Javier Llanos

List of Publications by Year
in descending order

91 papers	2,821 citations	126907 33 h-index	197818 49 g-index
93 all docs	93 docs citations	93 times ranked	2248 citing authors

#	Article	IF	Citations
1	Removal of Procion Red MX-5B dye from wastewater by conductive-diamond electrochemical oxidation. Electrochimica Acta, 2018, 263, 1-7.	5.2	124
2	Electrochemical denitrificacion with chlorides using DSA and BDD anodes. Chemical Engineering Journal, 2012, 184, 66-71.	12.7	123
3	Electrochemical jet-cell for the in-situ generation of hydrogen peroxide. Electrochemistry Communications, 2016, 71, 65-68.	4.7	104
4	Electrolytic and electro-irradiated processes with diamond anodes for the oxidation of persistent pollutants and disinfection of urban treated wastewater. Journal of Hazardous Materials, 2016, 319, 93-101.	12.4	91
5	Optimization of an integrated electrodisinfection/electrocoagulation process with Al bipolar electrodes for urban wastewater reclamation. Water Research, 2013, 47, 1741-1750.	11.3	88
6	Effect of the cathode material on the removal of nitrates by electrolysis in non-chloride media. Journal of Hazardous Materials, 2012, 213-214, 478-484.	12.4	80
7	Improving the Efficiency of Carbon Cloth for the Electrogeneration of H₂O₂: Role of Polytetrafluoroethylene and Carbon Black Loading. Industrial & Engineering Chemistry Research, 2017, 56, 12588-12595.	3.7	80
8	Use of carbon felt cathodes for the electrochemical reclamation of urban treated wastewaters. Applied Catalysis B: Environmental, 2015, 162, 252-259.	20.2	79
9	Arsenic removal from drinking water through a hybrid ion exchange membrane â€“ Coagulation process. Separation and Purification Technology, 2011, 83, 137-143.	7.9	66
10	Effect of bipolar electrode material on the reclamation of urban wastewater by an integrated electrodisinfection/electrocoagulation process. Water Research, 2014, 53, 329-338.	11.3	64
11	Treatment of copper (II)-loaded aqueous nitrate solutions by polymer enhanced ultrafiltration and electrodeposition. Separation and Purification Technology, 2010, 70, 320-328.	7.9	62
12	Removal of nitrates by electrolysis in non-chloride media: Effect of the anode material. Separation and Purification Technology, 2011, 80, 592-599.	7.9	62
13	Effect of pressure on the electrochemical generation of hydrogen peroxide in undivided cells on carbon felt electrodes. Electrochimica Acta, 2017, 248, 169-177.	5.2	59
14	Development of an innovative approach for low-impact wastewater treatment: A microfluidic flow-through electrochemical reactor. Chemical Engineering Journal, 2018, 351, 766-772.	12.7	55
15	On the applications of peroxodiphosphate produced by BDD-electrolyses. Chemical Engineering Journal, 2013, 233, 8-13.	12.7	54
16	Treatment of real effluents from the pharmaceutical industry: A comparison between Fenton oxidation and conductive-diamond electro-oxidation. Journal of Environmental Management, 2017, 195, 216-223.	7.8	51
17	Towards the scale up of a pressurized-jet microfluidic flow-through reactor for cost-effective electro-generation of H2O2. Journal of Cleaner Production, 2019, 211, 1259-1267.	9.3	50
18	Solar-powered electrokinetic remediation for the treatment of soil polluted with the herbicide 2,4-D. Electrochimica Acta, 2016, 190, 371-377.	5.2	49

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19	Irradiation-assisted electrochemical processes for the removal of persistent organic pollutants from wastewater. Journal of Applied Electrochemistry, 2015, 45, 799-808.	2.9	48
20	Characterization of a ceramic ultrafiltration membrane in different operational states after its use in a heavy-metal ion removal process. Water Research, 2010, 44, 3522-3530.	11.3	47
21	The jet aerator as oxygen supplier for the electrochemical generation of H2O2. Electrochimica Acta, 2017, 246, 466-474.	5.2	47
22	A wind-powered BDD electrochemical oxidation process for the removal of herbicides. Journal of Environmental Management, 2015, 158, 36-39.	7.8	46
23	A microfluidic flow-through electrochemical reactor for wastewater treatment: A proof-of-concept. Electrochemistry Communications, 2017, 82, 85-88.	4.7	43
24	Synergistic integration of sonochemical and electrochemical disinfection with DSA anodes. Chemosphere, 2016, 163, 562-568.	8.2	42
25	Copper recovery by polymer enhanced ultrafiltration (PEUF) and electrochemical regeneration. Journal of Membrane Science, 2008, 323, 28-36.	8.2	40
26	Use of DiaCell modules for the electro-disinfection of secondary-treated wastewater with diamond anodes. Chemical Engineering Journal, 2016, 306, 433-440.	12.7	40
27	On the design of a jet-aerated microfluidic flow-through reactor for wastewater treatment by electro-Fenton. Separation and Purification Technology, 2019, 208, 123-129.	7.9	40
28	Scaling-up an integrated electrodisinfection-electrocoagulation process for wastewater reclamation. Chemical Engineering Journal, 2020, 380, 122415.	12.7	39
29	Selective separation of Pb from hard water by a semi-continuous polymer-enhanced ultrafiltration process (PEUF). Desalination, 2007, 206, 602-613.	8.2	38
30	Novel integrated electrodialysis/electro-oxidation process for the efficient degradation of 2,4-dichlorophenoxyacetic acid. Chemosphere, 2017, 182, 85-89.	8.2	37
31	Effect of air pressure on the electro-Fenton process at carbon felt electrodes. Electrochimica Acta, 2018, 273, 447-453.	5.2	36
32	The pressurized jet aerator: A new aeration system for high-performance H2O2 electrolyzers. Electrochemistry Communications, 2018, 89, 19-22.	4.7	35
33	Coupling UV irradiation and electrocoagulation for reclamation of urban wastewater. Electrochimica Acta, 2014, 140, 396-403.	5.2	34
34	Hydrogen from electrochemical reforming of ethanol assisted by sulfuric acid addition. Applied Catalysis B: Environmental, 2018, 231, 310-316.	20.2	32
35	Exploring the applicability of a combined electrodialysis/electro-oxidation cell for the degradation of 2,4-dichlorophenoxyacetic acid. Electrochimica Acta, 2018, 269, 415-421.	5.2	30
36	Can CabECOÂ® technology be used for the disinfection of highly faecal-polluted surface water?. Chemosphere, 2018, 209, 346-352.	8.2	30

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37	Operating the CabECOÂ® membrane electrolytic technology in continuous mode for the direct disinfection of highly fecal-polluted water. Separation and Purification Technology, 2019, 208, 110-115.	7.9	30
38	Remarkable hydrodechlorination activity over silica supported nickel/gold catalysts. Catalysis Communications, 2005, 6, 555-562.	3.3	29
39	Preliminary design and optimisation of a PEUF process for Cr(VI) removal. Desalination, 2008, 223, 229-237.	8.2	29
40	Novel electrodialysisâ€“electrochlorination integrated process for the reclamation of treated wastewaters. Separation and Purification Technology, 2014, 132, 362-369.	7.9	29
41	Polymer supported ultrafiltration as a technique for selective heavy metal separation and complex formation constants prediction. Separation and Purification Technology, 2010, 73, 126-134.	7.9	28
42	Electro-disinfection with BDD-electrodes featuring PEM technology. Separation and Purification Technology, 2020, 248, 117081.	7.9	28
43	New insights about the electrochemical production of ozone. Current Opinion in Electrochemistry, 2021, 27, 100697.	4.8	28
44	Solar-powered CDEO for the treatment of wastewater polluted with the herbicide 2,4-D. Chemical Engineering Journal, 2015, 277, 64-69.	12.7	27
45	Conductive diamond sono-electrochemical disinfection (CDSED) for municipal wastewater reclamation. Ultrasonics Sonochemistry, 2015, 22, 493-498.	8.2	27
46	Understanding ozone generation in electrochemical cells at mild pHs. Electrochimica Acta, 2021, 376, 138033.	5.2	27
47	Testing the use of cells equipped with solid polymer electrolytes for electro-disinfection. Science of the Total Environment, 2020, 725, 138379.	8.0	26
48	Electrocoagulation as the Key for an Efficient Concentration and Removal of Oxyfluorfen from Liquid Wastes. Industrial & Engineering Chemistry Research, 2017, 56, 3091-3097.	3.7	24
49	Combined electrochemical processes for the efficient degradation of non-polar organochlorine pesticides. Journal of Environmental Management, 2019, 248, 109289.	7.8	21
50	Electrochemical generation of ozone using a PEM electrolyzer at acidic pHs. Separation and Purification Technology, 2021, 267, 118672.	7.9	21
51	Improved electrolysis of colloid-polluted wastes using ultrasounds and electrocoagulation. Separation and Purification Technology, 2020, 231, 115926.	7.9	20
52	The Treatment of Actual Industrial Wastewaters Using Electrochemical Techniques. Electrocatalysis, 2013, 4, 252-258.	3.0	19
53	Analysis of photocurrent and capacitance of TiO2 nanotubeâ€“polyaniline hybrid composites synthesized through electroreduction of an aryldiazonium salt. RSC Advances, 2014, 4, 23957-23965.	3.6	19
54	Scale-up of electrolytic and photoelectrolytic processes for water reclaiming: a preliminary study. Environmental Science and Pollution Research, 2016, 23, 19713-19722.	5.3	19

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55	Can the substrate of the diamond anodes influence on the performance of the electrosynthesis of oxidants?. Journal of Electroanalytical Chemistry, 2019, 850, 113416.	3.8	19
56	A comparison between flow-through cathode and mixed tank cells for the electro-Fenton process with conductive diamond anode. Chemosphere, 2020, 238, 124854.	8.2	19
57	A review on the electrochemical production of chlorine dioxide from chlorates and hydrogen peroxide. Current Opinion in Electrochemistry, 2021, 27, 100685.	4.8	18
58	Tannic acid removal from aqueous effluents using micellar enhanced ultrafiltration at pilot scale. Desalination, 2006, 200, 310-312.	8.2	17
59	Water-soluble polymer ultrafiltration process at pilot scale: Study of hydrodynamics and factors limiting flux. Journal of Membrane Science, 2009, 341, 37-45.	8.2	17
60	Cationâ€exchange membranes: Comparison of homopolymer, block copolymer, and heterogeneous membranes. Journal of Applied Polymer Science, 2012, 124, E66.	2.6	16
61	Performance of wind-powered soil electroremediation process for the removal of 2,4-D from soil. Journal of Environmental Management, 2016, 171, 128-132.	7.8	16
62	Costs estimation of an integrated process for the treatment of heavy-metal loaded aqueous effluents. Journal of Applied Electrochemistry, 2011, 41, 1099-1107.	2.9	13
63	Integration of anodic and cathodic processes for the synergistic electrochemical production of peracetic acid. Electrochemistry Communications, 2016, 73, 1-4.	4.7	13
64	Performance of ultrafiltration as a pre-concentration stage for the treatment of oxyfluorfen by electrochemical BDD oxidation. Separation and Purification Technology, 2020, 237, 116366.	7.9	13
65	On the production of ozone, hydrogen peroxide and peroxone in pressurized undivided electrochemical cells. Electrochimica Acta, 2021, 390, 138878.	5.2	13
66	Pre-disinfection columns to improve the performance of the direct electro-disinfection of highly faecal-polluted surface water. Journal of Environmental Management, 2018, 222, 135-140.	7.8	12
67	Electrochemical regeneration of partially ethoxylated polyethylenimine used in the polymer-supported ultrafiltration of copper. Journal of Hazardous Materials, 2009, 168, 25-30.	12.4	11
68	How to avoid the formation of hazardous chlorates and perchlorates during electro-disinfection with diamond anodes?. Journal of Environmental Management, 2020, 265, 110566.	7.8	11
69	Electrocoagulation as a key technique in the integrated urban water cycle â€“ A case study in the centre of Spain. Urban Water Journal, 2017, 14, 650-654.	2.1	10
70	Is it worth using the coupled electrodialysis/electro-oxidation system for the removal of pesticides? Process modelling and role of the pollutant. Chemosphere, 2020, 246, 125781.	8.2	10
71	Electrochemical production of perchlorate as an alternative for the valorization of brines. Chemosphere, 2019, 220, 637-643.	8.2	9
72	Game-Based Learning and Just-in-Time Teaching to Address Misconceptions and Improve Safety and Learning in Laboratory Activities. Journal of Chemical Education, 2021, 98, 3118-3130.	2.3	9

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73	Use of process simulator to enhance the teachingâ€learning process of flow of fluids for engineering students. Computer Applications in Engineering Education, 2018, 26, 980-993.	3.4	8
74	Toward real applicability of electro-ozonizers: Paying attention to the gas phase using actual commercial PEM electrolyzers technology. Chemosphere, 2022, 289, 133141.	8.2	8
75	Neuro-evolutionary modelling of the electrodeposition stage of a polymer-supported ultrafiltrationâ€"electrodeposition process for the recovery of heavy metals. Environmental Modelling and Software, 2013, 42, 133-142.	4.5	7
76	Optimization of a cell for the electrochemical synergistic production of peroxoacetic acid. Electrochimica Acta, 2018, 260, 177-183.	5.2	7
77	Development of a novel electrochemical coagulant dosing unit for water treatment. Journal of Chemical Technology and Biotechnology, 2019, 94, 216-221.	3.2	7
78	Reactor design as a critical input in the electrochemical production of peroxoacetic acid. Journal of Chemical Technology and Biotechnology, 2019, 94, 2955-2960.	3.2	6
79	Is ozone production able to explain the good performance of CabECOÂ® technology in wastewater treatment?. Electrochimica Acta, 2021, 396, 139262.	5.2	6
80	Physicalâ€"Chemical Characterization of Fruit Purees and Relationship with Sensory Analysis Carried out by Infants (12 to 24 mo). Journal of Food Science, 2015, 80, E1005-11.	3.1	5
81	Electrochemically assisted dewatering for the removal of oxyfluorfen from a coagulation/flocculation sludge. Journal of Environmental Management, 2020, 258, 110015.	7.8	4
82	Treatment of Cu/Zn wastes by combined PSUâ€"electrodeposition processes. Journal of Environmental Management, 2013, 116, 181-185.	7.8	3
83	An Old Technique with A Promising Future: Recent Advances in the Use of Electrodeposition for Metal Recovery. Molecules, 2021, 26, 5525.	3.8	3
84	Valorization of high-salinity effluents for CO2 fixation and hypochlorite generation. Chemosphere, 2021, 285, 131359.	8.2	3
85	Degradation of Neonicotinoids and Caffeine from Surface Water by Photolysis. Molecules, 2021, 26, 7277.	3.8	3
86	Removal of polyether-polyols by means of ultrafiltration. Desalination, 2007, 206, 594-601.	8.2	2
87	Enhancing the Teaching of Corrosion to Chemical-Engineering Students through Laboratory Experiments. Journal of Chemical Education, 2019, 96, 1029-1032.	2.3	2
88	Adapting the low-cost pre-disinfection column PREDICO for simultaneous softening and disinfection of pore water. Chemosphere, 2022, 287, 132334.	8.2	1
89	HOW DID WE FACE THE ACCREDITATION PROCESS FOR THE FIRST TIME AND WHAT DID WE LEARN? THE CHE PROGRAMS AT THE UCLM. , 2016, , .		0
90	ECONOMIC FEASIBILITY STUDY AND ENVIRONMENTAL IMPACT ASSESSMENT OF PHASE CHANGE MATERIALS INCORPORATION IN BUILDINGS. , 2016, , .		0

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91	ENHANCEMENT IN THE ACQUISITION OF THE SUSTAINABILITY KEY COMPETENCE THROUGHOUT THE WHOLE DEGREE OF CHEMICAL ENGINEERING. EDULEARN Proceedings, 2018, , .	0.0	0