Mara G Freire

List of Publications by Citations

218 papers	14,573 citations	69 h-index	116 g-index
232 ext. papers	16,139 ext. citations	6 avg, IF	6.7 L-index

#	Paper	IF	Citations
218	Aqueous biphasic systems: a boost brought about by using ionic liquids. *Chemical Society Reviews*, **2012**, 41, 4966-95	58.5	610
217	Ionic-Liquid-Mediated Extraction and Separation Processes for Bioactive Compounds: Past, Present, and Future Trends. *Chemical Reviews*, **2017**, 117, 6984-7052	68.1	492
216	Hydrolysis of tetrafluoroborate and hexafluorophosphate counter ions in imidazolium-based ionic liquids. *Journal of Physical Chemistry A*, **2010**, 114, 3744-9	2.8	475
215	Surface tensions of imidazolium based ionic liquids: anion, cation, temperature and water effect. *Journal of Colloid and Interface Science*, **2007**, 314, 621-30	9.3	369
214	High-Pressure Densities and Derived Thermodynamic Properties of Imidazolium-Based Ionic Liquids. *Journal of Chemical & Engineering Data*, **2007**, 52, 80-88	2.8	357
213	Mutual solubilities of water and hydrophobic ionic liquids. *Journal of Physical Chemistry B*, **2007**, 111, 13082-9	3.4	347
212	Surface tension of ionic liquids and ionic liquid solutions. *Chemical Society Reviews*, **2012**, 41, 829-68	58.5	318
211	Ionic liquid solutions as extractive solvents for value-added compounds from biomass. *Green Chemistry*, **2014**, 16, 4786-4815	10	289
210	Mutual solubilities of water and the [C(n)mim][Tf(2)N] hydrophobic ionic liquids. *Journal of Physical Chemistry B*, **2008**, 112, 1604-10	3.4	289
209	An overview of the mutual solubilities of water–imidazolium-based ionic liquids systems. *Fluid Phase Equilibria*, **2007**, 261, 449-454	2.5	265
208	Evaluation of anion influence on the formation and extraction capacity of ionic-liquid-based aqueous biphasic systems. *Journal of Physical Chemistry B*, **2009**, 113, 9304-10	3.4	264
207	PTt Measurements of Imidazolium-Based Ionic Liquids. *Journal of Chemical & Engineering Data*, **2007**, 52, 1881-1888	2.8	257
206	Thermophysical Characterization of Ionic Liquids Able To Dissolve Biomass. *Journal of Chemical & Engineering Data*, **2011**, 56, 4813-4822	2.8	254
205	Evaluation of cation influence on the formation and extraction capability of ionic-liquid-based aqueous biphasic systems. *Journal of Physical Chemistry B*, **2009**, 113, 5194-9	3.4	221
204	Densities and Derived Thermodynamic Properties of Imidazolium-, Pyridinium-, Pyrrolidinium-, and Piperidinium-Based Ionic Liquids. *Journal of Chemical & Engineering Data*, **2008**, 53, 805-811	2.8	216
203	Evaluation of cation-anion interaction strength in ionic liquids. *Journal of Physical Chemistry B*, **2011** , 115, 4033-41	3.4	197
202	High-performance extraction of alkaloids using aqueous two-phase systems with ionic liquids. *Green Chemistry*, **2010**, 12, 1715	10	194

201	Extended scale for the hydrogen-bond basicity of ionic liquids. *Physical Chemistry Chemical Physics*, **2014**, 16, 6593-601	3.6	189
200	Surface Tensions for the 1-Alkyl-3-methylimidazolium Bis(trifluoromethylsulfonyl)imide Ionic Liquids. *Journal of Chemical & Engineering Data*, **2008**, 53, 1346-1350	2.8	186
199	Ion specific effects on the mutual solubilities of water and hydrophobic ionic liquids. *Journal of Physical Chemistry B*, **2009**, 113, 202-11	3.4	168
198	Extraction of biomolecules using phosphonium-based ionic liquids + K(3)PO(4) aqueous biphasic systems. *International Journal of Molecular Sciences*, **2010**, 11, 1777-91	6.3	165
197	Extraction of vanillin using ionic-liquid-based aqueous two-phase systems. *Separation and Purification Technology*, **2010**, 75, 39-47	8.3	163
196	Aqueous biphasic systems composed of a water-stable ionic liquid + carbohydrates and their applications. *Green Chemistry*, **2011**, 13, 1536	10	162
195	Role of the Hofmeister series in the formation of ionic-liquid-based aqueous biphasic systems. *Journal of Physical Chemistry B*, **2012**, 116, 7252-8	3.4	161
194	Overview of the Liquid–Liquid Equilibria of Ternary Systems Composed of Ionic Liquid and Aromatic and Aliphatic Hydrocarbons, and Their Modeling by COSMO-RS. *Industrial & Engineering Chemistry Research*, **2012**, 51, 3483-3507	3.9	157
193	Ionic liquids as adjuvants for the tailored extraction of biomolecules in aqueous biphasic systems. *Green Chemistry*, **2010**, 12, 1661	10	154
192	Systematic study of the thermophysical properties of imidazolium-based ionic liquids with cyano-functionalized anions. *Journal of Physical Chemistry B*, **2013**, 117, 10271-83	3.4	153
191	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, 1831-9	4.8	144
190	Thermophysical properties of pure and water-saturated tetradecyltrihexylphosphonium-based ionic liquids. *Journal of Chemical Thermodynamics*, **2011**, 43, 948-957	2.9	140
189	An Overview of the Liquid–Liquid Equilibria of (Ionic Liquid + Hydrocarbon) Binary Systems and Their Modeling by the Conductor-like Screening Model for Real Solvents. *Industrial & Engineering Chemistry Research*, **2011**, 50, 5279-5294	3.9	139
188	Complete removal of textile dyes from aqueous media using ionic-liquid-based aqueous two-phase systems. *Separation and Purification Technology*, **2014**, 128, 58-66	8.3	127
187	Evaluation of COSMO-RS for the prediction of LLE and VLE of water and ionic liquids binary systems. *Fluid Phase Equilibria*, **2008**, 268, 74-84	2.5	127
186	The magic of aqueous solutions of ionic liquids: ionic liquids as a powerful class of catanionic hydrotropes. *Green Chemistry*, **2015**, 17, 3948-3963	10	126
185	Thermophysical Properties of Five Acetate-Based Ionic Liquids. *Journal of Chemical & Engineering Data*, **2012**, 57, 3005-3013	2.8	126
184	Are Aqueous Biphasic Systems Composed of Deep Eutectic Solvents Ternary or Quaternary Systems?. *ACS Sustainable Chemistry and Engineering*, **2016**, 4, 2881-2886	8.3	124

183	Measurements and Correlation of High-Pressure Densities of Imidazolium-Based Ionic Liquids. *Journal of Chemical & Engineering Data*, **2008**, 53, 1914-1921	2.8	123
182	(Extraction of biomolecules using) aqueous biphasic systems formed by ionic liquids and aminoacids. *Separation and Purification Technology*, **2010**, 72, 85-91	8.3	122
181	Aqueous biphasic systems: a benign route using cholinium-based ionic liquids. *RSC Advances*, **2013**, 3, 1835-1843	3.7	121
180	Evaluation of COSMO-RS for the prediction of LLE and VLE of alcohols+ionic liquids. *Fluid Phase Equilibria*, **2007**, 255, 167-178	2.5	118
179	Separation of ethanol□water mixtures by liquid□liquid extraction using phosphonium-based ionic liquids. *Green Chemistry*, **2011**, 13, 1517	10	113
178	Electrospun nanosized cellulose fibers using ionic liquids at room temperature. *Green Chemistry*, **2011**, 13, 3173	10	111
177	Tryptophan extraction using hydrophobic ionic liquids. *Separation and Purification Technology*, **2010** , 72, 167-173	8.3	111
176	1H NMR and molecular dynamics evidence for an unexpected interaction on the origin of salting-in/salting-out phenomena. *Journal of Physical Chemistry B*, **2010**, 114, 2004-14	3.4	109
175	Ionic liquids as additives to enhance the extraction of antioxidants in aqueous two-phase systems. *Separation and Purification Technology*, **2014**, 128, 1-10	8.3	106
174	Enhanced extraction of caffeine from guaran□seeds using aqueous solutions of ionic liquids. *Green Chemistry*, **2013**, 15, 2002	10	104
173	Structural and Positional Isomerism Influence in the Physical Properties of Pyridinium NTf2-Based Ionic Liquids: Pure and Water-Saturated Mixtures□*Journal of Chemical & Engineering Data*, **2010**, 55, 4514-4520	2.8	104
172	Solubility of Water in Tetradecyltrihexylphosphonium-Based Ionic Liquids. *Journal of Chemical & Engineering Data*, **2008**, 53, 2378-2382	2.8	101
171	Optimization of the gallic acid extraction using ionic-liquid-based aqueous two-phase systems. *Separation and Purification Technology*, **2012**, 97, 142-149	8.3	98
170	Extraction of tetracycline from fermentation broth using aqueous two-phase systems composed of polyethylene glycol and cholinium-based salts. *Process Biochemistry*, **2013**, 48, 716-722	4.8	90
169	Ionic Liquid Based Aqueous Biphasic Systems with Controlled pH: The Ionic Liquid Cation Effect. *Journal of Chemical & Engineering Data*, **2011**, 56, 4253-4260	2.8	89
168	Novel biocompatible and self-buffering ionic liquids for biopharmaceutical applications. *Chemistry - A European Journal*, **2015**, 21, 4781-8	4.8	88
167	Densities and Viscosities of Mixtures of Two Ionic Liquids Containing a Common Cation. *Journal of Chemical & Engineering Data*, **2016**, 61, 2828-2843	2.8	85
166	Characterization of aqueous biphasic systems composed of ionic liquids and a citrate-based biodegradable salt. *Biochemical Engineering Journal*, **2012**, 67, 68-76	4.2	85

165	Good's buffers as a basis for developing self-buffering and biocompatible ionic liquids for biological research. *Green Chemistry*, **2014**, 16, 3149-3159	10	84
164	Development of back-extraction and recyclability routes for ionic-liquid-based aqueous two-phase systems. *Green Chemistry*, **2014**, 16, 259-268	10	84
163	Hydrogen-bond acidity of ionic liquids: an extended scale. *Physical Chemistry Chemical Physics*, **2015**, 17, 18980-90	3.6	82
162	Thermophysical properties of sulfonium- and ammonium-based ionic liquids. *Fluid Phase Equilibria*, **2014**, 381, 36-45	2.5	80
161	Design of ionic liquids for lipase purification. *Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences*, **2011**, 879, 2679-87	3.2	80
160	Enhanced extraction of proteins using cholinium-based ionic liquids as phase-forming components of aqueous biphasic systems. *Biotechnology Journal*, **2015**, 10, 1457-66	5.6	79
159	Aqueous two-phase systems based on acetonitrile and carbohydrates and their application to the extraction of vanillin. *Separation and Purification Technology*, **2013**, 104, 106-113	8.3	79
158	Critical assessment of the formation of ionic-liquid-based aqueous two-phase systems in acidic media. *Journal of Physical Chemistry B*, **2011**, 115, 11145-53	3.4	79
157	Towards an understanding of the mutual solubilities of water and hydrophobic ionic liquids in the presence of salts: the anion effect. *Journal of Physical Chemistry B*, **2009**, 113, 2815-25	3.4	76
156	Combining ionic liquids and polyethylene glycols to boost the hydrophobic-hydrophilic range of aqueous biphasic systems. *Physical Chemistry Chemical Physics*, **2013**, 15, 19580-3	3.6	75
155	Molecular interactions in aqueous biphasic systems composed of polyethylene glycol and crystalline vs. liquid cholinium-based salts. *Physical Chemistry Chemical Physics*, **2014**, 16, 5723-31	3.6	74
154	Surface tension and refractive index of pure and water-saturated tetradecyltrihexylphosphonium-based ionic liquids. *Journal of Chemical Thermodynamics*, **2013**, 57, 372-379	2.8	74
153	Solubility of non-aromatic ionic liquids in water and correlation using a QSPR approach. *Fluid Phase Equilibria*, **2010**, 294, 234-240	2.5	73
152	Aqueous biphasic systems composed of ionic liquids and polymers: A platform for the purification of biomolecules. *Separation and Purification Technology*, **2013**, 113, 83-89	8.3	72
151	Solvatochromic parameters of deep eutectic solvents formed by ammonium-based salts and carboxylic acids. *Fluid Phase Equilibria*, **2017**, 448, 15-21	2.5	71
150	Thermophysical Properties and Water Saturation of [PF6]-Based Ionic Liquids. *Journal of Chemical & Engineering Data*, **2010**, 55, 5065-5073	2.8	70
149	Vapor−Liquid Equilibria of Water + Alkylimidazolium-Based Ionic Liquids: Measurements and Perturbed-Chain Statistical Associating Fluid Theory Modeling. *Industrial & Engineering Chemistry Research*, **2014**, 53, 3737-3748	3.9	69
148	Mutual solubility of water and structural/positional isomers of N-alkylpyridinium-based ionic liquids. *Journal of Physical Chemistry B*, **2010**, 114, 15925-34	3.4	69

147	Improved recovery of ionic liquids from contaminated aqueous streams using aluminium-based salts. *RSC Advances*, **2012**, 2, 10882	3.7	68
146	Evaluation of the impact of phosphate salts on the formation of ionic-liquid-based aqueous biphasic systems. *Journal of Chemical Thermodynamics*, **2012**, 54, 398-405	2.9	67
145	The impact of self-aggregation on the extraction of biomolecules in ionic-liquid-based aqueous two-phase systems. *Separation and Purification Technology*, **2013**, 108, 174-180	8.3	66
144	Cation alkyl side chain length and symmetry effects on the surface tension of ionic liquids. *Langmuir*, **2014**, 30, 6408-18	4	65
143	Long-term protein packaging in bio-ionic liquids: Improved catalytic activity and enhanced stability of cytochrome C against multiple stresses. *Green Chemistry*, **2017**, 19, 4900-4911	10	63
142	Surface hydrophobization of bacterial and vegetable cellulose fibers using ionic liquids as solvent media and catalysts. *Green Chemistry*, **2011**, 13, 2464	10	61
141	Ionic-Liquid-Based Aqueous Biphasic Systems with Controlled pH: The Ionic Liquid Anion Effect. *Journal of Chemical & Engineering Data*, **2012**, 57, 507-512	2.8	60
140	Influence of the anion on the surface tension of 1-ethyl-3-methylimidazolium-based ionic liquids. *Journal of Chemical Thermodynamics*, **2012**, 54, 49-54	2.9	58
139	Enhanced extraction of bovine serum albumin with aqueous biphasic systems of phosphonium- and ammonium-based ionic liquids. *Journal of Biotechnology*, **2015**, 206, 17-25	3.7	57
138	Extraction and stability of bovine serum albumin (BSA) using cholinium-based Good's buffers ionic liquids. *Process Biochemistry*, **2015**, 50, 1158-1166	4.8	56
137	The effect of the cation alkyl chain branching on mutual solubilities with water and toxicities. *Physical Chemistry Chemical Physics*, **2014**, 16, 19952-63	3.6	56
136	Ionic-liquid-based aqueous biphasic systems for improved detection of bisphenol A in human fluids. *Analytical Methods*, **2012**, 4, 2664	3.2	55
135	Contact angles and wettability of ionic liquids on polar and non-polar surfaces. *Physical Chemistry Chemical Physics*, **2015**, 17, 31653-31661	3.6	54
134	Densities, Viscosities and Derived Thermophysical Properties of Water-Saturated Imidazolium-Based Ionic Liquids. *Fluid Phase Equilibria*, **2016**, 407, 188-196	2.5	54
133	Deep Eutectic Solvent Aqueous Solutions as Efficient Media for the Solubilization of Hardwood Xylans. *ChemSusChem*, **2018**, 11, 753-762	8.3	53
132	Suitability of bio-based ionic liquids for the extraction and purification of IgG antibodies. *Green Chemistry*, **2016**, 18, 6071-6081	10	53
131	Thermoreversible (Ionic-Liquid-Based) Aqueous Biphasic Systems. *Scientific Reports*, **2016**, 6, 20276	4.9	52
130	On the interactions between amino acids and ionic liquids in aqueous media. *Journal of Physical Chemistry B*, **2009**, 113, 13971-9	3.4	52

129	Surface Tension of Liquid Fluorocompounds. *Journal of Chemical & Engineering Data*, **2006**, 51, 1820-1824	2.8	52
128	Increased significance of food wastes: selective recovery of added-value compounds. *Food Chemistry*, **2012**, 135, 2453-61	8.5	51
127	Impact of self-aggregation on the formation of ionic-liquid-based aqueous biphasic systems. *Journal of Physical Chemistry B*, **2012**, 116, 7660-8	3.4	51
126	Thermophysical properties of phosphonium-based ionic liquids. *Fluid Phase Equilibria*, **2015**, 400, 103-113	2.5	50
125	Improving the extraction and purification of immunoglobulin G by the use of ionic liquids as adjuvants in aqueous biphasic systems. *Journal of Biotechnology*, **2016**, 236, 166-175	3.7	49
124	Ionic liquids for thiols desulfurization: Experimental liquid–liquid equilibrium and COSMO-RS description. *Fuel*, **2014**, 128, 314-329	7.1	47
123	Aqueous biphasic systems composed of ionic liquids and sodium carbonate as enhanced routes for the extraction of tetracycline. *Biotechnology Progress*, **2013**, 29, 645-54	2.8	47
122	Mutual solubilities between water and non-aromatic sulfonium-, ammonium- and phosphonium-hydrophobic ionic liquids. *Physical Chemistry Chemical Physics*, **2015**, 17, 4569-77	3.6	45
121	Ionic liquids in chromatographic and electrophoretic techniques: toward additional improvements in the separation of natural compounds. *Green Chemistry*, **2016**, 18, 4582-4604	10	42
120	One-step extraction and concentration of estrogens for an adequate monitoring of wastewater using ionic-liquid-based aqueous biphasic systems. *Green Chemistry*, **2015**, 17, 2570-2579	10	40
119	Aqueous biphasic systems composed of ionic liquids and polypropylene glycol: insights into their liquid-liquid demixing mechanisms. *Physical Chemistry Chemical Physics*, **2016**, 18, 20571-20582	3.6	40
118	Aqueous solutions of surface-active ionic liquids: remarkable alternative solvents to improve the solubility of triterpenic acids and their extraction from biomass. *ACS Sustainable Chemistry and Engineering*, **2017**, 5, 7344-7351	8.3	40
117	The Role of Ionic Liquids in the Pharmaceutical Field: An Overview of Relevant Applications. *International Journal of Molecular Sciences*, **2020**, 21,	6.3	39
116	Alkaloids as Alternative Probes To Characterize the Relative Hydrophobicity of Aqueous Biphasic Systems. *ACS Sustainable Chemistry and Engineering*, **2016**, 4, 1512-1520	8.3	38
115	Novel aqueous two-phase systems composed of acetonitrile and polyols: Phase diagrams and extractive performance. *Separation and Purification Technology*, **2014**, 124, 54-60	8.3	38
114	Aqueous two-phase systems: Towards novel and more disruptive applications. *Fluid Phase Equilibria* , **2020**, 505, 112341	2.5	38
113	Use of Ionic Liquids and Deep Eutectic Solvents in Polysaccharides Dissolution and Extraction Processes towards Sustainable Biomass Valorization. *Molecules*, **2020**, 25,	4.8	38
112	Enhancing the adsorption of ionic liquids onto activated carbon by the addition of inorganic salts. *Chemical Engineering Journal*, **2014**, 252, 305-310	14.7	37

111	Controlling the Formation of Ionic-Liquid-based Aqueous Biphasic Systems by Changing the Hydrogen-Bonding Ability of Polyethylene Glycol End Groups. *ChemPhysChem*, **2015**, 16, 2219-25	3.2	36
110	Extraction and Recovery of Rutin from Acerola Waste using Alcohol-Salt-Based Aqueous Two-Phase Systems. *Separation Science and Technology*, **2014**, 49, 656-663	2.5	36
109	Effective separation of aromatic and aliphatic amino acids mixtures using ionic-liquid-based aqueous biphasic systems. *Green Chemistry*, **2017**, 19, 1850-1854	10	35
108	Removal of Non-Steroidal Anti-Inflammatory Drugs from Aqueous Environments with Reusable Ionic-Liquid-based Systems. *ACS Sustainable Chemistry and Engineering*, **2017**, 5, 2428-2436	8.3	34
107	An integrated process for enzymatic catalysis allowing product recovery and enzyme reuse by applying thermoreversible aqueous biphasic systems. *Green Chemistry*, **2018**, 20, 1218-1223	10	34
106	Aqueous biphasic systems composed of ionic liquids and acetate-based salts: phase diagrams, densities and viscosities. *Journal of Chemical & Engineering Data*, **2015**, 60, 1674-1682	2.8	33
105	Comprehensive Study on the Impact of the Cation Alkyl Side Chain Length on the Solubility of Water in Ionic Liquids. *Journal of Molecular Liquids*, **2015**, 210, 264-271	6	33
104	Influence of Nanosegregation on the Surface Tension of Fluorinated Ionic Liquids. *Langmuir*, **2016**, 32, 6130-9	4	33
103	Partition Coefficients of Alkaloids in Biphasic Ionic-Liquid-Aqueous Systems and their Dependence on the Hofmeister Series. *Separation Science and Technology*, **2012**, 47, 284-291	2.5	31
102	Enhanced tunability afforded by aqueous biphasic systems formed by fluorinated ionic liquids and carbohydrates. *Green Chemistry*, **2016**, 18, 1070-1079	10	28
101	The impact of ionic liquid fluorinated moieties on their thermophysical properties and aqueous phase behaviour. *Physical Chemistry Chemical Physics*, **2014**, 16, 21340-8	3.6	28
100	Evaluation of the effect of ionic liquids as adjuvants in polymer-based aqueous biphasic systems using biomolecules as molecular probes. *Separation and Purification Technology*, **2018**, 196, 244-253	8.3	27
99	Understanding the Effect of Ionic Liquids as Adjuvants in the Partition of Biomolecules in Aqueous Two-Phase Systems Formed by Polymers and Weak Salting-Out Agents. *Biochemical Engineering Journal*, **2019**, 141, 239-246	4.2	27
98	Supported ionic liquids as efficient materials to remove non-steroidal anti-inflammatory drugs from aqueous media. *Chemical Engineering Journal*, **2020**, 381, 122616	14.7	26
97	Aqueous Two-Phase Systems formed by Biocompatible and Biodegradable Polysaccharides and Acetonitrile. *Separation and Purification Technology*, **2014**, 136, 74-80	8.3	25
96	Enhanced separation performance of aqueous biphasic systems formed by carbohydrates and tetraalkylphosphonium- or tetraalkylammonium-based ionic liquids. *Green Chemistry*, **2018**, 20, 2978-2983	10	24
95	Enhanced extraction and biological activity of 7-hydroxymatairesinol obtained from Norway spruce knots using aqueous solutions of ionic liquids. *Green Chemistry*, **2017**, 19, 2626-2635	10	23
94	Valorization of olive tree leaves: Extraction of oleanolic acid using aqueous solutions of surface-active ionic liquids. *Separation and Purification Technology*, **2018**, 204, 30-37	8.3	23

93	Improved Monitoring of Aqueous Samples by the Concentration of Active Pharmaceutical Ingredients using Ionic-Liquid-based Systems. *Green Chemistry*, **2017**, 19, 4651-4659	10	23
92	Switchable (pH-Driven) Aqueous Biphasic Systems formed by Ionic Liquids as Integrated Production-Separation Platforms. *Green Chemistry*, **2017**, 19, 2768-2773	10	22
91	Improved extraction of fluoroquinolones with recyclable ionic-liquid-based aqueous biphasic systems. *Green Chemistry*, **2016**, 18, 2717-2725	10	22
90	Surface Tensions of Ionic Liquids: Non-Regular Trend Along the Number of Cyano Groups. *Fluid Phase Equilibria*, **2016**, 409, 458-465	2.5	22
89	Impact of the cation symmetry on the mutual solubilities between water and imidazolium-based ionic liquids. *Fluid Phase Equilibria*, **2014**, 375, 161-167	2.5	22
88	The Effect of vs. Isomerization on the Thermophysical Properties of Aromatic and Non-aromatic Ionic Liquids. *Fluid Phase Equilibria*, **2016**, 423, 190-202	2.5	22
87	Effect of polyvalent ions in the formation of ionic-liquid-based aqueous biphasic systems. *Journal of Physical Chemistry B*, **2014**, 118, 297-308	3.4	21
86	Performance of tetraalkylammonium-based ionic liquids as constituents of aqueous biphasic systems in the extraction of ovalbumin and lysozyme. *Separation and Purification Technology*, **2020**, 233, 116019	8.3	21
85	Good's buffers as novel phase-forming components of ionic-liquid-based aqueous biphasic systems. *Biochemical Engineering Journal*, **2015**, 101, 142-149	4.2	20
84	"Washing-out" ionic liquids from polyethylene glycol to form aqueous biphasic systems. *Physical Chemistry Chemical Physics*, **2014**, 16, 2271-4	3.6	20
83	Solubility of non-aromatic hexafluorophosphate-based salts and ionic liquids in water determined by electrical conductivity. *Fluid Phase Equilibria*, **2013**, 358, 50-55	2.5	20
82	Thermophysical properties of two ammonium-based protic ionic liquids. *Journal of Solution Chemistry*, **2015**, 44, 703-717	1.8	19
81	Poly(vinyl alcohol) as a novel constituent to form aqueous two-phase systems with acetonitrile: Phase diagrams and partitioning experiments. *Chemical Engineering Research and Design*, **2015**, 94, 317-323	3.5	19
80	Enhanced Activity of Immobilized Lipase by Phosphonium-Based Ionic Liquids Used in the Support Preparation and Immobilization Process. *ACS Sustainable Chemistry and Engineering*, **2019**, 7, 15648-15659	8.3	19
79	Solubility of Adamantane in Phosphonium-Based Ionic Liquids *Journal of Chemical & Engineering Data*, **2010**, 55, 662-665	2.8	19
78	Insights into coacervative and dispersive liquid-phase microextraction strategies with hydrophilic media - A review. *Analytica Chimica Acta*, **2021**, 1143, 225-249	6.6	19
77	Effect of salts on the solubility of ionic liquids in water: experimental and electrolyte Perturbed-Chain Statistical Associating Fluid Theory. *Physical Chemistry Chemical Physics*, **2015**, 17, 32044-32052	2.6	18
76	Simultaneous extraction and concentration of water pollution tracers using ionic-liquid-based systems. *Journal of Chromatography A*, **2018**, 1559, 69-77	4.5	18

75	Cholinium-based Good's buffers ionic liquids as remarkable stabilizers and recyclable preservation media for recombinant small RNAs. *ACS Sustainable Chemistry and Engineering*, **2018**, 6, 16645-16656	8.3	18
74	Alternative probe for the determination of the hydrogen-bond acidity of ionic liquids and their aqueous solutions. *Physical Chemistry Chemical Physics*, **2017**, 19, 11011-11016	3.6	17
73	Toward an Understanding of the Mechanisms behind the Formation of Liquid-liquid Systems formed by Two Ionic Liquids. *Journal of Physical Chemistry Letters*, **2017**, 8, 3015-3019	6.4	17
72	Separation of immunoglobulin G using aqueous biphasic systems composed of cholinium-based ionic liquids and poly(propylene glycol). *Journal of Chemical Technology and Biotechnology*, **2018**, 93, 1931-1939	3.5	17
71	Sustainable strategies based on glycine-betaine analogue ionic liquids for the recovery of monoclonal antibodies from cell culture supernatants. *Green Chemistry*, **2019**, 21, 5671-5682	10	16
70	Pioneering Use of Ionic Liquid-Based Aqueous Biphasic Systems as Membrane-Free Batteries. *Advanced Science*, **2018**, 5, 1800576	13.6	16
69	Evidence for the interactions occurring between ionic liquids and tetraethylene glycol in binary mixtures and aqueous biphasic systems. *Journal of Physical Chemistry B*, **2014**, 118, 4615-29	3.4	16
68	A critical assessment of the mechanisms governing the formation of aqueous biphasic systems composed of protic ionic liquids and polyethylene glycol. *Physical Chemistry Chemical Physics*, **2016**, 18, 30009-30019	3.6	15
67	Temperature dependency of aqueous biphasic systems: an alternative approach for exploring the differences between Coulombic-dominated salts and ionic liquids. *Chemical Communications*, **2017**, 53, 7298-7301	5.8	14
66	Enhanced performance of polymer-polymer aqueous two-phase systems using ionic liquids as adjuvants towards the purification of recombinant proteins. *Separation and Purification Technology*, **2020**, 248, 117051	8.3	14
65	Odd-even effect on the formation of aqueous biphasic systems formed by 1-alkyl-3-methylimidazolium chloride ionic liquids and salts. *Journal of Chemical Physics*, **2018**, 148,	3.9	14
64	Extraction and recovery processes for cynaropicrin from Cynara cardunculus L. using aqueous solutions of surface-active ionic liquids. *Biophysical Reviews*, **2018**, 10, 915-925	3.7	14
63	Hydrogen bond basicity of ionic liquids and molar entropy of hydration of salts as major descriptors in the formation of aqueous biphasic systems. *Physical Chemistry Chemical Physics*, **2018**, 20, 14234-14241	3.6	14
62	A Triple Salting-Out Effect is Required for the Formation of Ionic-Liquid-Based Aqueous Multiphase Systems. *Angewandte Chemie - International Edition*, **2017**, 56, 15058-15062	16.4	13
61	Economic evaluation of the primary recovery of tetracycline with traditional and novel aqueous two-phase systems. *Separation and Purification Technology*, **2018**, 203, 178-184	8.3	13
60	Glycine-betaine ionic liquid analogues as novel phase-forming components of aqueous biphasic systems. *Biotechnology Progress*, **2018**, 34, 1205-1212	2.8	13
59	Good's Buffer Ionic Liquids as Relevant Phase-Forming Components of Self-Buffered Aqueous Biphasic Systems. *Journal of Chemical Technology and Biotechnology*, **2017**, 92, 2287-2299	3.5	11
58	Insights on the laccase extraction and activity in ionic-liquid-based aqueous biphasic systems. *Separation and Purification Technology*, **2020**, 248, 117052	8.3	11

57	Solubility and solvation of monosaccharides in ionic liquids. *Physical Chemistry Chemical Physics*, **2016**, 18, 19722-30	3.6	11
56	Why are some cyano-based ionic liquids better glucose solvents than water?. *Physical Chemistry Chemical Physics*, **2016**, 18, 18958-70	3.6	11
55	Recovery of Syringic Acid from Industrial Food Waste with Aqueous Solutions of Ionic Liquids. *ACS Sustainable Chemistry and Engineering*, **2019**, 7, 14143-14152	8.3	11
54	Analysis of the isomerism effect on the mutual solubilities of bis(trifluoromethylsulfonyl)imide-based ionic liquids with water. *Fluid Phase Equilibria*, **2014**, 381, 28-35	2.5	11
53	Critical aspects of membrane-free aqueous battery based on two immiscible neutral electrolytes. *Energy Storage Materials*, **2020**, 26, 400-407	19.4	11
52	Synthesis and characterization of analogues of glycine-betaine ionic liquids and their use in the formation of aqueous biphasic systems. *Fluid Phase Equilibria*, **2019**, 494, 239-245	2.5	10
51	Integrated Extraction-Preservation Strategies for RNA Using Biobased Ionic Liquids. *ACS Sustainable Chemistry and Engineering*, **2019**, 7, 9439-9448	8.3	10
50	Simultaneous Separation of Antioxidants and Carbohydrates From Food Wastes Using Aqueous Biphasic Systems Formed by Cholinium-Derived Ionic Liquids. *Frontiers in Chemistry*, **2019**, 7, 459	5	8
49	Hybrid alginate protein cryogel beads: efficient and sustainable bio-based materials to purify immunoglobulin G antibodies. *Green Chemistry*, **2020**, 22, 2225-2233	10	8
48	Mechanisms ruling the partition of solutes in ionic-liquid-based aqueous biphasic systems - the multiple effects of ionic liquids. *Physical Chemistry Chemical Physics*, **2018**, 20, 8411-8422	3.6	8
47	Ionic Liquids in Drug Delivery. *Encyclopedia*, **2021**, 1, 324-339		6
46	Recovery of lactose and proteins from cheese whey with poly(ethylene)glycol/sulfate aqueous two-phase systems. *Separation and Purification Technology*, **2021**, 255, 117686	8.3	6
45	Odd Even Effect in the Formation and Extraction Performance of Ionic-Liquid-Based Aqueous Biphasic Systems. *Industrial & Engineering Chemistry Research*, **2019**, 58, 8323-8331	3.9	5
44	Instantaneous fibrillation of egg white proteome with ionic liquid and macromolecular crowding. *Communications Materials*, **2020**, 1,	6	5
43	Potential of Aqueous Two-Phase Systems for the Separation of Levodopa from Similar Biomolecules. *Journal of Chemical Technology and Biotechnology*, **2018**, 93, 1940-1947	3.5	5
42	Liquid liquid Equilibrium and Extraction Performance of Aqueous Biphasic Systems Composed of Water, Cholinium Carboxylate Ionic Liquids and K2CO3. *Journal of Chemical & Engineering Data*, **2019**, 64, 4946-4955	2.8	5
41	Aqueous biphasic systems comprising copolymers and cholinium-based salts or ionic liquids: Insights on the mechanisms responsible for their creation. *Separation and Purification Technology*, **2020**, 248, 117050	8.3	5
40	Towards the differential diagnosis of prostate cancer by the pre-treatment of human urine using ionic liquids. *Scientific Reports*, **2020**, 10, 14931	4.9	5

39	Binary Mixtures of Ionic Liquids in Aqueous Solution: Towards an Understanding of their Salting-In/Salting-Out Phenomena. *Journal of Solution Chemistry*, **2019**, 48, 983-991	1.8	5
38	Valorization of Expired Energy Drinks by Designed and Integrated Ionic Liquid-Based Aqueous Biphasic Systems. *ACS Sustainable Chemistry and Engineering*, **2020**, 8, 5683-5692	8.3	4
37	Insights on the DNA Stability in Aqueous Solutions of Ionic Liquids. *Frontiers in Bioengineering and Biotechnology*, **2020**, 8, 547857	5.8	4
36	Sustainable liquid supports for laccase immobilization and reuse: Degradation of dyes in aqueous biphasic systems. *Biotechnology and Bioengineering*, **2021**, 118, 2514-2523	4.9	4
35	Aqueous biphasic systems in the separation of food colorants. *Biochemistry and Molecular Biology Education*, **2018**, 46, 390-397	1.3	3
34	Aqueous Biphasic Systems Based on Ionic Liquids for Extraction, Concentration and Purification Approaches. *Green Chemistry and Sustainable Technology*, **2016**, 91-119	1.1	3
33	Overview on Protein Extraction and Purification Using Ionic-Liquid-Based Processes. *Journal of Solution Chemistry*,1	1.8	3
32	Interferon-Based Biopharmaceuticals: Overview on the Production, Purification, and Formulation. *Vaccines*, **2021**, 9,	5.3	3
31	Introduction to Ionic-Liquid-Based Aqueous Biphasic Systems (ABS). *Green Chemistry and Sustainable Technology*, **2016**, 1-25	1.1	3
30	Simultaneous separation of egg white proteins using aqueous three-phase partitioning systems. *Journal of Molecular Liquids*, **2021**, 336, 116245	6	3
29	Purification of green fluorescent protein using fast centrifugal partition chromatography. *Separation and Purification Technology*, **2021**, 257, 117648	8.3	2
28	Valorization of Spent Coffee by Caffeine Extraction Using Aqueous Solutions of Cholinium-Based Ionic Liquids. *Sustainability*, **2021**, 13, 7509	3.6	2
27	Advances Achieved by Ionic-Liquid-Based Materials as Alternative Supports and Purification Platforms for Proteins and Enzymes. *Nanomaterials*, **2021**, 11,	5.4	2
26	A Triple Salting-Out Effect is Required for the Formation of Ionic-Liquid-Based Aqueous Multiphase Systems. *Angewandte Chemie*, **2017**, 129, 15254-15258	3.6	2
25	Efficient Extraction of the RuBisCO Enzyme from Spinach Leaves Using Aqueous Solutions of Biocompatible Ionic Liquids. *Sustainable Chemistry*, **2022**, 3, 1-18	3.6	2
24	Application of Ionic Liquids in Separation and Fractionation Processes **2019**, 637-665		1
23	Supported Ionic Liquids for the Efficient Removal of Acetylsalicylic Acid from Aqueous Solutions. *European Journal of Inorganic Chemistry*, **2020**, 2020, 2380-2389	2.3	1
22	Separation of Albumin from Bovine Serum Applying Ionic-Liquid-Based Aqueous Biphasic Systems. *Applied Sciences (Switzerland)*, **2022**, 12, 707	2.6	1

21	Improved Production of 5-Hydroxymethylfurfural in Acidic Deep Eutectic Solvents Using Microwave-Assisted Reactions.. *International Journal of Molecular Sciences*, **2022**, 23,	6.3	1
20	A simple approach for the determination and characterization of ternary phase diagrams of aqueous two-phase systems composed of water, polyethylene glycol and sodium carbonate **2019**, 53, 112-120		1
19	Enhancing Artemisinin Solubility in Aqueous Solutions: Searching for Hydrotropes based on Ionic Liquids. *Fluid Phase Equilibria*, **2021**, 534, 112961	2.5	1
18	Integrated Production and Separation of Furfural Using an Acidic-Based Aqueous Biphasic System. *ACS Sustainable Chemistry and Engineering*, **2021**, 9, 12205-12212	8.3	1
17	L-Asparaginase-Based Biosensors. *Encyclopedia*, **2021**, 1, 848-858		1
16	Characterization of cholinium-carboxylate-based aqueous biphasic systems. *Fluid Phase Equilibria*, **2022**, 558, 113458	2.5	1
15	Enhanced Furfural Production in Deep Eutectic Solvents Comprising Alkali Metal Halides as Additives. *Molecules*, **2021**, 26,	4.8	1
14	Chlorophylls Extraction from Spinach Leaves Using Aqueous Solutions of Surface-Active Ionic Liquids. *Sustainable Chemistry*, **2021**, 2, 764-777	3.6	1
13	Aqueous Biphasic Systems Comprising Natural Organic Acid-Derived Ionic Liquids. *Separations*, **2022**, 9, 46	3.1	0
12	Superior operational stability of immobilized L-asparaginase over surface-modified carbon nanotubes. *Scientific Reports*, **2021**, 11, 21529	4.9	0
11	Application of Ionic Liquids in Separation and Fractionation Processes **2018**, 1-29		0
10	3. Aqueous biphasic systems formed by cholinium-based ionic liquids and mixtures of polymers **2019**, 29-54		0
9	Ionic Liquids in Bioseparation Processes. *Advances in Biochemical Engineering/Biotechnology*, **2019**, 168, 1-29	1.7	0
8	Immobilization and Characterization of L-Asparaginase over Carbon Xerogels. *BioTech*, **2022**, 11, 10	1.2	0
7	Ionic Liquids and Deep Eutectic Solvents in the Field of Environmental Monitoring. *Green Chemistry and Sustainable Technology*, **2019**, 203-240	1.1	
6	Relevance on the Recovery of High Economic Value Elements and Potential of Ionic Liquids **2022**, 1995-2021		
5	Achievements and perspectives of using deep eutectic solvents in the analytical chemistry field **2022**, 33-72		
4	Relevance on the Recovery of High Economic Value Elements and Potential of Ionic Liquids **2021**, 1-28		

3	Nucleophilic degradation of diazinon in thermoreversible polymer-polymer aqueous biphasic systems. *Physical Chemistry Chemical Physics*, **2021**, 23, 4133-4140	3.6
2	Extraction and Purification of IgY **2021**, 135-160	
1	Advances Brought by Ionic Liquids in the Development of Polymer-Based Drug Delivery Systems **2021**, 113-135	