

# Joan Formosa

## List of Publications by Year in descending order

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Version: 2024-02-01

52  
papers

1,444  
citations

304602

22  
h-index

330025

37  
g-index

54  
all docs

54  
docs citations

54  
times ranked

1335  
citing authors

#	ARTICLE	IF	CITATIONS
1	Combined use of MSWI bottom ash and fly ash as aggregate in concrete formulation: Environmental and mechanical considerations. <i>Journal of Hazardous Materials</i> , 2009, 169, 643-650.	6.5	189
2	Aggregate material formulated with MSWI bottom ash and APC fly ash for use as secondary building material. <i>Waste Management</i> , 2013, 33, 621-627.	3.7	113
3	Magnesium Phosphate Cements formulated with a low-grade MgO by-product: Physico-mechanical and durability aspects. <i>Construction and Building Materials</i> , 2015, 91, 150-157.	3.2	77
4	Interaction between low-grade magnesium oxide and boric acid in chemically bonded phosphate ceramics formulation. <i>Ceramics International</i> , 2012, 38, 2483-2493.	2.3	57
5	Pilot-scale road subbase made with granular material formulated with MSWI bottom ash and stabilized APC fly ash: Environmental impact assessment. <i>Journal of Hazardous Materials</i> , 2014, 266, 132-140.	6.5	54
6	Preliminary study of the mechanical and hygrothermal properties of hemp-magnesium phosphate cements. <i>Construction and Building Materials</i> , 2016, 105, 62-68.	3.2	54
7	Material characterization of the MSWI bottom ash as a function of particle size. Effects of glass recycling over time. <i>Science of the Total Environment</i> , 2017, 581-582, 897-905.	3.9	53
8	Municipal solid waste incineration bottom ash as alkali-activated cement precursor depending on particle size. <i>Journal of Cleaner Production</i> , 2020, 242, 118443.	4.6	52
9	Thermal degradation and fire behaviour of thermal insulation materials based on food crop by-products. <i>Construction and Building Materials</i> , 2015, 79, 34-39.	3.2	48
10	Characterization of poly(ethylene-co-vinyl acetate) (EVA) filled with low grade magnesium hydroxide. <i>Polymer Degradation and Stability</i> , 2009, 94, 57-60.	2.7	44
11	Thermal study of low-grade magnesium hydroxide used as fire retardant and in passive fire protection. <i>Thermochimica Acta</i> , 2011, 515, 43-50.	1.2	44
12	Use of weathered and fresh bottom ash mix layers as a subbase in road constructions: Environmental behavior enhancement by means of a retaining barrier. <i>Chemosphere</i> , 2014, 117, 402-409.	4.2	42
13	Biogas upgrading using MSWI bottom ash: An integrated municipal solid waste management. <i>Renewable Energy</i> , 2015, 80, 184-189.	4.3	41
14	Synergistic effect of the parameters affecting wet flue gas desulfurization using magnesium oxides by-products. <i>Chemical Engineering Journal</i> , 2015, 262, 268-277.	6.6	33
15	Novel fire-protecting mortars formulated with magnesium by-products. <i>Cement and Concrete Research</i> , 2011, 41, 191-196.	4.6	31
16	Flame retardancy effect of combined ammonium polyphosphate and aluminium diethyl phosphinate in acrylonitrile-butadiene-styrene. <i>Polymer Degradation and Stability</i> , 2018, 155, 208-219.	2.7	31
17	Low-grade magnesium oxide by-products for environmental solutions: Characterization and geochemical performance. <i>Journal of Geochemical Exploration</i> , 2015, 152, 134-144.	1.5	29
18	Characterisation and partition of valuable metals from WEEE in weathered municipal solid waste incineration bottom ash, with a view to recovering. <i>Journal of Cleaner Production</i> , 2019, 218, 61-68.	4.6	29

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19	Cork as a sustainable carbon source for nature-based solutions treating hydroponic wastewaters â€” Preliminary batch studies. <i>Science of the Total Environment</i> , 2019, 650, 267-276.	3.9	28
20	Reutilization of low-grade magnesium oxides for flue gas desulfurization during calcination of natural magnesite: A closed-loop process. <i>Chemical Engineering Journal</i> , 2014, 254, 63-72.	6.6	26
21	Magnesium phosphate cements formulated with low grade magnesium oxide incorporating phase change materials for thermal energy storage. <i>Construction and Building Materials</i> , 2017, 155, 209-216.	3.2	25
22	Municipal Solid Waste Incineration Bottom Ash as Sole Precursor in the Alkali-Activated Binder Formulation. <i>Applied Sciences (Switzerland)</i> , 2020, 10, 4129.	1.3	25
23	Epsomite as flame retardant treatment for wood: Preliminary study. <i>Construction and Building Materials</i> , 2016, 126, 936-942.	3.2	24
24	Elastic modulus of a chemically bonded phosphate ceramic formulated with low-grade magnesium oxide determined by Nanoindentation. <i>Ceramics International</i> , 2015, 41, 12137-12146.	2.3	22
25	Magnesium phosphate cement formulated with low grade magnesium oxide with controlled porosity and low thermal conductivity as a function of admixture. <i>Ceramics International</i> , 2016, 42, 15049-15056.	2.3	20
26	Improvement of passive fire protection in a gypsum panel by adding inorganic fillers: Experiment and theory. <i>Applied Thermal Engineering</i> , 2011, 31, 3971-3978.	3.0	19
27	Hydration of a low-grade magnesium oxide. Lab-scale study. <i>Journal of Chemical Technology and Biotechnology</i> , 2012, 87, 1702-1708.	1.6	18
28	Wet flue gas desulfurization using alkaline agents. <i>Reviews in Chemical Engineering</i> , 2015, 31, .	2.3	18
29	Valorisation of water treatment sludge for lightweight aggregate production. <i>Construction and Building Materials</i> , 2021, 269, 121335.	3.2	18
30	Water treatment sludge as precursor in non-dehydroxylated kaolin-based alkali-activated cements. <i>Applied Clay Science</i> , 2021, 204, 106032.	2.6	18
31	Transposition of wet flue gas desulfurization using MgO by-products: From laboratory discontinuous batch reactor to pilot scrubber. <i>Fuel Processing Technology</i> , 2015, 138, 30-36.	3.7	14
32	MSWI bottom ash for thermal energy storage: An innovative and sustainable approach for its reutilization. <i>Renewable Energy</i> , 2016, 99, 431-436.	4.3	14
33	Alkali-Activated Binders Using Bottom Ash from Waste-to-Energy Plants and Aluminium Recycling Waste. <i>Applied Sciences (Switzerland)</i> , 2021, 11, 3840.	1.3	12
34	Fabrication of sustainable magnesium phosphate cement micromortar using design of experiments statistical modelling: Valorization of ceramic-stone-porcelain containing waste as filler. <i>Ceramics International</i> , 2021, 47, 10905-10917.	2.3	10
35	Use of municipal solid waste incineration bottom ash and crop by-product for producing lightweight aggregate. <i>IOP Conference Series: Materials Science and Engineering</i> , 2017, 251, 012126.	0.3	9
36	Alkali-Activated Cements for TES Materials in Buildingsâ€™ Envelops Formulated With Glass Cullet Recycling Waste and Microencapsulated Phase Change Materials. <i>Materials</i> , 2019, 12, 2144.	1.3	9

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37	Crushed Autoclaved Aerated Concrete (CAAC), a Potential Reactive Filter Medium for Enhancing Phosphorus Removal in Nature-Based Solutionsâ€”Preliminary Batch Studies. <i>Water (Switzerland)</i> , 2019, 11, 1442.	1.2	9
38	Comparative Study of Magnesium By-Products and Vermiculite Formulations to Obtain Fire Resistant Mortars. <i>Materials Science Forum</i> , 0, 587-588, 898-902.	0.3	8
39	Influence of MSWI bottom ash used as unbound granular material on the corrosion behaviour of reinforced concrete. <i>Journal of Material Cycles and Waste Management</i> , 2017, 19, 124-133.	1.6	8
40	APC Fly Ash Recycling: Development of a Granular Material from Laboratory to a Pilot Scale. <i>Waste and Biomass Valorization</i> , 2017, 8, 1409-1419.	1.8	8
41	Granular Material Development Applied in an Experimental Section for Civil Engineering Purposes. <i>Applied Sciences (Switzerland)</i> , 2020, 10, 6782.	1.3	8
42	Reutilization of MgO Byproducts from the Calcination of Natural Magnesite in Dry Desulfurization: A Closed-Loop Process. <i>Energy &amp; Fuels</i> , 2015, 29, 3845-3854.	2.5	7
43	Desulfurization Performance of MgO Byproducts as a Function of Particle Size. <i>Energy &amp; Fuels</i> , 2016, 30, 2328-2335.	2.5	7
44	Geopolymers based on the valorization of Municipal Solid Waste Incineration residues. <i>IOP Conference Series: Materials Science and Engineering</i> , 2017, 251, 012125.	0.3	7
45	Stabilization Study of a Contaminated Soil with Metal(loid)s Adding Different Low-Grade MgO Degrees. <i>Sustainability</i> , 2020, 12, 7340.	1.6	7
46	Alkali-activated binders based on the coarse fraction of municipal solid waste incineration bottom ash. <i>Boletin De La Sociedad Espanola De Ceramica Y Vidrio</i> , 2022, 61, 313-324.	0.9	7
47	Cementos quÃ¡micos formulados con subproductos de Ã³xido de magnesio. <i>Boletin De La Sociedad Espanola De Ceramica Y Vidrio</i> , 2008, 47, 293-297.	0.9	7
48	Physical, thermal and mechanical study of MPC formulated with LG-MgO incorporating Phase Change Materials as admixture. <i>IOP Conference Series: Materials Science and Engineering</i> , 2017, 251, 012024.	0.3	3
49	Thermogravimetric study of a Phase Change Slurry: Effect of variable conditions. <i>Applied Thermal Engineering</i> , 2016, 107, 329-338.	3.0	2
50	Preliminary Study of New Sustainable, Alkali-Activated Cements Using the Residual Fraction of the Glass Cullet Recycling as Precursor. <i>Applied Sciences (Switzerland)</i> , 2021, 11, 3528.	1.3	2
51	APC fly ashes stabilized with Portland cement for further development of road sub-base aggregates. <i>IOP Conference Series: Materials Science and Engineering</i> , 2017, 251, 012124.	0.3	1
52	Flue Gas Desulfurization. <i>Advances in Chemical and Materials Engineering Book Series</i> , 2016, , 337-377.	0.2	1