.8	21
84	Kinetics of formation and thermal stability of Mg ₂ (OH) ₃ ClÂ•4H ₂ O. <i>AIP Conference Proceedings</i> , 2019, , .	0.3	3
85	Further studies of the hydration of MgO-hydromagnesite blends. <i>Cement and Concrete Research</i> , 2019, 126, 105912.	4.6	54
86	A comprehensive study of basalt fiber reinforced magnesium phosphate cement incorporating ultrafine fly ash. <i>Composites Part B: Engineering</i> , 2019, 168, 204-217.	5.9	138
87	3D microstructure of magnesium potassium phosphate ceramics from X-ray tomography: new insights into the reaction mechanisms. <i>Journal of Materials Science</i> , 2019, 54, 3748-3760.	1.7	15
88	Tuning the properties of magnesium phosphate-based bone cements: Effect of powder to liquid ratio and aqueous solution concentration. <i>Materials Science and Engineering C</i> , 2019, 95, 248-255.	3.8	31
89	Phosphoric acidâ€¢modified magnesium oxychloride: Study of water stability, kinetics, and pair distribution function. <i>Journal of the American Ceramic Society</i> , 2019, 102, 3728-3737.	1.9	6
90	Multiâ€¢analytical Studies of the Lime Mortars from the Yanxi Hall in the Yangxin Palace of the Palace Museum (Beijing). <i>Archaeometry</i> , 2019, 61, 309-326.	0.6	9

#	ARTICLE	IF	CITATIONS
91	Effects of low- and high-calcium fly ash on the water resistance of magnesium oxysulfate cement. <i>Construction and Building Materials</i> , 2020, 230, 116951.	3.2	54
92	Microstructural evolution and texture analysis of magnesium phosphate cement. <i>Journal of the American Ceramic Society</i> , 2020, 103, 1414-1424.	1.9	12
93	Utilizing mixed-mineralogy ferroan magnesite tailings as the source of magnesium oxide in magnesium potassium phosphate cement. <i>Construction and Building Materials</i> , 2020, 231, 117098.	3.2	14
94	Effect of superplasticisers and their mechanisms of action on magnesium oxysulfate cement properties. <i>Advances in Cement Research</i> , 2020, 32, 225-233.	0.7	4
95	Bioinspired and biomineralized magnesium oxychloride cement with enhanced compressive strength and water resistance. <i>Journal of Hazardous Materials</i> , 2020, 383, 121099.	6.5	53
96	An Inorganic Magnesium-based Consolidant for the Consolidation of Silica Sand (A Substitute for Tj ETQq1 1 0.784314 rgBT ₅ /Overload 0.6)	0.6	5
97	Autogenous healing of Engineered Cementitious Composites (ECC) based on MgO-fly ash binary system activated by carbonation curing. <i>Construction and Building Materials</i> , 2020, 238, 117672.	3.2	43
98	Microstructural characterization of basalt fiber reinforced magnesium phosphate cement supplemented by silica fume. <i>Construction and Building Materials</i> , 2020, 237, 117795.	3.2	41
99	Degradation of carbonated reactive MgO-based concrete exposed to nitric acid. <i>Journal of CO2 Utilization</i> , 2020, 36, 210-219.	3.3	14
100	In situ monitoring of pore structure of magnesium oxysulfate cement paste: Effect of MgSO ₄ /H ₂ O ratio. <i>Journal of Industrial and Engineering Chemistry</i> , 2020, 83, 387-400.	2.9	29
101	Towards carbon-neutral construction materials: Carbonation of cement-based materials and the future perspective. <i>Journal of Building Engineering</i> , 2020, 28, 101062.	1.6	64
102	Hydration, carbonation, strength development and corrosion resistance of reactive MgO cement-based composites. <i>Cement and Concrete Research</i> , 2020, 128, 105941.	4.6	91
103	Accelerated carbonation of reactive magnesium oxide cement (RMC)-based composite with supercritical carbon dioxide (scCO ₂). <i>Journal of Cleaner Production</i> , 2020, 248, 119282.	4.6	51
104	Accelerated carbonation of reactive MgO and Portland cement blends under flowing CO ₂ gas. <i>Cement and Concrete Composites</i> , 2020, 106, 103489.	4.6	108
105	Preliminary investigation of the hydration mechanism of MgO-SiO ₂ -K ₂ HPO ₄ cement. <i>Construction and Building Materials</i> , 2020, 235, 117471.	3.2	21
106	Influence of silica fume on the setting time and mechanical properties of a new magnesium phosphate cement. <i>Construction and Building Materials</i> , 2020, 235, 117544.	3.2	68
107	A preliminary investigation of the properties of potassium magnesium phosphate cement-based grouts mixed with fly ash, water glass and bentonite. <i>Construction and Building Materials</i> , 2020, 237, 117501.	3.2	48
108	Effects of unreactive MgO and impurities in light burned MgO on the hydration process and performance of base magnesium sulfate cement. <i>Construction and Building Materials</i> , 2020, 240, 117854.	3.2	26

#	ARTICLE	IF	CITATIONS
109	Modeling hydration of mine tailings: Production of hydraulic binders from alkali-activated materials. Cement and Concrete Research, 2020, 137, 106216.	4.6	9
110	Influence of hybrid graphene oxide/carbon nanotubes on the mechanical properties and microstructure of magnesium potassium phosphate cement paste. Construction and Building Materials, 2020, 260, 120449.	3.2	38
111	Preparation and properties of a magnesium phosphate cement with dolomite. Cement and Concrete Research, 2020, 138, 106235.	4.6	37
112	Struvite Mineralized Wood as Sustainable Building Material: Mechanical and Combustion Behavior. ACS Sustainable Chemistry and Engineering, 2020, 8, 10402-10412.	3.2	32
113	Mechanical properties of struvite-K: A high-pressure X-ray diffraction study. Cement and Concrete Research, 2020, 136, 106171.	4.6	28
114	Corrosion resistance of wollastonite modified magnesium phosphate cement paste exposed to freeze-thaw cycles and acid-base corrosion. Case Studies in Construction Materials, 2020, 13, e00421.	0.8	6
115	Effect of Carbonation on the Water Resistance of Steel Slag-Magnesium Oxysulfate (MOS) Cement Blends. Materials, 2020, 13, 5006.	1.3	6
116	Radiolysis of the magnesium phosphate cement on γ -irradiation. Construction and Building Materials, 2020, 252, 119156.	3.2	9
117	Study on Binder of Cold-Bonded Pellets Containing Basic Oxygen Furnace Dust Based on Hydration Mechanism of Magnesium Potassium Phosphate Cementitious Material. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2020, 51, 2400-2412.	1.0	3
118	Influence of aqueous carbonate species on hydration and carbonation of reactive MgO cement. Journal of CO2 Utilization, 2020, 41, 101260.	3.3	22
119	A numerical approach for designing composite cements with calcined clay and limestone. Cement and Concrete Research, 2020, 138, 106232.	4.6	43
120	Environmental impacts and decarbonization strategies in the cement and concrete industries. Nature Reviews Earth & Environment, 2020, 1, 559-573.	12.2	483
121	Thermodynamic modeling of magnesium ammonium phosphate cement and stability of its hydration products. Cement and Concrete Research, 2020, 138, 106223.	4.6	31
122	Magnesium oxychloride boards: understanding a novel building material. Materials and Structures/Materiaux Et Constructions, 2020, 53, 1.	1.3	24
123	Research on technology of performance improvement of basic magnesium sulfate cement-BMS. Structural Concrete, 2023, 24, 4313-4321.	1.5	8
124	In situ XRD analysis of dolomite calcination under CO2 in a humid environment. CrystEngComm, 2020, 22, 6502-6516.	1.3	7
125	Influence of calcination temperature on the structure and hydration of MgO. Construction and Building Materials, 2020, 262, 120776.	3.2	28
126	Effect of Ion Corrosion on 517 Phase Stability. Materials, 2020, 13, 5659.	1.3	9

#	ARTICLE	IF	CITATIONS
127	Study of Eco-Friendly Belite-Calcium Sulfoaluminate Cements Obtained from Special Wastes. Applied Sciences (Switzerland), 2020, 10, 8650.	1.3	15
128	Preparation and Application of Self-Curing Magnesium Phosphate Cement Concrete with High Early Strength in Severe Cold Environments. Materials, 2020, 13, 5587.	1.3	9
129	Magnesia (MgO) Production and Characterization, and Its Influence on the Performance of Cementitious Materials: A Review. Materials, 2020, 13, 4752.	1.3	54
130	Materials for Well Integrity " Short-Term Mechanical Properties of Cement Systems. , 2020, , .		3
131	Bentonite/CEM-II cement mortar INTERFACE EXPERIMENTS: A proxy to in situ deep geological repository engineered barrier system surface reactivity. Applied Geochemistry, 2020, 117, 104599.	1.4	6
132	Green remediation by using low-carbon cement-based stabilization/solidification approaches. , 2020, , 93-118.		11
133	Using the Egyptian magnesite for preparation of some types of grinding stones. Journal of the Korean Ceramic Society, 2020, 57, 296-304.	1.1	3
134	Calcium oxychloride: A critical review of the literature surrounding the formation, deterioration, testing procedures, and recommended mitigation techniques. Cement and Concrete Composites, 2020, 113, 103663.	4.6	35
135	Water resistance of magnesium oxychloride cement wood board with the incorporation of supplementary cementitious materials. Construction and Building Materials, 2020, 255, 119145.	3.2	26
136	Experimental research on properties and microstructures of magnesium-iron phosphate cement. Construction and Building Materials, 2020, 257, 119570.	3.2	26
137	Stability and phase transition of 5Å-7 phase in alkaline solutions. Construction and Building Materials, 2020, 258, 119683.	3.2	16
138	Research on the incorporation of untreated flue gas desulfurization gypsum into magnesium oxysulfate cement. Journal of Cleaner Production, 2020, 271, 122497.	4.6	80
139	Magnesium Oxychloride Cement Composites with Silica Filler and Coal Fly Ash Admixture. Materials, 2020, 13, 2537.	1.3	16
140	High-pH/low pH ordinary Portland cement mortars impacts on compacted bentonite surfaces: Application to clay barriers performance. Applied Clay Science, 2020, 193, 105672.	2.6	15
141	Mining tailings as a raw material for glass-bonded thermally sprayed ceramic coatings: Microstructure and properties. Journal of the European Ceramic Society, 2020, 40, 4111-4121.	2.8	4
142	Role of shear stress at rest on the viscoelastic response of fresh cement pastes. Journal of Rheology, 2020, 64, 433-444.	1.3	6
143	Magnesium-Based Cements for Martian Construction. Journal of Aerospace Engineering, 2020, 33, .	0.8	11
144	Hydration kinetics and microstructural development of a magnesium oxysulfate cement modified by macromolecules. Construction and Building Materials, 2020, 248, 118624.	3.2	24

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145	Effect of alcohol leachable chloride on strength of magnesium oxychloride cement. Journal of the American Ceramic Society, 2020, 103, 5927-5938.	1.9	5
146	Magnesium Oxybromides MOB-318 and MOB-518: Brominated Analogues of Magnesium Oxychlorides. Applied Sciences (Switzerland), 2020, 10, 4032.	1.3	3
147	Carbonated binder systems containing reactive MgO and Portland cement: Strength, chemical composition and pore structure. Journal of Cleaner Production, 2020, 271, 122021.	4.6	23
148	Efficacy of green alternatives and carbon dioxide curing in reactive magnesia cement-bonded particleboards. Journal of Cleaner Production, 2020, 258, 120997.	4.6	25
149	Magnesium oxysulfate cement. , 2020, , 75-83.		2
150	Influence of wollastonite on hydration and properties of magnesium potassium phosphate cements. Cement and Concrete Research, 2020, 131, 106012.	4.6	53
151	3D printable magnesium oxide concrete: towards sustainable modern architecture. Additive Manufacturing, 2020, 33, 101145.	1.7	16
152	Thermal Stability and Kinetics of Formation of Magnesium Oxychloride Phase $3\text{Mg}(\text{OH})_2 \cdot \text{MgCl}_2 \cdot 8\text{H}_2\text{O}$. Materials, 2020, 13, 767.	1.3	28
153	Performance of MgO and MgO-SiO ₂ systems containing seeds under different curing conditions. Cement and Concrete Composites, 2020, 108, 103543.	4.6	27
154	Experimental-Computational Approach to Investigate Nanoindentation of Magnesium Potassium Phosphate Hexahydrate (MKP) With X-CT Technique and Finite Element Analysis. Frontiers in Materials, 2020, 6, .	1.2	2
155	Energy Technology 2020: Recycling, Carbon Dioxide Management, and Other Technologies. Minerals, Metals and Materials Series, 2020, , .	0.3	3
156	Evolution of microstructures of cement paste via continuous-based hydration model of non-spherical cement particles. Composites Part B: Engineering, 2020, 185, 107795.	5.9	27
157	Hydration and Crystallization Behavior of MgO in Cold-Bonded Pellets Containing Basic Oxygen Furnace Dust. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2020, 51, 1016-1026.	1.0	2
158	In situ monitoring of hydration of magnesium oxysulfate cement paste: Effect of MgO/MgSO ₄ ratio. Construction and Building Materials, 2020, 251, 119003.	3.2	25
159	Environmentally Friendly Water-Based Self-Crosslinking Acrylate Dispersion Containing Magnesium Nanoparticles and Their Films Exhibiting Antimicrobial Properties. Coatings, 2020, 10, 340.	1.2	11
160	Study of using dolomite ores as raw materials to produce magnesium phosphate cement. Construction and Building Materials, 2020, 253, 119147.	3.2	29
161	Chemical-physical-mechanical stability of MKG mortars under sulfate attacks. Advances in Cement Research, 2021, 33, 224-238.	0.7	1
162	High-efficiency and low-carbon remediation of zinc contaminated sludge by magnesium oxysulfate cement. Journal of Hazardous Materials, 2021, 408, 124486.	6.5	61

#	ARTICLE	IF	CITATIONS
163	A Roadmap for Production of Cement and Concrete with Low-CO2 Emissions. Waste and Biomass Valorization, 2021, 12, 4745-4775.	1.8	21
164	Sandcastle worm-inspired phytic acid and magnesium oxychloride cement copolymerization for performance enhancement. Journal of Hazardous Materials, 2021, 404, 123992.	6.5	20
165	Recent advances in slag-based binder and chemical activators derived from industrial by-products – A review. Construction and Building Materials, 2021, 272, 121657.	3.2	39
166	Improvement of water resistance in magnesia cements with renewable source silica. Construction and Building Materials, 2021, 272, 121650.	3.2	11
167	Physical and mechanical performance of magnesium-based construction boards: A comparative study. Construction and Building Materials, 2021, 270, 121397.	3.2	11
168	Raw material ratio optimisation of magnesium oxychloride cement using response surface method. Construction and Building Materials, 2021, 272, 121648.	3.2	18
169	Prospective usage of magnesium potassium phosphate cement combined with Bougainvillea alba derived biochar to reduce Pb bioavailability in soil and its uptake by Spinacia oleracea L. Ecotoxicology and Environmental Safety, 2021, 208, 111723.	2.9	108
170	Characterization of and Structural Insight into Struvite-K, $MgKPO_4 \cdot 6H_2O$, an Analogue of Struvite. Inorganic Chemistry, 2021, 60, 195-205.	1.9	29
171	Structural, Vibrational, Electronic and Thermodynamical properties of B ₂ HgMg amalgam: A DFT study. Physica B: Condensed Matter, 2021, 601, 412605.	1.3	4
172	Mechanical performance of MgO-doped Engineered Cementitious Composites (ECC). Cement and Concrete Composites, 2021, 115, 103857.	4.6	29
173	Preparation and characterization of novel environmentally sustainable mortars based on magnesium potassium phosphate cement for additive manufacturing. AIMS Materials Science, 2021, 8, 640-658.	0.7	11
174	ILW conditioning and performance. , 2021, , 548-563.		1
175	Influence of sodium nitrate on the phases formed in the MgO-Al ₂ O ₃ -SiO ₂ -H ₂ O system. Materials and Design, 2021, 198, 109391.	3.3	13
176	Sustainability of cementitious structures, systems, and components (SSC TM): Long-term environmental stressors. , 2021, , 181-232.		2
177	Life cycle of nuclear cementitious structures, systems, and components. , 2021, , 89-121.		0
178	Magnesium-Phosphate Cement Pastes to Encapsulate Industrial Waste Powders. RILEM Bookseries, 2021, , 315-327.	0.2	0
179	The Improvement Effects of NaH ₂ PO ₄ and KH ₂ PO ₄ on the Properties of Magnesium Oxysulfate Cement. Journal Wuhan University of Technology, Materials Science Edition, 2021, 36, 50-57.	0.4	15
180	Preparation of novel chemically bonded ceramics with steel slag and potassium hydrogen oxalate. Journal of Hazardous Materials, 2021, 403, 124042.	6.5	6

#	ARTICLE	IF	CITATIONS
181	Transformation of abundant magnesium silicate minerals for enhanced CO2 sequestration. Communications Earth & Environment, 2021, 2, .	2.6	38
182	Foam Glass Lightened Sorel's Cement Composites Doped with Coal Fly Ash. Materials, 2021, 14, 1103.	1.3	8
183	Use of Potabilized Water Sludge in the Production of Low-Energy Blended Calcium Sulfoaluminate Cements. Applied Sciences (Switzerland), 2021, 11, 1679.	1.3	4
184	Magnesium oxysulfate cement as a fast curing agent in drilling fluids to solve the severe loss. Petroleum Science and Technology, 2021, 39, 216-234.	0.7	2
185	Performance of Mortars with Commercially-Available Reactive Magnesium Oxide as Alternative Binder. Materials, 2021, 14, 938.	1.3	4
186	Quartz dissolution associated with magnesium silicate hydrate cement precipitation. Solid Earth, 2021, 12, 389-404.	1.2	6
187	Mechanical properties of fiber and nano-Al2O3 reinforced magnesium phosphate cement composite. Construction and Building Materials, 2021, 270, 121861.	3.2	29
188	Fracture Behaviour of Concrete with Reactive Magnesium Oxide as Alternative Binder. Applied Sciences (Switzerland), 2021, 11, 2891.	1.3	7
189	Nanoscale insight on the initial hydration mechanism of magnesium phosphate cement. Construction and Building Materials, 2021, 276, 122213.	3.2	12
191	Optimal design of multi-layer structure composite containing inorganic hydrated salt phase change materials and cement: Lab-scale tests for buildings. Construction and Building Materials, 2021, 275, 122125.	3.2	15
192	Effects of K-struvite on hydration behavior of magnesium potassium phosphate cement. Construction and Building Materials, 2021, 275, 121741.	3.2	13
193	Influence of fly ash on the properties of magnesium oxysulfate cement. Emerging Materials Research, 2021, 10, 58-65.	0.4	1
194	Temperature transformation of blended magnesium potassium phosphate cement binders. Cement and Concrete Research, 2021, 141, 106332.	4.6	25
195	Properties of alkali-activated mortars with salt aggregate for sealing structures in evaporite rock. Open Ceramics, 2021, 5, 100041.	1.0	1
196	Physicochemical and Biological Properties of Mg-Doped Calcium Silicate Endodontic Cement. Materials, 2021, 14, 1843.	1.3	11
197	Assessment of magnesium potassium phosphate cement for waste sludge solidification: Macro- and micro-analysis. Journal of Cleaner Production, 2021, 294, 126365.	4.6	29
198	Superhydrophobic magnesium oxychloride cement based composites with integral stability and recyclability. Cement and Concrete Composites, 2021, 118, 103973.	4.6	24
199	Magnesium oxychloride cement reinforced via D-gluconic acid sodium salt for slow-curing, with enhanced compressive strength and water resistance. Construction and Building Materials, 2021, 280, 122487.	3.2	18

#	ARTICLE	IF	CITATIONS
200	Development of a stoichiometric magnesium potassium phosphate cement (MKPC) for the immobilization of powdered minerals. <i>Cement and Concrete Research</i> , 2021, 142, 106346.	4.6	18
201	Atomic structure and phase assemblages in novel M-(N)-A-S-H materials. <i>Cement and Concrete Research</i> , 2021, 142, 106336.	4.6	6
202	Magnesia-Metakaolin Regolith Mortar for Martian Construction. , 2021, , .		2
203	Effect of temperature curing on properties and hydration of wollastonite blended magnesium potassium phosphate cements. <i>Cement and Concrete Research</i> , 2021, 142, 106370.	4.6	26
204	Study on the basic properties and mechanism of waste sludge solidified by magnesium phosphate cement containing different active magnesium oxide. <i>Construction and Building Materials</i> , 2021, 281, 122609.	3.2	20
205	3D microstructure controls on mineral carbonation. <i>Journal of CO2 Utilization</i> , 2021, 47, 101494.	3.3	3
206	Hydration and improved properties of magnesium oxysulfate cement modified by phosphoric acid. <i>Advances in Cement Research</i> , 2022, 34, 36-44.	0.7	2
207	Lightweight concretes based on wheat husk and hemp hurd as bio-aggregates and modified magnesium oxysulfate binder: Microstructure and technological performances. <i>Construction and Building Materials</i> , 2021, 284, 122751.	3.2	22
208	Use Of Olivine For The Production Of MgO-SiO2 Binders. <i>Frontiers in Built Environment</i> , 2021, 7, .	1.2	3
209	Effects of Water-to-Cement Ratios on the Properties of Magnesium Potassium Phosphate Cement Prepared with Lithium-Extracted Magnesium Residue. <i>Applied Sciences (Switzerland)</i> , 2021, 11, 4193.	1.3	7
210	Preparation of magnesium oxysulfate cement as a 3D printing material. <i>Construction and Building Materials</i> , 2021, 282, 122677.	3.2	5
211	Study on the Mechanical Properties and Leaching Mechanism of Cr ³⁺ and Cu ²⁺ Cured by Basic Magnesium Sulfate Cement. <i>Journal of Advanced Concrete Technology</i> , 2021, 19, 462-476.	0.8	3
212	Early age hydration and application of blended magnesium potassium phosphate cements for reduced corrosion of reactive metals. <i>Cement and Concrete Research</i> , 2021, 143, 106375.	4.6	37
213	Recovery of Magnesium from Industrial Effluent and Its Implication on Carbon Capture and Storage. <i>ACS Sustainable Chemistry and Engineering</i> , 2021, 9, 6732-6740.	3.2	10
214	Effect of early-hydration behavior on rheological properties of borax-admixed magnesium phosphate cement. <i>Construction and Building Materials</i> , 2021, 283, 122701.	3.2	35
215	Effect of hydromagnesite addition on the properties and water resistance of magnesium oxysulfate (MOS) cement. <i>Cement and Concrete Research</i> , 2021, 143, 106387.	4.6	47
216	Multifunctional magnesium oxychloride based composite with stable superhydrophobicity, self-luminescence and reusability. <i>Construction and Building Materials</i> , 2021, 286, 122978.	3.2	6
217	Amorphous-crystalline transformation control on the microstructural evolution of magnesium phosphate cements. <i>Materials Letters</i> , 2021, 292, 129630.	1.3	11

#	ARTICLE	IF	CITATIONS
218	Treatment of municipal solid waste incineration fly ash: State-of-the-art technologies and future perspectives. <i>Journal of Hazardous Materials</i> , 2021, 411, 125132.	6.5	219
219	Intrinsically hydrophobic magnesium oxychloride cement foam for thermal insulation material. <i>Construction and Building Materials</i> , 2021, 288, 123129.	3.2	16
220	Influencing mechanism of mineral admixtures on rheological properties of fresh magnesium phosphate cement. <i>Construction and Building Materials</i> , 2021, 288, 123130.	3.2	26
221	Mechanical and Thermal Properties of Magnesia Binder Based on Natural and Technogenic Raw Materials. <i>Solid State Phenomena</i> , 0, 320, 181-185.	0.3	2
222	The Influence of Chemical Activators on the Hydration Behavior and Technical Properties of Calcium Sulfoaluminate Cements Blended with Ground Granulated Blast Furnace Slags. <i>Buildings</i> , 2021, 11, 268.	1.4	1
223	Use of kaolinite clays in development of a low carbon MgO-clay binder system. <i>Cement and Concrete Research</i> , 2021, 144, 106422.	4.6	22
224	Pore structure characteristics of MgO-SiO ₂ binder. <i>Journal of the American Ceramic Society</i> , 2021, 104, 6002-6014.	1.9	7
225	Carbonation curing influencing factors of Carbonated Reactive Magnesia Cements (CRMC) – A review. <i>Journal of Cleaner Production</i> , 2021, 305, 127210.	4.6	26
226	Theoretical model for the high-pressure melting process of MgO with the B1 structure. <i>Vacuum</i> , 2021, 189, 110231.	1.6	7
227	Evidence of formation of an amorphous magnesium silicate (AMS) phase during alkali activation of (Na-Mg) aluminosilicate glasses. <i>Cement and Concrete Research</i> , 2021, 145, 106464.	4.6	15
228	The occurrence of MgO and its influence on properties of clinker and cement: A review. <i>Construction and Building Materials</i> , 2021, 293, 123494.	3.2	26
229	Preparation of Low-Cost Magnesium Oxychloride Cement Using Magnesium Residue Byproducts from the Production of Lithium Carbonate from Salt Lakes. <i>Materials</i> , 2021, 14, 3899.	1.3	5
230	Rheological Properties of Lunar Mortars. <i>Applied Sciences (Switzerland)</i> , 2021, 11, 6961.	1.3	7
231	MgO-Based Cementitious Composites for Sustainable and Energy Efficient Building Design. <i>Sustainability</i> , 2021, 13, 9188.	1.6	10
232	Investigation and prediction of sticking tendency, blocks formation and occasional melting of lime at HT (1300°C) by the overburning test method. <i>Construction and Building Materials</i> , 2021, 294, 123577.	3.2	4
233	Two-scale modelling of fracture of magnesium phosphate cement under bending using X-ray computed tomography characterisation. <i>Cement and Concrete Composites</i> , 2021, 121, 104099.	4.6	5
234	Preparation and properties of magnesium oxysulfate cement and its application as lost circulation materials. <i>Petroleum Science</i> , 2021, 18, 1492-1506.	2.4	22
235	Characterization of magnesium-calcium oxysulfate cement prepared by replacing MgSO ₄ in magnesium oxysulfate cement with untreated desulfurization gypsum. <i>Cement and Concrete Composites</i> , 2021, 121, 104091.	4.6	34

#	ARTICLE	IF	CITATIONS
236	Solid waste-based magnesium phosphate cements: Preparation, performance and solidification/stabilization mechanism. <i>Construction and Building Materials</i> , 2021, 297, 123761.	3.2	32
237	Optimization of MgO-GGBS Cementitious Systems Using Thermo-Chemical Approaches. <i>Sustainability</i> , 2021, 13, 9378.	1.6	3
238	Review of reactive magnesia-based cementitious materials: Current developments and potential applicability. <i>Journal of Building Engineering</i> , 2021, 40, 102342.	1.6	12
239	Hydration and microstructural characteristics of MgO in the presence of metakaolin and silica fume. <i>Cement and Concrete Composites</i> , 2021, 121, 104068.	4.6	32
240	Magnesium phosphate-based cements containing Halloysite nanotubes for cracks repair. <i>Construction and Building Materials</i> , 2021, 301, 124056.	3.2	19
242	Recycling of waste gypsum in preparation of magnesium oxychloride cement (MOC). <i>Journal of Cleaner Production</i> , 2021, 313, 127958.	4.6	23
243	3D printable magnesium-based cements towards the preparation of bioceramics. <i>Journal of Colloid and Interface Science</i> , 2021, 598, 24-35.	5.0	2
244	Mechanical and durability properties of alkali-activated fly ash concrete with increasing slag content. <i>Construction and Building Materials</i> , 2021, 301, 124330.	3.2	50
245	Stabilised sulfate-rich clay with magnesium oxysulfate cement. <i>Geomechanics and Geoengineering</i> , 2022, 17, 1751-1761.	0.9	1
246	Experimental study on mechanical properties of a novel micro-steel fiber reinforced magnesium phosphate cement-based concrete. <i>Frontiers of Structural and Civil Engineering</i> , 2021, 15, 1047-1057.	1.2	6
247	Reaction characteristics and compressive strength of magnesia-phosphate cement at negative temperatures. <i>Construction and Building Materials</i> , 2021, 305, 124819.	3.2	10
248	Exposure of magnesium oxide boards to various conditions for extended durations. <i>Construction and Building Materials</i> , 2021, 302, 124429.	3.2	5
249	Preparation and properties of a low-cost magnesium phosphate cement with the industrial by-products boron muds. <i>Construction and Building Materials</i> , 2021, 302, 124400.	3.2	9
250	Factors influencing strength of magnesium oxychloride cement. <i>Construction and Building Materials</i> , 2021, 303, 124571.	3.2	28
251	Lightweight magnesium phosphate cement composites with struvite recovered from wastewater. <i>Canadian Journal of Civil Engineering</i> , 2021, 48, 1257-1265.	0.7	1
252	Clinker-free carbonate-bonded (CFCB) products prepared by accelerated carbonation of steel furnace slags: A parametric overview of the process development. <i>Construction and Building Materials</i> , 2021, 303, 124556.	3.2	13
253	Enhancement of magnesium phosphate cement solidification of Pb ²⁺ by K-struvite whisker in lead-contaminated solution. <i>Journal of Cleaner Production</i> , 2021, 320, 128848.	4.6	17
254	Thermo-alkali activation of talc for the production of a novel white one-part alkali-activated magnesia-based cement. <i>Construction and Building Materials</i> , 2021, 306, 124909.	3.2	6

#	ARTICLE	IF	CITATIONS
255	Could reactive MgO cement be a green solution? The effect of CO ₂ mineralization and manufacturing route on the potential global warming impact. <i>Cement and Concrete Composites</i> , 2021, 124, 104263.	4.6	26
256	Effect of Ammonium Citrate Tribasic on the Hydration Reaction and Properties of Magnesium Oxy-sulfate Cement. <i>Journal of Materials in Civil Engineering</i> , 2021, 33, .	1.3	17
257	Mechanical behavior of carbonated MgO-based Engineered Cementitious Composite (ECC) after high temperatures exposure. <i>Cement and Concrete Composites</i> , 2021, 124, 104255.	4.6	16
258	Investigation of aluminum nitrate as a set retarder of magnesium potassium phosphate cement: Mechanisms involved in diluted suspension. <i>Cement and Concrete Research</i> , 2021, 150, 106608.	4.6	14
259	Long-term immobilization of soil metalloids under simulated aging: Experimental and modeling approach. <i>Science of the Total Environment</i> , 2022, 806, 150501.	3.9	8
260	The kinetic of calcium silicate hydrate formation from silica and calcium hydroxide nanoparticles. <i>Journal of Colloid and Interface Science</i> , 2022, 605, 33-43.	5.0	11
261	Direct CO ₂ capture and conversion to fuels on magnesium nanoparticles under ambient conditions simply using water. <i>Chemical Science</i> , 2021, 12, 5774-5786.	3.7	25
262	Hydration process: Kinetics and thermodynamics. , 2021, , 125-160.		0
263	Use of Kaolin Clay as a Source of Silica in MgO-SiO ₂ Binder. <i>RILEM Bookseries</i> , 2020, , 815-819.	0.2	4
264	Recent progress of magnesium oxychloride cement: Manufacture, curing, structure and performance. <i>Construction and Building Materials</i> , 2020, 255, 119381.	3.2	53
265	Study of effects of downhole conditions on the setting time and compressive strength of MOS settable system by orthogonal experimental design. <i>IOP Conference Series: Earth and Environmental Science</i> , 0, 612, 012011.	0.2	3
266	MOC Cement-Based Composites with Silica Filler and Wood Chips Ash Admixture. <i>IOP Conference Series: Materials Science and Engineering</i> , 0, 960, 022081.	0.3	1
267	Mechanistic Study of the Effects of Magnesia Reactivity on Setting and Hardening of Basic Magnesium Sulfate Cement. <i>Journal of Advanced Concrete Technology</i> , 2020, 18, 678-688.	0.8	13
268	Strength and Durability Characteristics of MPC Mortar Used for Repairing Concrete Pavements. <i>Korean Society of Hazard Mitigation</i> , 2019, 19, 185-193.	0.1	1
269	Thermal properties and stability of reactive magnesia cement. <i>Construction and Building Materials</i> , 2021, 308, 125102.	3.2	8
270	Early Age Compressive Strength of Waste-based-glass-powder Magnesium Silicate Binders on Initial Carbonation Curing. <i>KnE Engineering</i> , 0, , .	0.1	3
271	Study on Cracking Control of Cold Bonded Pellets Containing Converter Dust Based on Nonhydraulic Hardening Principle. <i>Minerals, Metals and Materials Series</i> , 2020, , 179-187.	0.3	1
272	Synthesis and characterization of magnesium oxybromide Mg ₂ (OH) ₃ Br·4 H ₂ O. <i>AIP Conference Proceedings</i> , 2020, , .	0.3	0

#	ARTICLE	IF	CITATIONS
273	THE EFFECTS OF CALCIUM AND POTASSIUM DIHYDROGEN PHOSPHATE ON THE PROPERTIES OF MAGNESIUM OXY-SULFATE CEMENTS. <i>Ceramics - Silikaty</i> , 2019, , 7-17.	0.2	1
274	Thermal stability and kinetics of formation of Mg ₃ (OH) ₅ Cl·4 H ₂ O. <i>AIP Conference Proceedings</i> , 2020, , .	0.3	0
275	Thermophysical parameters of MOC-based composite with fly ash admixture. <i>AIP Conference Proceedings</i> , 2020, , .	0.3	0
276	Influence mechanisms of fly ash in magnesium ammonium phosphate cement. <i>Construction and Building Materials</i> , 2022, 314, 125581.	3.2	27
277	Effect of Molar Ratios and Curing Conditions on the Moisture Resistance of Magnesium Oxychloride Cement. <i>Journal of Materials in Civil Engineering</i> , 2022, 34, .	1.3	9
278	The Immobilisation of Heavy Metals from Sewage Sludge Ash in CO ₂ -Cured Mortars. <i>Sustainability</i> , 2021, 13, 12893.	1.6	6
279	Characterizing the influencing factors in a novel repairing material for concrete structures by AC impedance spectroscopy. <i>Journal of Building Engineering</i> , 2022, 47, 103858.	1.6	4
280	Sustainable Wall Solutions Using Foam Concrete and Hemp Composites. <i>Environmental and Climate Technologies</i> , 2021, 25, 917-930.	0.5	12
281	Promoting effect and mechanism of several inorganic salts on hydration reaction of magnesium oxychloride cement at low temperature. <i>Construction and Building Materials</i> , 2022, 317, 126171.	3.2	4
282	Long-term effect of recycled aggregate on microstructure, mechanical properties, and CO ₂ sequestration of rendering mortars. <i>Construction and Building Materials</i> , 2022, 321, 126357.	3.2	14
283	Cement-based stabilization/solidification of radioactive waste. , 2022, , 407-431.		4
284	Comprehending the stability of Sr ²⁺ immobilization in chemically bonded phosphate ceramic system: A mechanism study. <i>Ceramics International</i> , 2022, 48, 10209-10219.	2.3	2
285	Preliminary assessment of the efficacy of nano“MgO”-based dispersion for the consolidation of artificial weathered sandstone. <i>Archaeometry</i> , 2022, 64, 997-1012.	0.6	4
286	Effects and mechanisms of waste gypsum influencing the mechanical properties and durability of magnesium oxychloride cement. <i>Journal of Cleaner Production</i> , 2022, 339, 130679.	4.6	17
287	Co-Doped Magnesium Oxychloride Composites with Unique Flexural Strength for Construction Use. <i>Materials</i> , 2022, 15, 604.	1.3	1
288	Hydration Performance of Magnesium Potassium Phosphate Cement Using Sodium Alginate as a Candidate Retarder. <i>Materials</i> , 2022, 15, 943.	1.3	8
289	Influence of supplementary materials on the early age hydration reactions and microstructural progress of magnesium phosphate cement matrices. <i>Journal of Cleaner Production</i> , 2022, 333, 130086.	4.6	24
290	Improved Magnesium Cement for Durable Hemp Composite Boards. , 0, , .		0

#	ARTICLE	IF	CITATIONS
291	Dolomite-based binders manufactured using concentrated solar energy in a fluidised bed reactor. <i>Solar Energy</i> , 2022, 232, 471-482.	2.9	4
292	Effects of ethylenediamine tetra-acetic acid (EDTA) and its disodium salt derivative (EDTA-Na) on the characteristics of magnesium oxysulfate (MOS) cement. <i>Composites Part B: Engineering</i> , 2022, 232, 109654.	5.9	37
293	Review of space resources processing for Mars missions: Martian simulants, regolith bonding concepts and additive manufacturing. <i>Open Ceramics</i> , 2022, 9, 100216.	1.0	18
294	Performance of magnesium silicate hydrate cement modified with dipotassium hydrogen phosphate. <i>Construction and Building Materials</i> , 2022, 323, 126389.	3.2	12
295	Feasibility for co-utilisation of Carbonated Reactive Magnesia Cement (CRMC) and industrial wastes in circular economy and CO ₂ mineralisation. <i>Construction and Building Materials</i> , 2022, 323, 126488.	3.2	8
296	Ultra-high strength multicomponent composites based on reactive magnesia: Tailoring of material properties by addition of 1D and 2D carbon nanoadditives. <i>Journal of Building Engineering</i> , 2022, 50, 104122.	1.6	6
297	Long-term performance of MgO-SiO ₂ binder. <i>Materials and Structures/Materiaux Et Constructions</i> , 2022, 55, 1.	1.3	4
298	Experimental Research on Saline Soil Erosion Resistance of Magnesium Phosphate Cement Pastes. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0
299	Calcium phosphates in geological, biological, and industrial systems. , 2022, , 141-165.		1
300	Low CO ₂ reactive magnesia cements and their applications via nano-modification. , 2022, , 407-458.		1
301	Influence of anisotropy on heterogeneous nucleation of gold nanorod assemblies. <i>Faraday Discussions</i> , 2022, 235, 132-147.	1.6	2
302	Influence and Mechanism of Borax on the Physico-Mechanical Properties of Magnesium Potassium Phosphate Cement Exposed to High Temperatures. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0
303	Reaction mechanisms of slowly cooled and quickly cooled copper slag in magnesium phosphate cement. <i>Journal of Sustainable Cement-Based Materials</i> , 2023, 12, 234-245.	1.7	3
304	An Experimental Investigation on the Effects of Limestone Fines in Manufactured Sands on the Performance of Magnesia Ammonium Phosphate Mortar. <i>Buildings</i> , 2022, 12, 249.	1.4	2
305	Preparation of Magnesium Ammonium Phosphate Mortar by Manufactured Limestone Sand Using Compound Defoaming Agents for Improved Strength and Impermeability. <i>Buildings</i> , 2022, 12, 267.	1.4	3
306	The Effect of Alcohol Compound on the Solidification of Magnesium Oxysulfate Cement-Boron Mud Blends. <i>Materials</i> , 2022, 15, 1446.	1.3	2
307	Hydration evolution mechanisms of magnesium ammonium phosphate cement within three days of curing. <i>Powder Technology</i> , 2022, 399, 117208.	2.1	11
308	Exploring Mechanisms of Hydration and Carbonation of MgO and Mg(OH) ₂ in Reactive Magnesium Oxide-Based Cements. <i>Journal of Physical Chemistry C</i> , 2022, 126, 6196-6206.	1.5	18

#	ARTICLE	IF	CITATIONS
309	Magnesium Potassium Phosphate Cement-Based Derivatives for Construction Use: Experimental Assessment. <i>Materials</i> , 2022, 15, 1896.	1.3	6
310	The Effect of Magnesium Chloride on the Macroscopic and MI-Croscopic Properties of Phosphate Cement-Based Materials. <i>Coatings</i> , 2022, 12, 370.	1.2	2
311	Enhancing carbonation and strength of MgO cement through 3D printing. <i>Construction and Building Materials</i> , 2022, 328, 126867.	3.2	7
312	Influence of boron on the properties of basic magnesium sulfate cement. <i>Construction and Building Materials</i> , 2022, 327, 126951.	3.2	5
313	Hydration and hardening properties of reactive magnesia and Portland cement composite. <i>Construction and Building Materials</i> , 2022, 327, 126779.	3.2	6
314	Effect of sodium monofluorophosphate and phosphates on mechanical properties and water resistance of magnesium oxychloride cement. <i>Cement and Concrete Composites</i> , 2022, 129, 104472.	4.6	22
315	Evaluation of Mechanical Performance of Compacted Magnesium Hydroxide after Carbonation Curing. <i>Journal of Materials in Civil Engineering</i> , 2022, 34, .	1.3	2
316	Production of Rapid-Hardening Magnesium Oxysulfate Cement Containing Boric Acid. <i>Journal of Materials in Civil Engineering</i> , 2022, 34, .	1.3	12
317	Influence of aluminum sulfate on properties and hydration of magnesium potassium phosphate cements. <i>Cement and Concrete Research</i> , 2022, 156, 106788.	4.6	22
318	Improvement mechanism of water resistance and volume stability of magnesium oxychloride cement: A comparison study on the influences of various gypsum. <i>Science of the Total Environment</i> , 2022, 829, 154546.	3.9	38
319	Effect of Vehicleâ€“Bridge Coupled Vibration on the Performance of Magnesium Phosphate Cement Repair Materials. <i>Materials</i> , 2021, 14, 7743.	1.3	4
320	Evaluation of Cement Performance Using Industrial Byproducts Such as Nano MgO and Fly Ash from Greece. <i>Applied Sciences (Switzerland)</i> , 2021, 11, 11601.	1.3	5
321	BCSA Rawmix Design: Correlation between Chemical Constituents and Mineralogy. <i>ASEAN Journal on Science and Technology for Development</i> , 2021, 38, .	0.2	0
323	Hydration Characteristics and Mechanic Properties of Basic Magnesium Sulfate Cement Containing Steel Slag. <i>Journal of Advanced Concrete Technology</i> , 2022, 20, 277-286.	0.8	1
324	Study on Modification Mechanism of Modifiers on Properties of Sawdust-Magnesium Oxychloride Cement Composites. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0
325	Electrochemical Study of Anodized AZ31 Magnesium Alloy (Mg/MgO) Immersed under Watered Cementice Paste. <i>Journal of Materials Engineering and Performance</i> , 2022, 31, 8896-8905.	1.2	4
326	Materials for Well Integrity â€“ Rheological Behavior Study. , 2022, , .		1
327	Effects of compound mineral admixtures on the properties of magnesium oxysulfate cement. <i>Advances in Cement Research</i> , 2022, 34, 560-573.	0.7	2

#	ARTICLE	IF	CITATIONS
328	Biomimetic Swallow Nest Structure: A Lightweight and High-Strength Thermal Insulation Material. ACS Nano, 2022, 16, 8116-8127.	7.3	30
329	Metallurgical Wastes as Resources for Sustainability of the Steel Industry. Sustainability, 2022, 14, 5488.	1.6	9
330	Thermal Performance of Concrete with Reactive Magnesium Oxide as an Alternative Binder. Sustainability, 2022, 14, 5885.	1.6	3
331	Improved corrosion resistance on Mg-2Ca alloy with TiO ₂ nanoparticles embedded in a polycaprolactone (PCL) coating. Applied Surface Science Advances, 2022, 9, 100257.	2.9	4
332	Experimental research on saline soil erosion resistance of magnesium phosphate cement pastes. Construction and Building Materials, 2022, 341, 127752.	3.2	5
333	The role of calcium silicates and quicklime on the reactivity of rehydrated cements. Construction and Building Materials, 2022, 340, 127625.	3.2	10
334	Effects of magnesia in semi-hydraulic and non-hydraulic calcium silicate binders during carbonation curing. Construction and Building Materials, 2022, 338, 127628.	3.2	6
335	Sulfuric acid-resistance performances of magnesium phosphate cements: Macro-properties, mineralogy and microstructure evolutions. Cement and Concrete Research, 2022, 157, 106830.	4.6	28
336	Structural and durability properties for magnesia alumina silicate concrete. Construction and Building Materials, 2022, 340, 127725.	3.2	3
337	Properties of MgO-SiO ₂ -K ₂ HPO ₄ cement modified with ground blast furnace slag. Ceramics International, 2022, 48, 23618-23629.	2.3	3
338	Investigation on the optimal formulation and mechanism of marine organic silt improved with magnesium-cement-based stabilizer. Construction and Building Materials, 2022, 341, 127233.	3.2	8
339	Influence of Curing Conditions on Hydration of Magnesium Silicate Hydrate Cement. SSRN Electronic Journal, 0, , .	0.4	0
340	Flow-Assisted Selective Mineral Extraction from Seawater. Environmental Science and Technology Letters, 2022, 9, 645-649.	3.9	11
341	Low-carbon stabilization/solidification of municipal solid waste incineration fly ash. Waste Disposal & Sustainable Energy, 2022, 4, 69-74.	1.1	26
342	Research progress on interfacial bonding between magnesium phosphate cement and steel: A review. Construction and Building Materials, 2022, 342, 127925.	3.2	17
343	Isothermal Calorimetry Study of the Effect of Citric Acid on Thehydration Kinetics of Magnesium Oxyulfate Cement. SSRN Electronic Journal, 0, , .	0.4	0
345	The Effect of Doping High Volume Magnesium Sulfate on Properties of Magnesium Oxychloride Cement. Crystals, 2022, 12, 857.	1.0	3
346	Designing Magnesium Phosphate Cement for Stabilization/Solidification of Zn-Rich Electroplating Sludge. Environmental Science & Technology, 2022, 56, 9398-9407.	4.6	20

#	ARTICLE	IF	CITATIONS
347	Study on the modification mechanism of modifiers on the properties of sawdust-magnesium oxychloride cement composite. <i>Construction and Building Materials</i> , 2022, 344, 128172.	3.2	9
348	Enhancing carbonation of magnesium oxide (MgO) cement (RMC)-based composites with calcined limestone. <i>Cement</i> , 2022, 9, 100037.	0.9	8
349	Application of Geopolymer in Stabilization/Solidification of Hazardous Pollutants: A Review. <i>Molecules</i> , 2022, 27, 4570.	1.7	21
350	Effect of adding Na ₂ SO ₄ –MgSO ₄ solution on compressive strength of self-compacting concrete subjected to extreme conditions. <i>Innovative Infrastructure Solutions</i> , 2022, 7, .	1.1	4
351	Hydration products and microstructural properties analysis of magnesium phosphate cement comprising with industrial residues. <i>Construction and Building Materials</i> , 2022, 344, 128228.	3.2	5
352	Early-age mechanical properties and hydration degrees of magnesium phosphate cement paste in freezing winter of cold regions. <i>Construction and Building Materials</i> , 2022, 345, 128337.	3.2	13
353	Delivering Low Carbon Concrete for Network Rail On the Routemap to Net Zero. <i>Case Studies in Construction Materials</i> , 2022, , e01343.	0.8	1
354	Carbon-negative cement manufacturing from seawater-derived magnesium feedstocks. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2022, 119, .	3.3	11
355	In situ X-ray Scattering of the Crystallisation of Basic Magnesium Chlorides using a Laboratory Instrument. <i>Chemistry Methods</i> , 0, , .	1.8	0
356	Tannin-modified magnesium oxychloride cement with high-strength and reinforced water-resistance. <i>Journal of Cleaner Production</i> , 2022, 374, 133543.	4.6	15
358	Periosteum-Inspired Membranes Integrated with Bioactive Magnesium Oxychloride Ceramic Nanoneedles for Guided Bone Regeneration. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 39830-39842.	4.0	10
359	Influence of Copper and Zinc Tailing Powder on the Hydration of Composite Cementitious Materials. <i>Materials</i> , 2022, 15, 5612.	1.3	0
360	CO ₂ storage in cement and concrete by mineral carbonation. <i>Current Opinion in Green and Sustainable Chemistry</i> , 2022, 38, 100672.	3.2	27
361	Binder Jetting 3D Printing of Magnesium Oxychloride Cement-Based Materials: Parametric Analysis of Manufacturing Factors. <i>Journal of Manufacturing and Materials Processing</i> , 2022, 6, 86.	1.0	5
362	Effect of borax on the hydration and setting of magnesium phosphate cements. <i>Construction and Building Materials</i> , 2022, 348, 128686.	3.2	23
363	Performance of magnesium hydroxide gel at different alkali concentrations and its effect on properties of magnesium oxysulfate cement. <i>Construction and Building Materials</i> , 2022, 348, 128669.	3.2	10
364	Experimental research on properties of magnesium oxysulfate cement during high temperature exposure. <i>Composites Part B: Engineering</i> , 2022, 244, 110168.	5.9	11
365	Mechanosynthesizing a dual cation orthophosphate using planetary ball mill; Potassium struvite production employing different primary components. <i>Advanced Powder Technology</i> , 2022, 33, 103751.	2.0	1

#	ARTICLE	IF	CITATIONS
366	Early biomimetic degradation of Mg-2Ca alloy reveals the impact of β -phases at the interface of this biomaterial on a micro-scale level. <i>Corrosion Science</i> , 2022, 207, 110526.	3.0	6
367	In-situ polymerized polyacrylamide/magnesium phosphate cement electrolyte for structural supercapacitor. <i>Journal of Energy Storage</i> , 2022, 55, 105416.	3.9	5
368	Layered double hydroxides nanosheets for capturing chloride ions in magnesium oxychloride cement. <i>Construction and Building Materials</i> , 2022, 351, 128917.	3.2	1
369	Recycling of phosphate tailings and acid wastewater from phosphorus chemical industrial chain to prepare a high value-added magnesium oxysulfate cement. <i>Journal of Cleaner Production</i> , 2022, 369, 133343.	4.6	11
370	Effects of sodium dihydrogen phosphate on properties of magnesium phosphate cement. <i>Journal of Building Engineering</i> , 2022, 60, 105216.	1.6	3
371	Optimization of magnesium phosphate cement: Stabilization of a kaolinitic soil. <i>Transportation Geotechnics</i> , 2022, 37, 100854.	2.0	5
372	Sustainable Improvement of Magnesium Oxychloride Cement Solidified Waste Sludge with Fly-Ash Inclusion. <i>Journal of Materials in Civil Engineering</i> , 2022, 34, .	1.3	17
373	EFFECT OF MgO/MgSO ₄ ,,, MOLAR RATIO ON THE HYDRATION AND MECHANICAL PROPERTIES OF BMS CONTAINING STEEL SLAG. <i>Ceramics - Silikaty</i> , 2022, , 0-0.	0.2	0
374	The phase composition of the MgO-MgSO ₄ -H ₂ O system and mechanisms of chemical additives. <i>Composites Part B: Engineering</i> , 2022, 247, 110328.	5.9	7
375	Effect of partial MgO replacement on the properties of magnesium oxychloride cement. <i>Cement and Concrete Composites</i> , 2022, 134, 104791.	4.6	13
376	Inhibited Cr(VI) formation in Cr ₂ O ₃ -containing refractory castable using reactive MgO as hydraulic binder. <i>Journal of the European Ceramic Society</i> , 2022, 42, 7656-7666.	2.8	5
377	Tailoring the phosphorus release from biochar-based fertilizers: role of magnesium or calcium addition during co-pyrolysis. <i>RSC Advances</i> , 2022, 12, 30539-30548.	1.7	4
378	Hemp Biocomposite Boards Using Improved Magnesium Oxychloride Cement. <i>Energies</i> , 2022, 15, 7320.	1.6	4
379	Physical and Mechanical Properties of Novel Porous Ecological Concrete Based on Magnesium Phosphate Cement. <i>Materials</i> , 2022, 15, 7521.	1.3	4
380	Preparation and Hardened Performance of Bentonite-Induced Porous Magnesium Oxysulfate Cement Paste. <i>Materials</i> , 2022, 15, 6872.	1.3	1
381	Carbon-negative cement-bonded biochar particleboards. <i>Biochar</i> , 2022, 4, .	6.2	16
382	Study on early hydration and properties of basic magnesium sulfate cement using electrodeless resistivity measurements. <i>Advances in Cement Research</i> , 2023, 35, 238-247.	0.7	1
383	The Effect of Mixing Ratios on Physical, Mechanical, and Thermal Properties in Lightweight Composite with Magnesium Oxychloride Cement. <i>International Journal of Thermophysics</i> , 2023, 44, .	1.0	1

#	ARTICLE	IF	CITATIONS
384	A state-of-the-art review on the utilization of calcareous fillers in the alkali activated cement. <i>Construction and Building Materials</i> , 2022, 357, 129348.	3.2	1
385	Improved low-carbon magnesium oxysulfate cement pastes containing boric acid and citric acid. <i>Cement and Concrete Composites</i> , 2022, 134, 104813.	4.6	20
386	Imitating Spiders to catch flying insects: Realizing high-strength bonding of bamboo scraps/magnesium oxychloride lightweight composite interface. <i>Composites Science and Technology</i> , 2022, 230, 109767.	3.8	1
387	Integrated applications of water hyacinth biochar: A circular economy case study. <i>Journal of Cleaner Production</i> , 2022, 378, 134621.	4.6	7
388	Preparation of Magnesium Oxysulfate Cement with Calcined Phosphate Tailings. <i>Journal of Materials in Civil Engineering</i> , 2022, 34, .	1.3	7
389	Effects of co-calcining kaolinite-rich clay blends with alkali and alkali earth metal hydroxides. <i>Applied Clay Science</i> , 2023, 231, 106742.	2.6	4
390	Research progress on the properties and applications of magnesium phosphate cement. <i>Ceramics International</i> , 2023, 49, 4001-4016.	2.3	62
391	Comparison of sawdust bio-composites based on magnesium oxysulfate cement and ordinary Portland cement. <i>Journal of Building Engineering</i> , 2023, 63, 105514.	1.6	4
392	Fire Extinguishing Performance of Chemically Bonded Struvite Ceramic Powder with High Heat-Absorbing and Flame Retardant Properties. <i>Materials</i> , 2022, 15, 8021.	1.3	5
393	Performance of MgO-Mk based M S H concrete column reinforced with steel and BFRP bars under cyclic loads. <i>Structures</i> , 2022, 46, 1764-1780.	1.7	1
394	Influence of curing conditions on hydration of magnesium silicate hydrate cement. <i>Construction and Building Materials</i> , 2022, 361, 129648.	3.2	4
395	Life cycle assessment of brucite and synthetic MgO produced from reject brine using different alkalis. <i>Journal of Cleaner Production</i> , 2022, 380, 135071.	4.6	12
396	The role of biomass bottom ash in Carbonated Reactive Magnesia Cement (CRMC) for CO ₂ mineralisation. <i>Journal of Cleaner Production</i> , 2022, 380, 135092.	4.6	2
397	Effect of a Ca-rich environment on the reaction process of the MgO-activated SiO ₂ system. <i>Cement and Concrete Composites</i> , 2023, 136, 104855.	4.6	4
398	Isothermal calorimetry study of the effect of citric acid on the hydration kinetics of magnesium oxysulfate cement. <i>Construction and Building Materials</i> , 2023, 365, 130041.	3.2	2
399	Filler effects of CaCO ₃ polymorphs derived from limestone and seashell on hydration and carbonation of reactive magnesium oxide (MgO) cement (RMC). <i>Cement and Concrete Research</i> , 2023, 164, 107040.	4.6	15
400	Hydration Behavior of Magnesium Potassium Phosphate Cement: Experimental Study and Thermodynamic Modeling. <i>Materials</i> , 2022, 15, 8496.	1.3	1
401	Effect of Modified Magnesium Oxide on the Properties of Magnesium Phosphate Cement under a Negative Temperature Environment. <i>Materials</i> , 2022, 15, 9047.	1.3	1

#	ARTICLE	IF	CITATIONS
402	Formation of magnesium silicate hydrate (M-S-H) at pH 10 and 50°C in open-flow systems. Applied Geochemistry, 2023, 148, 105544.	1.4	2
403	Uncovering the Early Stages of Magnesium Silicate Hydrate Formation: A Nonclassical Multistep Pathway. , 2023, 1, 696-707.		2
404	Evaluation of Fillers for Magnesium Potassium Phosphate Cement (MKPC) for the Encapsulation of Low and Intermediate Level Metallic Radioactive Wastes. Materials, 2023, 16, 679.	1.3	3
405	Anisotropic compressional behaviour of the Sorel cement F5-phase (Mg ₃ (OH)5Cl·4H ₂ O). Construction and Building Materials, 2023, 366, 130162.	3.2	0
406	Mechanical properties and microstructure of basalt fiber-biobased- basic magnesium sulfate cement. Cement and Concrete Composites, 2023, 137, 104934.	4.6	5
407	Accelerated thermal history analysis of light-burnt magnesium oxide by surface properties. Results in Materials, 2023, 17, 100368.	0.9	0
408	Development of alternative cementitious binders for 3D printing applications: A critical review of progress, advantages and challenges. Composites Part B: Engineering, 2023, 252, 110492.	5.9	19
409	Recent progress and technical challenges in using calcium sulfoaluminate (CSA) cement. Cement and Concrete Composites, 2023, 137, 104908.	4.6	36
410	Potential capture and conversion of CO ₂ from oceanwater through mineral carbonation. Science of the Total Environment, 2023, 867, 161589.	3.9	7
411	Effect of tartaric acid on the early hydration process and water resistance of magnesium oxychloride cement. Journal of Building Engineering, 2023, 66, 105838.	1.6	4
412	Prioritization of habitat construction materials on Mars based on multi-criteria decision-making. Journal of Building Engineering, 2023, 66, 105864.	1.6	1
413	Influence of carbonation curing and nano-silica incorporation on compressive strength and micro-structural development of binary RMC-based systems. Journal of Building Engineering, 2023, 66, 105856.	1.6	2
414	Investigation of the Mechanical Physical Properties of Fly Ash Modified Magnesium Phosphate Cement Repair Mortar Cured at Varying Temperatures. Buildings, 2023, 13, 88.	1.4	2
415	Recent Advances in Alternative Cementitious Materials for Nuclear Waste Immobilization: A Review. Sustainability, 2023, 15, 689.	1.6	5
416	Mechanisms of Mg carbonates precipitation and implications for CO ₂ capture and utilization/storage. Inorganic Chemistry Frontiers, 2023, 10, 2507-2546.	3.0	5
417	Investigation of the performance of basic magnesium sulfate cement mortar. Advances in Cement Research, 2023, 35, 432-451.	0.7	0
418	Impact of amino acids as performance-controlling additives on the hydration of reactive MgO. Journal of Physics: Conference Series, 2023, 2423, 012029.	0.3	0
419	Mechanical Properties and Water Resistance of Magnesium Oxychloride Cement "Solidified Residual Sludge. Processes, 2023, 11, 413.	1.3	1

#	ARTICLE	IF	CITATIONS
420	Stabilization of Soft Clays Exposed to Freeze-Thaw Cycles Using Chitosan. Journal of Cold Regions Engineering - ASCE, 2023, 37, .	0.5	5
421	Improved mechanical strength of magnesium oxysulfate cement using ferric sulfate. Journal of Building Engineering, 2023, 67, 106007.	1.6	1
422	Influence and mechanism of borax on the physico-mechanical properties of magnesium potassium phosphate cement exposed to high temperatures. Construction and Building Materials, 2023, 376, 131015.	3.2	2
423	Mechanism of CaO in Light-Burned Magnesia on the Formation Process, Mechanical Properties, and Water and Chloride Resistance of the 517 Phase. Journal of Materials in Civil Engineering, 2023, 35, .	1.3	1
424	Injectable magnesium oxychloride cement foam-derived scaffold for augmenting osteoporotic defect repair. Journal of Colloid and Interface Science, 2023, 640, 199-210.	5.0	2
425	Effect of seed emulsion on the early hydration behavior of basic magnesium sulfate cement. Construction and Building Materials, 2023, 383, 131316.	3.2	1
426	A new method for carbonating magnesia and its possible application to soil stabilization and CO2 capture. Construction and Building Materials, 2023, 383, 131263.	3.2	1
427	Alternative Non-Portland Binders. Elements, 2022, 18, 314-320.	0.5	7
428	Understanding hydration process and paste viscosity evolution of magnesium potassium phosphate cement. Cement and Concrete Research, 2023, 169, 107177.	4.6	5
429	Preparation and fire extinguishing mechanism of novel fire extinguishing powder based on recyclable struvite. Materials Today Communications, 2023, 34, 105410.	0.9	4
430	Investigation of water stability and microcharacteristics of magnesium potassium phosphate cement modified by calcium aluminate cement and wollastonite. Construction and Building Materials, 2023, 369, 130580.	3.2	4
431	Study on Proportion Optimization of Magnesium Oxychloride Cement-Stabilized Clayey Soil Based on the Response Surface Methodology. Advances in Materials Science and Engineering, 2023, 2023, 1-15.	1.0	0
432	Recent advances in magnesium-based materials: CO2 sequestration and utilization, mechanical properties and environmental impact. Cement and Concrete Composites, 2023, 138, 104983.	4.6	20
433	Advances in the carbonation of MgO-based binder and CO2 utilization in the construction industry. Clean Technologies and Environmental Policy, 2023, 25, 1763-1782.	2.1	4
434	MACRO-MECHANICAL AND MICRO-MICROMECHANICAL PROPERTIES OF NANO-ENHANCED MAGNESIUM OXYCHLORIDE CEMENT. , 2022, , .		0
435	Creep Deformation and Its Effect on Mechanical Properties and Microstructure of Magnesium Phosphate Cement Concrete. Materials, 2023, 16, 1760.	1.3	0
436	The role of nano magnesia in accelerating the early hydration rate of sodium sulfate activated slag. Construction and Building Materials, 2023, 373, 130863.	3.2	8
437	Different effects for phosphoric acid and calcium citrate on properties of magnesium oxysulfate cement. Construction and Building Materials, 2023, 374, 130931.	3.2	4

#	ARTICLE	IF	CITATIONS
438	Effect of Low Nesquehonite Addition on the Hydration Product and Pore Structure of Reactive Magnesia Paste. <i>Materials</i> , 2023, 16, 2445.	1.3	0
439	Durability of Concrete with Partial Replacement of Portland Cement by Incorporating Reactive Magnesium Oxide and Fly Ash. <i>Materials</i> , 2023, 16, 2670.	1.3	1
440	Effect of Epsom Salt Concentration and Dry-Mix Composition on Bonding Properties of Magnesium Oxysulfate. <i>Asian Journal of Chemistry</i> , 2023, 35, 869-876.	0.1	0
441	The Influence of Recycled Cement, Fly Ash, and Magnesium Oxide on the Mechanical Performance of Sustainable Cementitious Materials. <i>Materials</i> , 2023, 16, 2760.	1.3	1
442	Designing low-carbon cement-free binders for stabilization/solidification of MSWI fly ash. <i>Journal of Environmental Management</i> , 2023, 339, 117938.	3.8	15
447	The Impact of Additives and Curing Conditions on the Mechanical Strength and Microstructural Development of MgO Based Systems. <i>Lecture Notes in Civil Engineering</i> , 2023, , 286-297.	0.3	0
478	Study on the mechanism and mechanical properties of magnesium oxychloride cement for blocking pollutants migration from electrolytic manganese residue. <i>Journal of Material Cycles and Waste Management</i> , 0, , .	1.6	0
486	The Resource Utilization and Environmental Assessment of MSWI Fly Ash with Solidification and Stabilization: A Review. <i>Waste and Biomass Valorization</i> , 0, , .	1.8	0
496	Thermal properties of lightweight MKPC composites. <i>AIP Conference Proceedings</i> , 2023, , .	0.3	0
539	Biochar-augmented binders for sustainable stabilization/solidification of wastes. , 2024, , 163-190.		0
540	Cementitious binders incorporating residues. , 2024, , 429-444.		0
554	Finding a Greener, Cost-Effective and Colour-Based Partial or Complete Replacement to White Portland Cement for Cast Stone Production Using TOPSIS. <i>Smart Innovation, Systems and Technologies</i> , 2024, , 159-168.	0.5	0
560	Sulfate Corrosion of MKG. , 2024, , 117-157.		0