Alexandre Chagnes

List of Publications by Year
in descending order

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75 papers	2,528 citations	201575 27 h-index	206029 48 g-index
77 all docs	77 docs citations	77 times ranked	2894 citing authors

#	Article	IF	Citations
1	Antisolvent Precipitation for Metal Recovery from Citric Acid Solution in Recycling of NMC Cathode Materials. Metals, 2022, 12, 607.	1.0	12
2	Application of Electrodialysis for the Selective Lithium Extraction Towards Cobalt, Nickel and Manganese from Leach Solutions Containing High Divalent Cations/Li Ratio. Recycling, 2022, 7, 14.	2.3	8
3	Development of a Novel Solvent Extraction Process to Recover Cobalt, Nickel, Manganese, and Lithium from Cathodic Materials of Spent Lithium-Ion Batteries. ACS Sustainable Chemistry and Engineering, 2022, 10, 582-593.	3.2	16
4	New insights in the leaching kinetics of cathodic materials in acidic chloride media for lithium-ion battery recycling. Hydrometallurgy, 2021, 204, 105705.	1.8	23
5	New insights for titanium(<scp>iv</scp>) speciation in acidic media based on UV-visible and ³¹P NMR spectroscopies and molecular modeling. RSC Advances, 2021, 11, 27059-27073.	1.7	6
6	Physico-Chemical Characteristics of Spodumene Concentrate and Its Thermal Transformations. Materials, 2021, 14, 7423.	1.3	8
7	The Future of Scandium Recovery from Wastes. , 2021, 5, .		4
8	Simulation of Solvent Extraction Flowsheets by a Global Model Combining Physicochemical and Engineering Approachesâ€"Application to Cobalt(II) Extraction by D2EHPA. Solvent Extraction and Ion Exchange, 2020, 38, 3-13.	0.8	9
9	Recovery of Metal Values from Ni-Cd Cake Waste Residue of an Iranian Zinc Plant by Hydrometallurgical Route. Metals, 2020, 10, 655.	1.0	5
10	Effect of the Addition of Amine in Organophosphorus Compounds on Molecular Structuration of Ionic Liquidsâ€"Application to Solvent Extraction. Molecules, 2020, 25, 2584.	1.7	6
11	Literature Review and Thermodynamic Modelling of Roasting Processes for Lithium Extraction from Spodumene. Metals, 2020, 10, 1312.	1.0	20
12	Development of a Physiochemical Model Combined with an Engineering Model for Predicting Solvent Extraction Performances Within the Context of Lithium-Ion Battery Recycling. Minerals, Metals and Materials Series, 2020, , 3-9.	0.3	0
13	Recent advances on electrodialysis for the recovery of lithium from primary and secondary resources. Hydrometallurgy, 2019, 189, 105124.	1.8	71
14	In silico Design, Virtual Screening and Synthesis of Novel Electrolytic Solvents. Molecular Informatics, 2019, 38, 1900014.	1.4	5
15	Advances in Hydrometallurgy. Metals, 2019, 9, 211.	1.0	5
16	Investigation of the leaching mechanism of NMC 811 (LiNi_{0.8}Mn_{0.1}Co_{0.1}O₂) by hydrochloric acid for recycling lithium ion battery cathodes. RSC Advances, 2019, 9, 38612-38618.	1.7	45
17	Liquid-Liquid Extraction of Cobalt(II), Nickel(II) and Manganese(II) from Acidic Chloride Media. Minerals, Metals and Materials Series, 2018, , 2027-2032.	0.3	0
18	New cationic exchangers for the recovery of cobalt(II), nickel(II) and manganese(II) from acidic chloride solutions: Modelling of extraction curves. Hydrometallurgy, 2018, 180, 96-103.	1.8	10

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19	Chemical Degradation of a Mixture of tri-n-Octylamine and 1-Tridecanol in the Presence of Chromium(VI) in Acidic Sulfate Media. Metals, 2018, 8, 57.	1.0	10
20	Characterization of palladium species after Î³-irradiation of a TBPâ€“alkaneâ€“Pd(NO₃)₂system. RSC Advances, 2018, 8, 21513-21527.	1.7	9
21	Phosphoric acid recovery from concentrated aqueous feeds by a mixture of di-isopropyl ether (DiPE) and tri-n-butylphosphate (TBP): extraction data and modelling. RSC Advances, 2017, 7, 6922-6930.	1.7	25
22	A review on clogging of recirculating steam generators in Pressurized-Water Reactors. Progress in Nuclear Energy, 2017, 97, 182-196.	1.3	35
23	Sustainable extraction and separation of precious metals from hydrochloric media using novel ionic liquid-in-water microemulsion. Hydrometallurgy, 2017, 171, 344-354.	1.8	27
24	Guidelines to design organic electrolytes for lithium-ion batteries: environmental impact, physicochemical and electrochemical properties. Green Chemistry, 2017, 19, 1828-1849.	4.6	83
25	Effects of structural changes of new organophosphorus cationic exchangers on a solvent extraction of cobalt, nickel and manganese from acidic chloride media. RSC Advances, 2017, 7, 5660-5668.	1.7	36
26	Experimental Determination and Modeling of the Speciation of Uranium(VI) in Phosphoric Acid Medium. Solvent Extraction and Ion Exchange, 2016, 34, 241-259.	0.8	11
27	Multinuclear Solid-State NMR Investigation of Hexaniobate and Hexatantalate Compounds. Inorganic Chemistry, 2016, 55, 5946-5956.	1.9	19
28	Highly selective separation of individual platinum group metals (Pd, Pt, Rh) from acidic chloride media using phosphonium-based ionic liquid in aromatic diluent. RSC Advances, 2016, 6, 62717-62728.	1.7	49
29	Development of a capillary electrophoresis method for the analysis in alkaline media as polyoxoanions of two strategic metals: Niobium and tantalum. Journal of Chromatography A, 2016, 1437, 210-218.	1.8	14
30	Modelling of uranium(VI) extraction by D2EHPA/TOPO from phosphoric acid within a wide range of concentrations. Hydrometallurgy, 2016, 165, 57-63.	1.8	23
31	Solubility of niobium(V) and tantalum(V) under mild alkaline conditions. Hydrometallurgy, 2015, 156, 99-106.	1.8	48
32	Extraction of Gold(III) from Acidic Chloride Media Using Phosphonium-based Ionic Liquid as an Anion Exchanger. Industrial & Engineering Chemistry Research, 2015, 54, 1350-1358.	1.8	75
33	First investigation of polyoxoniobate and polyoxotantalate aqueous speciation by capillary zone electrophoresis. RSC Advances, 2015, 5, 64119-64124.	1.7	19
34	Fundamentals in Electrochemistry andÂHydrometallurgy. , 2015, , 41-80.		8
35	Physicochemical properties of novel cholinium ionic liquids for the recovery of silver from nitrate media. RSC Advances, 2015, 5, 78268-78277.	1.7	4
36	Separation of Co(II) and Ni(II) from aqueous solutions by bis(2,4,4-trimethylpentyl)phosphinic acid (Cyanex 272) using trihexyl(tetradecyl)phosphonium chloride (Cyphos IL 101) as solvent. Journal of Molecular Liquids, 2015, 209, 203-208.	2.3	27

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37	Highly Selective Solvent Extraction of Zn(II) and Cu(II) from Acidic Aqueous Chloride Solutions with Mixture of Cyanex 272 and Aliquat 336. Separation Science and Technology, 2015, 50, 1302-1309.	1.3	20
38	Pysicochemical Phenomena Involved in the Recovery of Uranium from Phosphate by BiDiBOPP/di-n-HMOPO and Development of New Cationic Extractants. Procedia Engineering, 2014, 83, 259-264.	1.2	3
39	Insight into the Solid Electrolyte Interphase on Si Nanowires in Lithium-Ion Battery: Chemical and Morphological Modifications upon Cycling. Journal of Physical Chemistry C, 2014, 118, 2919-2928.	1.5	42
40	Investigation of the speciation of uranium(VI) in concentrated phosphoric acid and in synergistic extraction systems by time-resolved laser-induced fluorescence spectroscopy (TRLFS). Journal of Molecular Liquids, 2014, 190, 42-49.	2.3	27
41	Electrochemical behavior of sebaconitrile as a cosolvent in the formulation of electrolytes at high potentials for lithium-ion batteries. Electrochimica Acta, 2014, 115, 223-233.	2.6	34
42	Recovery of Uranium from Wet Phosphoric Acid by Solvent Extraction Processes. Chemical Reviews, 2014, 114, 12002-12023.	23.0	151
43	Solvent extraction studies of uranium(VI) from phosphoric acid: Role of synergistic reagents in mixture with bis(2-ethylhexyl) phosphoric acid. Hydrometallurgy, 2014, 144-145, 207-214.	1.8	34
44	Chemical properties of trihexyl(tetradecyl)phosphonium chloride and bis(2,4,4-trimethylpentyl)phosphinic acid mixtures: Interaction study by FT-IR and NMR spectroscopies. Journal of Molecular Liquids, 2013, 187, 165-170.	2.3	47
45	Development of New Cationic Exchangers for the Recovery of Uranium (VI) from Concentrated Phosphoric Acid. Separation Science and Technology, 2013, 48, 480-486.	1.3	27
46	A brief review on hydrometallurgical technologies for recycling spent lithiumâ€ion batteries. Journal of Chemical Technology and Biotechnology, 2013, 88, 1191-1199.	1.6	384
47	Recovery of uranium (VI) from concentrated phosphoric acid by mixtures of new bis(1,3-) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 5 28-33.	1.8	28
48	Interphase chemistry of Si electrodes used as anodes in Li-ion batteries. Applied Surface Science, 2013, 266, 5-16.	3.1	134
49	On the Metal Ion Selectivity of Oxoacid Extractants. Solvent Extraction and Ion Exchange, 2013, 31, 95-105.	0.8	4
50	In-Silico Calculations as a Helpful Tool for Designing New Extractants in Liquid-Liquid Extraction. Solvent Extraction and Ion Exchange, 2013, 31, 499-518.	0.8	5
51	Modeling of the extraction of uranium (VI) from concentrated phosphoric acid by synergistic mixtures of bis-(2-ethylhexyl)-phosphoric acid and tri-n-octylphosphine oxide. Hydrometallurgy, 2012, 129-130, 118-125.	1.8	35
52	Influence of Phase Modifiers on the Degradation of Tri-n-octylamine/dodecane Extracting Mixture by an Acidic Solution of Vanadium (V). Solvent Extraction and Ion Exchange, 2012, 30, 67-76.	0.8	7
53	In Vitro Biomineralization and Bulk Characterization of Chitosan/Hydroxyapatite Composite Microparticles Prepared by Emulsification Cross-Linking Method: Orthopedic Use. Applied Biochemistry and Biotechnology, 2012, 168, 1459-1475.	1.4	8
54	Morphology and antimicrobial properties of Luffa cylindrica fibers/chitosan biomaterial as micro-reservoirs for silver delivery. Materials Letters, 2012, 79, 238-241.	1.3	21

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55	Rheological behaviour of binary mixtures containing hexyl(tetradecyl)phosphonium chloride (Cyphos) Tj ETQq1 1 0.784314 rgBT /Ove Molecular Liquids, 2012, 169, 27-32.	2.3	18
56	A density functional theory study of uranium(vi) nitrate monoamide complexes. Physical Chemistry Chemical Physics, 2011, 13, 19371.	1.3	15
57	XPS, XRD and SEM characterization of a thin ceria layer deposited onto graphite electrode for application in lithium-ion batteries. Applied Surface Science, 2011, 257, 9110-9119.	3.1	106
58	Chemical degradation of trioctylamine and 1-tridecanol phase modifier in acidic sulfate media in the presence of vanadium (V). Hydrometallurgy, 2011, 105, 328-333.	1.8	24
59	Speciation of vanadium (V) extracted from acidic sulfate media by trioctylamine in n-dodecane modified with 1-tridecanol. Hydrometallurgy, 2010, 104, 20-24.	1.8	42
60	IR Fingerprints of U(VI) Nitrate Monoamides Complexes: A Joint Experimental and Theoretical Study. Journal of Physical Chemistry A, 2010, 114, 10878-10884.	1.1	12
61	Solvent extraction of uranium from acidic sulfate media by AlamineÂ®336: computer simulation and optimization of the flow-sheets. Journal of Chemical Technology and Biotechnology, 2009, 84, 1331-1337.	1.6	19
62	Computer simulation of flowâ€sheets for the solvent extraction of uranium: a new route to delay the effect of chemical degradation of the organic phase during uranium recovery from acidic sulfate media. Journal of Chemical Technology and Biotechnology, 2009, 84, 1899-1907.	1.6	9
63	Is 3-methyl-2-oxazolidinone a suitable solvent for lithium-ion batteries?. Journal of Power Sources, 2006, 156, 634-644.	4.0	21
64	Imidazolium-organic solvent mixtures as electrolytes for lithium batteries. Journal of Power Sources, 2005, 145, 82-88.	4.0	115
65	Mixed ionic liquid as electrolyte for lithium batteries. Journal of Power Sources, 2005, 146, 682-684.	4.0	134
66	Thermal analysis of Î³-butyrolactone+1 butyl-3-methyl-imidazolium ionic liquids mixtures. Solid State Ionics, 2005, 176, 1419-1427.	1.3	35
67	X-ray powder diffraction structure determination of Î³-butyrolactone at 180â€…K: phase-problem solution from the lattice energy minimization with two independent molecules. Acta Crystallographica Section B: Structural Science, 2005, 61, 312-320.	1.8	16
68	Physicochemical properties of fluorine-containing electrolytes for lithium batteries. , 2005, , 137-171.		4
69	Abnormal Temperature Dependence of the Viscosity of Ethylammonium Nitrateâ€“Methanol Ionic Mixtures. Journal of Solution Chemistry, 2004, 33, 247-255.	0.6	29
70	Experimental and computational investigation of the electrocatalytic hydrogenation of phenol in an electrochemical cell. Canadian Journal of Chemistry, 2004, 82, 641-648.	0.6	8
71	Rational Design of Original Materials for the Electrocatalytic Hydrogenation Reactions:Â Concept, Preparation, Characterization, and Theoretical Analysis. Langmuir, 2004, 20, 6365-6373.	1.6	28
72	Ion-Dipole Interactions in Concentrated Organic Electrolytes. ChemPhysChem, 2003, 4, 559-566.	1.0	18

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73	Cycling Ability of Î³-Butyrolactone-Ethylene Carbonate Based Electrolytes. Journal of the Electrochemical Society, 2003, 150, A1255.	1.3	46
74	Excess thermodynamic properties of binary liquid mixtures containing dimethylcarbonate and Î³-butyrolactone. Journal of Chemical Thermodynamics, 2002, 34, 1847-1856.	1.0	35
75	Phase diagram of Î³-butyrolactone-dimethyl-carbonate mixtures. European Physical Journal Special Topics, 2001, 11, Pr10-27-Pr10-33.	0.2	8