Juan M Paz-Garcia

List of Publications by Year
in descending order

39 papers	924 citations	361413 20 h-index	454955 30 g-index
41 all docs	41 docs citations	41 times ranked	1055 citing authors

#	Article	IF	Citations
1	Harvesting Energy from CO₂ Emissions. Environmental Science and Technology Letters, 2014, 1, 31-35.	8.7	61
2	Microstructural degradation of silicon electrodes during lithiation observed via operando X-ray tomographic imaging. Journal of Power Sources, 2017, 342, 904-912.	7.8	54
3	4D analysis of the microstructural evolution of Si-based electrodes during lithiation: Time-lapse X-ray imaging and digital volume correlation. Journal of Power Sources, 2016, 320, 196-203.	7.8	53
4	Feasibility study of the use of different extractant agents in the remediation of a mercury contaminated soil from Almaden. Separation and Purification Technology, 2011, 79, 151-156.	7.9	52
5	Modeling of electrokinetic processes by finite element integration of the Nernstâ€“Planckâ€“Poisson system of equations. Separation and Purification Technology, 2011, 79, 183-192.	7.9	47
6	Investigating the evolving microstructure of lithium metal electrodes in 3D using X-ray computed tomography. Physical Chemistry Chemical Physics, 2017, 19, 22111-22120.	2.8	47
7	Simulation-based analysis of the differences in the removal rate of chlorides, nitrates and sulfates by electrokinetic desalination treatments. Electrochimica Acta, 2013, 89, 436-444.	5.2	40
8	Emerging organic contaminants in wastewater: Understanding electrochemical reactors for triclosan and its by-products degradation. Chemosphere, 2020, 247, 125758.	8.2	37
9	A generalized model for transport of contaminants in soil by electric fields. Journal of Environmental Science and Health - Part A Toxic/Hazardous Substances and Environmental Engineering, 2012, 47, 308-318.	1.7	36
10	Modeling of electrokinetic remediation of Cd- and Pb-contaminated kaolinite. Journal of Hazardous Materials, 2019, 366, 630-635.	12.4	35
11	Modeling of electrokinetic desalination of bricks. Electrochimica Acta, 2012, 86, 213-222.	5.2	34
12	Scaling-up the acid-enhanced electrokinetic remediation of a real contaminated soil. Electrochimica Acta, 2015, 181, 139-145.	5.2	33
13	Computing multi-species chemical equilibrium with an algorithm based on the reaction extents. Computers and Chemical Engineering, 2013, 58, 135-143.	3.8	32
14	Energy from CO2 using capacitive electrodes â€“ Theoretical outline and calculation of open circuit voltage. Journal of Colloid and Interface Science, 2014, 418, 200-207.	9.4	32
15	Effects of the buffering capacity of the soil on the mobilization of heavy metals. Equilibrium and kinetics. Chemosphere, 2015, 131, 78-84.	8.2	32
16	Acid Enhanced Electrokinetic Remediation of a Contaminated Soil using Constant Current Density: Strong vs. Weak Acid. Separation Science and Technology, 2014, 49, 1461-1468.	2.5	30
17	Comparison of different extracting agents for the recovery of Pb and Zn through electrokinetic remediation of mine tailings. Journal of Environmental Management, 2021, 279, 111728.	7.8	30
18	Energy from CO2 using capacitive electrodes â€“ A model for energy extraction cycles. Journal of Colloid and Interface Science, 2015, 442, 103-109.	9.4	29

#	Article	IF	Citations
19	Recovery of Li and Co from LiCoO2 via Hydrometallurgicalâ€"Electrodialytic Treatment. Applied Sciences (Switzerland), 2020, 10, 2367.	2.5	26
20	The use of ethylenediaminetetraacetic acid as enhancing agent for the remediation of a lead polluted soil. Electrochimica Acta, 2015, 181, 82-89.	5.2	23
21	Modeling of Electric Double-Layers Including Chemical Reaction Effects. Electrochimica Acta, 2014, 150, 263-268.	5.2	22
22	Modeling of electrokinetic remediation combining local chemical equilibrium and chemical reaction kinetics. Journal of Hazardous Materials, 2019, 371, 728-733.	12.4	16
23	Aging effects on the mobility of Pb in soil: Influence on the energy requirements in electroremediation. Chemosphere, 2018, 213, 351-357.	8.2	15
24	Exploring hydrogen production for self-energy generation in electroremediation: A proof of concept. Applied Energy, 2019, 255, 113839.	10.1	14
25	Electronic Tongue Coupled to an Electrochemical Flow Reactor for Emerging Organic Contaminants Real Time Monitoring. Sensors, 2019, 19, 5349.	3.8	14
26	Acid leaching of LiCoO2 enhanced by reducing agent. Model formulation and validation. Chemosphere, 2022, 287, 132020.	8.2	14
27	Electrochemical desalination of bricks â€" Experimental and modeling. Electrochimica Acta, 2015, 181, 24-30.	5.2	12
28	Electrodialytic processes in solid matrices. New insights into battery recycling. A review. Journal of Chemical Technology and Biotechnology, 2019, 94, 1727-1738.	3.2	11
29	Hydrometallurgical Extraction of Li and Co from LiCoO2 Particlesâ€"Experimental and Modeling. Applied Sciences (Switzerland), 2020, 10, 6375.	2.5	11
30	Sustainability of construction materials: Electrodialytic technology as a tool for mortars production. Journal of Hazardous Materials, 2019, 363, 421-427.	12.4	10
31	Specific Energy Requirements in Electrokinetic Remediation. Transport in Porous Media, 2018, 121, 585-595.	2.6	9
32	Chemical Reduction of Nitrate by Zero-Valent Iron: Shrinking-Core versus Surface Kinetics Models. International Journal of Environmental Research and Public Health, 2020, 17, 1241.	2.6	6
33	A Coupled Reactive-Transport Model for Electrokinetic Remediation. , 2016, , 251-278.		3
34	Electrokinetic Remediation Procedure Applied to Polluted Soils in Southern Spain. Journal of Hazardous, Toxic, and Radioactive Waste, 2019, 23, 04019017.	2.0	1
35	Feasibility Study of the Electrokinetic Remediation of a Mercury-Polluted Soil. , 2016, , 295-310.		1
36	Modelling of Electrokinetic Processes in Civil and Environmental Engineering Applications. , 0, , .		1

#	Article	IF	Citations
37	SEQUENTIAL EXTRACTION PROCEDURE: A VERSATILE TOOL FOR ENVIRONMENTAL RESEARCH. Detritus, 2020, , 23-28.	0.9	0
38	NEW TRENDS IN ACADEMIC ASSIGNMENTS: LESS PAPER AND MORE CLOUD. INTED Proceedings, 2022, , .	0.0	0
39	BOARDGAMES AS LEARNING ACTIVITIES IN STEM DEGREES. INTED Proceedings, 2022, , .	0.0	0