Macarena MuÃ±oz

List of Publications by Year
in descending order

61 papers	2,797 citations	172207 29 h-index	174990 52 g-index
62 all docs	62 docs citations	62 times ranked	3321 citing authors

#	Article	IF	Citations
1	Preparation of magnetite-based catalysts and their application in heterogeneous Fenton oxidation â€“ A review. Applied Catalysis B: Environmental, 2015, 176-177, 249-265.	10.8	593
2	Trends in the Intensification of the Fenton Process for Wastewater Treatment: An Overview. Critical Reviews in Environmental Science and Technology, 2015, 45, 2611-2692.	6.6	191
3	Accelerating Oxygenâ€Reduction Catalysts through Preventing Poisoning with Nonâ€Reactive Species by Using Hydrophobic Ionic Liquids. Angewandte Chemie - International Edition, 2016, 55, 2257-2261.	7.2	125
4	Assessment of the generation of chlorinated byproducts upon Fenton-like oxidation of chlorophenols at different conditions. Journal of Hazardous Materials, 2011, 190, 993-1000.	6.5	109
5	Boosting Performance of Low Temperature Fuel Cell Catalysts by Subtle Ionic Liquid Modification. ACS Applied Materials & Interfaces, 2015, 7, 3562-3570.	4.0	90
6	Tuning the Electrocatalytic Performance of Ionic Liquid Modified Pt Catalysts for the Oxygen Reduction Reaction via Cationic Chain Engineering. ACS Catalysis, 2018, 8, 8244-8254.	5.5	82
7	Adsorption of micropollutants onto realistic microplastics: Role of microplastic nature, size, age, and NOM fouling. Chemosphere, 2021, 283, 131085.	4.2	79
8	A ferromagnetic Î³-alumina-supported iron catalyst for CWPO. Application to chlorophenols. Applied Catalysis B: Environmental, 2013, 136-137, 218-224.	10.8	77
9	Triclosan breakdown by Fenton-like oxidation. Chemical Engineering Journal, 2012, 198-199, 275-281.	6.6	64
10	Ionic liquids breakdown by Fenton oxidation. Catalysis Today, 2015, 240, 16-21.	2.2	64
11	Application of CWPO to the treatment of pharmaceutical emerging pollutants in different water matrices with a ferromagnetic catalyst. Journal of Hazardous Materials, 2017, 331, 45-54.	6.5	64
12	Naturally-occurring iron minerals as inexpensive catalysts for CWPO. Applied Catalysis B: Environmental, 2017, 203, 166-173.	10.8	61
13	Application of Fenton-like oxidation as pre-treatment for carbamazepine biodegradation. Chemical Engineering Journal, 2015, 264, 856-862.	6.6	60
14	Application of intensified Fenton oxidation to the treatment of sawmill wastewater. Chemosphere, 2014, 109, 34-41.	4.2	57
15	Synthesis of high surface area carbon adsorbents prepared from pine sawdust- Onopordum acanthium L. for nonsteroidal anti-inflammatory drugs adsorption. Journal of Environmental Management, 2016, 183, 294-305.	3.8	56
16	Degradation of imidazoliumâ€based ionic liquids in aqueous solution by Fenton oxidation. Journal of Chemical Technology and Biotechnology, 2014, 89, 1197-1202.	1.6	53
17	Effective Adsorption of Methylene Blue dye onto Magnetic Nanocomposites. Modeling and Reuse Studies. Applied Sciences (Switzerland), 2019, 9, 4563.	1.3	48
18	A comparative study among catalytic wet air oxidation, Fenton, and Photo-Fenton technologies for the on-site treatment of hospital wastewater. Journal of Environmental Management, 2021, 290, 112624.	3.8	47

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19	Chlorophenols breakdown by a sequential hydrodechlorination-oxidation treatment with a magnetic Pdâ€“Fe/Î³-Al2O3 catalyst. Water Research, 2013, 47, 3070-3080.	5.3	45
20	Application of intensified Fenton oxidation to the treatment of hospital wastewater: Kinetics, ecotoxicity and disinfection. Journal of Environmental Chemical Engineering, 2016, 4, 4107-4112.	3.3	45
21	Size-controlled PtNi nanoparticles as highly efficient catalyst for hydrodechlorination reactions. Applied Catalysis B: Environmental, 2016, 192, 1-7.	10.8	45
22	Deducing kinetic constants for the hydrodechlorination of 4-chlorophenol using high adsorption capacity catalysts. Chemical Engineering Journal, 2016, 285, 228-235.	6.6	37
23	Chlorinated Byproducts from the Fenton-like Oxidation of Polychlorinated Phenols. Industrial & Engineering Chemistry Research, 2012, 51, 13092-13099.	1.8	36
24	Role of the chemical structure of ionic liquids in their ecotoxicity and reactivity towards Fenton oxidation. Separation and Purification Technology, 2015, 150, 252-256.	3.9	36
25	Improved Î³-alumina-supported Pd and Rh catalysts for hydrodechlorination of chlorophenols. Applied Catalysis A: General, 2014, 488, 78-85.	2.2	35
26	Treatment of hospital wastewater through the CWPO-Photoassisted process catalyzed by ilmenite. Journal of Environmental Chemical Engineering, 2017, 5, 4337-4343.	3.3	35
27	Highly efficient removal of pharmaceuticals from water by well-defined carbide-derived carbons. Chemical Engineering Journal, 2018, 347, 595-606.	6.6	34
28	Antibiotics abatement in synthetic and real aqueous matrices by H2O2/natural magnetite. Catalysis Today, 2018, 313, 142-147.	2.2	32
29	Polymer-based spherical activated carbon as catalytic support for hydrodechlorination reactions. Applied Catalysis B: Environmental, 2017, 218, 498-505.	10.8	31
30	Boosting the Activity in Supported Ionic Liquid-Phase-Catalyzed Hydroformylation via Surface Functionalization of the Carbon Support. ACS Catalysis, 2016, 6, 2280-2286.	5.5	30
31	Degradation of widespread cyanotoxins with high impact in drinking water (microcystins,) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50	5.3	30
32	Overview of toxic cyanobacteria and cyanotoxins in Ibero-American freshwaters: Challenges for risk management and opportunities for removal by advanced technologies. Science of the Total Environment, 2021, 761, 143197.	3.9	30
33	Carbon-encapsulated iron nanoparticles as reusable adsorbents for micropollutants removal from water. Separation and Purification Technology, 2021, 257, 117974.	3.9	29
34	Fast degradation of diclofenac by catalytic hydrodechlorination. Chemosphere, 2018, 213, 141-148.	4.2	28
35	Improved wet peroxide oxidation strategies for the treatment of chlorophenols. Chemical Engineering Journal, 2013, 228, 646-654.	6.6	25
36	Fast oxidation of the neonicotinoid pesticides listed in the EU Decision 2018/840 from aqueous solutions. Separation and Purification Technology, 2020, 235, 116168.	3.9	25

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37	Palladium-based Catalytic Membrane Reactor for the continuous flow hydrodechlorination of chlorinated micropollutants. Applied Catalysis B: Environmental, 2021, 293, 120235.	10.8	23
38	Combining efficiently catalytic hydrodechlorination and wet peroxide oxidation (HDCâ€“CWPO) for the abatement of organochlorinated water pollutants. Applied Catalysis B: Environmental, 2014, 150-151, 197-203.	10.8	22
39	Polymerâ€Based Spherical Activated Carbon as Easyâ€toâ€Handle Catalyst Support forÂHydrogenation Reactions. Chemical Engineering and Technology, 2016, 39, 276-284.	0.9	22
40	Degradation of imidazolium-based ionic liquids by catalytic wet peroxide oxidation with carbon and magnetic iron catalysts. Journal of Chemical Technology and Biotechnology, 2016, 91, 2882-2887.	1.6	18
41	CWPO intensification by induction heating using magnetite as catalyst. Journal of Environmental Chemical Engineering, 2020, 8, 104085.	3.3	17
42	Catalytic hydrodechlorination as polishing step in drinking water treatment for the removal of chlorinated micropollutants. Separation and Purification Technology, 2019, 227, 115717.	3.9	16
43	Exploring the role of the catalytic support sorption capacity on the hydrodechlorination kinetics by the use of carbide-derived carbons. Applied Catalysis B: Environmental, 2017, 203, 591-598.	10.8	15
44	Efficient removal of the pharmaceutical pollutants included in the EU Watch List (Decision 2015/495) by modified magnetite/H2O2. Chemical Engineering Journal, 2019, 376, 120265.	6.6	15
45	Combining HDC and CWPO for the removal of p -chloro- m -cresol from water under ambient-like conditions. Applied Catalysis B: Environmental, 2017, 216, 20-29.	10.8	13
46	Boosting the catalytic activity of natural magnetite for wet peroxide oxidation. Environmental Science and Pollution Research, 2020, 27, 1176-1185.	2.7	13
47	Nanoscale Fe/Ag particles activated persulfate: optimization using response surface methodology. Water Science and Technology, 2017, 75, 2216-2224.	1.2	12
48	Role of the pore structure of Fe/C catalysts on heterogeneous Fenton oxidation. Journal of Environmental Chemical Engineering, 2020, 8, 102921.	3.3	11
49	AktivitÃtssteigerung von Sauerstoffreduktionskatalysatoren durch UnterdrÃ¼ckung der Katalysatorvergiftung mittels hydrophober ionischer FlÃ¼ssigkeiten. Angewandte Chemie, 2016, 128, 2298-2302.	1.6	10
50	Kinetics of imidazolium-based ionic liquids degradation in aqueous solution by Fenton oxidation. Environmental Science and Pollution Research, 2018, 25, 34811-34817.	2.7	10
51	Stable Immobilization of Sizeâ€Controlled Bimetallic Nanoparticles in Photonic Crystal Fiber Microreactor. Chemie-Ingenieur-Technik, 2018, 90, 653-659.	0.4	8
52	Condensation By-Products in Wet Peroxide Oxidation: Fouling or Catalytic Promotion? Part I. Evidences of an Autocatalytic Process. Catalysts, 2019, 9, 516.	1.6	7
53	Catalytic Hydrodehalogenation of Haloacetic Acids: A Kinetic Study. Industrial & Engineering Chemistry Research, 2020, 59, 17779-17785.	1.8	7
54	Catalytic Wet Peroxide Oxidation of Cylindrospermopsin over Magnetite in a Continuous Fixed-Bed Reactor. Catalysts, 2020, 10, 1250.	1.6	6

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55	On the deactivation and regeneration of Pd/Al2O3 catalyst for aqueous-phase hydrodechlorination of diluted chlorpromazine solution. Catalysis Today, 2020, 356, 255-259.	2.2	5
56	Innovative iron oxide foams for the removal of micropollutants by Catalytic Wet Peroxide Oxidation: Assessment of long-term operation under continuous mode. Journal of Environmental Chemical Engineering, 2021, 9, 105914.	3.3	5
57	Condensation By-Products in Wet Peroxide Oxidation: Fouling or Catalytic Promotion? Part II: Activity, Nature and Stability. Catalysts, 2019, 9, 518.	1.6	3
58	Editorial Catalysts: Special Issue on Trends in Catalytic Wet Peroxide Oxidation Processes. Catalysts, 2019, 9, 918.	1.6	3
59	Catalyst deactivation in the hydrodechlorination of micropollutants. A case of study with neonicotinoid pesticides. Journal of Water Process Engineering, 2020, 38, 101550.	2.6	3
60	Catalytic hydrodehalogenation of the flame retardant tetrabromobisphenol A by alumina-supported Pd, Rh and Pt catalysts. Chemical Engineering Journal Advances, 2022, 9, 100212.	2.4	2
61	Application of catalytic hydrodehalogenation in drinking water treatment for organohalogenated micropollutants removal: A review. Journal of Hazardous Materials Advances, 2022, 5, 100047.	1.2	1