MÃ³nica Calero

List of Publications by Year
in descending order

94 papers	3,738 citations	117571 34 h-index	138417 58 g-index
94 all docs	94 docs citations	94 times ranked	3680 citing authors

#	Article	IF	Citations
1	The potential of microplastics as carriers of metals. Environmental Pollution, 2019, 255, 113363.	3.7	367
2	Study of Cr (III) biosorption in a fixed-bed column. Journal of Hazardous Materials, 2009, 171, 886-893.	6.5	211
3	Removal of nickel (II) ions from aqueous solutions by biosorption on sugarcane bagasse. Journal of the Taiwan Institute of Chemical Engineers, 2012, 43, 275-281.	2.7	164
4	The effect of pH on the biosorption of Cr (III) and Cr (VI) with olive stone. Chemical Engineering Journal, 2009, 148, 473-479.	6.6	142
5	Batch biosorption of lead(II) from aqueous solutions by olive tree pruning waste: Equilibrium, kinetics and thermodynamic study. Chemical Engineering Journal, 2011, 168, 170-177.	6.6	136
6	New treatment of real electroplating wastewater containing heavy metal ions by adsorption onto olive stone. Journal of Cleaner Production, 2014, 81, 120-129.	4.6	123
7	Removal of cadmium ions with olive stones: the effect of somes parameters. Process Biochemistry, 2005, 40, 2649-2654.	1.8	112
8	Modification of the sorptive characteristics of sugarcane bagasse for removing lead from aqueous solutions. Desalination, 2010, 256, 58-63.	4.0	97
9	Biosorption of hexavalent chromium from aqueous solution by Sargassum muticum brown alga. Application of statistical design for process optimization. Chemical Engineering Journal, 2012, 183, 68-76.	6.6	96
10	Equilibrium biosorption of lead(II) from aqueous solutions by solid waste from olive-oil production. Chemical Engineering Journal, 2010, 160, 615-622.	6.6	89
11	Characterization of chemically modified biosorbents from olive tree pruning for the biosorption of lead. Ecological Engineering, 2013, 58, 344-354.	1.6	84
12	Surface chemistry evaluation of some solid wastes from olive-oil industry used for lead removal from aqueous solutions. Biochemical Engineering Journal, 2009, 44, 151-159.	1.8	80
13	Physical-chemical characterization of microplastics present in some exfoliating products from Spain. Marine Pollution Bulletin, 2019, 139, 91-99.	2.3	75
14	Chemical treatment of olive pomace: Effect on acid-basic properties and metal biosorption capacity. Journal of Hazardous Materials, 2008, 156, 448-457.	6.5	69
15	Binary biosorption of copper and lead onto pine cone shell in batch reactors and in fixed bed columns. International Journal of Mineral Processing, 2016, 148, 72-82.	2.6	66
16	Multiple biosorptionâ€“desorption cycles in a fixed-bed column for Pb(II) removal by acid-treated olive stone. Journal of Industrial and Engineering Chemistry, 2012, 18, 1006-1012.	2.9	65
17	Effect of lead in biosorption of copper by almond shell. Journal of the Taiwan Institute of Chemical Engineers, 2013, 44, 466-473.	2.7	63
18	Copper biosorption by pine cone shell and thermal decomposition study of the exhausted biosorbent. Journal of Industrial and Engineering Chemistry, 2012, 18, 1741-1750.	2.9	62

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19	Kinetic modelling of torrefaction of olive tree pruning. Applied Thermal Engineering, 2017, 113, 1410-1418.	3.0	61
20	Optimization of the pyrolysis process of a plastic waste to obtain a liquid fuel using different mathematical models. Energy Conversion and Management, 2019, 188, 19-26.	4.4	59
21	Evaluation and comparison of the biosorption process of copper ions onto olive stone and pine bark. Journal of Industrial and Engineering Chemistry, 2011, 17, 824-833.	2.9	58
22	Kinetic study of the pyrolysis of pine cone shell through non-isothermal thermogravimetry: Effect of heavy metals incorporated by biosorption. Renewable Energy, 2016, 96, 613-624.	4.3	58
23	Analysis of the kinetics of lead biosorption using native and chemically treated olive tree pruning. Ecological Engineering, 2013, 58, 278-285.	1.6	54
24	Production of an Alternative Fuel by Pyrolysis of Plastic Wastes Mixtures. Energy & Fuels, 2020, 34, 1781-1790.	2.5	53
25	Biosorption kinetics of Cd (II), Cr (III) and Pb (II) in aqueous solutions by olive stone. Brazilian Journal of Chemical Engineering, 2009, 26, 265-273.	0.7	49
26	Froth flotation: kinetic models based on chemical analogy. Chemical Engineering and Processing: Process Intensification, 2001, 40, 269-275.	1.8	48
27	Development and Characterization of Biosorbents To Remove Heavy Metals from Aqueous Solutions by Chemical Treatment of Olive Stone. Industrial & Engineering Chemistry Research, 2013, 52, 10809-10819.	1.8	47
28	Physico-chemical characterization of pine cone shell and its use as biosorbent and fuel. Bioresource Technology, 2015, 196, 406-412.	4.8	47
29	Influence of quebracho and sodium silicate on flotation of celestite and calcite with sodium oleate. International Journal of Mineral Processing, 1993, 37, 283-298.	2.6	45
30	Characterization and modeling of pyrolysis of the two-phase olive mill solid waste. Fuel Processing Technology, 2014, 126, 104-111.	3.7	45
31	Study of kinetics in the biosorption of lead onto native and chemically treated olive stone. Journal of Industrial and Engineering Chemistry, 2014, 20, 2754-2760.	2.9	40
32	Effect of the Acid Treatment of Olive Stone on the Biosorption of Lead in a Packed-Bed Column. Industrial & Engineering Chemistry Research, 2010, 49, 12587-12595.	1.8	38
33	Neural fuzzy modelization of copper removal from water by biosorption in fixed-bed columns using olive stone and pinion shell. Bioresource Technology, 2018, 252, 100-109.	4.8	38
34	Microplastics and fibers from three areas under different anthropogenic pressures in Douro river. Science of the Total Environment, 2021, 776, 145999.	3.9	37
35	Comparative study of the biosorption of cadmium(II), chromium(III), and lead(II) by olive stone. Environmental Progress, 2008, 27, 469-478.	0.8	35
36	The relevance of interaction of chemicals/pollutants and microplastic samples as route for transporting contaminants. Chemical Engineering Research and Design, 2020, 138, 312-323.	2.7	35

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37	Effects of distance to the sea and geomorphological characteristics on the quantity and distribution of microplastics in beach sediments of Granada (Spain). Science of the Total Environment, 2020, 746, 142023.	3.9	33
38	Factorial experimental design for optimizating the removal conditions of lead ions from aqueous solutions by three wastes of the olive-oil production. Desalination, 2011, 278, 132-140.	4.0	32
39	Optimization of the use of a biosorbent to remove heavy metals: Regeneration and reuse of exhausted biosorbent. Journal of the Taiwan Institute of Chemical Engineers, 2015, 51, 109-118.	2.7	30
40	Removal of heavy metals from acid mining effluents by hydrolyzed olive cake. Bioresource Technology, 2018, 268, 169-175.	4.8	30
41	Effect of torrefaction conditions on greenhouse crop residue: Optimization of conditions to upgrade solid characteristics. Bioresource Technology, 2017, 244, 741-749.	4.8	29
42	The role of temperature on slow pyrolysis of olive cake for the production of solid fuels and adsorbents. Chemical Engineering Research and Design, 2019, 121, 209-220.	2.7	29
43	Microplastics as Vectors of Chromium and Lead during Dynamic Simulation of the Human Gastrointestinal Tract. Sustainability, 2020, 12, 4792.	1.6	28
44	Biosorption of Cr⁶⁺from aqueous solution by sugarcane bagasse. Desalination and Water Treatment, 2014, 52, 5912-5922.	1.0	27
45	Combustion of a Pb(II)-loaded olive tree pruning used as biosorbent. Journal of Hazardous Materials, 2016, 308, 285-293.	6.5	27
46	Batch and continuous packed column studies of chromium (III) biosorption by olive stone. Environmental Progress and Sustainable Energy, 2011, 30, 576-585.	1.3	26
47	Kinetic analysis of pyrolysis and combustion of the olive tree pruning by chemical fractionation. Bioresource Technology, 2018, 249, 557-566.	4.8	26
48	Flotation of low-grade phosphate ore. Advanced Powder Technology, 2004, 15, 421-433.	2.0	24
49	Chemical activation of olive tree pruning to remove lead(II) in batch system: Factorial design for process optimization. Biomass and Bioenergy, 2013, 58, 322-332.	2.9	23
50	Sorption of Cr (VI) onto Olive Stone in a Packed Bed Column: Prediction of Kinetic Parameters and Breakthrough Curves. Journal of Environmental Engineering, ASCE, 2010, 136, 1389-1397.	0.7	22
51	Pyrolysis kinetics of the lead-impregnated olive stone by non-isothermal thermogravimetry. Chemical Engineering Research and Design, 2018, 113, 448-458.	2.7	22
52	Hydrolyzed olive cake as novel adsorbent for copper removal from fertilizer industry wastewater. Journal of Cleaner Production, 2020, 268, 121935.	4.6	22
53	Copper biosorption in the presence of lead onto olive stone and pine bark in batch and continuous systems. Environmental Progress and Sustainable Energy, 2014, 33, 192-204.	1.3	21
54	Kinetic Modeling of the Biosorption of Lead(II) from Aqueous Solutions by Solid Waste Resulting from the Olive Oil Production. Journal of Chemical & Engineering Data, 2011, 56, 3053-3060.	1.0	19

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55	Kinetics of thermal decomposition of some biomasses in an inert environment. An investigation of the effect of lead loaded by biosorption. Waste Management, 2017, 70, 101-113.	3.7	19
56	Recovery, separation and production of fuel, plastic and aluminum from the Tetra PAK waste to hydrothermal and pyrolysis processes. Waste Management, 2022, 137, 179-189.	3.7	17
57	Kinetic study of thermal degradation of olive cake based on a scheme of fractionation and its behavior impregnated of metals. Bioresource Technology, 2018, 261, 104-116.	4.8	15
58	Playing a Board Game to Learn Bioenergy and Biofuels Topics in an Interactive, Engaging Context. Journal of Chemical Education, 2020, 97, 1375-1380.	1.1	15
59	Effect of the Presence of Chromium (III) on the Removal of Lead (II) from Aqueous Solutions by Agricultural Wastes. Journal of Environmental Engineering, ASCE, 2009, 135, 1348-1356.	0.7	13
60	Liquid Hot Water Pretreatment and Enzymatic Hydrolysis as a Valorization Route of Italian Green Pepper Waste to Delivery Free Sugars. Foods, 2020, 9, 1640.	1.9	13
61	Kinetic considerations in the flotation of phosphate ore. Advanced Powder Technology, 2005, 16, 347-361.	2.0	12
62	The scale-up of Cr³⁺ biosorption onto olive stone in a fixed bed column. Desalination and Water Treatment, 2016, 57, 25140-25152.	1.0	12
63	Reaction schemes for estimating kinetic parameters of thermal decomposition of native and metal-loaded almond shell. Chemical Engineering Research and Design, 2018, 118, 234-244.	2.7	12
64	The effect of pH modifier on the flotation of celestite with sodium oleate and quebracho. Chemical Engineering Science, 1996, 51, 4289-4294.	1.9	11
65	Biosorption of Cu²⁺in a packed bed column by almond shell: optimization of process variables. Desalination and Water Treatment, 2013, 51, 1954-1965.	1.0	11
66	Comparative study of isotherm parameters of lead biosorption by two wastes of olive-oil production. Water Science and Technology, 2015, 72, 711-720.	1.2	11
67	Recovering Metals from Aqueous Solutions by Biosorption onto Hydrolyzed Olive Cake. Water (Switzerland), 2019, 11, 2519.	1.2	11
68	Life cycle assessment on producing a heavy metals biosorbent from sugarcane bagasse. Desalination and Water Treatment, 2011, 30, 272-277.	1.0	10
69	Complete use of an agricultural waste: Application of untreated and chemically treated olive stone as biosorbent of lead ions and reuse as fuel. Chemical Engineering Research and Design, 2015, 104, 740-751.	2.7	10
70	Simultaneous biosorption of methylene blue and trivalent chromium onto olive stone. Desalination and Water Treatment, 2016, 57, 17400-17410.	1.0	10
71	A novel methodology to characterize and to valorize a waste by a fractionation technology. Chemical Engineering Research and Design, 2017, 109, 140-150.	2.7	10
72	Optimization of the sugar hydrothermal extraction process from olive cake using neuro-fuzzy models. Bioresource Technology, 2018, 268, 81-90.	4.8	10

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73	Surface Tension for Aqueous Solutions of Sodium 1-Dodecanesulfonate. Journal of Chemical & Engineering Data, 2006, 51, 1216-1219.	1.0	9
74	Thermal analysis of olive tree pruning and the by-products obtained by its gasification and pyrolysis: The effect of some heavy metals on their devolatilization behavior. Journal of Energy Chemistry, 2019, 32, 105-117.	7.1	9
75	Characterization of liquid fraction obtained from pyrolysis of post-consumer mixed plastic waste: A comparing between measured and calculated parameters. Chemical Engineering Research and Design, 2022, 159, 1053-1063.	2.7	9
76	The effect of the degree of grinding on the flotation of celestite ore. Advanced Powder Technology, 2001, 12, 481-491.	2.0	8
77	Study of the catalytic effect of nickel in the thermal decomposition of olive tree pruning via thermogravimetric analysis. Renewable Energy, 2017, 103, 825-835.	4.3	8
78	Evaluation of biosorption of copper ions onto pinion shell. Desalination and Water Treatment, 2013, 51, 2411-2422.	1.0	7
79	Effect of different pre-treatments and addition of plastic on the properties of bio-oil obtained by pyrolysis of greenhouse crop residue. Journal of Analytical and Applied Pyrolysis, 2021, 153, 104977.	2.6	7
80	CHARACTERIZATION OF PLASTIC MATERIALS PRESENT IN MUNICIPAL SOLID WASTE: PRELIMINARY STUDY FOR THEIR MECHANICAL RECYCLING. Detritus, 2018, In Press, 1.	0.4	7
81	Influence of nickel during the thermal degradation of pine cone shell. Study of the environmental implications. Journal of Cleaner Production, 2018, 183, 403-414.	4.6	6
82	Study of the kinetic parameters of thermal and oxidative degradation of various residual materials. Biomass and Bioenergy, 2019, 124, 13-24.	2.9	6
83	Comparison Between Performance of Fluorite Flotation Under Different Depressants Reagents in Two Pieces of Laboratory Equipment. Applied Sciences (Switzerland), 2020, 10, 5667.	1.3	4
84	Testing of New Collectors for Concentration of Fluorite by Flotation in Pneumatic (Modified) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 302 T	0.8	4
85	Separation of the Soluble Salts KNO3 and NH4Cl by Flotation with Oleic Acid. Chemical Engineering Research and Design, 2003, 81, 963-970.	2.7	3
86	Equilibrium modelling of Cr (VI) biosorption by olive stone. , 2008, , .		3
87	Interaction probabilities in a four components aqueous two-phase system: polymer+salt+water+protein. Chemical Engineering Science, 2001, 56, 4451-4456.	1.9	2
88	Potentiometric titrations for the characterization of functional groups on solid wastes of the olive oil production. Environmental Progress and Sustainable Energy, 2010, 29, 249-258.	1.3	2
89	Characterization of the Different Oils Obtained through the Catalytic In Situ Pyrolysis of Polyethylene Film from Municipal Solid Waste. Applied Sciences (Switzerland), 2022, 12, 4043.	1.3	2
90	Contact Angle and Surface Tension in the Celestite + Alkylic Collector Aqueous Solutions + Air System. Journal of Chemical & Engineering Data, 2009, 54, 314-317.	1.0	1

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91	BINARY BIOSORPTION OF Cu(II)-Pb(II) MIXTURES ONTO PINE NUTS SHELL IN BATCH AND PACKED BED SYSTEMS. Environmental Engineering and Management Journal, 2018, 17, 1349-1361.	0.2	1
92	Physic-Chemical Characterization of a Waste from Olive Industry. Key Engineering Materials, 2015, 663, 140-147.	0.4	0
93	Column Leaching Tests to Valorize a Solid Waste from the Decommissioning of Coal-Fired Power Plants. Energies, 2019, 12, 1684.	1.6	0
94	Olive-Oil Waste for the Removal of Heavy Metals from Wastewater. Environmental Chemistry for A Sustainable World, 2021, , 51-79.	0.3	0