Francisco Jesus Fernndez

List of Publications by Year in Descending Order

107 papers	2,699 citations	30 h-index	47 g-index
114 ext. papers	3,036 ext. citations	6.2 avg, IF	5.35 L-index

#	Paper	IF	Citations
107	Modelling the cathodic reduction of 2,4-dichlorophenol in a microbial fuel cell.. *Bioprocess and Biosystems Engineering*, **2022**, 45, 771	3.7	
106	Does environmental risk really change in abandoned mining areas in the medium term when no control measures are taken?. *Chemosphere*, **2021**, 291, 133129	8.4	1
105	Modelling of a bioelectrochemical system for metal-polluted wastewater treatment and sequential metal recovery. *Journal of Chemical Technology and Biotechnology*, **2021**, 96, 2033-2041	3.5	1
104	Simulation of the number of storm overflows considering changes in precipitation dynamics and the urbanisation of the catchment area: A probabilistic approach. *Journal of Hydrology*, **2021**, 598, 126275	6	2
103	Bio-electrocatalytic dechlorination of 2,4-dichlorophenol. Effect of pH and operational configuration. *Electrochimica Acta*, **2021**, 367, 137456	6.7	4
102	The Influence of External Load on the Performance of Microbial Fuel Cells. *Energies*, **2021**, 14, 612	3.1	3
101	Acid mine drainage treatment and sequential metal recovery by means of bioelectrochemical technology. *Journal of Chemical Technology and Biotechnology*, **2021**, 96, 1543-1552	3.5	1
100	The Influent Effects of Flow Rate Profile on the Performance of Microbial Fuel Cells Model. *Energies*, **2020**, 13, 4735	3.1	1
99	Advanced Lithium-Ion Battery Model for Power System Performance Analysis. *Energies*, **2020**, 13, 2411	3.1	7
98	Modelization of anaerobic processes during co-digestion of slowly biodegradable substrates. *Chemosphere*, **2020**, 250, 126222	8.4	9
97	New Trends in Substrates and Biogas Systems in Poland. *Journal of Ecological Engineering*, **2020**, 21, 19-25	2	8
96	Removal of oxyfluorfen from polluted effluents by combined bio-electro processes. *Chemosphere*, **2020**, 240, 124912	8.4	6
95	Biodegradability improvement and toxicity reduction of soil washing effluents polluted with atrazine by means of electrochemical pre-treatment: Influence of the anode material. *Journal of Environmental Management*, **2020**, 255, 109895	7.9	9
94	Electrocatalytic dechlorination of 2,4-dichlorophenol in bioelectrochemical systems. *Journal of Electroanalytical Chemistry*, **2020**, 876, 114731	4.1	3
93	Bio-Energy Generation from Synthetic Winery Wastewaters. *Applied Sciences (Switzerland)*, **2020**, 10, 8360	2.6	2
92	Selection of anodic material for the combined electrochemical-biological treatment of lindane polluted soil washing effluents. *Journal of Hazardous Materials*, **2020**, 384, 121237	12.8	5
91	A mesocosm study of electrokinetic-assisted phytoremediation of atrazine-polluted soils. *Separation and Purification Technology*, **2020**, 233, 116044	8.3	20

90	Performance of microbial fuel cells operated under anoxic conditions. *Applied Energy*, **2019**, 250, 1-6	10.7	11
89	Electro-irradiated technologies for clopyralid removal from soil washing effluents. *Separation and Purification Technology*, **2019**, 227, 115728	8.3	11
88	Electro Fenton removal of clopyralid in soil washing effluents. *Chemosphere*, **2019**, 237, 124447	8.4	10
87	Dehalogenation of 2,4-Dichlorophenoxyacetic acid by means of bioelectrochemical systems. *Journal of Electroanalytical Chemistry*, **2019**, 854, 113564	4.1	8
86	Reproducibility and robustness of microbial fuel cells technology. *Journal of Power Sources*, **2019**, 412, 640-647	8.9	10
85	Assessing the impact of design factors on the performance of two miniature microbial fuel cells. *Electrochimica Acta*, **2019**, 297, 297-306	6.7	12
84	Model based evaluation of plant improvement at a large wastewater treatment plant (WWTP). *Journal of Environmental Science and Health - Part A Toxic/Hazardous Substances and Environmental Engineering*, **2018**, 53, 669-675	2.3	8
83	Effect of organic nitrogen concentration on the efficiency of trickling filters. *E3S Web of Conferences*, **2018**, 30, 02007	0.5	
82	Development of a module of stacks of air-breathing microbial fuel cells to light-up a strip of LEDs. *Electrochimica Acta*, **2018**, 274, 152-159	6.7	13
81	Improving biodegradability of soil washing effluents using anodic oxidation. *Bioresource Technology* , **2018**, 252, 1-6	11	28
80	Effect of sludge age on microbial consortia developed in MFCs. *Journal of Chemical Technology and Biotechnology*, **2018**, 93, 1290-1299	3.5	11
79	Modelization of Nutrient Removal Processes at a Large WWTP Using a Modified ASM2d Model. *International Journal of Environmental Research and Public Health*, **2018**, 15,	4.6	8
78	On the staking of miniaturized air-breathing microbial fuel cells. *Applied Energy*, **2018**, 232, 1-8	10.7	11
77	A Critical View of Microbial Fuel Cells: What Is the Next Stage?. *ChemSusChem*, **2018**, 11, 4183-4192	8.3	20
76	Biological treatment of wastewater polluted with an oxyfluorfen-based commercial herbicide. *Chemosphere*, **2018**, 213, 244-251	8.4	14
75	Driving force of the better performance of metal-doped carbonaceous anodes in microbial fuel cells. *Applied Energy*, **2018**, 225, 52-59	10.7	22
74	Driving force behind electrochemical performance of microbial fuel cells fed with different substrates. *Chemosphere*, **2018**, 207, 313-319	8.4	20
73	Biofilm and planktonic population distribution. Key aspects in carbonaceous anodes for microbial fuel cells. *Journal of Chemical Technology and Biotechnology*, **2018**, 93, 3436-3443	3.5	6

72	Combining bioadsorption and photoelectrochemical oxidation for the treatment of soil-washing effluents polluted with herbicide 2,4-D. *Journal of Chemical Technology and Biotechnology*, **2017**, 92, 83-89	3.5	24
71	Treatment of Soil-Washing Effluents Polluted with Herbicide Oxyfluorfen by Combined Biosorption□lectrolysis. *Industrial & Engineering Chemistry Research*, **2017**, 56, 1903-1910	3.9	19
70	The influence of sludge retention time on mixed culture microbial fuel cell start-ups. *Biochemical Engineering Journal*, **2017**, 123, 38-44	4.2	15
69	Optimization of the performance of an air□athode MFC by changing solid retention time. *Journal of Chemical Technology and Biotechnology*, **2017**, 92, 1746-1755	3.5	15
68	Influence of the methodology of inoculation in the performance of air-breathing microbial fuel cells. *Journal of Electroanalytical Chemistry*, **2017**, 803, 81-88	4.1	14
67	Modelling aerobic biodegradation of atrazine and 2,4-dichlorophenoxy acetic acid by mixed-cultures. *Bioresource Technology*, **2017**, 243, 1044-1050	11	43
66	The salinity effects on the performance of a constructed wetland-microbial fuel cell. *Ecological Engineering*, **2017**, 107, 1-7	3.9	24
65	Influence of the Cathode Platinum Loading and of the Implementation of Membranes on the Performance of Air-Breathing Microbial Fuel Cells. *Electrocatalysis*, **2017**, 8, 442-449	2.7	10
64	Electrochemical Advanced Oxidation Processes: An Overview of the Current Applications to Actual Industrial Effluents **2017**, 58,		14
63	A grey box model of glucose fermentation and syntrophic oxidation in microbial fuel cells. *Bioresource Technology*, **2016**, 200, 396-404	11	25
62	Heterotrophic Anodic Denitrification in Microbial Fuel Cells. *Sustainability*, **2016**, 8, 561	3.6	10
61	Long-term effects of the transient COD concentration on the performance of microbial fuel cells. *Biotechnology Progress*, **2016**, 32, 883-90	2.8	12
60	Importance of the combined effects of dissolved oxygen and pH on optimization of nitrogen removal in anammox-enriched granular sludge. *Process Biochemistry*, **2016**, 51, 1274-1282	4.8	26
59	New prototypes for the isolation of the anodic chambers in microbial fuel cells. *Fuel*, **2016**, 181, 704-710	7.1	11
58	Biorefineries: An Overview on Bioethanol Production. *Handbook of Environmental Chemistry*, **2015**, 153-167	0.8	
57	Characterization of light/dark cycle and long-term performance test in a photosynthetic microbial fuel cell. *Fuel*, **2015**, 140, 209-216	7.1	32
56	Oxygen availability effect on the performance of air-breathing cathode microbial fuel cell. *Biotechnology Progress*, **2015**, 31, 900-7	2.8	28
55	Microbial Fuel Cell: The Definitive Technological Approach for Valorizing Organic Wastes. *Handbook of Environmental Chemistry*, **2014**, 287-316	0.8	4

54	Bioelectricity generation in a self-sustainable Microbial Solar Cell. *Bioresource Technology*, **2014**, 159, 451-4	11	20
53	Study of a photosynthetic MFC for energy recovery from synthetic industrial fruit juice wastewater. *International Journal of Hydrogen Energy*, **2014**, 39, 21828-21836	6.7	33
52	Energy recovery of biogas from juice wastewater through a short high temperature PEMFC stack. *International Journal of Hydrogen Energy*, **2014**, 39, 6937-6943	6.7	13
51	ENERGY PRODUCTION FROM WASTEWATER USING HORIZONTAL AND VERTICAL SUBSURFACE FLOW CONSTRUCTED WETLANDS. *Environmental Engineering and Management Journal*, **2014**, 13, 2517-2523	0.6	9
50	Lagooning microbial fuel cells: A first approach by coupling electricity-producing microorganisms and algae. *Applied Energy*, **2013**, 110, 220-226	10.7	81
49	Microbial fuel cell with an algae-assisted cathode: A preliminary assessment. *Journal of Power Sources*, **2013**, 242, 638-645	8.9	142
48	Optimization methodology based on neural networks and genetic algorithms applied to electro-coagulation processes. *Open Chemistry*, **2013**, 11, 1213-1224	1.6	4
47	Arsenic Removal from High-Arsenic Water Sources by Coagulation and Electrocoagulation. *Separation Science and Technology*, **2013**, 48, 508-514	2.5	18
46	Operation of a horizontal subsurface flow constructed wetland--microbial fuel cell treating wastewater under different organic loading rates. *Water Research*, **2013**, 47, 6731-8	12.5	178
45	Application of a genetic algorithm to n-K power system security assessment. *International Journal of Electrical Power and Energy Systems*, **2013**, 49, 114-121	5.1	28
44	Influence of the cleaning additives on the methane production from brewery effluents. *Chemical Engineering Journal*, **2013**, 215-216, 685-690	14.7	8
43	Bacterial-fungal interactions enhance power generation in microbial fuel cells and drive dye decolourisation by an ex situ and in situ electro-Fenton process. *Bioresource Technology*, **2013**, 148, 39-46	11	66
42	Short-term effects of temperature and COD in a microbial fuel cell. *Applied Energy*, **2013**, 101, 213-217	10.7	109
41	Electricity production by integration of acidogenic fermentation of fruit juice wastewater and fuel cells. *International Journal of Hydrogen Energy*, **2012**, 37, 9028-9037	6.7	26
40	Kinetic model and study of the influence of pH, temperature and undissociated acids on acidogenic fermentation. *Biochemical Engineering Journal*, **2012**, 66, 66-72	4.2	31
39	An evaluation of aerobic and anaerobic sludges as start-up material for microbial fuel cell systems. *New Biotechnology*, **2012**, 29, 415-20	6.4	38
38	Respiration indices and stability measurements of compost through electrolytic respirometry. *Journal of Environmental Management*, **2012**, 95 Suppl, S134-8	7.9	19
37	Kinetics of forced aerated biodegradation of digested sewage sludge-reed mixtures at different temperatures. *Journal of Environmental Management*, **2012**, 95 Suppl, S128-33	7.9	2

36	Simulation of carbon degradation in a rotary drum pilot scale composting process. *Journal of Environmental Management*, **2012**, 108, 1-7	7.9	7
35	Electro-oxidation of As(III) with dimensionally-stable and conductive-diamond anodes. *Journal of Hazardous Materials*, **2012**, 203-204, 22-8	12.8	20
34	Kinetics of biodegradation of diesel fuel by enriched microbial consortia from polluted soils. *International Journal of Environmental Science and Technology*, **2012**, 9, 749-758	3.3	27
33	Feasibility of Different Bioremediation Strategies for Treatment of Clayey and Silty Soils Recently Polluted with Diesel Hydrocarbons. *Water, Air, and Soil Pollution*, **2012**, 223, 2473-2482	2.6	22
32	By-products inhibition effects on bio-hydrogen production. *International Journal of Hydrogen Energy*, **2012**, 37, 7077-7083	6.7	20
31	Feasibility of mixed enzymatic complexes to enhanced soil bioremediation processes. *Procedia Environmental Sciences*, **2011**, 9, 54-59		13
30	Reduction of aeration costs by tuning a multi-set point on/off controller: A case study. *Control Engineering Practice*, **2011**, 19, 1231-1237	3.9	31
29	Influence of pH, temperature and volatile fatty acids on hydrogen production by acidogenic fermentation. *International Journal of Hydrogen Energy*, **2011**, 36, 15595-15601	6.7	76
28	Kinetic and stoichiometric modelling of acidogenic fermentation of glucose and fructose. *Biomass and Bioenergy*, **2011**, 35, 3877-3883	5.3	37
27	Removal of nitrates from groundwater by electrocoagulation. *Chemical Engineering Journal*, **2011**, 171, 1012-1017	14.7	108
26	Electrochemical phosphates removal using iron and aluminium electrodes. *Chemical Engineering Journal*, **2011**, 172, 137-143	14.7	88
25	Removal of arsenic by iron and aluminium electrochemically assisted coagulation. *Separation and Purification Technology*, **2011**, 79, 15-19	8.3	58
24	Agro-food wastewaters as external carbon source to enhance biological phosphorus removal. *Chemical Engineering Journal*, **2011**, 166, 559-567	14.7	19
23	Monitoring respiration and biological stability during sludge composting with a modified dynamic respirometer. *Bioresource Technology*, **2011**, 102, 6562-8	11	22
22	Kinetics of domestic wastewater COD removal by subsurface flow constructed wetlands using different plant species in temperate period. *International Journal of Environmental Analytical Chemistry*, **2011**, 91, 693-707	1.8	12
21	Composting domestic sewage sludge with natural zeolites in a rotary drum reactor. *Bioresource Technology*, **2011**, 102, 1447-54	11	107
20	Hydraulic modelling of horizontal-subsurface flow constructed wetlands: Influence of operation time and plant species. *International Journal of Environmental Analytical Chemistry*, **2011**, 91, 786-800	1.8	2
19	Modeling and monitoring of the acclimatization of conventional activated sludge to a biohydrogen producing culture by biokinetic control. *International Journal of Hydrogen Energy*, **2010**, 35, 10927-10933	6.7	31

18	Feasibility of composting combinations of sewage sludge, olive mill waste and winery waste in a rotary drum reactor. *Waste Management*, **2010**, 30, 1948-56	8.6	43
17	Use of neurofuzzy networks to improve wastewater flow-rate forecasting. *Environmental Modelling and Software*, **2009**, 24, 686-693	5.2	36
16	Feasibility of anaerobic co-digestion as a treatment option of meat industry wastes. *Bioresource Technology*, **2009**, 100, 1903-9	11	67
15	Biodegradability of meat industry wastes under anaerobic and aerobic conditions. *Water Research*, **2008**, 42, 3767-74	12.5	36
14	Evaluation of carbon degradation during co-composting of exhausted grape marc with different biowastes. *Chemosphere*, **2008**, 73, 670-7	8.4	31
13	Enhancing the co-composting of olive mill wastes and sewage sludge by the addition of an industrial waste. *Bioresource Technology*, **2008**, 99, 6346-53	11	34
12	Design of horizontal and vertical subsurface flow constructed wetlands treating industrial wastewater. *WIT Transactions on Ecology and the Environment*, **2008**,	1	8
11	Effect of the Internal Recycles on the Phosphorus Removal Efficiency of a WWTP. *Industrial & Engineering Chemistry Research*, **2007**, 46, 7300-7307	3.9	8
10	Re-use of winery wastewaters for biological nutrient removal. *Water Science and Technology*, **2007**, 56, 95-102	2.2	31
9	Influence of industrial discharges on the performance and population of a biological nutrient removal process. *Biochemical Engineering Journal*, **2007**, 34, 51-61	4.2	30
8	Use of agro-food wastewaters for the optimisation of the denitrification process. *Water Science and Technology*, **2007**, 55, 63-70	2.2	31
7	Anaerobic co-digestion of winery wastewater. *Water Science and Technology*, **2007**, 56, 49-54	2.2	10
6	Fermentation of agro-food wastewaters by activated sludge. *Water Research*, **2007**, 41, 1635-44	12.5	29
5	Anaerobic codigestion of biowastes generated in Castilla-La Mancha (Spain): batch studies. *WIT Transactions on Ecology and the Environment*, **2006**,	1	3
4	Denitrification potential of industrial wastewaters. *Water Research*, **2005**, 39, 3715-26	12.5	60
3	Biodegradation kinetics of stored wastewater substrates by a mixed microbial culture. *Biochemical Engineering Journal*, **2005**, 26, 191-197	4.2	20
2	High-rate acidophilic ferrous iron oxidation in a biofilm airlift reactor and the role of the carrier material. *Biotechnology and Bioengineering*, **2005**, 90, 462-72	4.9	30
1	Operational Optimisation of Pilot Scale Biological Nutrient Removal at the Ciudad Real (Spain) Domestic Wastewater Treatment Plant. *Water, Air, and Soil Pollution*, **2004**, 152, 279-296	2.6	35