Fernando Martinez

List of Publications by Citations

93 papers	3,373 citations	36 h-index	56 g-index
96 ext. papers	3,767 ext. citations	7.9 avg, IF	5.36 L-index

#	Paper	IF	Citations
93	Synthesis of a honeycomb-like Cu-based metal-organic framework and its carbon dioxide adsorption behaviour. *Dalton Transactions*, **2013**, 42, 2392-8	4.3	143
92	Heterogeneous photo-Fenton degradation of phenolic aqueous solutions over iron-containing SBA-15 catalyst. *Applied Catalysis B: Environmental*, **2005**, 60, 181-190	21.8	141
91	Nanocomposite Fe2O3/SBA-15: An efficient and stable catalyst for the catalytic wet peroxidation of phenolic aqueous solutions. *Chemical Engineering Journal*, **2007**, 131, 245-256	14.7	118
90	Heterogeneous catalytic wet peroxide oxidation systems for the treatment of an industrial pharmaceutical wastewater. *Water Research*, **2009**, 43, 4010-8	12.5	115
89	Effective pharmaceutical wastewater degradation by Fenton oxidation with zero-valent iron. *Applied Catalysis B: Environmental*, **2013**, 136-137, 64-69	21.8	110
88	Degradation of phenolic aqueous solutions by high frequency sono-Fenton systems (US□e2O3/SBA-15□H2O2). *Applied Catalysis B: Environmental*, **2009**, 90, 380-388	21.8	109
87	Iron species incorporated over different silica supports for the heterogeneous photo-Fenton oxidation of phenol. *Applied Catalysis B: Environmental*, **2007**, 70, 452-460	21.8	104
86	Integrated heterogeneous sono-photo Fenton processes for the degradation of phenolic aqueous solutions. *Ultrasonics Sonochemistry*, **2009**, 16, 417-24	8.9	97
85	Heterogeneous photo-Fenton oxidation of benzoic acid in water: Effect of operating conditions, reaction by-products and coupling with biological treatment. *Applied Catalysis B: Environmental*, **2008**, 85, 24-32	21.8	94
84	Zero valent iron (ZVI) mediated Fenton degradation of industrial wastewater: Treatment performance and characterization of final composites. *Chemical Engineering Journal*, **2015**, 269, 298-305	14.7	93
83	Copper-based MOF-74 material as effective acid catalyst in Friedel□rafts acylation of anisole. *Catalysis Today*, **2014**, 227, 130-137	5.3	91
82	Mineralization of phenol by a heterogeneous ultrasound/Fe-SBA-15/H2O2 process: Multivariate study by factorial design of experiments. *Applied Catalysis B: Environmental*, **2006**, 66, 198-207	21.8	90
81	Enhancement of the advanced Fenton process (Fe0/H2O2) by ultrasound for the mineralization of phenol. *Applied Catalysis B: Environmental*, **2012**, 113-114, 100-106	21.8	88
80	Amino-impregnated MOF materials for CO 2 capture at post-combustion conditions. *Chemical Engineering Science*, **2016**, 142, 55-61	4.4	83
79	Coupling membrane separation and photocatalytic oxidation processes for the degradation of pharmaceutical pollutants. *Water Research*, **2013**, 47, 5647-58	12.5	83
78	Treatment of Phenolic Effluents by Catalytic Wet Hydrogen Peroxide Oxidation over Fe2O3/SBA-15 Extruded Catalyst in a Fixed-Bed Reactor. *Industrial & Engineering Chemistry Research*, **2007**, 46, 4396-4405	3.9	82
77	The beneficial role of use of ultrasound in heterogeneous Fenton-like system over supported copper catalysts for degradation of p-chlorophenol. *Catalysis Today*, **2007**, 124, 224-231	5.3	81

76	Assessment of Fe2O3/SiO2 catalysts for the continuous treatment of phenol aqueous solutions in a fixed bed reactor. *Catalysis Today*, **2010**, 149, 334-340	5.3	75
75	Activity and resistance of iron-containing amorphous, zeolitic and mesostructured materials for wet peroxide oxidation of phenol. *Water Research*, **2005**, 39, 1741-50	12.5	72
74	Catalytic wet peroxide oxidation of phenolic solutions over a LaTi1−xCuxO3 perovskite catalyst. *Applied Catalysis B: Environmental*, **2004**, 47, 281-294	21.8	70
73	Drugs of abuse in surface and tap waters of the Tagus River basin: heterogeneous photo-Fenton process is effective in their degradation. *Environment International*, **2012**, 41, 35-43	12.9	67
72	Comparative life cycle assessment (LCA) study of heterogeneous and homogenous Fenton processes for the treatment of pharmaceutical wastewater. *Journal of Cleaner Production*, **2016**, 124, 21-29	10.3	61
71	Wet Peroxide Oxidation of Phenolic Solutions over Different Iron-Containing Zeolitic Materials. *Industrial & Engineering Chemistry Research*, **2001**, 40, 3921-3928	3.9	60
70	Heterogeneous photo-Fenton treatment for the reduction of pharmaceutical contamination in Madrid rivers and ecotoxicological evaluation by a miniaturized fern spores bioassay. *Chemosphere*, **2010**, 80, 381-8	8.4	59
69	Acid hybrid catalysts from poly(styrenesulfonic acid) grafted onto ultra-large-pore SBA-15 silica using atom transfer radical polymerization. *Journal of Materials Chemistry*, **2010**, 20, 8026		56
68	Nanocomposite of crystalline Fe2O3 and CuO particles and mesostructured SBA-15 silica as an active catalyst for wet peroxide oxidation processes. *Catalysis Communications*, **2006**, 7, 478-483	3.2	56
67	Toxicity assessment of pharmaceutical compounds on mixed culture from activated sludge using respirometric technique: The role of microbial community structure. *Science of the Total Environment*, **2018**, 630, 809-819	10.2	55
66	Biological removal of pharmaceutical and personal care products by a mixed microbial culture: Sorption, desorption and biodegradation. *Biochemical Engineering Journal*, **2013**, 81, 108-119	4.2	50
65	Elimination of drugs of abuse and their toxicity from natural waters by photo-Fenton treatment. *Science of the Total Environment*, **2015**, 520, 198-205	10.2	47
64	Catalytic advantages of NH 2 -modified MIL-53(Al) materials for Knoevenagel condensation reaction. *Microporous and Mesoporous Materials*, **2017**, 246, 43-50	5.3	43
63	Biological removal of pharmaceutical compounds using white-rot fungi with concomitant FAME production of the residual biomass. *Journal of Environmental Management*, **2016**, 180, 228-37	7.9	43
62	Perfluorinated Nafion-modified SBA-15 materials for catalytic acylation of anisole. *Applied Catalysis A: General*, **2008**, 347, 169-178	5.1	43
61	Sustainable Fe-BTC catalyst for efficient removal of mehylene blue by advanced fenton oxidation. *Catalysis Today*, **2018**, 313, 6-11	5.3	41
60	Crystallization mechanism of Fe-MFI from wetness impregnated Fe2O3SiO2 amorphous xerogels: Role of iron species in Fenton-like processes. *Microporous and Mesoporous Materials*, **2004**, 74, 11-21	5.3	41
59	Exploring the effects of ZVI addition on resource recovery in the anaerobic digestion process. *Chemical Engineering Journal*, **2018**, 335, 703-711	14.7	38

58	Techno-economical assessment of coupling Fenton/biological processes for the treatment of a pharmaceutical wastewater. *Journal of Environmental Chemical Engineering*, **2018**, 6, 485-494	6.8	36
57	Experimental and modeling study on removal of pharmaceutically active compounds in rotating biological contactors. *Journal of Hazardous Materials*, **2014**, 274, 473-82	12.8	33
56	Treatment of an agrochemical wastewater by integration of heterogeneous catalytic wet hydrogen peroxide oxidation and rotating biological contactors. *Chemical Engineering Journal*, **2013**, 226, 409-415	14.7	31
55	Sulfonated polystyrene-modified mesoporous organosilicas for acid-catalyzed processes. *Chemical Engineering Journal*, **2010**, 161, 388-396	14.7	31
54	Immobilization of active and stable goethite coated-films by a dip-coating process and its application for photo-Fenton systems. *Chemical Engineering Journal*, **2012**, 203, 212-222	14.7	28
53	Synthesis and characterisation of iron-containing SBA-15 mesoporous silica. *Studies in Surface Science and Catalysis*, **2002**, 142, 1109-1116	1.8	26
52	Biodiesel and biogas production from Isochrysis galbana using dry and wet lipid extraction: A biorefinery approach. *Renewable Energy*, **2020**, 146, 188-195	8.1	26
51	Low-cost Fe/SiO 2 catalysts for continuous Fenton processes. *Catalysis Today*, **2017**, 280, 176-183	5.3	24
50	Highly Efficient Synthesis of New □Arylamino-□-chloropropan-2-ones via Oxidative Hydrolysis of Vinyl Chlorides Promoted by Calcium Hypochlorite. *Advanced Synthesis and Catalysis*, **2009**, 351, 3199-3206	5.6	22
49	Influence of preoxidizing treatments on the preparation of iron-containing activated carbons for catalytic wet peroxide oxidation of phenol. *Journal of Chemical Technology and Biotechnology*, **2012**, 87, 880-886	3.5	21
48	Influence of synthesis routes on the state of Fe-species in SBA-15 mesoporous materials. *Studies in Surface Science and Catalysis*, **2004**, 154, 805-812	1.8	21
47	Understanding the role of mediators in the efficiency of advanced oxidation processes using white-rot fungi. *Chemical Engineering Journal*, **2019**, 359, 1427-1435	14.7	21
46	Highly Active Anti-Diabetic Metal□Organic Framework. *Crystal Growth and Design*, **2016**, 16, 537-540	3.5	20
45	Trametes versicolor immobilized on rotating biological contactors as alternative biological treatment for the removal of emerging concern micropollutants. *Water Research*, **2020**, 170, 115313	12.5	19
44	A Recyclable Cu-MOF-74 Catalyst for the Ligand-Free O-Arylation Reaction of 4-Nitrobenzaldehyde and Phenol. *Nanomaterials*, **2017**, 7,	5.4	18
43	Removal of pharmaceutical compounds from urban wastewater by an advanced bio-oxidation process based on fungi Trametes versicolor immobilized in a continuous RBC system. *Environmental Science and Pollution Research*, **2018**, 25, 34884-34892	5.1	17
42	Biological and Bioelectrochemical Systems for Hydrogen Production and Carbon Fixation Using Purple Phototrophic Bacteria. *Frontiers in Energy Research*, **2018**, 6,	3.8	17
41	Novel heterogeneous catalysts in the wet peroxide oxidation of phenol. *Water Science and Technology*, **2001**, 44, 153-160	2.2	16

40	Chemical surface modified-activated carbon cloth for catalytic wet peroxide oxidation of phenol. *Journal of Chemical Technology and Biotechnology*, **2014**, 89, 1182-1188	3.5	15
39	Resource Recovery Potential From Lignocellulosic Feedstock Upon Lysis With Ionic Liquids. *Frontiers in Bioengineering and Biotechnology*, **2018**, 6, 119	5.8	15
38	Alkaline-earth metal based MOFs with second scale long-lasting phosphor behavior. *CrystEngComm* , **2018**, 20, 4793-4803	3.3	14
37	Fenton-like catalyst based on a reticulated porous perovskite material: Activity and stability for the on-site removal of pharmaceutical micropollutans in a hospital wastewater. *Chemical Engineering Journal*, **2020**, 401, 126113	14.7	13
36	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	7.9	13
35	Wastewater sludges pretreated by different oxidation systems at mild conditions to promote the biogas formation in anaerobic processes. *Environmental Science and Pollution Research*, **2016**, 23, 24393-24401	5.1	13
34	URJC-1-MOF as New Heterogeneous Recyclable Catalyst for C-Heteroatom Coupling Reactions. *ChemCatChem*, **2019**, 11, 3376-3380	5.2	11
33	A double basic Sr-amino containing MOF as a highly stable heterogeneous catalyst. *Dalton Transactions*, **2019**, 48, 11556-11564	4.3	11
32	Treatment of an agrochemical wastewater by combined coagulation and Fenton oxidation. *Journal of Chemical Technology and Biotechnology*, **2014**, 89, 1189-1196	3.5	11
31	Contamination of N-poor wastewater with emerging pollutants does not affect the performance of purple phototrophic bacteria and the subsequent resource recovery potential. *Journal of Hazardous Materials*, **2020**, 385, 121617	12.8	11
30	Exploring the inhibition boundaries of mixed cultures of purple phototrophic bacteria for wastewater treatment in anaerobic conditions. *Water Research*, **2020**, 183, 116057	12.5	10
29	Intensified-Fenton process for the treatment of phenol aqueous solutions. *Water Science and Technology*, **2015**, 71, 359-65	2.2	9
28	Catalytic wet peroxidation of phenol in a fixed bed reactor. *Water Science and Technology*, **2007**, 55, 75-81	2.2	9
27	Strontium-Based MOFs Showing Dual Emission: Luminescence Thermometers and Toluene Sensors. *Inorganic Chemistry*, **2020**, 59, 18432-18443	5.1	9
26	Extrusion of Fe2O3/SBA-15 mesoporous material for application as heterogeneous Fenton-like catalyst. *AIMS Environmental Science*, **2015**, 2, 154-168	1.9	8
25	Nafion-Modified Large-Pore Silicas for the Catalytic Acylation of Anisole with Acetic Anhydride. *Industrial & Engineering Chemistry Research*, **2013**, 52, 10145-10151	3.9	7
24	Catalytic wet hydrogen peroxide oxidation of a petrochemical wastewater. *Water Science and Technology*, **2010**, 61, 1829-36	2.2	7
23	KBR (Kinetics in Batch Reactors): a MATLAB-based application with a friendly Graphical User Interface for chemical kinetic model simulation and parameter estimation. *Education for Chemical Engineers*, **2019**, 28, 80-89	2.4	7

22	New URJC-1 Material with Remarkable Stability and Acid-Base Catalytic Properties. *Polymers*, **2016**, 8,	4.5	6
21	Direct □arylation of ketones efficiently catalyzed by Cu-MOF-74. *Catalysis Today*, **2020**, 345, 251-257	5.3	6
20	Catalytic activity of LaCu0.5Mn0.5O3 perovskite at circumneutral/basic pH conditions in electro-Fenton processes. *Catalysis Today*, **2021**, 361, 159-164	5.3	5
19	Advanced bio-oxidation of fungal mixed cultures immobilized on rotating biological contactors for the removal of pharmaceutical micropollutants in a real hospital wastewater.. *Journal of Hazardous Materials*, **2021**, 425, 128002	12.8	4
18	Wastewater treatment as a process and a resource **2020**, 19-45		4
17	Simple and efficient treatment of high-strength industrial waste water using commercial zero-valent iron. *Chemical Papers*, **2016**, 70,	1.9	4
16	Novel and Versatile Cobalt Azobenzene-Based Metal-Organic Framework as Hydrogen Adsorbent. *ChemPhysChem*, **2019**, 20, 1334-1339	3.2	4
15	Modeling the integrated heterogeneous catalytic fixed-bed reactor and rotating biological contactor system for the treatment of poorly biodegradable industrial agrochemical wastewater. *Journal of Environmental Chemical Engineering*, **2016**, 4, 2313-2321	6.8	3
14	An enantiomeric pair of alkaline-earth metal based coordination polymers showing room temperature phosphorescence and circularly polarized luminescence. *Journal of Materials Chemistry C*, **2021**, 9, 5544-5553	7.1	3
13	Assessment of Voltage Influence in Carbon Dioxide Fixation Process by a Photo-Bioelectrochemical System under Photoheterotrophy. *Microorganisms*, **2021**, 9,	4.9	3
12	Anaerobic digestion of purple phototrophic bacteria - The release step of the partition-release-recover concept. *Bioresource Technology*, **2020**, 306, 123125	11	2
11	Catalytic Wet Peroxide Oxidation Process for the Continuous Treatment of Polluted Effluents on a Pilot Plant Scale. *Journal of Advanced Oxidation Technologies*, **2008**, 11,		2
10	Stabilization of iron in micro-and mesoporous ferrisilicates (MFI, MCM-22, SBA-15, and MCM-41) as detected by in situ m□sbauer spectroscopy. *Studies in Surface Science and Catalysis*, **2005**, 158, 733-740	1.8	2
9	Siting and redox properties of iron in porous ferrisilicates. *European Physical Journal D*, **2006**, 56, E109-E121		2
8	ZVI Addition in Continuous Anaerobic Digestion Systems Dramatically Decreases P Recovery Potential: Dynamic Modelling. *Lecture Notes in Civil Engineering*, **2017**, 211-217	0.3	2
7	Two Isostructural URJC-4 Materials: From Hydrogen Physisorption to Heterogeneous Reductive Amination through Hydrogen Molecule Activation at Low Pressure. *Inorganic Chemistry*, **2020**, 59, 15733-15740	5.1	1
6	Pharmaceutical wastewater degradation: effective and economical treatment using waste-metallic iron shavings. *International Journal of Environmental Studies*, **2014**, 71, 200-208	1.8	0
5	Application of a Fenton process for the pretreatment of an iron-containing oily sludge: A sustainable management for refinery wastes. *Journal of Environmental Management*, **2021**, 304, 114244	7.9	0

4	Alkalinity, and Not the Oxidation State of the Organic Substrate, Is the Key Factor in Domestic Wastewater Treatment by Mixed Cultures of Purple Phototrophic Bacteria. *Resources*, **2020**, 9, 88	3.7	0
3	Polystyrene modified hybrid materials based on ordered mesoporous silica. *Studies in Surface Science and Catalysis*, **2008**, 345-348	1.8	
2	Optimization of H2 Production through Minimization of CO2 Emissions by Mixed Cultures of Purple Phototrophic Bacteria in Aqueous Samples. *Water (Switzerland)*, **2020**, 12, 2015	3	
1	Inhibition of the metabolism of mixed cultures of purple phototrophic bacteria by typical refinery and petrochemistry wastewater pollutants. *Journal of Chemical Technology and Biotechnology*, **2021**, 96, 1893-1901	3.5	