

Raquel Ibañez

List of Publications by Year in descending order

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62
papers

3,888
citations

159358

30
h-index

128067

60
g-index

62
all docs

62
docs citations

62
times ranked

4664
citing authors

#	ARTICLE	IF	CITATIONS
1	State of the art and review on the treatment technologies of water reverse osmosis concentrates. <i>Water Research</i> , 2012, 46, 267-283.	5.3	606
2	Pharmaceutical Industry Wastewater: Review of the Technologies for Water Treatment and Reuse. <i>Industrial & Engineering Chemistry Research</i> , 2014, 53, 11571-11592.	1.8	586
3	Liquid membrane technology: fundamentals and review of its applications. <i>Journal of Chemical Technology and Biotechnology</i> , 2010, 85, 2-10.	1.6	196
4	Removal of pharmaceuticals from a WWTP secondary effluent by ultrafiltration/reverse osmosis followed by electrochemical oxidation of the RO concentrate. <i>Desalination</i> , 2013, 331, 26-34.	4.0	186
5	Morphology and Microtopology of Cation-Exchange Polymers and the Origin of the Overlimiting Current. <i>Journal of Physical Chemistry B</i> , 2007, 111, 2152-2165.	1.2	174
6	Kinetics of electro-oxidation of ammonia-N, nitrites and COD from a recirculating aquaculture saline water system using BDD anodes. <i>Water Research</i> , 2011, 45, 125-134.	5.3	149
7	Assessment of the formation of inorganic oxidation by-products during the electrocatalytic treatment of ammonium from landfill leachates. <i>Water Research</i> , 2012, 46, 2579-2590.	5.3	133
8	Nanofiltration separation of polyvalent and monovalent anions in desalination brines. <i>Journal of Membrane Science</i> , 2015, 473, 16-27.	4.1	131
9	Assessment of soil pollution based on total petroleum hydrocarbons and individual oil substances. <i>Journal of Environmental Management</i> , 2013, 130, 72-79.	3.8	128
10	Role of membrane surface in concentration polarization at cation exchange membranes. <i>Journal of Membrane Science</i> , 2004, 239, 119-128.	4.1	112
11	Kinetic study of the simultaneous electrochemical removal of aqueous nitrogen compounds using BDD electrodes. <i>Chemical Engineering Journal</i> , 2012, 197, 475-482.	6.6	86
12	Acid and base recovery from softened reverse osmosis (RO) brines. Experimental assessment using model concentrates. <i>Desalination</i> , 2013, 309, 165-170.	4.0	83
13	Characterisation and management of incinerator wastes. <i>Journal of Hazardous Materials</i> , 2000, 79, 215-227.	6.5	63
14	Sustainability assessment of electrodialysis powered by photovoltaic solar energy for freshwater production. <i>Renewable and Sustainable Energy Reviews</i> , 2015, 47, 604-615.	8.2	63
15	Comparative performance of Salinity Gradient Power-Reverse Electrodialysis under different operating conditions. <i>Desalination</i> , 2019, 457, 8-21.	4.0	60
16	Comparative study of the separation of methanol-methyl acetate mixtures by pervaporation and vapor permeation using a commercial membrane. <i>Journal of Membrane Science</i> , 2006, 280, 582-593.	4.1	57
17	Electrodialysis with Bipolar Membranes for Valorization of Brines. <i>Separation and Purification Reviews</i> , 2016, 45, 275-287.	2.8	51
18	Electrochemical oxidation of saline industrial wastewaters using boron-doped diamond anodes. <i>Catalysis Today</i> , 2010, 151, 178-184.	2.2	46

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19	Improved separation of bovine serum albumin and lactoferrin mixtures using charged ultrafiltration membranes. Separation and Purification Technology, 2014, 125, 163-169.	3.9	46
20	Valorization of desalination brines by electrodialysis with bipolar membranes using nanocomposite anion exchange membranes. Desalination, 2017, 406, 16-24.	4.0	44
21	Highly concentrated HCl and NaOH from brines using electrodialysis with bipolar membranes. Separation and Purification Technology, 2020, 242, 116785.	3.9	43
22	Influence of ion concentration on the kinetics of electrodialysis with bipolar membranes. Separation and Purification Technology, 2008, 59, 197-205.	3.9	41
23	Electrochemical disinfection of secondary wastewater treatment plant (WWTP) effluent. Water Science and Technology, 2010, 62, 892-897.	1.2	41
24	Kinetics of nitrogen compounds in a commercial marine Recirculating Aquaculture System. Aquacultural Engineering, 2012, 50, 20-27.	1.4	37
25	Enhancing fouling resistance of polyethylene anion exchange membranes using carbon nanotubes and iron oxide nanoparticles. Desalination, 2017, 411, 19-27.	4.0	37
26	Experimental study of the waste binder anhydrite in the solidification/ stabilization process of heavy metal sludges. Journal of Hazardous Materials, 1998, 57, 155-168.	6.5	36
27	Photovoltaic solar electrodialysis with bipolar membranes. Desalination, 2018, 433, 155-163.	4.0	35
28	Human Risk Assessment of Contaminated Soils by Oil Products: Total TPH Content Versus Fraction Approach. Human and Ecological Risk Assessment (HERA), 2014, 20, 1231-1248.	1.7	32
29	Membrane Processes for Whey Proteins Separation and Purification. A Review. Current Organic Chemistry, 2017, 21, .	0.9	32
30	Influence of process variables on the production of bovine milk casein by electrodialysis with bipolar membranes. Biochemical Engineering Journal, 2008, 40, 304-311.	1.8	31
31	Environmental sustainability assessment of seawater reverse osmosis brine valorization by means of electrodialysis with bipolar membranes. Environmental Science and Pollution Research, 2020, 27, 1256-1266.	2.7	31
32	Kinetics of separating multicomponent mixtures by nondispersive solvent extraction: Ni and Cd. AIChE Journal, 2001, 47, 895-905.	1.8	29
33	Kinetic modeling and energy evaluation of sodium dodecylbenzenesulfonate photocatalytic degradation in a new LED reactor. Journal of Industrial and Engineering Chemistry, 2016, 37, 237-242.	2.9	28
34	Hybrid membrane process for the recovery of major components (zinc, iron and HCl) from spent pickling effluents. Journal of Membrane Science, 2012, 415-416, 616-623.	4.1	27
35	Characterization of metal finishing sludges: influence of the pH. Journal of Hazardous Materials, 2000, 79, 63-75.	6.5	26
36	Pervaporation Technology for the Dehydration of Solvents and Raw Materials in the Process Industry. Drying Technology, 2007, 25, 1819-1828.	1.7	26

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37	Membrane selective recovery of HCl, zinc and iron from simulated mining effluents. <i>Desalination</i> , 2018, 440, 78-87.	4.0	26
38	Blue energy for sustainable water reclamation in WWTPs. <i>Journal of Water Process Engineering</i> , 2020, 33, 101020.	2.6	26
39	Mathematical modelling of styrene drying by adsorption onto activated alumina. <i>Chemical Engineering Science</i> , 2002, 57, 2589-2592.	1.9	25
40	Techno-Economic Feasibility Analysis for Minor Elements Valorization from Desalination Concentrates. <i>Separation and Purification Reviews</i> , 2019, 48, 220-241.	2.8	23
41	Phenomenological prediction of desalination brines nanofiltration through the indirect determination of zeta potential. <i>Separation and Purification Technology</i> , 2019, 210, 746-753.	3.9	23
42	A comparison of models for assessing human risks of petroleum hydrocarbons in polluted soils. <i>Environmental Modelling and Software</i> , 2014, 55, 61-69.	1.9	22
43	Accurate determination of key surface properties that determine the efficient separation of bovine milk BSA and LF proteins. <i>Separation and Purification Technology</i> , 2014, 135, 145-157.	3.9	21
44	Recovery of desalination brines: separation of calcium, magnesium and sulfate as a pre-treatment step. <i>Desalination and Water Treatment</i> , 2015, 56, 3617-3625.	1.0	19
45	Life cycle assessment of salinity gradient energy recovery by reverse electrodialysis in a seawater reverse osmosis desalination plant. <i>Sustainable Energy and Fuels</i> , 2020, 4, 4273-4284.	2.5	18
46	Kinetic analysis and biodegradability of the Fenton mineralization of bisphenol A. <i>Journal of Chemical Technology and Biotechnology</i> , 2014, 89, 1228-1234.	1.6	15
47	Optimum design of PV processes for dehydration of organic mixtures. <i>Desalination</i> , 2006, 193, 152-159.	4.0	13
48	Microalgae biorefinery alternatives and hazard evaluation. <i>Chemical Engineering Research and Design</i> , 2016, 107, 117-125.	2.7	13
49	Modeling of pervaporation processes controlled by concentration polarization. <i>Computers and Chemical Engineering</i> , 2007, 31, 1326-1335.	2.0	12
50	Environmental Characterization of Metal Finishing Sludges. <i>Environmental Technology (United Kingdom)</i> , 2000, 21, 1157-1164.	1.2	11
51	Preliminary assessment of soil contamination by hydrocarbon storage activities: Main site investigation selection. <i>Journal of Geochemical Exploration</i> , 2014, 147, 283-290.	1.5	11
52	Monetizing Environmental Footprints: Index Development and Application to a Solar-Powered Chemicals Self-Supplied Desalination Plant. <i>ACS Sustainable Chemistry and Engineering</i> , 2018, 6, 14533-14541.	3.2	11
53	Comparative behaviour of hydrophilic membranes in the pervaporative dehydration of cyclohexane. <i>Journal of Membrane Science</i> , 2006, 279, 635-644.	4.1	10
54	Electrochemical impedance spectroscopy of enhanced layered nanocomposite ion exchange membranes. <i>Journal of Membrane Science</i> , 2017, 541, 611-620.	4.1	10

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55	Laboratory- and pilot plant-scale study on the dehydration of cyclohexane by pervaporation. Journal of Chemical Technology and Biotechnology, 2006, 81, 48-57.	1.6	9
56	Reverse Electrodialysis: Potential Reduction in Energy and Emissions of Desalination. Applied Sciences (Switzerland), 2020, 10, 7317.	1.3	9
57	Analysis of the elimination process of polymerisation inhibitors from styrene by means of adsorption. Journal of Chemical Technology and Biotechnology, 2003, 78, 64-72.	1.6	8
58	Scale-up of adsorptive styrene drying. Polymer International, 2002, 51, 792-799.	1.6	6
59	Chemical and Energy Recovery Alternatives in SWRO Desalination through Electro-Membrane Technologies. Applied Sciences (Switzerland), 2021, 11, 8100.	1.3	6
60	Integration of Electrochemical Advanced Oxidation With Membrane Separation and Biodegradation. , 2018, , 495-510.		4
61	Desalination by Renewable Energy-Powered Electrodialysis Processes. , 2019, , 111-131.		3
62	Intensified fish farming. Performance of electrochemical remediation of marine RAS waters. Science of the Total Environment, 2022, , 157368.	3.9	2