

W Matthew Reichert

List of Publications by Year in descending order

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44
papers

9,134
citations

186265

28
h-index

223800

46
g-index

47
all docs

47
docs citations

47
times ranked

7874
citing authors

#	ARTICLE	IF	CITATIONS
1	Characterization and comparison of hydrophilic and hydrophobic room temperature ionic liquids incorporating the imidazolium cation. <i>Green Chemistry</i> , 2001, 3, 156-164.	9.0	3,466
2	Task-specific ionic liquids for the extraction of metal ions from aqueous solutions. <i>Chemical Communications</i> , 2001, , 135-136.	4.1	828
3	Traditional Extractants in Nontraditional Solvents: % Groups 1 and 2 Extraction by Crown Ethers in Room-Temperature Ionic Liquids. <i>Industrial & Engineering Chemistry Research</i> , 2000, 39, 3596-3604.	3.7	612
4	Efficient, halide free synthesis of new, low cost ionic liquids: 1,3-dialkylimidazolium salts containing methyl- and ethyl-sulfate anions. <i>Green Chemistry</i> , 2002, 4, 407-413.	9.0	508
5	Task-Specific Ionic Liquids Incorporating Novel Cations for the Coordination and Extraction of Hg ²⁺ and Cd ²⁺ : Synthesis, Characterization, and Extraction Studies. <i>Environmental Science & Technology</i> , 2002, 36, 2523-2529.	10.0	460
6	Liquid clathrate formation in ionic liquid aromatic mixtures Electronic supplementary information (ESI) available: crystallographic information, CCDC 2005888. See http://www.rsc.org/suppdata/cc/b2/b212726a/ for crystallographic files in CIF or other electronic format. <i>Chemical Communications</i> , 2003, , 476-477.	4.1	370
7	Crystal polymorphism in 1-butyl-3-methylimidazolium halides: supporting ionic liquid formation by inhibition of crystallization Electronic supplementary information (ESI) available: packing diagrams for I and II; table of closest contacts for I, I-Br and II. See http://www.rsc.org/suppdata/cc/b3/b304543a/ . <i>Chemical Communications</i> , 2003, , 1636.	4.1	364
8	Crystal structures of imidazolium bis(trifluoromethanesulfonyl)imide ionic liquid™ salts: the first organic salt with a cis-TFSI anion conformation. <i>Dalton Transactions</i> , 2004, , 2267-2271.	3.3	246
9	1,3-Dimethylimidazolium-2-carboxylate: the unexpected synthesis of an ionic liquid precursor and carbene-CO ₂ adduct Electronic supplementary information (ESI) available: experimental data for 1,3-dimethylimidazolium-2-carboxylate. Supplemental crystal structure data. ORTEP, hydrogen bonding and packing diagrams. See http://www.rsc.org/suppdata/cc/b2/b211519k/ . <i>Chemical Communications</i> , 2003, , 26-29.	4.1	241
10	Ionic liquids with dual biological function: sweet and anti-microbial, hydrophobic quaternary ammonium-based salts. <i>New Journal of Chemistry</i> , 2009, 33, 26-33.	2.8	173
11	Conventional free radical polymerization in room temperature ionic liquids: a green approach to commodity polymers with practical advantages. <i>Chemical Communications</i> , 2002, , 1368-1369.	4.1	167
12	Approaches to crystallization from ionic liquids: complex solvents complex results, or, a strategy for controlled formation of new supramolecular architectures?. <i>Chemical Communications</i> , 2006, , 4767-4779.	4.1	165
13	On the solubilization of water with ethanol in hydrophobic hexafluorophosphate ionic liquids. <i>Green Chemistry</i> , 2002, 4, 81-87.	9.0	159
14	Mercury(ii) partitioning from aqueous solutions with a new, hydrophobic ethylene-glycol functionalized bis-imidazolium ionic liquid This work was presented at the Green Solvents for Catalysis Meeting held in Bruchsal, Germany, 13-16th October 2002. <i>Green Chemistry</i> , 2003, 5, 129-135.	9.0	130
15	New ionic liquids containing an appended hydroxyl functionality from the atom-efficient, one-pot reaction of 1-methylimidazole and acid with propylene oxide. <i>Green Chemistry</i> , 2003, 5, 731.	9.0	115
16	Understanding the Effects of Ionicity in Salts, Solvates, Co-Crystals, Ionic Co-Crystals, and Ionic Liquids, Rather than Nomenclature, Is Critical to Understanding Their Behavior. <i>Crystal Growth and Design</i> , 2013, 13, 965-975.	3.0	115
17	Synthesis and activation of Pt nanoparticles with controlled size for fuel cell electrocatalysts. <i>Journal of Power Sources</i> , 2007, 164, 472-480.	7.8	110
18	1-Butyl-3-methylimidazolium 3,5-dinitro-1,2,4-triazolate: a novel ionic liquid containing a rigid, planar energetic anion. <i>Chemical Communications</i> , 2005, , 868.	4.1	99

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19	Solid-State Analysis of Low-Melting 1,3-Dialkylimidazolium Hexafluorophosphate Salts (Ionic Liquids) by Combined X-ray Crystallographic and Computational Analyses. <i>Crystal Growth and Design</i> , 2007, 7, 1106-1114.	3.0	97
20	Ionic liquids via reaction of the zwitterionic 1,3-dimethylimidazolium-2-carboxylate with protic acids. Overcoming synthetic limitations and establishing new halide free protocols for the formation of ILs. <i>Green Chemistry</i> , 2007, 9, 90-98.	9.0	93
21	Solvation of 1-butyl-3-methylimidazolium hexafluorophosphate in aqueous ethanol—a green solution for dissolving hydrophobic ionic liquids. <i>Chemical Communications</i> , 2001, , 2070-2071.	4.1	76
22	In Search of Ionic Liquids Incorporating Azolate Anions. <i>Chemistry - A European Journal</i> , 2006, 12, 4630-4641.	3.3	76
23	Strategies toward the design of energetic ionic liquids: nitro- and nitrile-substituted N,N'-dialkylimidazolium salts. <i>New Journal of Chemistry</i> , 2006, 30, 349.	2.8	62
24	Natural Fiber Welding. <i>Macromolecular Materials and Engineering</i> , 2010, 295, 425-430.	3.6	42
25	Process variables that control natural fiber welding: time, temperature, and amount of ionic liquid. <i>Cellulose</i> , 2012, 19, 13-22.	4.9	41
26	Exploiting isolobal relationships to create new ionic liquids: novel room-temperature ionic liquids based upon (N-alkylimidazole)(amine)BH ₂ +boronium ions. <i>Chemical Communications</i> , 2005, , 3679.	4.1	39
27	Synthesis, limitations, and thermal properties of energetically-substituted, protonated imidazolium picrate and nitrate salts and further comparison with their methylated analogs. <i>New Journal of Chemistry</i> , 2012, 36, 702-722.	2.8	37
28	Exploring control of cadmium halide coordination polymers via control of cadmium(II) coordination sites utilizing short multidentate ligands. <i>Journal of Molecular Structure</i> , 2006, 796, 76-85.	3.6	30
29	Ionic liquid characteristics of 1-alkyl-n-cyanopyridinium and 1-alkyl-n-(trifluoromethyl)pyridinium salts. <i>New Journal of Chemistry</i> , 2008, 32, 1953.	2.8	29
30	Sorption of Ammonia in Mesoporous-Silica Ionic Liquid Composites. <i>Industrial & Engineering Chemistry Research</i> , 2016, 55, 12191-12204.	3.7	29
31	Characterization of Hydrophilic and Hydrophobic Ionic Liquids: Alternatives to Volatile Organic Compounds for Liquid-Liquid Separations. <i>ACS Symposium Series</i> , 2002, , 289-308.	0.5	27
32	Ionic Liquid Welding of the UiO-66-NH ₂ MOF to Cotton Textiles. <i>Industrial & Engineering Chemistry Research</i> , 2020, 59, 19285-19298.	3.7	17
33	The structure of [Co(H-tptz)Cl ₃]·H ₂ O (tptz=2,4,6-tri(2-pyridyl)-1,3,5-triazine) prepared by crystallization from the ionic liquid, N-butyl-N-methyl-pyrrolidinium bis(trifluoromethanesulfonyl)imide. <i>Journal of Chemical Crystallography</i> , 2006, 36, 799-804.	1.1	16
34	3-(1-Methyl-3-imidazolyl)propanesulfonate: a precursor to a Brønsted acid ionic liquid. <i>Acta Crystallographica Section E: Structure Reports Online</i> , 2010, 66, o591-o591.	0.2	13
35	Azolium azolates from reactions of neutral azoles with 1,3-dimethyl-imidazolium-2-carboxylate, 1,2,3-trimethyl-imidazolium hydrogen carbonate, and N,N-dimethyl-pyrrolidinium hydrogen carbonate. <i>New Journal of Chemistry</i> , 2013, 37, 1461.	2.8	12
36	Room Temperature Ionic Liquids as Replacements for Traditional Organic Solvents and Their Applications Towards Green Chemistry in Separation Processes. , 2003, , 137-156.		10

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37	The role of urea in the solubility of cellulose in aqueous quaternary ammonium hydroxide. RSC Advances, 2020, 10, 5919-5929.	3.6	9
38	Acoustic levitation and infrared thermography: a sound approach to studying droplet evaporation. Chemical Communications, 2020, 56, 4224-4227.	4.1	6
39	Grass to Gas: Ionic Liquid Based Conversion of Biomass to Fuels. ECS Transactions, 2010, 33, 109-116.	0.5	5
40	Degradation of Chitin Utilizing Acid Functionalized Ionic Liquids Technology. ACS Symposium Series, 2012, , 189-198.	0.5	5
41	Multi-ion ionic liquids and a direct, reproducible, diversity-oriented way to make them. Chemical Communications, 2015, 51, 15914-15916.	4.1	5
42	Hydrophobic <i>n</i> -Alkyl- <i>N</i> -isoquinolinium Salts: Ionic Liquids and Low Melting Solids. ACS Symposium Series, 2007, , 362-380.	0.5	3
43	Effects of Crystal Packing on the Thermal Behavior of <i>N,N'</i> -alkylpiperidinium and <i>N,N'</i> -alkylmorpholinium Iodide Salts. ECS Transactions, 2010, 33, 667-677.	0.5	3
44	1-Butyl-3-methylimidazolium 3,5-Dinitro-1,2,4-triazolate: A Novel Ionic Liquid Containing a Rigid, Planar Energetic Anion. ChemInform, 2005, 36, no.	0.0	1