Ana FernÃ¡ndez-JimÃ©nez

List of Publications by Year
in descending order

146 papers	20,711 citations	20817 60 h-index	10734 138 g-index
148 all docs	148 docs citations	148 times ranked	6423 citing authors

#	Article	IF	Citations
1	Effect of alkalinity on early-age hydration in calcium sulfoaluminate clinker. Cement and Concrete Research, 2022, 155, 106781.	11.0	11
2	Fusion of phosphate by-products and glass waste for preparation of alkali-activated binders. Composites Part B: Engineering, 2022, 242, 110044.	12.0	5
3	Alkali-Activated Cements from Urban, Mining and Agro-Industrial Waste: State-of-the-art and Opportunities. Waste and Biomass Valorization, 2021, 12, 2665-2683.	3.4	12
4	Effect of Alkaline Salts on Calcium Sulfoaluminate Cement Hydration. Molecules, 2021, 26, 1938.	3.8	11
5	Stabilisation of a Plastic Soil with Alkali Activated Cements Developed from Industrial Wastes. Sustainability, 2021, 13, 4501.	3.2	7
6	Study on the activation of ternesite in CaOÂ·Al2O3 and 12CaOÂ·7Al2O3 blends with gypsum for the development of low-CO2 binders. Journal of Cleaner Production, 2021, 291, 125726.	9.3	10
7	Monitoring early hydration of calcium sulfoaluminate clinker. Construction and Building Materials, 2021, 295, 123578.	7.2	10
8	Iron and Aluminium Production Wastes as Exclusive Components of Alkali Activated Bindersâ€"Towards a Sustainable Alternative. Sustainability, 2021, 13, 9938.	3.2	4
9	One-part hybrid cements from fly ash and electric arc furnace slag activated by sodium sulphate or sodium chloride. Journal of Building Engineering, 2021, 44, 103298.	3.4	13
10	Portland Versus Alkaline Cement: Continuity or Clean Break: â€œA Key Decision for Global Sustainabilityâ€• Frontiers in Chemistry, 2021, 9, 705475.	3.6	48
11	Application of alkali-activated industrial wastes for the stabilisation of a full-scale (sub)base layer. Journal of Cleaner Production, 2020, 242, 118427.	9.3	38
12	Effect of alkalis content on calcium sulfoaluminate (CSA) cement hydration. Cement and Concrete Research, 2020, 128, 105953.	11.0	55
13	Calcium sulfoaluminate clinker hydration at different alkali concentrations. Cement and Concrete Research, 2020, 138, 106251.	11.0	31
14	Application of the response surface method to optimize alkali activated cements based on low-reactivity ladle furnace slag. Construction and Building Materials, 2020, 264, 120271.	7.2	28
15	Low-Calcium, Porous, Alkali-Activated Materials as Novel pH Stabilizers for Water Media. Minerals (Basel, Switzerland), 2020, 10, 935.	2.0	4
16	ZnO Nanoparticles for Photocatalytic Application in Alkali-Activated Materials. Molecules, 2020, 25, 5519.	3.8	5
17	Effect of Alkali Concentration on the Activation of Carbonate-High Illite Clay. Applied Sciences (Switzerland), 2020, 10, 2203.	2.5	10
18	Replacing fly ash with limestone dust in hybrid cements. Construction and Building Materials, 2020, 243, 118169.	7.2	30

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19	Recycling and Application of Mine Tailings in Alkali-Activated Cements and Mortarsâ€"Strength Development and Environmental Assessment. Applied Sciences (Switzerland), 2020, 10, 2084.	2.5	18
20	Use of industrial by-products as alkaline cement activators. Construction and Building Materials, 2020, 253, 119000.	7.2	16
21	Effect of high temperatures on the mechanical behaviour of hybrid cement. Materiales De Construccion, 2020, 70, 213.	0.7	12
22	Hydration mechanisms of hybrid cements as a function of the way of addition of chemicals. Journal of the American Ceramic Society, 2019, 102, 427-436.	3.8	52
23	Hybrid binders: A journey from the past to a sustainable future (opus caementicium futurum). Cement and Concrete Research, 2019, 124, 105829.	11.0	57
24	Mechanical-Chemical Activation of Coal Fly Ashes: An Effective Way for Recycling and Make Cementitious Materials. Frontiers in Materials, 2019, 6, .	2.4	32
25	Studies About the Hydration of Hybrid â€œAlkaline-Beliteâ€•Cement. Frontiers in Materials, 2019, 6, .	2.4	4
26	Synthesis of alkaline cements based on fly ash and metallurgic slag: Optimisation of the SiO2/Al2O3 and Na2O/SiO2 molar ratios using the response surface methodology. Construction and Building Materials, 2019, 213, 424-433.	7.2	30
27	Alkali activated composites â€“ An innovative concept using iron and steel slag as both precursor and aggregate. Cement and Concrete Composites, 2019, 103, 11-21.	10.7	32
28	Statistical Study of Curing Conditions in Alkali Activation of Mine Tailings. Environmental Geotechnics, 2019, , 1-13.	2.3	1
29	Sustainable alkaline activation of fly ash, aluminium anodising sludge and glass powder blends with a recycled alkaline cleaning solution. Construction and Building Materials, 2019, 204, 609-620.	7.2	28
30	Reuse of waste sandstone sludge via alkali activation in matrices of fly ash and metakaolin. Construction and Building Materials, 2018, 172, 212-223.	7.2	38
31	Stabilisation of construction and demolition waste with a high fines content using alkali activated fly ash. Construction and Building Materials, 2018, 170, 26-39.	7.2	67
32	Use of clays in alkaline hybrid cement preparation. The role of bentonites. Materials Letters, 2018, 233, 134-137.	2.6	25
33	Rheology of activated phosphorus slag with lime and alkaline salts. Cement and Concrete Research, 2018, 113, 121-129.	11.0	64
34	Hybrid Alkaline Cements: Bentonite-Opc Binders. Minerals (Basel, Switzerland), 2018, 8, 137.	2.0	12
35	C₃S and C₂S hydration in the presence of Na₂CO₃ and Na₂SO₄. Journal of the American Ceramic Society, 2017, 100, 3188-3198.	3.8	48
36	Sustainable alkali activated materials: Precursor and activator derived from industrial wastes. Journal of Cleaner Production, 2017, 162, 1200-1209.	9.3	117

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37	Statistical Analysis of the Influence of Several Factors on Compressive Strength of Alkali Activated Fly Ash. Procedia Structural Integrity, 2017, 5, 1116-1122.	0.8	4
38	Recycling Industrial By-Products in Hybrid Cements: Mechanical and Microstructure Characterization. Waste and Biomass Valorization, 2017, 8, 1433-1440.	3.4	15
39	The Effect of Heat Treatment on Alkali Activated Materials. Medziagotyra, 2017, 23, .	0.2	2
40	Hydration of Hybrid Alkaline Cement Containing a Very Large Proportion of Fly Ash: A Descriptive Model. Materials, 2016, 9, 605.	2.9	106
41	Alkaline Hydration Of C₂S and C₃S. Journal of the American Ceramic Society, 2016, 99, 604-611.	3.8	56
42	Characterisation of pre-industrial hybrid cement and effect of pre-curing temperature. Cement and Concrete Composites, 2016, 73, 281-288.	10.7	43
43	Manufacture of hybrid cements with fly ash and bottom ash from a municipal solid waste incinerator. Construction and Building Materials, 2016, 105, 218-226.	7.2	112
44	Alternative prime materials for developing new cements: Alkaline activation of alkali aluminosilicate glasses. Ceramics International, 2016, 42, 9333-9340.	4.8	25
45	Effect of calcium on the alkaline activation of aluminosilicate glass. Ceramics International, 2016, 42, 7697-7707.	4.8	32
46	Development of New Cementitious Caterials by Alkaline Activating Industrial by-Products. IOP Conference Series: Materials Science and Engineering, 2015, 96, 012005.	0.6	3
47	Mechanical behaviour at high temperature of alkali-activated aluminosilicates (geopolymers). Construction and Building Materials, 2015, 93, 1188-1196.	7.2	60
48	Cements with a low clinker content: versatile use of raw materials. Journal of Sustainable Cement-Based Materials, 2015, 4, 140-151.	3.1	24
49	Cements with low Clinker Content. IOP Conference Series: Materials Science and Engineering, 2015, 96, 012006.	0.6	0
50	The role of aluminium in alkali-activated bentonites. Materials and Structures/Materiaux Et Constructions, 2015, 48, 585-597.	3.1	30
51	Crucial insights on the mix design of alkali-activated cement-based binders. , 2015, , 49-73.		25
52	An overview of the chemistry of alkali-activated cement-based binders. , 2015, , 19-47.		82
53	Specific Examples of Hybrid Alkaline Cement. MATEC Web of Conferences, 2014, 11, 01001.	0.2	12
54	Effect of temperature and alkaline concentration on metakaolin leaching kinetics. Ceramics International, 2014, 40, 8975-8985.	4.8	77

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55	The Early Age Hydration Reactions of a Hybrid Cement Containing a Very High Content of Coal Bottom Ash. Journal of the American Ceramic Society, 2014, 97, 929-937.	3.8	37
56	High temperature resistance of a very high volume fly ash cement paste. Cement and Concrete Composites, 2014, 45, 234-242.	10.7	71
57	Alkaline activation of synthetic aluminosilicate glass. Ceramics International, 2014, 40, 5547-5558.	4.8	52
58	Some durability aspects of hybrid alkaline cements. MATEC Web of Conferences, 2014, 11, 01008.	0.2	5
59	Binder Chemistry â€“ High-Calcium Alkali-Activated Materials. RILEM State-of-the-Art Reports, 2014, , 59-91.	0.7	41
60	Binder Chemistry â€“ Low-Calcium Alkali-Activated Materials. RILEM State-of-the-Art Reports, 2014, , 93-123.	0.7	23
61	Durability and Testing â€“ Degradation via Mass Transport. RILEM State-of-the-Art Reports, 2014, , 223-276.	0.7	12
62	A review on alkaline activation: new analytical perspectives. Materiales De Construccion, 2014, 64, e022.	0.7	299
63	A statistical approach to the study of concrete carbonation. Materiales De Construccion, 2014, 64, e001.	0.7	2
64	Alkali-activated blends of calcium aluminate cement and slag/diatomite. Ceramics International, 2013, 39, 9237-9245.	4.8	44
65	Clay reactivity: Production of alkali activated cements. Applied Clay Science, 2013, 73, 11-16.	5.2	87
66	Variation in hybrid cements over time. Alkaline activation of fly ashâ€“portland cement blends. Cement and Concrete Research, 2013, 52, 112-122.	11.0	243
67	Hydration kinetics in hybrid binders: Early reaction stages. Cement and Concrete Composites, 2013, 39, 82-92.	10.7	152
68	C4A3Å hydration in different alkaline media. Cement and Concrete Research, 2013, 46, 41-49.	11.0	74
69	Durability of very high volume fly ash cement pastes and mortars in aggressive solutions. Cement and Concrete Composites, 2013, 38, 12-20.	10.7	78
70	â€œMetakaolinâ€•Slagâ€•Clinker Blends.â€•The Role of Na⁺ or K⁺ as Alkaline Activators of Theses Ternary Blends. Journal of the American Ceramic Society, 2013, 96, 1991-1998.	3.8	41
71	Very High Volume Fly Ash Cements. Early Age Hydration Study Using <scp><scp>Na</scp></scp>₂<scp><scp>SO</scp></scp>₄ as an Activator. Journal of the American Ceramic Society, 2013, 96, 900-906.	3.8	125
72	Alkali-activated based concrete. , 2013, , 439-487.		8

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73	Alkaline solution/binder ratio as a determining factor in the alkaline activation of aluminosilicates. Cement and Concrete Research, 2012, 42, 1242-1251.	11.0	139
74	<scp><scp>C</scp></scp>â€“<scp><scp>S</scp></scp>â€“<scp><scp>H</scp></scp> Gels: Interpretation of ²⁹<scp><scp>Si </scp><scp>MAS</scp></scp>â€<scp><scp>NMR</scp></scp> Spectra. Journal of the American Ceramic Society, 2012, 95, 1440-1446.	3.8	31
75	Alkaline Hydration of Tricalcium Aluminate. Journal of the American Ceramic Society, 2012, 95, 3317-3324.	3.8	35
76	Effect of relative humidity on the reaction products of alkali activated fly ash. Journal of the European Ceramic Society, 2012, 32, 2799-2807.	5.7	58
77	An assessment of Mercury immobilisation in alkali activated fly ash (AAFA) cements. Journal of Hazardous Materials, 2012, 213-214, 207-215.	12.4	27
78	Effect of Sodium Silicate on Calcium Aluminate Cement Hydration in Highly Alkaline Media: A Microstructural Characterization. Journal of the American Ceramic Society, 2011, 94, 1297-1303.	3.8	51
79	Corrosion behaviour of a new low-nickel stainless steel embedded in activated fly ash mortars. Cement and Concrete Composites, 2011, 33, 644-652.	10.7	65
80	New cements for the 21st century: The pursuit of an alternative to Portland cement. Cement and Concrete Research, 2011, 41, 750-763.	11.0	1,106
81	Compatibility studies between N-A-S-H and C-A-S-H gels. Study in the ternary diagram Na2Oâ€“CaOâ€“Al2O3â€“SiO2â€“H2O. Cement and Concrete Research, 2011, 41, 923-931.	11.0	837
82	Alkali activation of fly ash. Part III: Effect of curing conditions on reaction and its graphical description. Fuel, 2010, 89, 3185-3192.	6.4	139
83	Effect of sodium sulfate on the alkali activation of fly ash. Cement and Concrete Composites, 2010, 32, 589-594.	10.7	67
84	Effect on fresh C-S-H gels of the simultaneous addition of alkali and aluminium. Cement and Concrete Research, 2010, 40, 27-32.	11.0	221
85	Effect of Calcium Additions on Nâ€“Aâ€“Sâ€“H Cementitious Gels. Journal of the American Ceramic Society, 2010, 93, 1934-1940.	3.8	196
86	Highâ€Temperature Resistance in Alkaliâ€Activated Cement. Journal of the American Ceramic Society, 2010, 93, 3411-3417.	3.8	74
87	Stability of Synthetic Calcium Silicate Hydrate Gels in Presence of Alkalis, Aluminum, and Soluble Silica. Transportation Research Record, 2010, 2142, 52-57.	1.9	12
88	Estabilidad del estado pasivo del acero en morteros de ceniza volante activada. Materiales De Construccion, 2010, 60, 51-65.	0.7	22
89	Chemical durability of geopolymers. , 2009, , 167-193.		15
90	Nanostructure/microstructure of fly ash geopolymers. , 2009, , 89-117.		27

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91	Alkali activated fly ash: effect of admixtures on paste rheology. Rheologica Acta, 2009, 48, 447-455.	2.4	135
92	Effect of alkalis on fresh Câ€“Sâ€“H gels. FTIR analysis. Cement and Concrete Research, 2009, 39, 147-153.	11.0	508
93	HidrataciÃ³n del cemento de aluminato de calcio en condiciones de muy elevada alcalinidad. Materiales De Construccion, 2009, 59, .	0.7	2
94	FTIR study of the solâ€“gel synthesis of cementitious gels: Câ€“Sâ€“H and Nâ€“Aâ€“Sâ€“H. Journal of Sol-Gel Science and Technology, 2008, 45, 63-72.	2.4	390
95	Alkaline activation of metakaolinâ€“fly ash mixtures: Obtain of Zeoceramics and Zeocements. Microporous and Mesoporous Materials, 2008, 108, 41-49.	4.4	150
96	Effect of the SiO2/Na2O ratio on the alkali activation of fly ash. Part II: 29Si MAS-NMR Survey. Microporous and Mesoporous Materials, 2008, 109, 525-534.	4.4	200
97	Alkaline Activation of Blends of Metakaolin and Calcium Aluminate. Journal of the American Ceramic Society, 2008, 91, 1231-1236.	3.8	54
98	New Cementitious Materials Based on Alkaliâ€Activated Fly Ash: Performance at High Temperatures. Journal of the American Ceramic Society, 2008, 91, 3308-3314.	3.8	149
99	A study on the passive state stability of steel embedded in activated fly ash mortars. Corrosion Science, 2008, 50, 1058-1065.	6.6	122
100	ActivaciÃ³n alcalina de metacaolÃn. Efecto de la adiciÃ³n de silicato soluble y de la temperatura de curado. Boletin De La Sociedad Espanola De Ceramica Y Vidrio, 2008, 47, 35-43.	1.9	6
101	Railway sleepers made of alkali activated fly ash concrete. Revista Ingenieria De Construccion, 2007, 22, .	0.4	49
102	Alkaliâ€“aggregate reaction in activated fly ash systems. Cement and Concrete Research, 2007, 37, 175-183.	11.0	203
103	An XRD study of the effect of the SiO2/Na2O ratio on the alkali activation of fly ash. Cement and Concrete Research, 2007, 37, 671-679.	11.0	394
104	Alkali-activated fly ash: Effect of thermal curing conditions on mechanical and microstructural development â€“ Part II. Fuel, 2007, 86, 315-322.	6.4	321
105	Alkali activation of fly ash: Effect of the SiO2/Na2O ratio. Microporous and Mesoporous Materials, 2007, 106, 180-191.	4.4	500
106	Durability of alkali-activated fly ash cementitious materials. Journal of Materials Science, 2007, 42, 3055-3065.	3.7	442
107	Opc-fly ash cementitious systems: study of gel binders produced during alkaline hydration. Journal of Materials Science, 2007, 42, 2958-2966.	3.7	221
108	Geopolymer technology: the current state of the art. Journal of Materials Science, 2007, 42, 2917-2933.	3.7	3,163

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109	Factores que afectan al desarrollo inicial de resistencias a compresiÃ³n en hormigones de ceniza volante activados alcalinamente (sin OPC). Materiales De Construccion, 2007, 57, .	0.7	16
110	Synthesis and thermal behavior of different aluminosilicate gels. Journal of Non-Crystalline Solids, 2006, 352, 2061-2066.	3.1	38
111	Effect of Synthesis pH on the Preparation and Properties of K-Al-Bearing Silicate Gels from Solution. Journal of the Ceramic Society of Japan, 2006, 114, 624-629.	1.3	15
112	The role played by the reactive alumina content in the alkaline activation of fly ashes. Microporous and Mesoporous Materials, 2006, 91, 111-119.	4.4	444
113	Quantitative determination of phases in the alkali activation of fly ash. Part I. Potential ash reactivity. Fuel, 2006, 85, 625-634.	6.4	224
114	Quantitative determination of phases in the alkaline activation of fly ash. Part II: Degree of reaction. Fuel, 2006, 85, 1960-1969.	6.4	181
115	Stabilization/solidification of hazardous and radioactive wastes with alkali-activated cements. Journal of Hazardous Materials, 2006, 137, 1656-1663.	12.4	297
116	Fly Ash Based Geocements: Genesis of Microstructure and Properties at Hydration-Dehydration Process. , 2006, , 55-64.		0
117	ActivaciÃ³n alcalina de cenizas volantes. Estudio comparativo entre activadores sÃ³dicos y potÃ¡sicos. Materiales De Construccion, 2006, 56, .	0.7	18
118	Properties of alkali-activated fly ashes determined from rheological measurements. Advances in Cement Research, 2005, 17, 143-151.	1.6	51
119	Immobilization of cesium in alkaline activated fly ash matrix. Journal of Nuclear Materials, 2005, 346, 185-193.	2.7	87
120	Alkali activation of fly ashes. Part 1: Effect of curing conditions on the carbonation of the reaction products. Fuel, 2005, 84, 2048-2054.	6.4	456
121	Mid-infrared spectroscopic studies of alkali-activated fly ash structure. Microporous and Mesoporous Materials, 2005, 86, 207-214.	4.4	452
122	Corrosion resistance in activated fly ash mortars. Cement and Concrete Research, 2005, 35, 1210-1217.	11.0	147
123	Microstructure development of alkali-activated fly ash cement: a descriptive model. Cement and Concrete Research, 2005, 35, 1204-1209.	11.0	601
124	Composition and microstructure of alkali activated fly ash binder: Effect of the activator. Cement and Concrete Research, 2005, 35, 1984-1992.	11.0	788
125	Fixing Arsenic in Alkali-Activated Cementitious Matrices. Journal of the American Ceramic Society, 2005, 88, 1122-1126.	3.8	57
126	Alkaline Activation of Fly Ashes: NMR Study of the Reaction Products. Journal of the American Ceramic Society, 2004, 87, 1141-1145.	3.8	368

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127	Microstructural characterisation of alkali-activated PFA matrices for waste immobilisation. Cement and Concrete Composites, 2004, 26, 1001-1006.	10.7	42
128	Pore solution in alkali-activated slag cement pastes. Relation to the composition and structure of calcium silicate hydrate. Cement and Concrete Research, 2004, 34, 139-148.	11.0	287
129	"Geopolimeros": una Ãºnica base quÃmica y diferentes microestructuras. Materiales De Construccion, 2004, 54, 77-91.	0.7	57
130	Mechanical and durable behaviour of alkaline cement mortars reinforced with polypropylene fibres. Cement and Concrete Research, 2003, 33, 2031-2036.	11.0	265
131	Mineralogical and microstructural characterisation of alkali-activated fly ash/slag pastes. Cement and Concrete Composites, 2003, 25, 287-292.	10.7	331
132	Structure of Calcium Silicate Hydrates Formed in Alkalineâ€Activated Slag: Influence of the Type of Alkaline Activator. Journal of the American Ceramic Society, 2003, 86, 1389-1394.	3.8	349
133	Characterisation of fly ashes. Potential reactivity as alkaline cementsâ˜†. Fuel, 2003, 82, 2259-2265.	6.4	541
134	Effect of activator mix on the hydration and strength behaviour of alkali-activated slag cements. Advances in Cement Research, 2003, 15, 129-136.	1.6	197
135	Effect of superplasticisers on the behaviour and properties of alkaline cements. Advances in Cement Research, 2003, 15, 23-28.	1.6	59
136	Effect of activator mix on the hydration and strength behaviour of alkali-activated slag cements. Advances in Cement Research, 2003, 15, 129-136.	1.6	5
137	Effect of superplasticisers on the behaviour and properties of alkaline cements. Advances in Cement Research, 2003, 15, 23-28.	1.6	2
138	The alkaliâ€“silica reaction in alkali-activated granulated slag mortars with reactive aggregate. Cement and Concrete Research, 2002, 32, 1019-1024.	11.0	114
139	Morteros de cementos alcalinos. Resistencia quÃmica al ataque por sulfatos y al agua de mar. Materiales De Construccion, 2002, 52, 55-71.	0.7	82
140	Setting of alkali-activated slag cement. Influence of activator nature. Advances in Cement Research, 2001, 13, 115-121.	1.6	167
141	Setting of alkali-activated slag cement. Influence of activator nature. Advances in Cement Research, 2001, 13, 115-121.	1.6	4
142	Cementos de escorias activados alcalinamente. DeterminaciÃ³n del grado de reacciÃ³n. Materiales De Construccion, 2001, 51, 53-66.	0.7	8
143	Alkali-activated slag mortars. Cement and Concrete Research, 1999, 29, 1313-1321.	11.0	479
144	Title is missing!. Magyar AprÃ³vad KÃ¶zlemÃ©nyek, 1998, 52, 945-955.	1.4	86

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145	Alkali-activated slag cements: Kinetic studies. Cement and Concrete Research, 1997, 27, 359-368.	11.0	157
146	Influencia de la concentraciÃ³n del activador sobre la cinÃ©tica del proceso de activaciÃ³n alcalina de una escoria de alto horno. Materiales De Construccion, 1997, 47, 31-42.	0.7	21