

Synthesis and heavy metal immobilization behaviors of

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Citation Report

#	ARTICLE	IF	CITATIONS
1	Geopolymerisation: A review and prospects for the minerals industry. Minerals Engineering, 2007, 20, 1261-1277.	4.3	702
2	Preparation and Characterization of High Compressive Strength Geopolymeric Monoliths Using Silica Waste. Materials Science Forum, 2008, 569, 305-308.	0.3	0
3	Utilisation of low-calcium slags to improve the strength and durability of geopolymers. , 2009, , 343-375.		12
4	Immobilisation of toxic wastes in geopolymers. , 2009, , 421-440.		12
5	Spectroscopic studies of alkaline activated slag geopolymers. Journal of Molecular Structure, 2009, 924-926, 434-441.	3.6	152
6	Synthesis and heavy metal immobilization behaviors of fly ash based gepolymer. Journal Wuhan University of Technology, Materials Science Edition, 2009, 24, 819-825.	1.0	21
7	Geopolymerisation of silt generated from construction and demolition waste washing plants. Waste Management, 2009, 29, 368-373.	7.4	73
8	Effect of synthesis parameters on the compressive strength of low-calcium ferronickel slag inorganic polymers. Journal of Hazardous Materials, 2009, 161, 760-768.	12.4	166
9	Coal fly ash-slag-based geopolymers: Microstructure and metal leaching. Journal of Hazardous Materials, 2009, 166, 561-566.	12.4	200
10	Material and structural characterization of alkali activated low-calcium brown coal fly ash. Journal of Hazardous Materials, 2009, 168, 711-720.	12.4	184
11	Mechanical and microstructural characterization of an alkali-activated slag/limestone fine aggregate concrete. Construction and Building Materials, 2009, 23, 2951-2957.	7.2	92
12	Study on the Geopolymer Based on Fly Ash and Slag. , 2009, , .		5
13	Structure and strength of NaOH activated concretes containing fly ash or GGBFS as the sole binder. Cement and Concrete Composites, 2010, 32, 399-410.	10.7	162
14	Influence of granulated blast furnace slag on the reaction, structure and properties of fly ash based geopolymer. Journal of Materials Science, 2010, 45, 607-615.	3.7	570
15	Use of analytical techniques for identification of inorganic polymer gel composition. Journal of Materials Science, 2010, 45, 2715-2724.	3.7	124
16	The role of open and closed curing conditions on the leaching properties of fly ash-slag-based geopolymers. Journal of Hazardous Materials, 2010, 176, 623-628.	12.4	81
17	Factors affecting the suitability of fly ash as source material for geopolymers. Fuel, 2010, 89, 992-996.	6.4	397
18	Preparing and Characterization of the Geopolymer Based on Desulfurization Ash and Fly Ash. Advanced Materials Research, 0, 150-151, 1599-1602.	0.3	0

#	ARTICLE	IF	CITATIONS
19	Potential application of geopolymers as protection coatings for marine concretel. Basic properties. Applied Clay Science, 2010, 49, 1-6.	5.2	170
20	Potential application of geopolymers as protection coatings for marine concretell. Microstructure and anticorrosion mechanism. Applied Clay Science, 2010, 49, 7-12.	5.2	143
21	Freeze-thaw cycle test and damage mechanics models of alkali-activated slag concrete. Construction and Building Materials, 2011, 25, 3144-3148.	7.2	168
22	Fly ash-based geopolymer for Pb removal from aqueous solution. Journal of Hazardous Materials, 2011, 188, 414-421.	12.4	257
23	Application of Clay - Based Geopolymer in Brick Production: A Review. Advanced Materials Research, 0, 626, 878-882.	0.3	26
24	Calcined Kaolin Geopolymeric Powder: Influence of Water-to-Geopolymeric Powder Ratio. Advanced Materials Research, 2012, 548, 48-53.	0.3	1
25	Polymer Adhesion to Geopolymer via Silane Coupling Agent Additives. Journal of the American Ceramic Society, 2012, 95, 3758-3762.	3.8	12
26	Geopolymerization behavior of Cu-Ni slag mechanically activated in air and in CO2 atmosphere. International Journal of Mineral Processing, 2012, 112-113, 101-106.	2.6	57
27	The heavy metal adsorption characteristics on metakaolin-based geopolymer. Applied Clay Science, 2012, 56, 90-96.	5.2	321
28	Optimization of solids-to-liquid and alkali activator ratios of calcined kaolin geopolymeric powder. Construction and Building Materials, 2012, 37, 440-451.	7.2	106
29	Decalcification resistance of alkali-activated slag. Journal of Hazardous Materials, 2012, 233-234, 112-121.	12.4	52
30	The strength and microstructure of two geopolymers derived from metakaolin and red mud-fly ash admixture: A comparative study. Construction and Building Materials, 2012, 30, 80-91.	7.2	259
31	Processing and characterization of calcined kaolin cement powder. Construction and Building Materials, 2012, 30, 794-802.	7.2	146
32	Production of geopolymeric binder from blended waste concrete powder and fly ash. Construction and Building Materials, 2012, 35, 718-729.	7.2	253
33	Synthesis of inorganic polymers using fly ash and primary lead slag. Journal of Hazardous Materials, 2012, 205-206, 101-110.	12.4	120
34	Mechanical properties of sodium and potassium activated metakaolin-based geopolymers. Journal of Materials Science, 2012, 47, 2607-2616.	3.7	116
35	A comprehensive overview about the influence of different additives on the properties of alkali-activated slag - A guide for Civil Engineer. Construction and Building Materials, 2013, 47, 29-55.	7.2	282
36	Cementitious composites with glass waste from recycling of cathode ray tubes. Materials and Structures/Materiaux Et Constructions, 2013, 46, 2135-2144.	3.1	26

#	ARTICLE	IF	CITATIONS
37	Mechanical properties and setting time of geopolymer paste and mortar produced from ferrochrome slag. , 2013, , .		1
38	In situ synchrotron X-ray pair distribution function analysis of the early stages of gel formation in metakaolin-based geopolymers. Applied Clay Science, 2013, 73, 17-25.	5.2	82
39	New Processing Method of Kaolin-Based Geopolymer Brick by Using Geopolymer Brick Machine. Key Engineering Materials, 0, 594-595, 406-410.	0.4	7
40	Utilization of zinc slag through geopolymerization: Influence of milling atmosphere. International Journal of Mineral Processing, 2013, 123, 102-107.	2.6	65
41	Alkali-activated metakaolin: A short guide for civil Engineer “ An overview. Construction and Building Materials, 2013, 41, 751-765.	7.2	211
42	Synthesis and characterization of red mud and rice husk ash-based geopolymer composites. Cement and Concrete Composites, 2013, 37, 108-118.	10.7	536
43	Properties and microstructure of alkali-activated red clay brick waste. Construction and Building Materials, 2013, 43, 98-106.	7.2	252
44	Durability and leaching behavior of mine tailings-based geopolymer bricks. Construction and Building Materials, 2013, 44, 743-750.	7.2	165
45	A Review on the Immobilization of Heavy Metals with Geopolymers. Advanced Materials Research, 0, 634-638, 173-177.	0.3	2
46	Use of construction and demolition waste (CDW) for alkali-activated or geopolymer cements. , 2013, , 439-475.		26
47	The Effect of Different Parameters on the Development of Compressive Strength of Oil Palm Shell Geopolymer Concrete. Scientific World Journal, The, 2014, 2014, 1-16.	2.1	32
49	Geopolymer Materials Treatment of Calcium Arsenate Waste for Arsenic Immobilization. Advanced Materials Research, 0, 997, 500-503.	0.3	8
50	Simultaneous Reduction and Immobilization of Cr ₂ O ₇ ²⁻ in Metakaolinite-Based Geopolymer Complexed Reductant. Advanced Materials Research, 2014, 936, 892-897.	0.3	0
51	Light Weight Geopolymer Paste Made with Sidoarjo Mud (Lusi). Materials Science Forum, 0, 803, 63-74.	0.3	12
52	Production of Fiber Glass Reinforced Geopolymer Composite Pipe. Materials Science Forum, 2014, 803, 29-36.	0.3	2
53	Strength and microstructure of water treatment residue-based geopolymers containing heavy metals. Construction and Building Materials, 2014, 50, 486-491.	7.2	60
54	Strength and microstructure of alkali-activated binary blended binder containing palm oil fuel ash and ground blast-furnace slag. Construction and Building Materials, 2014, 52, 504-510.	7.2	103
55	Solidification/stabilization of ash from medical waste incineration into geopolymers. Waste Management, 2014, 34, 1823-1828.	7.4	96

#	ARTICLE	IF	CITATIONS
56	Durability of Alkali-Activated Materials: Progress and Perspectives. Journal of the American Ceramic Society, 2014, 97, 997-1008.	3.8	320
57	Recycling of waste PET granules as aggregate in alkali-activated blast furnace slag/metakaolin blends. Construction and Building Materials, 2014, 58, 31-37.	7.2	50
58	Alkali Activated Materials. RILEM State-of-the-Art Reports, 2014, , .	0.7	455
59	Detoxification and immobilization of chromite ore processing residue with metakaolin-based geopolymer. Journal of Environmental Chemical Engineering, 2014, 2, 304-309.	6.7	56
60	Mechanical properties and setting time of ferrochrome slag based geopolymer paste and mortar. Construction and Building Materials, 2014, 72, 283-292.	7.2	124
61	Synthesis and Characterization of Geopolymer from Bayer Red Mud with Thermal Pretreatment. Journal of the American Ceramic Society, 2014, 97, 1652-1660.	3.8	167
62	The identification of geopolymer affinity in specific cases of clay materials. Applied Clay Science, 2014, 102, 213-219.	5.2	22
63	Influence of sand on the mechanical properties of metakaolin geopolymers. Construction and Building Materials, 2014, 66, 442-446.	7.2	81
64	Applicability of alkali activated slag-seeded Egyptian Sinai kaolin for the immobilization of ⁶⁰ Co radionuclide. Journal of Nuclear Materials, 2014, 447, 15-21.	2.7	24
65	Synthesis factors affecting mechanical properties, microstructure, and chemical composition of red mud-fly ash based geopolymers. Fuel, 2014, 134, 315-325.	6.4	178
67	Performance Evolutions of Tailing-Slag-Based Geopolymer Under Severe Conditions. Journal of Sustainable Cement-Based Materials, 2015, 4, 101-115.	3.1	14
68	Influence of Molarity and Chemical Composition on the Development of Compressive Strength in POFA Based Geopolymer Mortar. Advances in Materials Science and Engineering, 2015, 2015, 1-15.	1.8	42
69	Alkali activation of recovered fuel-biofuel fly ash from fluidised-bed combustion: Stabilisation/solidification of heavy metals. Waste Management, 2015, 43, 273-282.	7.4	33
70	Characteristics of Australian brown coal fly ash blended geopolymers. Construction and Building Materials, 2015, 101, 396-409.	7.2	29
71	Effect of synthesis parameters on the quality of construction and demolition wastes (CDW) geopolymers. Advanced Powder Technology, 2015, 26, 368-376.	4.1	211
72	The effects of SiO ₂ /Na ₂ O molar ratio on the characteristics of alkali-activated waste catalyst-metakaolin based geopolymers. Construction and Building Materials, 2015, 95, 710-720.	7.2	43
73	Development of high strength alkali activated binder using palm oil fuel ash and GGBS at ambient temperature. Construction and Building Materials, 2015, 93, 289-300.	7.2	72
74	Application of the Taguchi approach for the composition optimization of alkali activated fly ash binders. Construction and Building Materials, 2015, 91, 17-22.	7.2	66

#	ARTICLE	IF	CITATIONS
75	Heavy Metal Leaching, CO ₂ Uptake and Mechanical Characteristics of Carbonated Porous Concrete with Alkali-Activated Slag and Bottom Ash. International Journal of Concrete Structures and Materials, 2015, 9, 283-294.	3.2	44
76	Epoxy Hardener Filled with Geopolymer Materials for Piping Application: Flexural Properties. Key Engineering Materials, 2015, 660, 44-48.	0.4	5
77	Solidification of nitrate solutions with alkali-activated slag and slag+metakaolin cements. Journal of Nuclear Materials, 2015, 457, 186-195.	2.7	11
78	Immobilization of Cu ²⁺ , Zn ²⁺ , Pb ²⁺ , and Cd ²⁺ during geopolymerization. Frontiers of Environmental Science and Engineering, 2015, 9, 642-648.	6.0	26
79	Porous geopolymeric spheres for removal of Cu(II) from aqueous solution: Synthesis and evaluation. Journal of Hazardous Materials, 2015, 283, 244-251.	12.4	193
80	A novel method to produce dry geopolymer cement powder. HBRC Journal, 2016, 12, 13-24.	0.7	117
81	The Characterization of Fixation of Ba, Pb, and Cu in Alkali-Activated Fly Ash/Blast Furnace Slag Matrix. Materials, 2016, 9, 533.	2.9	21
82	Geopolymers with a high percentage of bottom ash for solidification/immobilization of different toxic metals. Journal of Hazardous Materials, 2016, 318, 145-153.	12.4	80
83	Development of fly ash and iron ore tailing based porous geopolymer for removal of Cu(II) from wastewater. Ceramics International, 2016, 42, 13507-13518.	4.8	152
84	Experiment research on mix design and early mechanical performance of alkali-activated slag using response surface methodology (RSM). Ceramics International, 2016, 42, 11666-11673.	4.8	42
85	Failure and deformation mechanisms at macro- and nano-scales of alkali activated clay. Journal Physics D: Applied Physics, 2016, 49, 235503.	2.8	7
86	Solidification and immobilization of MSWI fly ash through aluminate geopolymerization: Based on partial charge model analysis. Waste Management, 2016, 58, 270-279.	7.4	63
87	Durability of red mud-fly ash based geopolymer and leaching behavior of heavy metals in sulfuric acid solutions and deionized water. Construction and Building Materials, 2016, 124, 373-382.	7.2	137
88	A review of alternatives traditional cementitious binders for engineering improvement of soils. International Journal of Geotechnical Engineering, 0, , 1-11.	2.0	17
89	A comparative study on fly ash, geopolymer and faujasite block for Pb removal from aqueous solution. Fuel, 2016, 185, 181-189.	6.4	154
90	Ground Granulated Blast Furnace Slag (GGBS) and Rice Husk Ash (RHA) Uses in the Production of Geopolymer Concrete. , 2016, , .		12
91	Structure and properties of clay-based geopolymer cements: A review. Progress in Materials Science, 2016, 83, 595-629.	32.8	371
92	Valorization of construction and demolition (C&D) and industrial wastes through alkali activation. Construction and Building Materials, 2016, 121, 686-693.	7.2	98

#	ARTICLE	IF	CITATIONS
93	Alternative cements based on alkali-activated red clay brick waste. Construction and Building Materials, 2016, 128, 163-169.	7.2	100
94	Effect of Glass Reinforced Epoxy (GRE) pipe filled with Geopolymer Materials for Piping Application: Compression Properties. MATEC Web of Conferences, 2016, 78, 01066.	0.2	3
95	Detoxification/immobilization of hexavalent chromium using metakaolin-based geopolymer coupled with ferrous chloride. Journal of Environmental Chemical Engineering, 2016, 4, 2084-2089.	6.7	27
96	Comparative study on the characteristics of ball-milled coal fly ash. Journal of Thermal Analysis and Calorimetry, 2016, 124, 839-846.	3.6	34
97	The effect of type and concentration of activators on flowability and compressive strength of natural pozzolan and slag-based geopolymers. Construction and Building Materials, 2016, 111, 337-347.	7.2	109
98	Immobilization of chromite ore processing residue with alkali-activated blast furnace slag-based geopolymer. Ceramics International, 2016, 42, 9538-9549.	4.8	111
99	Impact of activator type on the immobilisation of lead in fly ash-based geopolymer. Journal of Hazardous Materials, 2016, 305, 59-66.	12.4	76
100	Effects of alkali on one-part alkali-activated cement synthesized by calcining bentonite with dolomite and Na ₂ CO ₃ . Applied Clay Science, 2017, 139, 64-71.	5.2	47
101	Alkali activated slag foams: The effect of the alkali reaction on foam characteristics. Journal of Cleaner Production, 2017, 147, 330-339.	9.3	115
102	Impact of reactive SiO ₂ /Al ₂ O ₃ ratio in precursor on durability of porous alkali activated materials. Ceramics International, 2017, 43, 5471-5477.	4.8	39
103	Efficiency and mechanism of stabilization/solidification of Pb(II), Cd(II), Cu(II), Th(IV) and U(VI) in metakaolin based geopolymers. Applied Clay Science, 2017, 140, 148-156.	5.2	139
104	Steel fibre reinforced geopolymer concrete (SFRGC) with improved microstructure and enhanced fibre-matrix interfacial properties. Construction and Building Materials, 2017, 139, 286-307.	7.2	75
105	Mechanical Properties of Geopolymer Concrete Composites. Materials Today: Proceedings, 2017, 4, 2937-2945.	1.8	70
106	Synthesis of a kaolin-based geopolymer using a novel fusion method and its application in effective water softening. Applied Clay Science, 2017, 146, 238-245.	5.2	67
107	Performance evaluation and some durability characteristics of environmental friendly palm oil clinker based geopolymer concrete. Journal of Cleaner Production, 2017, 161, 477-492.	9.3	71
108	The influence of curing conditions on the mechanical properties and leaching of inorganic polymers made of fayalitic slag. Frontiers of Chemical Science and Engineering, 2017, 11, 317-327.	4.4	37
109	Re-use of waste glass in improving properties of metakaolin-based geopolymers: Mechanical and microstructure examinations. Construction and Building Materials, 2017, 132, 543-555.	7.2	84
110	Immobilization mechanism of Pb in fly ash-based geopolymer. Construction and Building Materials, 2017, 134, 123-130.	7.2	102

#	ARTICLE	IF	CITATIONS
111	CTAB modified large surface area nanoporous geopolymers with high adsorption capacity for copper ion removal. <i>Applied Clay Science</i> , 2017, 150, 106-114.	5.2	68
112	The role of synthesis parameters on the workability, setting and strength properties of binary binder based geopolymer paste. <i>Construction and Building Materials</i> , 2017, 157, 534-545.	7.2	116
113	IR spectral similarity studies of geothermal silica-bentonite based geopolymer. <i>AIP Conference Proceedings</i> , 2017, , .	0.4	11
114	Circulating fluidized bed combustion ash as controlled low-strength material (CLSM) by alkaline activation. <i>Construction and Building Materials</i> , 2017, 156, 728-738.	7.2	39
115	Experimental Study of Geopolymer Synthesized with Class F Fly Ash and Low-Calcium Slag. <i>Journal of Materials in Civil Engineering</i> , 2017, 29, .	2.9	25
116	Optimal conditions of porous ceramic membrane synthesis based on alkali activated blast furnace slag using Taguchi method. <i>Ceramics International</i> , 2017, 43, 14369-14379.	4.8	30
117	Fly ash-based geopolymers containing added silicate waste. A review. <i>Ceramics International</i> , 2017, 43, 14545-14551.	4.8	204
118	Mechanical properties effect on molarity of epoxy hardener filled with geopolymer materials for piping application: Flexural properties. <i>AIP Conference Proceedings</i> , 2017, , .	0.4	2
119	Detoxification and solidification of heavy metal of chromium using fly ash-based geopolymer with chemical agents. <i>Construction and Building Materials</i> , 2017, 151, 394-404.	7.2	60
120	Characterization and application of municipal solid waste incineration (MSWI) bottom ash and waste granite powder in alkali activated slag. <i>Journal of Cleaner Production</i> , 2017, 164, 410-419.	9.3	133
121	Incentive effect of bentonite and concrete admixtures on stabilization/solidification for heavy metal-polluted sediments of Xiangjiang River. <i>Environmental Science and Pollution Research</i> , 2017, 24, 892-901.	5.3	20
122	Reduction/immobilization processes of hexavalent chromium using metakaolin-based geopolymer. <i>Journal of Environmental Chemical Engineering</i> , 2017, 5, 373-380.	6.7	21
123	Development and Characterization of Norite-Based Cementitious Binder from an Ilmenite Mine Waste Stream. <i>Advances in Materials Science and Engineering</i> , 2017, 2017, 1-7.	1.8	6
124	Mechanical properties of different alkali activated slag content for oilwell cement under elevated conditions. <i>Contemporary Engineering Sciences</i> , 0, 10, 165-177.	0.2	5
125	Modeling the Polymerization Process for Geopolymer Synthesis through Reactive Molecular Dynamics Simulations. <i>Journal of Physical Chemistry C</i> , 2018, 122, 6760-6773.	3.1	49
126	Recycling of phosphate mine tailings for the production of geopolymers. <i>Journal of Cleaner Production</i> , 2018, 185, 891-903.	9.3	115
127	Alkali-activated composites of calcium carbide and black rice husk ash for immobilizing electroplating sludge. <i>Environmental Progress and Sustainable Energy</i> , 2018, 37, 1965-1972.	2.3	6
128	Effect of binder type and content on physical and mechanical properties of geopolymers. <i>Sadhana - Academy Proceedings in Engineering Sciences</i> , 2018, 43, 1.	1.3	4

#	ARTICLE	IF	CITATIONS
129	Iron Oxide NPs Facilitated a Smart Building Composite for Heavy-Metal Removal and Dye Degradation. ACS Omega, 2018, 3, 1081-1089.	3.5	35
130	Viability of bacterial spores and crack healing in bacteria-containing geopolymer. Construction and Building Materials, 2018, 169, 716-723.	7.2	62
131	Mechanical, hydrological and microstructural assessment of the durability of cemented paste backfill containing alkali-activated slag. International Journal of Mining, Reclamation and Environment, 2018, 32, 123-143.	2.8	49
132	A Review on Immobilisation of Toxic Wastes Using Geopolymer Technique. Lecture Notes in Civil Engineering, 2018, , 299-309.	0.4	1
133	Physicochemical and mineralogical characterization of Musina mine copper and New Union gold mine tailings: Implications for fabrication of beneficial geopolymeric construction materials. Journal of African Earth Sciences, 2018, 137, 218-228.	2.0	36
134	Reduction/immobilization of chromite ore processing residue using composite materials based geopolymer coupled with zero-valent iron. Ceramics International, 2018, 44, 3454-3463.	4.8	31
135	Solidification/stabilization mechanism of Pb(II), Cd(II), Mn(II) and Cr(III) in fly ash based geopolymers. Construction and Building Materials, 2018, 160, 818-827.	7.2	112
136	Factors affecting properties of high strength geopolymer concrete cured at ambient temperature. International Journal of Microstructure and Materials Properties, 2018, 13, 277.	0.1	1
137	Kaolinite Claystone-Based Geopolymer Materials: Effect of Chemical Composition and Curing Conditions. Minerals (Basel, Switzerland), 2018, 8, 444.	2.0	29
138	Building up and Characterization of Calcined Marl-Based Geopolymeric Cement. Infrastructures, 2018, 3, 22.	2.8	5
139	Solidification Versus Adsorption for Immobilization of Pollutants in Geopolymeric Materials: A Review. , 2018, , .		8
140	Clay-Based Materials in Geopolymer Technology. , 0, , .		30
141	Mechanisms of Heavy Metal Immobilisation using Geopolymerisation Techniques – A review. Journal of Advanced Concrete Technology, 2018, 16, 124-135.	1.8	60
142	Synthesis and Characterization of Porous Fly Ash-Based Geopolymers Using Si as Foaming Agent. Advances in Materials Science and Engineering, 2018, 2018, 1-11.	1.8	23
143	Improvement of physical and mechanical properties of geopolymer through addition of zircon. Materials Chemistry and Physics, 2018, 217, 90-97.	4.0	35
144	Geopolymers as a material suitable for immobilization of fly ash from municipal waste incineration plants. Journal of the Air and Waste Management Association, 2018, 68, 1190-1197.	1.9	35
145	Effect of SCM and nano-particles on static and dynamic mechanical properties of UHPC. Construction and Building Materials, 2018, 182, 118-125.	7.2	64
146	Reaction kinetics of red mud-fly ash based geopolymers: Effects of curing temperature on chemical bonding, porosity, and mechanical strength. Cement and Concrete Composites, 2018, 93, 175-185.	10.7	70

#	ARTICLE	IF	CITATIONS
147	The development of coral concretes and their upgrading technologies: A critical review. Construction and Building Materials, 2018, 187, 1004-1019.	7.2	108
148	Fly ash based geopolymeric foams using silica fume as pore generation agent. Physical, mechanical and acoustic properties. Journal of Non-Crystalline Solids, 2018, 500, 196-204.	3.1	45
149	The effect of mineralogy of calcined shales on the alkali activation and geopolymerization reactions: A case study from Abu-Tartur plateau, Western Desert, Egypt. Applied Clay Science, 2018, 162, 90-100.	5.2	12
150	Reaction products, structure and properties of alkali-activated metakaolin cements incorporated with supplementary materials – a review. Journal of Materials Research and Technology, 2019, 8, 1522-1531.	5.8	61
151	Uptake of heavy metal ions in layered double hydroxides and applications in cementitious materials: Experimental evidence and first-principle study. Construction and Building Materials, 2019, 222, 96-107.	7.2	21
152	Performance evaluation of alkali activated mortar containing high volume of waste brick powder blended with ground granulated blast furnace slag cured at ambient temperature. Construction and Building Materials, 2019, 223, 657-667.	7.2	69
153	Marl as a supplementary material to alkali-activated blended cements. European Journal of Environmental and Civil Engineering, 2019, , 1-18.	2.1	3
154	Effect of Concrete Waste on Compressive Strength and Microstructure Development of Ceramic Geopolymer Pastes. Transactions of the Indian Ceramic Society, 2019, 78, 146-154.	1.0	10
155	A comparative study of the utilization of synthetic foaming agent and aluminum powder as pore-forming agents in lightweight geopolymer synthesis. Open Chemistry, 2019, 17, 629-638.	1.9	11
156	A review on heavy metal pollution, toxicity and remedial measures: Current trends and future perspectives. Journal of Molecular Liquids, 2019, 290, 111197.	4.9	855
157	Preparation of a geopolymer from red mud slurry and class F fly ash and its behavior at elevated temperatures. Construction and Building Materials, 2019, 221, 308-317.	7.2	92
158	Fabrication of interconnected macroporosity in geopolymers via inverse suspension polymerization. Journal of the American Ceramic Society, 2019, 102, 4405-4409.	3.8	8
159	Development of metakaolin-based geopolymer for solidification of sulfate-rich HyBRID sludge waste. Journal of Nuclear Materials, 2019, 518, 247-255.	2.7	22
160	Application of alkali-activated materials for water and wastewater treatment: a review. Reviews in Environmental Science and Biotechnology, 2019, 18, 271-297.	8.1	117
161	Mechanical properties and microstructure analysis of FA-GGBS-HMNS based geopolymer concrete. Construction and Building Materials, 2019, 210, 198-209.	7.2	127
162	Geopolymers produced from drinking water treatment residue and bottom ash for the immobilization of heavy metals. Chemosphere, 2019, 225, 579-587.	8.2	46
163	Immobilization of Pb from mine sediments in metakaolin-based geomaterials. Environmental Science and Pollution Research, 2019, 26, 14473-14482.	5.3	6
164	Fabrication, sinterability and characterization of non-colored and colored geopolymers with improved properties. Materials Research Express, 2019, 6, 075205.	1.6	10

#	ARTICLE	IF	CITATIONS
165	Recycling of slag and lead-bearing sludge in the cleaner production of alkali activated cement with high performance and microbial resistivity. Journal of Cleaner Production, 2019, 220, 568-580.	9.3	64
166	Effects of Reactive MgO on the Reaction Process of Geopolymer. Materials, 2019, 12, 526.	2.9	26
167	Effect of Nano-Silica and Micro Steel Fiber on Compressive Strength Development of Fly Ash Geopolymer Paste Cured Under Ambient Temperature. IOP Conference Series: Materials Science and Engineering, 2019, 584, 012010.	0.6	8
168	Hybrid Geopolymeric Foams for the Removal of Metallic Ions from Aqueous Waste Solutions. Materials, 2019, 12, 4091.	2.9	22
169	Efficiency of stabilization/solidification of heavy metals contained in hydroxide sludge waste into metakaolin based geopolymers. Environmental Progress and Sustainable Energy, 2019, 38, 13137.	2.3	4
170	Potential utilization of artisanal gold-mine tailings as geopolymeric source material: preliminary investigation. SN Applied Sciences, 2019, 1, 1.	2.9	38
171	Bibliographic and visualized analysis of geopolymer research and its application in heavy metal immobilization: A review. Journal of Environmental Management, 2019, 231, 256-267.	7.8	122
172	Synthesis and Reaction Mechanism of an Alkali-Activated Metakaolin-Slag Composite System at Room Temperature. Journal of Materials in Civil Engineering, 2019, 31, .	2.9	36
173	Biomass fly ash and biomass bottom ash. , 2019, , 23-58.		20
174	Immobilization efficiency and mechanism of metal cations (Cd ²⁺ , Pb ²⁺ and Zn ²⁺) and anions (AsO ₄ ³⁻) Tj ETQq1 1.0.784314 rgBT /Ove 12.4 74 ⁸		
175	Development the properties of brick geopolymer pastes using concrete waste incorporating dolomite aggregate. Journal of Building Engineering, 2020, 27, 100919.	3.4	19
176	Constructing a novel nano-TiO ₂ /Epoxy resin composite and its application in alkali-activated slag/fly ash pastes. Construction and Building Materials, 2020, 232, 117218.	7.2	33
177	Immobilization behavior of Sr in geopolymer and its ceramic product. Journal of the American Ceramic Society, 2020, 103, 1372-1384.	3.8	24
178	Interplay between storage temperature, medium and leaching kinetics of hazardous wastes in Metakaolin-based geopolymer. Journal of Hazardous Materials, 2020, 384, 121377.	12.4	51
179	Fly ash and zinc slag blended geopolymer: Immobilization of hazardous materials and development of paving blocks. Journal of Hazardous Materials, 2020, 387, 121673.	12.4	58
180	Effects of Na/Al ratio on mechanical properties and microstructure of red mud-coal metakaolin geopolymer. Construction and Building Materials, 2020, 263, 120653.	7.2	44
181	Evaluation of Industrial by-products as pozzolans: A road map for use in concrete production. Case Studies in Construction Materials, 2020, 13, e00424.	1.7	18
182	Decalcification effect on stabilization/solidification performance of Pb-containing geopolymers. Cement and Concrete Composites, 2020, 114, 103803.	10.7	27

#	ARTICLE	IF	CITATIONS
183	Characteristics of underwater cast and cured geopolymers. Cement and Concrete Composites, 2020, 114, 103783.	10.7	19
184	Structure–Property Relationship of Geopolymers for Aqueous Pb Removal. ACS Omega, 2020, 5, 21689-21699.	3.5	10
185	A Review of Geopolymer Based Metakaolin Membrane as an Effective Adsorbent for Waste Water Treatment.. IOP Conference Series: Materials Science and Engineering, 2020, 864, 012128.	0.6	5
186	The Incorporation of Sodium Hydroxide (NaOH) Concentration and CaO-Si Components on Ground Granulated Blast Furnace Slag Geopolymers.. IOP Conference Series: Materials Science and Engineering, 2020, 864, 012005.	0.6	7
187	Effect of graphite additions on the intumescent behaviour of alkali-activated materials based on glass waste. Journal of Materials Research and Technology, 2020, 9, 14338-14349.	5.8	11
188	Optimal Mixture Designs for Heavy Metal Encapsulation in Municipal Solid Waste Incineration Fly Ash. Applied Sciences (Switzerland), 2020, 10, 6948.	2.5	3
189	Role of Clay Minerals Content and Calcite in Alkali Activation of Low-Grade Multimineral Clays. Journal of Materials in Civil Engineering, 2020, 32, .	2.9	12
191	Production of geopolymer adhesive paste material for NSM technique. AIP Conference Proceedings, 2020, , .	0.4	11
192	Chemical evaluation of immobilization of wastes containing Pb, Cd, Cu and Zn in alkali-activated materials: A critical review. Journal of Environmental Chemical Engineering, 2020, 8, 104194.	6.7	37
193	Durability and leach-ability evaluation of K-based geopolymer concrete in real environmental conditions. Case Studies in Construction Materials, 2020, 13, e00366.	1.7	5
194	Stabilization of Calcareous Sand by Applying the Admixture of Alkali-Activated Slag (AAS) and Biochar. , 2020, , .		4
195	Immobilization of hazardous municipal solid waste incineration fly ash by novel alternative binders derived from cementitious waste. Journal of Hazardous Materials, 2020, 393, 122386.	12.4	63
196	Behavior of geopolymer concrete under cyclic loading. Construction and Building Materials, 2020, 246, 118430.	7.2	9
197	Improved simultaneous adsorption of Cu(II) and Cr(VI) of organic modified metakaolin-based geopolymer. Arabian Journal of Chemistry, 2020, 13, 4811-4823.	4.9	45
198	Phase composition of ceramic-based alkali-activated polymers: combination of X-ray diffraction and thermal analysis. Journal of Thermal Analysis and Calorimetry, 2020, 142, 157-166.	3.6	5
199	Strength development of solely ground granulated blast furnace slag geopolymers. Construction and Building Materials, 2020, 250, 118720.	7.2	82
200	Influence of the Activator Concentration and Solid/Liquid Ratio on the Strength and Shrinkage Characteristics of Alkali-Activated Slag Geopolymer Pastes. Advances in Civil Engineering, 2021, 2021, 1-11.	0.7	9
201	The engineering properties and reaction mechanism of MgO-activated slag cement-clayey sand-bentonite (MSB) cutoff wall backfills. Construction and Building Materials, 2021, 271, 121890.	7.2	16

#	ARTICLE	IF	CITATIONS
202	Arsenic sequestration by iron oxide coated geopolymer microspheres. Journal of Cleaner Production, 2021, 291, 125931.	9.3	24
203	Damage evaluation and deformation behavior of mine tailing-based Geopolymer under uniaxial cyclic compression. Ceramics International, 2021, 47, 10773-10785.	4.8	33
204	Alkali-Activated Materials as Catalysts for Water Purification. Catalysts, 2021, 11, 664.	3.5	10
205	Behavior of alkali-activated pozzocrete-fly ash paste modified with ceramic tile waste against elevated temperatures and seawater attacks. Construction and Building Materials, 2021, 285, 122866.	7.2	14
206	Combined Influence of Low-Grade Metakaolins and Natural Zeolite on Compressive Strength and Heavy Metal Adsorption of Geopolymers. Minerals (Basel, Switzerland), 2021, 11, 486.	2.0	7
207	Characterization and adsorption performance of waste-based porous open-cell geopolymer with one-pot preparation. Ceramics International, 2021, 47, 12153-12162.	4.8	28
208	Review on Performance Evaluation of Autonomous Healing of Geopolymer Composites. Infrastructures, 2021, 6, 94.	2.8	15
209	Synthesis of geopolymer for the removal of hazardous waste: a review. IOP Conference Series: Earth and Environmental Science, 2021, 779, 012102.	0.3	4
210	The Effects of Nanosilica on Mechanical Properties and Fracture Toughness of Geopolymer Cement. Polymers, 2021, 13, 2178.	4.5	31
211	Survey of Mechanical Properties of Geopolymer Concrete: A Comprehensive Review and Data Analysis. Materials, 2021, 14, 4690.	2.9	64
212	Ambient temperature cured “just-add-water” geopolymer for 3D concrete printing applications. Cement and Concrete Composites, 2021, 121, 104060.	10.7	72
213	A novel titania/graphene composite applied in reinforcing microstructural and mechanical properties of alkali-activated slag. Journal of Building Engineering, 2021, 41, 102386.	3.4	13
214	Effect of steel slag and curing temperature on the improvement in technological properties of biomass bottom ash based alkali-activated materials. Construction and Building Materials, 2021, 302, 124205.	7.2	32
215	Thermal-mechanical properties of metakaolin-based geopolymer containing silicon carbide microwhiskers. Cement and Concrete Composites, 2021, 123, 104168.	10.7	13
216	Effects of pre-setting chemical exchanges on geopolymers cast in saline waters. Construction and Building Materials, 2021, 308, 125020.	7.2	7
217	A review on characteristics of silico-manganese slag and its utilization into construction materials. Resources, Conservation and Recycling, 2022, 176, 105946.	10.8	39
218	Prediction of compressive strength of geopolymer products using central composite design. Materials Today: Proceedings, 2021, 45, 4483-4489.	1.8	1
219	Binder Chemistry “ Blended Systems and Intermediate Ca Content. RILEM State-of-the-Art Reports, 2014, , 125-144.	0.7	26

#	ARTICLE	IF	CITATIONS
220	Alkali activated ceramic waste with or without two different calcium sources. <i>Advances in Materials Research</i> (South Korea), 2015, 4, 133-144.	0.6	7
221	A study on the compressive strength and microstructure characteristic of alkali-activated metakaolin cement. <i>Revista Materia</i> , 2019, 24, .	0.2	14
222	Methods of curing geopolymer concrete: A review. <i>International Journal of Advanced and Applied Sciences</i> , 2018, 5, 31-36.	0.4	103
223	Flyash Based Geopolymer Concrete – A State of the Art Review. <i>Journal of Engineering Science and Technology Review</i> , 2013, 6, 25-32.	0.4	17
224	The possibility of using waste materials as raw materials for the production of geopolymers. <i>Acta Innovations</i> , 2020, , 48-56.	1.0	16
225	The overview of mechanical properties of short natural fiber reinforced geopolymer composites. <i>Environmental Research and Technology</i> , 2020, 3, 21-32.	0.7	18
226	Development of Waste-Based Alkali-Activated Cement Composites. <i>Materials</i> , 2021, 14, 5815.	2.9	0
228	Preparation and Characterization of the Mine Residue-based Geopolymeric Ceramics. <i>Korean Journal of Materials Research</i> , 2011, 21, 502-508.	0.2	1
229	Characteristics of geopolymer based on recycling resources. <i>Journal of the Korean Crystal Growth and Crystal Technology</i> , 2012, 22, 152-157.	0.3	6
230	Property enhancement of geopolymer by means of separation/classification of spent-resources. <i>Journal of the Korean Crystal Growth and Crystal Technology</i> , 2012, 22, 299-304.	0.3	1
232	Thermal Property of Geopolymer Ceramics Based on Fly Ash-Blast Furnace Slag. <i>Korean Journal of Materials Research</i> , 2016, 26, 521-527.	0.2	0
233	Basic oxygen furnace and ground granulated blast furnace slag based alkali-activated pastes: Characterization and optimization. <i>Journal of Cleaner Production</i> , 2021, 327, 129483.	9.3	20
234	Characteristics of Novel Geopolymer Composites Synthesized from Red Mud and Diatomaceous Earth in Autoclave Conditions without Using Alkaline Activators. <i>Journal of Polymer & Composites</i> , 0, , .	0.0	2
236	The effect of micro-SiO ₂ and micro-Al ₂ O ₃ additive on the strength properties of ceramic powder-based geopolymer pastes. <i>Journal of Material Cycles and Waste Management</i> , 2022, 24, 333-350.	3.0	24
237	Alkaline activation of high-crystalline low-Al ₂ O ₃ Construction and Demolition Wastes to obtain geopolymers. <i>Journal of Cleaner Production</i> , 2022, 330, 129770.	9.3	21
238	Experimental study of the mechanical properties and microstructure of geopolymer paste containing nano-silica from agricultural waste and crystalline admixtures. <i>Case Studies in Construction Materials</i> , 2022, 16, e00792.	1.7	23
239	Utilisation of waste glass powder to improve the performance of hazardous incinerated biomedical waste ash geopolymer concrete. <i>Innovative Infrastructure Solutions</i> , 2022, 7, 1.	2.2	13
240	A comprehensive overview of geopolymer composites: A bibliometric analysis and literature review. <i>Case Studies in Construction Materials</i> , 2022, 16, e00830.	1.7	32

#	ARTICLE	IF	CITATIONS
241	Physicomechanical properties, stabilization mechanism, and antifungal activity of alkali-activated slag mixed with Cr6+ and Ni2+ rich industrial wastewater. Journal of Building Engineering, 2022, 46, 103813.	3.4	4
242	The effect of curing regimes on physico-mechanical, microstructural and durability properties of alkali-activated materials: A review. Construction and Building Materials, 2022, 321, 126335.	7.2	41
243	The Influence that Dissolution Properties of Aluminosilicates to Alkali Solutions Have on the Immobilization of Cesium in Fly Ash by Geopolymer Solidification. Journal of the Japan Society of Material Cycles and Waste Management, 2021, 32, 136-146.	0.0	0
244	Metakaolin-Based Geopolymers: Influence of Metakaolins on Quantitative Phase Composition and Mechanical Properties. SSRN Electronic Journal, 0, , .	0.4	0
245	Ternary combined industrial wastes for non-fired brick. Australian Journal of Structural Engineering, 2022, 23, 163-176.	1.1	3
246	Recent Developments in Steelmaking Industry and Potential Alkali Activated Based Steel Waste: A Comprehensive Review. Materials, 2022, 15, 1948.	2.9	14
247	Development of Geopolymer Foams for Multifunctional Applications. Crystals, 2022, 12, 386.	2.2	5
248	Blended Alkali-Activated Cements Based on Blast-Furnace Slag and Calcined Clays: Statistical Modeling and Effect of Amount and Chemistry of Reactive Phase. Journal of Materials in Civil Engineering, 2022, 34, .	2.9	1
249	Investigation of the effect of commercial limestone on alkali-activated blends based on Algerian slag-glass powder. European Journal of Environmental and Civil Engineering, 2022, 26, 8049-8072.	2.1	4
250	Effect of Slag on the Strength and Shrinkage Properties of Metakaolin-Based Geopolymers. Materials, 2022, 15, 2944.	2.9	7
251	Incorporation of bioleached sulfidic mine tailings in one-part alkali-activated blast furnace slag mortar. Construction and Building Materials, 2022, 333, 127195.	7.2	9
253	Application of central composite design for optimisation of the development of metakaolin based geopolymer as adsorbent for water treatment. International Journal of Environmental Analytical Chemistry, 0, , 1-19.	3.3	7
254	Plant-Derived Smoke Solution Alleviates Cellular Oxidative Stress Caused by Arsenic and Mercury by Modulating the Cellular Antioxidative Defense System in Wheat. Plants, 2022, 11, 1379.	3.5	11
255	Study on mechanical properties and solidification mechanism of stabilized dredged materials with recycled GFRP fibre reinforced geopolymer. Case Studies in Construction Materials, 2022, 17, e01187.	1.7	3
257	Structural and physico-mechanical investigations of Na ⁺ , Ba ²⁺ , O ²⁻ geopolymer for γ -radiation attenuating applications. Ceramics International, 2022, 48, 29359-29365.	4.8	2
258	The Study on the Properties and TCLP of GGBFS-Based Heavy-Metal-Contaminated Soil Geopolymer. Crystals, 2022, 12, 900.	2.2	5
259	Application of Geopolymer in Stabilization/Solidification of Hazardous Pollutants: A Review. Molecules, 2022, 27, 4570.	3.8	21
260	Simultaneous stabilization/solidification of arsenic in acidic wastewater and tin mine tailings with synthetic multiple solid waste base geopolymer. Journal of Environmental Management, 2022, 320, 115783.	7.8	7

#	ARTICLE	IF	CITATIONS
261	Performance optimization and characterization of loess-slag-based geopolymer composite: A new sustainable green material for backfill. Construction and Building Materials, 2022, 354, 129103.	7.2	6
262	Performance Optimization and Characterization of Loess-Slag-Based Geopolymer Composite: A New Sustainable Green Material for Backfill. SSRN Electronic Journal, 0, , .	0.4	0
263	Solidification/stabilization of hazardous wastes by alkali activation. , 2022, , 279-313.		0
264	Stabilization/Solidification of Wastes Containing Oxyanionic Metals: Reactions of Alkali-Activated Aluminosilicate Binders with Chromium, Arsenic, and Antimony in Comparison with Zinc. Water, Air, and Soil Pollution, 2022, 233, .	2.4	2
265	Sustainability Assessment of Recycling Leaching Closed-Loop Processes for Black Shale Raffinate and Intensive Examination of Crux Factors Including Fluoride and Heavy Metals. Journal of Sustainable Metallurgy, 0, , .	2.3	0
266	Mechanical Properties and Fracture Parameters of Geopolymers based on Cellulose Nanocrystals from Typha sp. Fibers. Case Studies in Construction Materials, 2022, , e01498.	1.7	0
267	Effect of Different Activators on Properties of Slag-Gold Tailings-Red Mud Ternary Composite. Sustainability, 2022, 14, 13573.	3.2	3
268	Influence of GGBFS and silica fume on characteristics of alkali-activated Metakaolin-based concrete. European Journal of Environmental and Civil Engineering, 2023, 27, 3260-3283.	2.1	4
269	Research on the Pavement Performance of Slag/Fly Ash-Based Geopolymer-Stabilized Macadam. Applied Sciences (Switzerland), 2022, 12, 10000.	2.5	4
270	Geopolymer concrete for net-zero buildings: Correlating paste chemistry with monolith hygrothermal performance. Resources, Conservation and Recycling, 2023, 189, 106743.	10.8	6
271	Blending Plastics Waste with Highly Available Jordanian Kaolin for Preparation of Alkali-Activated Mortars. Sustainability, 2022, 14, 15742.	3.2	0
272	Macroscopic Properties and Pore Structure Fractal Characteristics of Alkali-Activated Metakaolin-Slag Composite Cementitious Materials. Polymers, 2022, 14, 5217.	4.5	2
273	Use of Fe and Al Containing Electrocoagulation Sludge as an Adsorbent and a Catalyst in Water Treatment. Journal of Environmental Engineering, ASCE, 2023, 149, .	1.4	0
274	Characteristics of palm oil fuel ash geopolymer mortar activated with wood ash lye cured at ambient temperature. Journal of Building Engineering, 2023, 66, 105851.	3.4	3
275	Heavy metals immobilization of ternary geopolymer based on nickel slag, lithium slag and metakaolin. Journal of Hazardous Materials, 2023, 453, 131380.	12.4	28
276	Novel binder material in geopolymer mortar production: Obsidian stone powder. Structural Concrete, 2023, 24, 5600-5613.	3.1	3
277	Zinc oxide in alkali-activated slag (AAS): retardation mechanism, reaction kinetics and immobilization. Construction and Building Materials, 2023, 371, 130739.	7.2	3
278	High temperature performance of geopolymers based on construction and demolition waste. Journal of Building Engineering, 2023, 72, 106575.	3.4	7

#	ARTICLE	IF	CITATIONS
279	Study of the Mechanical Properties and Microstructure of Alkali-Activated Fly Ash-Slag Composite Cementitious Materials. <i>Polymers</i> , 2023, 15, 1903.	4.5	5
282	A state-of-the-art review on the mechanical behaviours of GGBFS concrete for sustainable development. <i>Materials Today: Proceedings</i> , 2023, , .	1.8	1
283	Influence of precursor materials and molar ratios on normal, high, and ultra-high performance geopolymer concrete – A state of art review. <i>Construction and Building Materials</i> , 2023, 392, 132006.	7.2	12
284	Development of high-strength rammed earth walls with alkali-activated ground granulated blast furnace slag (GGBFS) and waste tire textile fiber (WTF) as a step towards low-carbon building materials. <i>Construction and Building Materials</i> , 2023, 394, 132180.	7.2	6
285	Proposition of geopolymers obtained through the acid activation of iron ore tailings with phosphoric acid. <i>Construction and Building Materials</i> , 2023, 403, 133078.	7.2	1
287	Advancements in Geopolymer Concrete: A State-of-the-Art Analysis of Its Mechanical and Durability Features. <i>Iranian Journal of Science and Technology - Transactions of Civil Engineering</i> , 0, , .	1.9	0
288	Synergistic effect of characteristics of raw materials on controlling the mechanical properties of fly ash-based geopolymers. <i>Cement and Concrete Composites</i> , 2024, 145, 105368.	10.7	1
289	Comprehensive Analysis of Geopolymer Materials: Properties, Environmental Impacts, and Applications. <i>Materials</i> , 2023, 16, 7363.	2.9	4
290	Evaluating lithium slag for geopolymer concrete: A review of its properties and sustainable construction applications. <i>Case Studies in Construction Materials</i> , 2024, 20, e02822.	1.7	0
292	A comprehensive assessment of green concrete incorporated with municipal solid waste incineration bottom: Experiments and life cycle assessment (LCA). <i>Construction and Building Materials</i> , 2024, 413, 134822.	7.2	0
293	Review on the effect collision between hazardous metal ions and geopolymer as adsorbents or in situ stabilization/solidification. <i>Applied Clay Science</i> , 2024, 249, 107258.	5.2	1
294	Stabilization/solidification mechanisms of tin tailings and fuming slag-based geopolymers for different heavy metals. <i>Frontiers of Environmental Science and Engineering</i> , 2024, 18, .	6.0	0
295	Characteristics of geopolymer stabilised compressed earth bricks. <i>Structures</i> , 2024, 61, 106007.	3.6	0
296	Thermal insulation and flammability of composite waste polyurethane foam encapsulated in geopolymer for sustainable building envelope. <i>Journal of Cleaner Production</i> , 2024, 446, 141387.	9.3	0