Hector Rodriguez

List of Publications by Year in descending order

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69 papers

6,345 citations

36 h-index 95083 68 g-index

74 all docs

74 docs citations

74 times ranked 5794 citing authors

#	Article	IF	CITATIONS
1	Complete dissolution and partial delignification of wood in the ionic liquid 1-ethyl-3-methylimidazolium acetate. Green Chemistry, 2009, 11, 646.	4.6	906
2	The third evolution of ionic liquids: active pharmaceutical ingredients. New Journal of Chemistry, 2007, 31, 1429.	1.4	766
3	Temperature and Composition Dependence of the Density and Viscosity of Binary Mixtures of Water + Ionic Liquid. Journal of Chemical & Description (2006, 51, 2145-2155).	1.0	444
4	Where are ionic liquid strategies most suited in the pursuit of chemicals and energy from lignocellulosic biomass?. Chemical Communications, 2011, 47, 1405-1421.	2.2	391
5	Demonstration of Chemisorption of Carbon Dioxide in 1,3â€Dialkylimidazolium Acetate Ionic Liquids. Angewandte Chemie - International Edition, 2011, 50, 12024-12026.	7.2	349
6	Separation of aromatic hydrocarbons from alkanes using the ionic liquid 1-ethyl-3-methylimidazoliumbis{(trifluoromethyl) sulfonyl}amide. Green Chemistry, 2007, 9, 70-74.	4.6	223
7	Separation of Benzene and Hexane by Solvent Extraction with 1-Alkyl-3-methylimidazolium Bis{(trifluoromethyl)sulfonyl}amide lonic Liquids: Effect of the Alkyl-Substituent Lengthâ€. Journal of Physical Chemistry B, 2007, 111, 4732-4736.	1.2	194
8	Reaction of elemental chalcogens with imidazolium acetates to yield imidazole-2-chalcogenones: direct evidence for ionic liquids as proto-carbenes. Chemical Communications, 2011, 47, 3222.	2.2	176
9	Insight into the Interactions That Control the Phase Behaviour of New Aqueous Biphasic Systems Composed of Polyethylene Glycol Polymers and Ionic Liquids. Chemistry - A European Journal, 2012, 18, 1831-1839.	1.7	157
10	Heat Capacities and Excess Enthalpies of 1-Ethyl-3-methylimidazolium-Based Ionic Liquids and Water. Journal of Chemical & Data, 2008, 53, 2112-2119.	1.0	143
11	Extractive and oxidative-extractive desulfurization of fuels with ionic liquids. Fuel, 2014, 117, 882-889.	3.4	124
12	1-Ethyl-3-methylimidazolium bis{(trifluoromethyl)sulfonyl}amide as solvent for the separation of aromatic and aliphatic hydrocarbons by liquid extraction \hat{a} €" extension to C7- and C8-fractions. Green Chemistry, 2008, 10, 1294.	4.6	116
13	Title is missing!. Journal of Solution Chemistry, 2003, 32, 53-63.	0.6	114
14	Physicochemical properties of maize cob cellulose powders reconstituted from ionic liquid solution. Cellulose, 2012, 19, 425-433.	2.4	105
15	Bis{(trifluoromethyl)sulfonyl}amide ionic liquids as solvents for the extraction of aromatic hydrocarbons from their mixtures with alkanes: effect of the nature of the cation. Green Chemistry, 2009, 11, 365-372.	4.6	104
16	Pharmaceutically active ionic liquids with solids handling, enhanced thermal stability, and fast release. Chemical Communications, 2012, 48, 5422.	2.2	104
17	Mutually immiscible ionic liquids. Chemical Communications, 2006, , 2548-2550.	2.2	103
18	Absorption of Carbon Dioxide in Two Binary Mixtures of Ionic Liquids. Industrial & Engineering Chemistry Research, 2013, 52, 5975-5984.	1.8	101

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19	lonic Liquid-Based Preparation of Celluloseâ^'Dendrimer Films as Solid Supports for Enzyme Immobilization. Biomacromolecules, 2008, 9, 381-387.	2.6	92
20	Use of a green and cheap ionic liquid to purify gasoline octane boosters. Green Chemistry, 2007, 9, 247-253.	4.6	91
21	Application of mutually immiscible ionic liquids to the separation of aromatic and aliphatic hydrocarbons by liquid extraction: a preliminary approach. Physical Chemistry Chemical Physics, 2008, 10, 2538.	1.3	83
22	Enhanced oil recovery using the ionic liquid trihexyl(tetradecyl)phosphonium chloride: phase behaviour and properties. RSC Advances, 2012, 2, 9392.	1.7	81
23	Effect of anion fluorination in 1-ethyl-3-methylimidazolium as solvent for the liquid extraction of ethanol from ethyl tert-butyl ether. Fluid Phase Equilibria, 2006, 242, 164-168.	1.4	78
24	Dual functional ionic liquids as plasticisers and antimicrobial agents for medical polymers. Green Chemistry, 2011, 13, 1527.	4.6	73
25	Biphasic liquid mixtures of ionic liquids and polyethylene glycols. Physical Chemistry Chemical Physics, 2009, 11, 10916.	1.3	69
26	Combined physical and chemical absorption of carbon dioxide in a mixture of ionic liquids. Journal of Chemical Thermodynamics, 2014, 77, 197-205.	1.0	65
27	Phase equilibria of mixtures of mutually immiscible ionic liquids. Fluid Phase Equilibria, 2007, 261, 427-433.	1.4	64
28	Liquid mixtures of ionic liquids and polymers as solvent systems. Fluid Phase Equilibria, 2010, 294, 7-14.	1.4	59
29	Mixtures of ionic liquids as more efficient media for cellulose dissolution. Carbohydrate Polymers, 2017, 178, 277-285.	5.1	58
30	Liquid–liquid equilibrium and interfacial tension of the ternary system heptane+thiophene+1-ethyl-3-methylimidazolium bis(trifluoromethanesulfonyl)imide. Fluid Phase Equilibria, 2010, 298, 240-245.	1.4	56
31	Mixtures of Ethanol and the Ionic Liquid 1-Ethyl-3-methylimidazolium Acetate for the Fractionated Solubility of Biopolymers of Lignocellulosic Biomass. Industrial & Engineering Chemistry Research, 2014, 53, 11850-11861.	1.8	55
32	Improved concentration of citrus essential oil by solvent extraction with acetate ionic liquids. Fluid Phase Equilibria, 2014, 361, 37-44.	1.4	54
33	Deterpenation of Citrus Essential Oil by Liquidâ^'Liquid Extraction with 1-Alkyl-3-methylimidazolium Bis(trifluoromethylsulfonyl)amide Ionic Liquids. Journal of Chemical & Engineering Data, 2011, 56, 1273-1281.	1.0	51
34	Purification of ethyl tert-butyl ether from its mixtures with ethanol by using an ionic liquid. Chemical Engineering Journal, 2006, 115, 219-223.	6.6	47
35	Thermophysical Characterization of the Mixtures of the Ionic Liquid 1-Ethyl-3-Methylimidazolium Acetate with 1-Propanol or 2-Propanol. Journal of Chemical & Engineering Data, 2016, 61, 2299-2310.	1.0	43
36	Ionic liquids for liquid-in-glass thermometers. Green Chemistry, 2008, 10, 501.	4.6	37

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37	Carbon dioxide absorption in the ionic liquid 1-ethylpyridinium ethylsulfate and in its mixtures with another ionic liquid. International Journal of Greenhouse Gas Control, 2013, 18, 296-304.	2.3	36
38	Efficiency of hydrophobic phosphonium ionic liquids and DMSO as recyclable cellulose dissolution and regeneration media. RSC Advances, 2017, 7, 17451-17461.	1.7	36
39	Non-ideal behavior of ionic liquid mixtures to enhance CO2 capture. Fluid Phase Equilibria, 2017, 450, 175-183.	1.4	36
40	Liquid-liquid equilibria of mutually immiscible ionic liquids with a common anion of basic character. Journal of Chemical Thermodynamics, 2016, 102, 12-21.	1.0	29
41	Dual functional ionic liquids as antimicrobials and plasticisers for medical grade PVCs. RSC Advances, 2014, 4, 8567.	1.7	26
42	Eutectic mixtures of pyrrolidinium-based ionic liquids. Fluid Phase Equilibria, 2016, 408, 1-9.	1.4	26
43	Improved Reactivity of Cellulose via Its Crystallinity Reduction by Nondissolving Pretreatment with an Ionic Liquid. ACS Sustainable Chemistry and Engineering, 2019, 7, 9164-9171.	3.2	26
44	Alkylpyridinium Alkylsulfate Ionic Liquids as Solvents for the Deterpenation of Citrus Essential Oil. Separation Science and Technology, 2012, 47, 292-299.	1.3	23
45	Influence of Methanol on the Dissolution of Lignocellulose Biopolymers with the Ionic Liquid 1-Ethyl-3-methylimidazolium Acetate. Industrial & Engineering Chemistry Research, 2015, 54, 9605-9614.	1.8	23
46	Phase behaviour of trihexyl (tetradecyl) phosphonium chloride, nonane and water. Green Chemistry, 2009, 11, 780.	4.6	22
47	Addition of ammonia and/or oxygen to an ionic liquid for delignification of miscanthus. Bioresource Technology, 2011, 102, 7946-7952.	4.8	22
48	Properties modification by eutectic formation in mixtures of ionic liquids. RSC Advances, 2015, 5, 22178-22187.	1.7	21
49	Isomer effect in the separation of octane and xylenes using the ionic liquid 1-ethyl-3-methylimidazolium bis{(trifluoromethyl)sulfonyl}amide. Fluid Phase Equilibria, 2010, 294, 180-186.	1.4	20
50	lonic liquids in the pretreatment of lignocellulosic biomass. Acta Innovations, 2021, , 23-36.	0.4	19
51	Liquid-liquid interfacial tension of equilibrated mixtures of ionic liquids and hydrocarbons. Science China Chemistry, 2012, 55, 1519-1524.	4.2	14
52	Direct Preparation of Sulfide Semiconductor Nanoparticles from the Corresponding Bulk Powders in an Ionic Liquid. Angewandte Chemie - International Edition, 2012, 51, 1424-1427.	7.2	14
53	Thermal behaviour of mixtures of 1-alkylpyridinium halides with and without a common ion. Journal of Molecular Liquids, 2018, 268, 781-790.	2.3	13
54	Comparison of Temperature Effects on the Salting Out of Poly(ethylene glycol) versus Poly(ethylene) Tj ETQq0 C 2010, 49, 2371-2379.	0 0 rgBT /O 1.8	verlock 10 Tf 12

2010, 49, 2371-2379.

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55	Effect of Temperature on Salt–Salt Aqueous Biphasic Systems: Manifestations of Upper Critical Solution Temperature. Journal of Solution Chemistry, 2015, 44, 454-468.	0.6	12
56	Potential impact on the recruitment of chemical engineering graduates due to the industrial internship. Education for Chemical Engineers, 2019, 26, 107-113.	2.8	12
57	Recovery of the ionic liquids [C2mim][OAc] or [C2mim][SCN] by distillation from their binary mixtures with methanol or ethanol. Separation and Purification Technology, 2020, 248, 117103.	3.9	11
58	Tetrabutylphosphonium acetate and its eutectic mixtures with common-cation halides as solvents for carbon dioxide capture. Chemical Engineering Journal, 2021, 409, 128191.	6.6	11
59	(Liquid+liquid) equilibrium of (dibutyl ether+methanol+water) at different temperatures. Journal of Chemical Thermodynamics, 2005, 37, 1007-1012.	1.0	8
60	Dual Nature of Polyethylene Glycol-Based Aqueous Biphasic Extraction Chromatographic (ABEC) Resins: Uptakes of Perchlorate versus Mercury(II). Industrial & Engineering Chemistry Research, 2008, 47, 7390-7396.	1.8	6
61	AcetoneÂ+Â1-ethyl-3-methylimidazolium acetate phase diagram: A correlation challenge. Fluid Phase Equilibria, 2022, 557, 113419.	1.4	4
62	Life Cycle Assessment (LCA) of Ionic Liquids. , 2019, , 1-9.		3
63	Recovery of dialkylimidazolium-based ionic liquids from their mixtures with acetone or water by flash distillation. Journal of Molecular Liquids, 2022, 346, 118292.	2.3	3
64	AOT + Polyethylene Glycol Eutectics for Enhanced Oil Recovery. Applied Sciences (Switzerland), 2021, 11, 8164.	1.3	2
65	EDITORIAL – SS&T Special Issue on Ionic Liquids for Separations. Separation Science and Technology, 2012, 47, 167-168.	1.3	1
66	Solid-liquid phase behavior of mixtures of 1-alkyl-3-methylimidazolium bis(trifluoromethylsulfonyl)amides involving long alkyl side chains. Journal of Molecular Liquids, 2021, 339, 116805.	2.3	1
67	Ionic Liquids: Growth of a Field through the Eyes of the I&EC Division. ACS Symposium Series, 2008, , 389-400.	0.5	0
68	Conference report: Lake Constance turns green. Green Chemistry, 2009, 11, 604.	4.6	0
69	Liquid Systems Based on Tetra(<i>n</i> -butyl)phosphonium Acetate for the Non-dissolving Pretreatment of a Microcrystalline Cellulose (Avicel PH-101). Biomacromolecules, 2022, 23, 1970-1980.	2.6	O