Mara Victoria Borrachero

List of Publications by Citations

120 papers	3,555 citations	35 h-index	55 g-index
124 ext. papers	4,145 ext. citations	5.3 avg, IF	5.25 L-index

#	Paper	IF	Citations
120	Properties and microstructure of alkali-activated red clay brick waste. *Construction and Building Materials*, **2013**, 43, 98-106	6.7	176
119	Evaluation of the pozzolanic activity of fluid catalytic cracking catalyst residue (FC3R). Thermogravimetric analysis studies on FC3R-Portland cement pastes. *Cement and Concrete Research*, **2003**, 33, 603-609	10.3	113
118	Effect of nanosilica-based activators on the performance of an alkali-activated fly ash binder. *Cement and Concrete Composites*, **2013**, 35, 1-11	8.6	106
117	Mechanical treatment of fly ashes. Part I: Physico-chemical characterization of ground fly ashes. *Cement and Concrete Research*, **1995**, 25, 1469-1479	10.3	104
116	Reuse of sewage sludge ashes (SSA) in cement mixtures: the effect of SSA on the workability of cement mortars. *Waste Management*, **2003**, 23, 373-81	8.6	100
115	Enhanced conductivity measurement techniques for evaluation of fly ash pozzolanic activity. *Cement and Concrete Research*, **2001**, 31, 41-49	10.3	90
114	Mechanical treatment of fly ashes part II: Particle morphologies in ground fly ashes (GFA) and workability of GFA-cement mortars. *Cement and Concrete Research*, **1996**, 26, 225-235	10.3	90
113	Fluid catalytic cracking catalyst residue (FC3R). *Cement and Concrete Research*, **1999**, 29, 1773-1779	10.3	88
112	Alkaline Activation of Ceramic Waste Materials. *Waste and Biomass Valorization*, **2013**, 4, 729-736	3.2	87
111	Use of sewage sludge ash(SSA)-cement admixtures in mortars. *Cement and Concrete Research*, **1996**, 26, 1389-1398	10.3	87
110	Carbon footprint of geopolymeric mortar: study of the contribution of the alkaline activating solution and assessment of an alternative route. *RSC Advances*, **2014**, 4, 23846-23852	3.7	85
109	Mechanical and physical properties of cement blended with sewage sludge ash. *Waste Management*, **2008**, 28, 2495-502	8.6	84
108	Determination of amorphous silica in rice husk ash by a rapid analytical method. *Cement and Concrete Research*, **2001**, 31, 227-231	10.3	83
107	Mechanical behavior of mortars containing sewage sludge ash (SSA) and Portland cements with different tricalcium aluminate content. *Cement and Concrete Research*, **1999**, 29, 87-94	10.3	80
106	Mechanical treatments of fly ashes. Part III: Studies on strength development of ground fly ashes (GFA) Cement mortars. *Cement and Concrete Research*, **1997**, 27, 1365-1377	10.3	77
105	Determination of the pozzolanic activity of fluid catalytic cracking residue. Thermogravimetric analysis studies on FC3R me pastes. *Cement and Concrete Research*, **2003**, 33, 1085-1091	10.3	74
104	Use of Slag/Sugar Cane Bagasse Ash (SCBA) Blends in the Production of Alkali-Activated Materials. *Materials*, **2013**, 6, 3108-3127	3.5	73

103	Mechanical and durability properties of alkali-activated mortar based on sugarcane bagasse ash and blast furnace slag. *Ceramics International*, **2015**, 41, 13012-13024	5.1	65
102	Assessment of sugar cane straw ash (SCSA) as pozzolanic material in blended Portland cement: Microstructural characterization of pastes and mechanical strength of mortars. *Construction and Building Materials*, **2015**, 94, 670-677	6.7	64
101	Thermogravimetric Methods for Determining Carbon Content in Fly Ashes. *Cement and Concrete Research*, **1998**, 28, 675-686	10.3	64
100	Mineralogical evolution of Portland cement blended with silica nanoparticles and its effect on mechanical strength. *Construction and Building Materials*, **2012**, 36, 736-742	6.7	63
99	Mechanical treatment of fly ashes. *Cement and Concrete Research*, **2000**, 30, 543-551	10.3	60
98	Physical, chemical and mechanical properties of fluid catalytic cracking catalyst residue (FC3R) blended cements. *Cement and Concrete Research*, **2001**, 31, 57-61	10.3	56
97	Early-strength development of portland cement mortars containing air classified fly ashes. *Cement and Concrete Research*, **1995**, 25, 449-456	10.3	53
96	Refluxed rice husk ash/NaOH suspension for preparing alkali activated binders. *Materials Letters*, **2014**, 115, 72-74	3.3	52
95	Geopolymers based on spent catalyst residue from a fluid catalytic cracking (FCC) process. *Fuel*, **2013**, 109, 493-502	7.1	52
94	Use of ancient copper slags in Portland cement and alkali activated cement matrices. *Journal of Environmental Management*, **2016**, 167, 115-23	7.9	50
93	New geopolymeric binder based on fluid catalytic cracking catalyst residue (FCC). *Materials Letters*, **2012**, 80, 50-52	3.3	49
92	The use of electrical impedance spectroscopy for monitoring the hydration products of Portland cement mortars with high percentage of pozzolans. *Cement and Concrete Research*, **2013**, 50, 51-61	10.3	49
91	Effect of pozzolans on the hydration process of Portland cement cured at low temperatures. *Cement and Concrete Composites*, **2013**, 42, 41-48	8.6	43
90	Use of highly reactive rice husk ash in the production of cement matrix reinforced with green coconut fiber. *Industrial Crops and Products*, **2013**, 49, 88-96	5.9	43
89	Influence of calcium aluminate cement (CAC) on alkaline activation of red clay brick waste (RCBW). *Cement and Concrete Composites*, **2016**, 65, 177-185	8.6	40
88	Alkali activated materials based on fluid catalytic cracking catalyst residue (FCC): Influence of SiO2/Na2O and H2O/FCC ratio on mechanical strength and microstructure. *Fuel*, **2013**, 108, 833-839	7.1	38
87	Compressive strength and microstructure of alkali-activated mortars with high ceramic waste content. *Ceramics International*, **2017**, 43, 13622-13634	5.1	38
86	Design and properties of 100% waste-based ternary alkali-activated mortars: Blast furnace slag, olive-stone biomass ash and rice husk ash. *Journal of Cleaner Production*, **2020**, 243, 118568	10.3	36

85	Influence of the activator concentration and calcium hydroxide addition on the properties of alkali-activated porcelain stoneware. *Construction and Building Materials*, **2014**, 63, 214-222	6.7	32
84	Mechanical and physical performance of low alkalinity cementitious composites reinforced with recycled cellulosic fibres pulp from cement kraft bags. *Industrial Crops and Products*, **2013**, 49, 422-427	5.9	32
83	New use of sugar cane straw ash in alkali-activated materials: A silica source for the preparation of the alkaline activator. *Construction and Building Materials*, **2018**, 171, 611-621	6.7	31
82	Evaluation of the pozzolanic activity of spent FCC catalyst/fly ash mixtures in Portland cement pastes. *Thermochimica Acta*, **2016**, 632, 29-36	2.9	30
81	A 100% waste-based alkali-activated material by using olive-stone biomass ash (OBA) and blast furnace slag (BFS). *Materials Letters*, **2017**, 203, 46-49	3.3	28
80	Increasing the sustainability of alkali-activated binders: The use of sugar cane straw ash (SCSA). *Construction and Building Materials*, **2016**, 124, 148-154	6.7	27
79	Olive-stone biomass ash (OBA): An alternative alkaline source for the blast furnace slag activation. *Construction and Building Materials*, **2018**, 178, 327-338	6.7	27
78	A new geopolymeric binder from hydrated-carbonated cement. *Materials Letters*, **2012**, 74, 223-225	3.3	27
77	Increase of the reactivity of densified silica fume by sonication treatment. *Ultrasonics Sonochemistry*, **2012**, 19, 1099-107	8.9	26
76	Study of the binary system fly ash/sugarcane bagasse ash (FA/SCBA) in SiO2/K2O alkali-activated binders. *Fuel*, **2016**, 174, 307-316	7.1	25
75	Effect of sewage sludge ash on mechanical and microstructural properties of geopolymers based on metakaolin. *Construction and Building Materials*, **2019**, 203, 95-103	6.7	24
74	Comparisons among magnetic and non-magnetic fly ash fractions: Strength development of cement-fly ash mortars. *Waste Management*, **1996**, 16, 119-124	8.6	24
73	Geopolymer eco-cellular concrete (GECC) based on fluid catalytic cracking catalyst residue (FCC) with addition of recycled aluminium foil powder. *Journal of Cleaner Production*, **2017**, 168, 1120-1131	10.3	23
72	Structure of Portland Cement Pastes Blended with Sonicated Silica Fume. *Journal of Materials in Civil Engineering*, **2012**, 24, 1295-1304	3	23
71	Cement equivalence factor evaluations for fluid catalytic cracking catalyst residue. *Cement and Concrete Composites*, **2013**, 39, 12-17	8.6	22
70	High strength mortars using ordinary Portland cement–fly ash–fluid catalytic cracking catalyst residue ternary system (OPC/FA/FCC). *Construction and Building Materials*, **2016**, 106, 228-235	6.7	21
69	Effect of sugar cane straw ash (SCSA) as solid precursor and the alkaline activator composition on alkali-activated binders based on blast furnace slag (BFS). *Construction and Building Materials*, **2017**, 144, 214-224	6.7	20
68	New eco-cellular concretes: sustainable and energy-efficient materials. *Green Chemistry*, **2018**, 20, 4684-4694		20

67	Use of residual diatomaceous earth as a silica source in geopolymer production. *Materials Letters*, **2018**, 223, 10-13	3.3	19
66	Ceramic tiles waste as replacement material in Portland cement. *Advances in Cement Research*, **2016**, 28, 221-232	1.8	19
65	Accelerated carbonation of cement pastes partially substituted with fluid catalytic cracking catalyst residue (FC3R). *Cement and Concrete Composites*, **2009**, 31, 134-138	8.6	19
64	The carbonation of OPC mortars partially substituted with spent fluid catalytic catalyst (FC3R) and its influence on their mechanical properties. *Construction and Building Materials*, **2009**, 23, 1323-1328	6.7	19
63	Portland cement, gypsum and fly ash binder systems characterization for lignocellulosic fiber-cement. *Construction and Building Materials*, **2016**, 124, 208-218	6.7	19
62	Behaviour of metakaolin-based geopolymers incorporating sewage sludge ash (SSA). *Materials Letters*, **2016**, 180, 192-195	3.3	18
61	Compressive Strength and Microstructure of Alkali-Activated Blast Furnace Slag/Sewage Sludge Ash (GGBS/SSA) Blends Cured at Room Temperature. *Waste and Biomass Valorization*, **2017**, 8, 1441-1451	3.2	18
60	Production of bamboo leaf ash by auto-combustion for pozzolanic and sustainable use in cementitious matrices. *Construction and Building Materials*, **2019**, 208, 369-380	6.7	17
59	The effects of moisture and micro-structural modifications in drying mortars on vibration-based NDT methods. *Construction and Building Materials*, **2015**, 94, 565-571	6.7	17
58	Effect of curing time on microstructure and mechanical strength development of alkali activated binders based on vitreous calcium aluminosilicate (VCAS). *Bulletin of Materials Science*, **2013**, 36, 245-249	1.7	17
57	Preliminary study on short-term sulphate attack evaluation by non-linear impact resonance acoustic spectroscopy technique. *Construction and Building Materials*, **2015**, 78, 295-302	6.7	17
56	Reusing fly ash in glass fibre reinforced cement: a new generation of high-quality GRC composites. *Waste Management*, **2007**, 27, 1416-21	8.6	16
55	Potential use of sewage sludge ash (SSA) as a cement replacement in precast concrete blocks. *Materiales De Construccion*, **2014**, 64, e002	1.8	16
54	Mineralogical evolution of cement pastes at early ages based on thermogravimetric analysis (TG). *Journal of Thermal Analysis and Calorimetry*, **2018**, 132, 39-46	4.1	15
53	Pozzolanic reaction rate of fluid catalytic cracking catalyst residue (FC3R) in cement pastes. *Advances in Cement Research*, **2013**, 25, 112-118	1.8	14
52	Alkali activation of vitreous calcium aluminosilicate derived from glass fiber waste. *Journal of Sustainable Cement-Based Materials*, **2012**, 1, 83-93	3.6	14
51	New method to assess the pozzolanic reactivity of mineral admixtures by means of pH and electrical conductivity measurements in lime:pozzolan suspensions. *Materiales De Construccion*, **2014**, 64, e032	1.8	14
50	Bagasse ash **2018**, 559-598		13

49	Granulometric activation of densified silica fume (CSF) by sonication. *Advances in Cement Research*, **2008**, 20, 129-135	1.8	13
48	Compatibility of fluid catalytic cracking catalyst residue (FC3R) with various types of cement. *Advances in Cement Research*, **2007**, 19, 117-124	1.8	13
47	Properties of Portland cement mortars incorporating high amounts of oil-fuel ashes. *Waste Management*, **1999**, 19, 1-7	8.6	13
46	Estudio del comportamiento de diversos residuos de catalizadores de craqueo catalítico (FCC) en cemento Portland. *Materiales De Construccion*, **2009**, 59, 37-52	1.8	13
45	The chemical activation of pozzolanic reaction of fluid catalytic cracking catalyst residue (FC3R) in lime pastes. *Advances in Cement Research*, **2007**, 19, 9-16	1.8	12
44	Resistance to acid attack of alkali-activated binders: Simple new techniques to measure susceptibility. *Construction and Building Materials*, **2017**, 150, 355-366	6.7	11
43	Influence of calcium additions on the compressive strength and microstructure of alkali-activated ceramic sanitary-ware. *Journal of the American Ceramic Society*, **2018**, 101, 3094-3104	3.8	11
42	Pozzolanic Reactivity Studies on a Biomass-Derived Waste from Sugar Cane Production: Sugar Cane Straw Ash (SCSA). *ACS Sustainable Chemistry and Engineering*, **2016**, 4, 4273-4279	8.3	11
41	One-part eco-cellular concrete for the precast industry: Functional features and life cycle assessment. *Journal of Cleaner Production*, **2020**, 269, 122203	10.3	10
40	Assessment of the Pozzolanic Activity of a Spent Catalyst by Conductivity Measurement of Aqueous Suspensions with Calcium Hydroxide. *Materials*, **2014**, 7, 2561-2576	3.5	10
39	Preliminary Studies on the use of Sugar Cane Bagasse Ash (SCBA) in the Manufacture of Alkali Activated Binders. *Key Engineering Materials*, **2014**, 600, 689-698	0.4	10
38	One-part blast furnace slag mortars activated with almond-shell biomass ash: A new 100% waste-based material. *Materials Letters*, **2020**, 272, 127882	3.3	9
37	Effect of Pyrogenic Silica and Nanosilica on Portland Cement Matrices. *Journal of Materials in Civil Engineering*, **2018**, 30, 04018266	3	9
36	Influence of microwave oven calcination on the pozzolanicity of sugar cane bagasse ashes (SCBA) from the cogeneration industry. *Construction and Building Materials*, **2018**, 187, 892-902	6.7	9
35	Orthometallation reaction in dirhodium(II) compounds. Selective formation of doubly-metallated compounds with head-to-head structure. *Polyhedron*, **1993**, 12, 1715-1717	2.7	9
34	Study of Cement-Based Mortars Containing Spanish Ground Sewage Sludge Ash. *Studies in Environmental Science*, **1997**, 71, 349-354		8
33	Application of alkali-activated industrial waste **2019**, 357-424		8
32	Assessment of Pozzolanic Activity Using Methods Based on the Measurement of Electrical Conductivity of Suspensions of Portland Cement and Pozzolan. *Materials*, **2014**, 7, 7533-7547	3.5	7

31	Studies on crystalline rice husk ashes and the activation of their pozzolanic properties. *Waste Management Series*, **2000**, 1, 493-503		7
30	Influence of Addition of Fluid Catalytic Cracking Residue (FCC) and the SiO2 Concentration in Alkali-Activated Ceramic Sanitary-Ware (CSW) Binders. *Minerals (Basel, Switzerland)*, **2018**, 8, 123	2.4	6
29	Spent FCC Catalyst for Preparing Alkali-Activated Binders: An Opportunity for a High-Degree Valorization. *Key Engineering Materials*, **2014**, 600, 709-716	0.4	6
28	Mechanical Strength of Lime-Rice Husk Ash Mortars: A Preliminary Study. *Key Engineering Materials*, **2012**, 517, 495-499	0.4	6
27	Chemical activation of pozzolanic reaction of fluid catalytic cracking catalyst residue (FC3R) in lime pastes: thermal analysis. *Advances in Cement Research*, **2004**, 16, 123-130	1.8	6
26	Effect of carbonation on the linear and nonlinear dynamic properties of cement-based materials. *Optical Engineering*, **2015**, 55, 011004	1.1	5
25	New inorganic binders containing ashes from agricultural wastes **2017**, 127-164		5
24	Caracterizaci□ de escorias de cobre de fundiciones chilenas del Siglo XIX. *Revista De Metalurgia*, **2016**, 52, 083	0.4	5
23	Comparison of original and washed pure sugar cane bagasse ashes as supplementary cementing materials. *Construction and Building Materials*, **2021**, 272, 122001	6.7	5
22	Optimum Use of Sugar Cane Straw Ash in Alkali-Activated Binders Based on Blast Furnace Slag. *Journal of Materials in Civil Engineering*, **2018**, 30, 04018084	3	4
21	The Compressive Strength and Microstructure of Alkali-Activated Binary Cements Developed by Combining Ceramic Sanitaryware with Fly Ash or Blast Furnace Slag. *Minerals (Basel, Switzerland)*, **2018**, 8, 337	2.4	4
20	Lime/pozzolan/geopolymer systems: Performance in pastes and mortars. *Construction and Building Materials*, **2021**, 276, 122208	6.7	4
19	Almond-shell biomass ash (ABA): A greener alternative to the use of commercial alkaline reagents in alkali-activated cement. *Construction and Building Materials*, **2021**, 290, 123251	6.7	4
18	Evaluation of Rice Straw Ash as a Pozzolanic Addition in Cementitious Mixtures. *Applied Sciences (Switzerland)*, **2021**, 11, 773	2.6	4
17	Nonlinear Acoustic Spectroscopy and Frequency Sweep Ultrasonics: Case on Thermal Damage Assessment in Mortar. *Journal of Nondestructive Evaluation*, **2019**, 38, 1	2.1	3
16	Sustainable Soil-Compacted Blocks Containing Blast Furnace Slag (BFS) Activated with Olive Stone BIOMASS Ash (OBA). *Sustainability*, **2020**, 12, 9824	3.6	3
15	An Approach to a New Supplementary Cementing Material: Arundo donax Straw Ash. *Sustainability*, **2018**, 10, 4273	3.6	3
14	Improvement of Portland Cement/Fly Ash Mortars Strength Using Classified Fly Ashes. *Studies in Environmental Science*, **1994**, 60, 563-570		2

13	Formulation of Alkali-Activated Slag Binder Destined for Use in Developing Countries. *Applied Sciences (Switzerland)*, **2020**, 10, 9088	2.6	2
12	Preliminary studies on hydrated cement for its reuse in geopolymers. *DYNA (Colombia)*, **2016**, 83, 229-238	8.6	2
11	Sewage sludge ash **2019**, 121-152		2
10	Characterization of lagoon sediments and their pollutant charge. Proposals for reusing. *Waste Management Series*, **2000**, 1, 1014-1021		1
9	Effect of different high surface area silicas on the rheology of cement paste. *Materiales De Construccion*, **2020**, 70, 231	1.8	1
8	Efecto de un aditivo extra□do de la planta Agave americana sobre las propiedades f□sicas y mec□nicas de un yeso. *Materiales De Construccion*, **2013**, 63, 79-92	1.8	1
7	Stabilization of soil by means alternative alkali-activated cement prepared with spent FCC catalyst. *International Journal of Applied Ceramic Technology*, **2020**, 17, 190-196	2	1
6	Microscopic Chemical Characterization and Reactivity in Cementing Systems of Elephant Grass Leaf Ashes. *Microscopy and Microanalysis*, **2018**, 24, 593-603	0.5	1
5	Reusing Construction and Demolition Waste to Prepare Alkali-Activated Cement. *Materials*, **2022**, 15, 3437	3.5	1
4	Activadores alternativos para cementos de activaci□ alcalina. *Revista ALCONPAT*, **2022**, 12, 16-31	1.7	0
3	Durability of Glass Fiber Reinforced Cement (GRC) Containing a High Proportion of Pozzolans. *Applied Sciences (Switzerland)*, **2022**, 12, 3696	2.6	0
2	Air-Void System Characterization of Eco-Cellular Concretes. *Journal of Materials in Civil Engineering*, **2021**, 33, 04021088	3	
1	The role of dissolved rice husk ash in the development of binary blast furnace slag-sewage sludge ash alkali-activated mortars. *Journal of Building Engineering*, **2022**, 104472	5.2	