Joan Formosa

List of Publications by Citations

52 papers	1,035 citations	18 h-index	30 g-index
54 ext. papers	1,214 ext. citations	5.5 avg, IF	4.54 L-index

#	Paper	IF	Citations
52	Combined use of MSWI bottom ash and fly ash as aggregate in concrete formulation: environmental and mechanical considerations. *Journal of Hazardous Materials*, **2009**, 169, 643-50	12.8	148
51	Aggregate material formulated with MSWI bottom ash and APC fly ash for use as secondary building material. *Waste Management*, **2013**, 33, 621-7	8.6	93
50	Magnesium Phosphate Cements formulated with a low-grade MgO by-product: Physico-mechanical and durability aspects. *Construction and Building Materials*, **2015**, 91, 150-157	6.7	55
49	Pilot-scale road subbase made with granular material formulated with MSWI bottom ash and stabilized APC fly ash: environmental impact assessment. *Journal of Hazardous Materials*, **2014**, 266, 132-40	12.8	43
48	Interaction between low-grade magnesium oxide and boric acid in chemically bonded phosphate ceramics formulation. *Ceramics International*, **2012**, 38, 2483-2493	5.1	41
47	Thermal degradation and fire behaviour of thermal insulation materials based on food crop by-products. *Construction and Building Materials*, **2015**, 79, 34-39	6.7	40
46	Material characterization of the MSWI bottom ash as a function of particle size. Effects of glass recycling over time. *Science of the Total Environment*, **2017**, 581-582, 897-905	10.2	39
45	Preliminary study of the mechanical and hygrothermal properties of hemp-magnesium phosphate cements. *Construction and Building Materials*, **2016**, 105, 62-68	6.7	39
44	Characterization of poly(ethylene-co-vinyl acetate) (EVA) filled with low grade magnesium hydroxide. *Polymer Degradation and Stability*, **2009**, 94, 57-60	4.7	36
43	Biogas upgrading using MSWI bottom ash: An integrated municipal solid waste management. *Renewable Energy*, **2015**, 80, 184-189	8.1	34
42	Use of weathered and fresh bottom ash mix layers as a subbase in road constructions: environmental behavior enhancement by means of a retaining barrier. *Chemosphere*, **2014**, 117, 402-9	8.4	34
41	Thermal study of low-grade magnesium hydroxide used as fire retardant and in passive fire protection. *Thermochimica Acta*, **2011**, 515, 43-50	2.9	32
40	Novel fire-protecting mortars formulated with magnesium by-products. *Cement and Concrete Research*, **2011**, 41, 191-196	10.3	27
39	Synergistic effect of the parameters affecting wet flue gas desulfurization using magnesium oxides by-products. *Chemical Engineering Journal*, **2015**, 262, 268-277	14.7	26
38	Municipal solid waste incineration bottom ash as alkali-activated cement precursor depending on particle size. *Journal of Cleaner Production*, **2020**, 242, 118443	10.3	26
37	Flame retardancy effect of combined ammonium polyphosphate and aluminium diethyl phosphinate in acrylonitrile-butadiene-styrene. *Polymer Degradation and Stability*, **2018**, 155, 208-219	4.7	19
36	Reutilization of low-grade magnesium oxides for flue gas desulfurization during calcination of natural magnesite: A closed-loop process. *Chemical Engineering Journal*, **2014**, 254, 63-72	14.7	19

35	Characterisation and partition of valuable metals from WEEE in weathered municipal solid waste incineration bottom ash, with a view to recovering. *Journal of Cleaner Production*, **2019**, 218, 61-68	10.3	18
34	Elastic modulus of a chemically bonded phosphate ceramic formulated with low-grade magnesium oxide determined by Nanoindentation. *Ceramics International*, **2015**, 41, 12137-12146	5.1	18
33	Hydration of a low-grade magnesium oxide. Lab-scale study. *Journal of Chemical Technology and Biotechnology*, **2012**, 87, 1702-1708	3.5	18
32	Low-grade magnesium oxide by-products for environmental solutions: Characterization and geochemical performance. *Journal of Geochemical Exploration*, **2015**, 152, 134-144	3.8	17
31	Magnesium phosphate cements formulated with low grade magnesium oxide incorporating phase change materials for thermal energy storage. *Construction and Building Materials*, **2017**, 155, 209-216	6.7	16
30	Improvement of passive fire protection in a gypsum panel by adding inorganic fillers: Experiment and theory. *Applied Thermal Engineering*, **2011**, 31, 3971-3978	5.8	16
29	Cork as a sustainable carbon source for nature-based solutions treating hydroponic wastewaters - Preliminary batch studies. *Science of the Total Environment*, **2019**, 650, 267-276	10.2	15
28	Municipal Solid Waste Incineration Bottom Ash as Sole Precursor in the Alkali-Activated Binder Formulation. *Applied Sciences (Switzerland)*, **2020**, 10, 4129	2.6	14
27	Epsomite as flame retardant treatment for wood: Preliminary study. *Construction and Building Materials*, **2016**, 126, 936-942	6.7	14
26	Magnesium phosphate cement formulated with low grade magnesium oxide with controlled porosity and low thermal conductivity as a function of admixture. *Ceramics International*, **2016**, 42, 15049-15056	5.1	12
25	Wet flue gas desulfurization using alkaline agents. *Reviews in Chemical Engineering*, **2015**, 31,	5	12
24	Transposition of wet flue gas desulfurization using MgO by-products: From laboratory discontinuous batch reactor to pilot scrubber. *Fuel Processing Technology*, **2015**, 138, 30-36	7.2	10
23	MSWI bottom ash for thermal energy storage: An innovative and sustainable approach for its reutilization. *Renewable Energy*, **2016**, 99, 431-436	8.1	9
22	Use of municipal solid waste incineration bottom ash and crop by-product for producing lightweight aggregate. *IOP Conference Series: Materials Science and Engineering*, **2017**, 251, 012126	0.4	8
21	APC Fly Ash Recycling: Development of a Granular Material from Laboratory to a Pilot Scale. *Waste and Biomass Valorization*, **2017**, 8, 1409-1419	3.2	7
20	Reutilization of MgO Byproducts from the Calcination of Natural Magnesite in Dry Desulfurization: A Closed-Loop Process. *Energy & Fuels*, **2015**, 29, 3845-3854	4.1	7
19	Cementos químicos formulados con subproductos de óxido de magnesio. *Boletin De La Sociedad Espanola De Ceramica Y Vidrio*, **2008**, 47, 293-297	1.9	7
18	Alkali-Activated Binders Using Bottom Ash from Waste-to-Energy Plants and Aluminium Recycling Waste. *Applied Sciences (Switzerland)*, **2021**, 11, 3840	2.6	7

17	Water treatment sludge as precursor in non-dehydroxylated kaolin-based alkali-activated cements. *Applied Clay Science*, **2021**, 204, 106032	5.2	7
16	Comparative Study of Magnesium By-Products and Vermiculite Formulations to Obtain Fire Resistant Mortars. *Materials Science Forum*, **2008**, 587-588, 898-902	0.4	6
15	Desulfurization Performance of MgO Byproducts as a Function of Particle Size. *Energy & Fuels*, **2016**, 30, 2328-2335	4.1	6
14	Valorisation of water treatment sludge for lightweight aggregate production. *Construction and Building Materials*, **2021**, 269, 121335	6.7	6
13	Alkali-Activated Cements for TES Materials in BuildingsaEnvelops Formulated With Glass Cullet Recycling Waste and Microencapsulated Phase Change Materials. *Materials*, **2019**, 12,	3.5	5
12	Geopolymers based on the valorization of Municipal Solid Waste Incineration residues. *IOP Conference Series: Materials Science and Engineering*, **2017**, 251, 012125	0.4	5
11	Granular Material Development Applied in an Experimental Section for Civil Engineering Purposes. *Applied Sciences (Switzerland)*, **2020**, 10, 6782	2.6	4
10	Crushed Autoclaved Aerated Concrete (CAAC), a Potential Reactive Filter Medium for Enhancing Phosphorus Removal in Nature-Based SolutionsPreliminary Batch Studies. *Water (Switzerland)*, **2019**, 11, 1442	3	3
9	Alkali-activated binders based on the coarse fraction of municipal solid waste incineration bottom ash. *Boletin De La Sociedad Espanola De Ceramica Y Vidrio*, **2021**,	1.9	3
8	Influence of MSWI bottom ash used as unbound granular material on the corrosion behaviour of reinforced concrete. *Journal of Material Cycles and Waste Management*, **2017**, 19, 124-133	3.4	2
7	Physical, thermal and mechanical study of MPC formulated with LG-MgO incorporating Phase Change Materials as admixture. *IOP Conference Series: Materials Science and Engineering*, **2017**, 251, 012024	0.4	2
6	Stabilization Study of a Contaminated Soil with Metal(loid)s Adding Different Low-Grade MgO Degrees. *Sustainability*, **2020**, 12, 7340	3.6	2
5	Fabrication of sustainable magnesium phosphate cement micromortar using design of experiments statistical modelling: Valorization of ceramic-stone-porcelain containing waste as filler. *Ceramics International*, **2021**, 47, 10905-10917	5.1	2
4	Thermogravimetric study of a Phase Change Slurry: Effect of variable conditions. *Applied Thermal Engineering*, **2016**, 107, 329-338	5.8	2
3	APC fly ashes stabilized with Portland cement for further development of road sub-base aggregates. *IOP Conference Series: Materials Science and Engineering*, **2017**, 251, 012124	0.4	1
2	Flue Gas Desulfurization. *Advances in Chemical and Materials Engineering Book Series*, **2016**, 337-377	0.2	1
1	Preliminary Study of New Sustainable, Alkali-Activated Cements Using the Residual Fraction of the Glass Cullet Recycling as Precursor. *Applied Sciences (Switzerland)*, **2021**, 11, 3528	2.6	