Early strength development and hydration of alkali-act blends

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#	Article	IF	Citations
1	Alkali-activated fly ash/slag cements. Cement and Concrete Research, 2000, 30, 1625-1632.	4.6	705
2	High performance cementing materials from industrial slags â€" a review. Resources, Conservation and Recycling, 2000, 29, 195-207.	5.3	483
3	Effect of geothermal waste on strength and microstructure of alkali-activated slag cement mortars. Cement and Concrete Research, 2003, 33, 1567-1574.	4.6	32
4	Mineralogical and microstructural characterisation of alkali-activated fly ash/slag pastes. Cement and Concrete Composites, 2003, 25, 287-292.	4.6	331
5	Increasing Coal Fly Ash Use in Cement and Concrete Through Chemical Activation of Reactivity of Fly Ash. Energy Sources Part A Recovery, Utilization, and Environmental Effects, 2003, 25, 617-628.	0.5	17
6	Characteristics of bricks made from waste steel slag. Waste Management, 2004, 24, 1043-1047.	3.7	104
7	Activated fly ash/slag blended cement. Resources, Conservation and Recycling, 2007, 52, 303-313.	5.3	106
8	Utilization of steel slag for Portland cement clinker production. Journal of Hazardous Materials, 2008, 152, 805-811.	6.5	451
9	Studies on mortars containing waste bottle glass and industrial by-products. Construction and Building Materials, 2008, 22, 1288-1298.	3.2	59
10	Behavior of combined fly ash/slagâ€based geopolymers when exposed to high temperatures. Fire and Materials, 2010, 34, 163-175.	0.9	57
11	Utilization of High Carbon Fly Ash and Coal Gangue in Blended Cement: A Case Study. , 2009, , .		2
12	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.	1.7	570
13	The encapsulation of Mg(OH)2 sludge in composite cement. Cement and Concrete Research, 2010, 40, 452-459.	4.6	12
14	Study of Foamed Concrete from Activated Ash/Slag Blended Cement. Advanced Materials Research, 0, 160-162, 821-826.	0.3	5
15	Preparation of high performance blended cements and reclamation of iron concentrate from basic oxygen furnace steel slag. Resources, Conservation and Recycling, 2011, 56, 48-55.	5.3	154
16	Evolution of strength, microstructure and mineralogical composition of a CKDâ€"GGBFS binder. Cement and Concrete Research, 2011, 41, 197-208.	4.6	43
17	Structural characteristics and hydration kinetics of modified steel slag. Cement and Concrete Research, 2011, 41, 324-329.	4.6	172
18	The potential for using slags activated with near neutral salts as immobilisation matrices for nuclear wastes containing reactive metals. Journal of Nuclear Materials, 2011, 413, 183-192.	1.3	40

#	Article	IF	Citations
19	Effect of the Combined Using of Fly Ash and Granulated Blast Furnace Slag on Properties of Cementless Alkali-Activated Mortar. Advanced Materials Research, 2011, 287-290, 916-921.	0.3	0
20	Measures to Reduce Carbon Dioxide Emission of China Cement Industry. Advanced Materials Research, 0, 233-235, 412-415.	0.3	5
21	Recycling and use of wastes/co-products from the iron/steel and alumina industries. International Journal of Environment and Waste Management, 2011, 8, 174.	0.2	4
22	Research on the Strength and Permeability of Fly Ash Concrete Mixing Fiber. Advanced Materials Research, 0, 531, 647-650.	0.3	0
23	Effect of simulative pore solution on the hydration kinetics of GGBFS. Advances in Cement Research, 2012, 24, 283-290.	0.7	5
24	Ceramic waste as aggregate and supplementary cementing material: A combined action to contrast alkali silica reaction (ASR). Cement and Concrete Composites, 2012, 34, 1141-1148.	4.6	37
25	Recovery of calcium carbonate from steelmaking slag and utilization for acid mine drainage pre-treatment. Water Science and Technology, 2012, 65, 2236-2241.	1.2	16
26	Portland cement-blast furnace slag mortars activated using waterglass: â€“ Part 1: Effect of slag replacement and alkali concentration. Construction and Building Materials, 2012, 37, 462-469.	3.2	43
27	A comprehensive overview about the influence of different additives on the properties of alkali-activated slag â€“ A guide for Civil Engineer. Construction and Building Materials, 2013, 47, 29-55.	3.2	282
28	Influence of the composition of cement kiln dust on its interaction with fly ash and slag. Cement and Concrete Research, 2013, 54, 106-113.	4.6	36
29	Binding mechanism and properties of alkali-activated fly ash/slag mortars. Construction and Building Materials, 2013, 40, 291-298.	3.2	303
30	Effectiveness of novel and traditional methods to incorporate industrial wastes in cementitious materialsâ€”An overview. Resources, Conservation and Recycling, 2013, 74, 134-143.	5.3	83
31	Influence of iron making slags on strength and microstructure of fly ash geopolymer. Construction and Building Materials, 2013, 38, 924-930.	3.2	178
32	Soil Modification by the Application of Steel Slag. Periodica Polytechnica: Civil Engineering, 2014, 58, 371-377.	0.6	60
33	Influence of mineral admixtures on strength and hydration products of lime-activated slag cement. Advances in Cement Research, 2014, 26, 334-343.	0.7	6
34	A comprehensive overview about the influence of different admixtures and additives on the properties of alkali-activated fly ash. Materials & Design, 2014, 53, 1005-1025.	5.1	254
35	Activation of ground granulated blast furnace slag by using calcined dolomite. Construction and Building Materials, 2014, 68, 252-258.	3.2	45
36	A review on alkali-activated slag cements incorporated with supplementary materials. Journal of Sustainable Cement-Based Materials, 2014, 3, 61-74.	1.7	35

#	Article	IF	Citations
37	Effect of GGBFS on setting, workability and early strength properties of fly ash geopolymer concrete cured in ambient condition. Construction and Building Materials, 2014, 66, 163-171.	3.2	933
38	Characterisation of ground hydrated Portland cement-based mortar as an additive to alkali-activated slag cement. Cement and Concrete Composites, 2015, 57, 55-63.	4.6	13
39	Reaction kinetics, gel character and strength of ambient temperature cured alkali activated slagâ€“fly ash blends. Construction and Building Materials, 2015, 80, 105-115.	3.2	276
40	Utilization of Ladle Furnace slag from a steelwork for laboratory scale production of Portland cement. Construction and Building Materials, 2015, 94, 837-843.	3.2	73
41	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.	3.2	72
42	PERFORMANCE OF STEEL SLAG AGGREGATE CONCRETE WITH VARIED WATER- CEMENT RATIO. Jurnal Teknologi (Sciences and Engineering), 2016, 78, .	0.3	10
43	Experiment research on mix design and early mechanical performance of alkali-activated slag using response surface methodology (RSM). Ceramics International, 2016, 42, 11666-11673.	2.3	42
44	An overview of geopolymers derived from industrial by-products. Construction and Building Materials, 2016, 127, 183-198.	3.2	252
45	Synthesis of high strength ambient cured geopolymer composite by using low calcium fly ash. Construction and Building Materials, 2016, 125, 809-820.	3.2	162
46	Influence of different curing temperatures and alkali activators on properties of GBFS geopolymer mortars containing fly ash and palm-oil fuel ash. Construction and Building Materials, 2016, 125, 1229-1240.	3.2	167
47	Kinetics of electric arc furnace slag leaching in alkaline solutions. Construction and Building Materials, 2016, 108, 1-9.	3.2	37
48	Development of greener alkali-activated cement: utilisation of sodium carbonate for activating slag and fly ash mixtures. Journal of Cleaner Production, 2016, 113, 66-75.	4.6	276
49	Ground granulated blast furnace slag amended fly ash as an expansive soil stabilizer. Soils and Foundations, 2016, 56, 205-212.	1.3	193
50	Alkali-activated ground granulated blast-furnace slag incorporating incinerator fly ash as a potential binder. Construction and Building Materials, 2016, 112, 1005-1012.	3.2	74
51	Optimization of lightweight GGBFS and FA geopolymer mortars by response surface method. Construction and Building Materials, 2017, 139, 159-171.	3.2	71
52	Properties of Cement-Based Grouts with High Amounts of Ground Granulated Blast-Furnace Slag and Fly Ash. Journal of Materials in Civil Engineering, 2017, 29, .	1.3	34
53	Strength properties of slag/fly ash blends activated with sodium metasilicate. Gradevinar, 2017, 69, 199-205.	0.2	4
54	Environmental Compatibility of Lightweight Aggregates from Mine Tailings and Industrial Byproducts. Metals, 2017, 7, 390.	1.0	5

#	Article	IF	Citations
55	Geopolymeric concretes based on fly ash with high unburned content. Construction and Building Materials, 2018, 165, 697-706.	3.2	18
56	Matrix hybridization using waste fuel ash and slag in alkali-activated composites and its influence on maturity of fiber-matrix bond. Journal of Cleaner Production, 2018, 177, 857-867.	4.6	23
57	Evaluating an Eco-Olivine Nanosilica as an Alternative Silica Source in Alkali-Activated Composites. Journal of Materials in Civil Engineering, 2018, 30, 04018016.	1.3	3
58	Experimental study on performance of cement-based grouts admixed with fly ash, bentonite, superplasticizer and water glass. Construction and Building Materials, 2018, 161, 282-291.	3.2	116
59	Utilization of reduction slag and waste sludge for Portland cement clinker production. Environmental Progress and Sustainable Energy, 2018, 37, 669-677.	1.3	8
60	Effect of process parameters on the performance of fly ash/GGBS blended geopolymer composites. Journal of Sustainable Cement-Based Materials, 2018, 7, 122-140.	1.7	78
61	Chemical aspects related to using recycled geopolymers as aggregates. Advances in Cement Research, 2018, 30, 361-370.	0.7	2
62	Optimization of heat cured fly ash/slag blend geopolymer mortars designed by â€œCombined Designâ€• method: Part 1. Construction and Building Materials, 2018, 178, 393-404.	3.2	29
63	A study on the effect of the salt content on the solidification of sulfate saline soil solidified with an alkali-activated geopolymer. Construction and Building Materials, 2018, 176, 68-74.	3.2	68
64	Setting time and 7-day strength of geopolymer mortar with various binders. Construction and Building Materials, 2018, 187, 974-983.	3.2	113
65	Effect of the Nano-Ca(OH)2 Addition on the Portland Clinker Cooking Efficiency. Materials, 2019, 12, 1787.	1.3	1
66	Reinforcement simulation of water-rich and broken rock with Portland cement-based grout. Construction and Building Materials, 2019, 221, 292-300.	3.2	43
67	Effects of fly ash on the properties and microstructure of alkali-activated FA/BFS repairing mortar. Fuel, 2019, 256, 115919.	3.4	41
68	Performance of magnesia-modified sodium carbonate-activated slag/fly ash concrete. Cement and Concrete Composites, 2019, 103, 160-174.	4.6	39
69	Thermo-mechanical characteristics of geopolymer mortar. Construction and Building Materials, 2019, 213, 100-108.	3.2	65
70	Toward clean cement technologies: A review on alkali-activated fly-ash cements incorporated with supplementary materials. Journal of Non-Crystalline Solids, 2019, 509, 31-41.	1.5	58
71	Durability of alumina silicate concrete based on slag/fly ash blends against corrosion. Engineering, Construction and Architectural Management, 2019, 26, 1641-1651.	1.8	6
72	Effects of Fluoride and Sulphate Mineralizers on the Properties of Reconstructed Steel Slag. High Temperature Materials and Processes, 2019, 38, 856-866.	0.6	0

#	Article	IF	Citations
73	Mechanical and physical characterization of cement reinforced by iron slag and titanate nanofibers to produce advanced containment for radioactive waste. Construction and Building Materials, 2019, 200, 135-145.	3.2	40
74	Development of effective microfine cement-based grouts (EMCG) for porous and fissured strata. Construction and Building Materials, 2020, 262, 120775.	3.2	11
75	Assessment of important parameters involved in the synthesis of geopolymer composites: A review. Construction and Building Materials, 2020, 264, 120276.	3.2	82
76	Experimental behaviors of prefabricated members made of ferronickel slag concrete. Construction and Building Materials, 2020, 261, 120519.	3.2	7
77	Synthesis and characterization of eco-friendly alkali-activated industrial solid waste-based two-component backfilling grouts for shield tunnelling. Journal of Cleaner Production, 2020, 266, 121974.	4.6	24
78	Use of Steel Industry By-products in Sustainable Civil Engineering Applications. E3S Web of Conferences, 2020, 161, 01117.	0.2	0
79	Hydration/modification of fly ash in a fluidized bed. Materials Chemistry and Physics, 2020, 251, 123068.	2.0	2
80	Development of steel slag composite grouts for underground engineering. Journal of Materials Research and Technology, 2020, 9, 2793-2809.	2.6	13
81	Fluid Permeability of Ground Steel Slag-Blended Composites Evaluated by Pore Structure. Advances in Materials Science and Engineering, 2020, 2020, 1-14.	1.0	0
82	Benefits of using steel slag in cement clinker production for environmental conservation and economic revenue generation. Journal of Cleaner Production, 2021, 282, 124538.	4.6	49
83	Temperature and Duration Impact on the Strength Development of Geopolymerized Granulated Blast Furnace Slag for Usage as a Construction Material. Journal of Materials in Civil Engineering, 2021, 33, .	1.3	2
85	Effect of curing regime on the performance and microstructure characteristics of alkali-activated slag-fly ash blended concrete. Journal of Sustainable Cement-Based Materials, 2021, 10, 289-317.	1.7	30
86	Application investigation of high-phosphorus steel slag in cementitious material and ordinary concrete. Journal of Materials Research and Technology, 2021, 11, 2074-2091.	2.6	7
87	A comprehensive assessment of the global warming potential of geopolymer concrete. Journal of Cleaner Production, 2021, 297, 126669.	4.6	80
88	Synthesis and characterization of alkali-activated loess and its application as protective coating. Construction and Building Materials, 2021, 282, 122631.	3.2	17
89	Exploration of a Two-Step Aqueous Process for the Valorization of Sodium Fluorosilicate (Na2SiF6), an Intermediate Product of the Fluorosilicic Acid Conversion. Waste and Biomass Valorization, 2022, 13, 547-562.	1.8	5
90	Waste to wealth: Recovery of value-added products from steel slag. Journal of Environmental Chemical Engineering, 2021, 9, 105640.	3.3	29
91	Determining physico-chemical parameters for high strength ambient cured fly ash-based alkali-activated cements. Ceramics International, 2021, 47, 29109-29119.	2.3	3

#	Article	IF	Citations
92	Development of High-Performance Microfine Cementitious Grout with High Amount of Fly Ash, Silica Fume, and Slag. Journal of Materials in Civil Engineering, 2021, 33, .	1.3	6
94	Mechanical and Microstructural Characterization of Alkali-Activated Materials Based on Fly Ash and Slag. International Journal of Engineering and Technology, 2015, 7, 59-64.	0.1	21
95	UTILIZAÃ‡ÃƒO DE ESCÃ“RIA DE CONVERTEDOR NA FABRICAÃ‡ÃƒO DE CIMENTO PORTLAND. , 0, , .		0
96	Effect of ratio between Na2SiO3 and NaOH solutions and curing temperature on the early age properties of geopolymer mortar. IOP Conference Series: Materials Science and Engineering, 0, 981, 032060.	0.3	1
97	Chemical Activation of Pozzolanic Activity of Sludge Incineration Ash and Application as Row Bonding Materials for Pervious Ecological Brick. SSRN Electronic Journal, 0, , .	0.4	0
98	The Influencing Factors for Volume Stability of Ladle Slag. Processes, 2022, 10, 92.	1.3	1
99	Chemical activation of pozzolanic activity of sludge incineration ash and application as row bonding materials for pervious ecological brick. Construction and Building Materials, 2022, 329, 127199.	3.2	4
100	Multi-objective optimisation for mortar containing activated waste glass powder. Journal of Materials Research and Technology, 2022, 18, 1391-1411.	2.6	8
101	Mechanical Characteristics of GGBFS/FA-Based Geopolymer Concrete and Its Environmental Impact. Practice Periodical on Structural Design and Construction, 2022, 27, .	0.7	10
102	Behaviour of Mechano-Chemical Activated Ladle Furnace (Lf) Slag Based Cementitious Binder. SSRN Electronic Journal, 0, , .	0.4	1
103	A generic framework for augmented concrete mix design: Optimisation of geopolymer concrete considering environmental, financial and mechanical properties. Journal of Cleaner Production, 2022, 369, 133382.	4.6	8
104	Early age reaction, rheological properties and pore solution chemistry of NaOH-activated slag mixtures. Cement and Concrete Composites, 2022, 133, 104715.	4.6	15
105	Research on basic mechanical properties of different modulus alkaline excited ECC. Physics and Chemistry of the Earth, 2022, 128, 103233.	1.2	3
106	Short Review on the Application of Recycled Powder in Cement-Based Materials: Preparation, Performance and Activity Excitation. Buildings, 2022, 12, 1568.	1.4	6
107	Fly Ash-Based Geopolymer Composites: A Review of the Compressive Strength and Microstructure Analysis. Materials, 2022, 15, 7098.	1.3	42
108	Comparisons of alkali-activated binder concrete (ABC) with OPC concrete - A review. Cement and Concrete Composites, 2023, 135, 104851.	4.6	9
109	Sustainable use of recycled cement concrete with gradation carbonation in artificial stone: Preparation and characterization. Construction and Building Materials, 2023, 364, 129867.	3.2	4
110	Properties and Cementation Mechanism of Geopolymer Backfill Paste Incorporating Diverse Industrial Solid Wastes. Materials, 2023, 16, 480.	1.3	4

#	Article	IF	Citations
111	Comparative evaluation of mechanical performance of steel slag and earthen granular aggregates. Journal of Sustainable Construction Materials and Technologies, 0, , .	0.4	0
112	Synthesis, Stability and Microstructure of a One-Step Mixed Geopolymer Backfill Paste Derived from Diverse Waste Slags. Sustainability, 2023, 15, 6708.	1.6	0