Alistair W T King

List of Publications by Year
in descending order

80 papers	4,033 citations	126708 33 h-index	118652 62 g-index
95 all docs	95 docs citations	95 times ranked	3786 citing authors

#	Article	IF	Citations
1	Characterization and applications of a trioctyl(3/4-vinylbenzyl)phosphonium stationary phase for use in capillary liquid chromatography. Journal of Chromatography A, 2022, 1666, 462866.	1.8	1
2	Thermoâ€reversible cellulose micro phaseâ€separation in mixtures of methyltributylphosphonium acetate and Î³â€valerolactone or DMSO. ChemPhysChem, 2022, , .	1.0	2
3	Highly regioselective surface acetylation of cellulose and shaped cellulose constructs in the gas-phase. Green Chemistry, 2022, 24, 5604-5613.	4.6	12
4	Chemical Modification of Reducing Endâ€Groups in Cellulose Nanocrystals. Angewandte Chemie - International Edition, 2021, 60, 66-87.	7.2	83
5	Chemische Modifizierung der reduzierenden Enden von Cellulosenanokristallen. Angewandte Chemie, 2021, 133, 66-88.	1.6	2
6	Regioselective and water-assisted surface esterification of never-dried cellulose: nanofibers with adjustable surface energy. Green Chemistry, 2021, 23, 6966-6974.	4.6	24
7	Unique reactivity of nanoporous cellulosic materials mediated by surface-confined water. Nature Communications, 2021, 12, 2513.	5.8	57
8	Challenges in Synthesis and Analysis of Asymmetrically Grafted Cellulose Nanocrystals via Atom Transfer Radical Polymerization. Biomacromolecules, 2021, 22, 2702-2717.	2.6	14
9	Assembling Native Elementary Cellulose Nanofibrils via a Reversible and Regioselective Surface Functionalization. Journal of the American Chemical Society, 2021, 143, 17040-17046.	6.6	41
10	Phase-separation of cellulose from ionic liquid upon cooling: preparation of microsized particles. Cellulose, 2021, 28, 10921-10938.	2.4	4
11	Immobilization of natural lipid biomembranes and their interactions with choline carboxylates. A nanoplasmonic sensing study. Biochimica Et Biophysica Acta - Biomembranes, 2020, 1862, 183115.	1.4	2
12	Coaxial Spinning of All-Cellulose Systems for Enhanced Toughness: Filaments of Oxidized Nanofibrils Sheathed in Cellulose II Regenerated from a Protic Ionic Liquid. Biomacromolecules, 2020, 21, 878-891.	2.6	25
13	The molecular structure and multifunctionality of the cryptic plant polymer suberin. Materials Today Bio, 2020, 5, 100039.	2.6	24
14	Modification of Lignocellulosics in the Dissolved State for Added Functionality. , 2020, , 65-90.		0
15	2D Assignment and quantitative analysis of cellulose and oxidized celluloses using solution-state NMR spectroscopy. Cellulose, 2020, 27, 7929-7953.	2.4	34
16	Inhibition of hyperthermostable xylanases by superbase ionic liquids. Process Biochemistry, 2020, 95, 148-156.	1.8	10
17	Crystallinity reduction and enhancement in the chemical reactivity of cellulose by non-dissolving pre-treatment with tetrabutylphosphonium acetate. Cellulose, 2020, 27, 5545-5562.	2.4	39
18	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

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19	Plasticized Cellulosic Films by Partial Esterification and Welding in Low-Concentration Ionic Liquid Electrolyte. Biomacromolecules, 2019, 20, 2105-2114.	2.6	19
20	Binary mixtures of ionic liquids-DMSO as solvents for the dissolution and derivatization of cellulose: Effects of alkyl and alkoxy side chains. Carbohydrate Polymers, 2019, 212, 206-214.	5.1	26
21	Interactions of Ionic Liquids and Spirocyclic Compounds with Liposome Model Membranes. A Steady-State Fluorescence Anisotropy Study. Scientific Reports, 2019, 9, 18349.	1.6	10
22	Knoevenagel Condensation for Modifying the Reducing End Groups of Cellulose Nanocrystals. ACS Macro Letters, 2019, 8, 1642-1647.	2.3	19
23	Solvent Welding and Imprinting Cellulose Nanofiber Films Using Ionic Liquids. Biomacromolecules, 2019, 20, 502-514.	2.6	31
24	A comparative study of water-immiscible organic solvents in the production of furfural from xylose and birch hydrolysate. Journal of Industrial and Engineering Chemistry, 2019, 72, 354-363.	2.9	30
25	Superhydrophobic Paper from Nanostructured Fluorinated Cellulose Esters. ACS Applied Materials & Interfaces, 2018, 10, 11280-11288.	4.0	75
26	Liquid-State NMR Analysis of Nanocelluloses. Biomacromolecules, 2018, 19, 2708-2720.	2.6	57
27	Immobilization of a phosphonium ionic liquid on a silica monolith for hydrophilic interaction chromatography. Journal of Chromatography A, 2018, 1552, 53-59.	1.8	20
28	Correlation between Ionic Liquid Cytotoxicity and Liposomeâ€“Ionic Liquid Interactions. Chemistry - A European Journal, 2018, 24, 2669-2680.	1.7	43
29	Clustered Single Cellulosic Fiber Dissolution Kinetics and Mechanisms through Optical Microscopy under Limited Dissolving Conditions. Biomacromolecules, 2018, 19, 1635-1645.	2.6	7
30	Screening of glycoside hydrolases and ionic liquids for fibre modification. Journal of Chemical Technology and Biotechnology, 2018, 93, 818-826.	1.6	3
31	High-Performance Acetylated Ioncell-F Fibers with Low Degree of Substitution. ACS Sustainable Chemistry and Engineering, 2018, 6, 9418-9426.	3.2	26
32	On the Mechanism of the Reactivity of 1,3â€Dialkylimidazolium Salts under Basic to Acidic Conditions: A Combined Kinetic and Computational Study. Angewandte Chemie, 2018, 130, 11787-11791.	1.6	4
33	On the Mechanism of the Reactivity of 1,3â€Dialkylimidazolium Salts under Basic to Acidic Conditions: A Combined Kinetic and Computational Study. Angewandte Chemie - International Edition, 2018, 57, 11613-11617.	7.2	13
34	Impact of Surface-Active Guanidinium-, Tetramethylguanidinium-, and Cholinium-Based Ionic Liquids on Vibrio Fischeri Cells and Dipalmitoylphosphatidylcholine Liposomes. Scientific Reports, 2017, 7, 46673.	1.6	38
35	Efficiency of hydrophobic phosphonium ionic liquids and DMSO as recyclable cellulose dissolution and regeneration media. RSC Advances, 2017, 7, 17451-17461.	1.7	36
36	WtFâ€Nano: Oneâ€Pot Dewatering and Waterâ€Free Topochemical Modification of Nanocellulose in Ionic Liquids or Î³â€Valerolactone. ChemSusChem, 2017, 10, 4879-4890.	3.6	14

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37	Homogenous esterification of cellulose pulp in [DBNH][OAc]. Cellulose, 2017, 24, 5341-5354.	2.4	41
38	Solutionâ€State Oneâ€• and Twoâ€Dimensional NMR Spectroscopy of Highâ€Molecularâ€Weight Cellulose. ChemSusChem, 2016, 9, 880-892.	3.6	29
39	Feasibility of thermal separation in recycling of the distillable ionic liquid [DBNH][OAc] in cellulose fiber production. Chemical Engineering Research and Design, 2016, 114, 287-298.	2.7	23
40	Experimental and Theoretical Thermodynamic Study of Distillable Ionic Liquid 1,5-Diazabicyclo[4.3.0]non-5-enium Acetate. Industrial & Engineering Chemistry Research, 2016, 55, 10445-10454.	1.8	35
41	Effect of Ionic Liquids on Zebrafish (<i>Danio rerio</i>) Viability, Behavior, and Histology; Correlation between Toxicity and Ionic Liquid Aggregation. Environmental Science & Technology, 2016, 50, 7116-7125.	4.6	74
42	Parameters affecting monolayer organisation of substituted polysaccharides on solid substrates upon Langmuirâ€"Schaefer deposition. Reactive and Functional Polymers, 2016, 99, 100-106.	2.0	11
43	Application of mild autohydrolysis to facilitate the dissolution of wood chips in direct-dissolution solvents. Green Chemistry, 2016, 18, 3286-3294.	4.6	26
44	Diverting Hydrogenations with Wilkinson's Catalyst towards Highly Reactive Rhodium(I) Species. Angewandte Chemie - International Edition, 2015, 54, 14321-14325.	7.2	21
45	Ioncell-F: A High-strength regenerated cellulose fibre. Nordic Pulp and Paper Research Journal, 2015, 30, 43-57.	0.3	190
46	Impact of Amphiphilic Biomass-Dissolving Ionic Liquids on Biological Cells and Liposomes. Environmental Science & Technology, 2015, 49, 1870-1878.	4.6	78
47	Effect of ionic liquids on the interaction between liposomes and common wastewater pollutants investigated by capillary electrophoresis. Journal of Chromatography A, 2015, 1405, 178-187.	1.8	18
48	Ionic Liquids for the Production of Man-Made Cellulosic Fibers: Opportunities and Challenges. Advances in Polymer Science, 2015, , 133-168.	0.4	58
49	Sustainability of cellulose dissolution and regeneration in 1,5-diazabicyclo[4.3.0]non-5-enium acetate: a batch simulation of the IONCELL-F process. RSC Advances, 2015, 5, 69728-69737.	1.7	60
50	Synthesis of Cellulose Methylcarbonate in Ionic Liquids using Dimethylcarbonate. ChemSusChem, 2015, 8, 77-81.	3.6	41
51	Amination and thiolation of chloroacetyl cellulose through reactive dissolution in N,N-dimethylformamide. Carbohydrate Polymers, 2015, 116, 60-66.	5.1	19
52	CHAPTER 5: REDUCTION OF BIOMASS RECALCITRANCE VIA IONIC LIQUID PRETREATMENTS. Materials and Energy, 2014, , 95-125.	2.5	3
53	Amphiphilic and Phaseâ€Separable Ionic Liquids for Biomass Processing. ChemSusChem, 2014, 7, 1422-1434.	3.6	60
54	Oxygen delignification of conventional and high alkali cooked softwood Kraft pulps, and study of the residual lignin structure. RSC Advances, 2014, 4, 17469-17477.	1.7	19

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55	On the solubility of wood in non-derivatising ionic liquids. Green Chemistry, 2013, 15, 2374.	4.6	35
56	Cellulose hydrolysis with thermo- and alkali-tolerant cellulases in cellulose-dissolving superbase ionic liquids. RSC Advances, 2013, 3, 20001.	1.7	26
57	Enhancement of ionic liquid-aided fractionation of birchwood. Part 1: autohydrolysis pretreatment. RSC Advances, 2013, 3, 16365.	1.7	45
58	Predicting Cellulose Solvating Capabilities of Acidâ€“Base Conjugate Ionic Liquids. ChemSusChem, 2013, 6, 2161-2169.	3.6	121
59	Determination of the distribution constants of aromatic compounds and steroids in biphasic micellar phosphonium ionic liquid/aqueous buffer systems by capillary electrokinetic chromatography. Journal of Chromatography A, 2013, 1308, 144-151.	1.8	12
60	Pervaporation recovery of [AMIM]Cl during wood dissolution; effect of [AMIM]Cl properties on the membrane performance. Journal of Membrane Science, 2013, 444, 9-15.	4.1	3
61	Fractionation of Lignocellulosic Materials Using Ionic Liquids: Part 2. Effect of Particle Size on the Mechanisms of Fractionation. Industrial & Engineering Chemistry Research, 2013, 52, 3958-3966.	1.8	25
62	Fast and highly efficient acetylation of xylans in ionic liquid systems. Cellulose, 2013, 20, 2813-2824.	2.4	35
63	Extraction of Wheat Straw with Aqueous Tetra-n-Butylphosphonium Hydroxide. BioResources, 2013, 9, .	0.5	23
64	Relative and inherent reactivities of imidazolium-based ionic liquids: the implications for lignocellulose processing applications. RSC Advances, 2012, 2, 8020.	1.7	72
65	Phosphonium-based ionic liquids in electrokinetic capillary chromatography for the separation of neutral analytes. Journal of Chromatography A, 2012, 1253, 171-176.	1.8	20
66	Role of Solvent Parameters in the Regeneration of Cellulose from Ionic Liquid Solutions. Biomacromolecules, 2012, 13, 2896-2905.	2.6	236
67	Molecular Weight Distributions and Linkages in Lignocellulosic Materials Derivatized from Ionic Liquid Media. Journal of Agricultural and Food Chemistry, 2011, 59, 829-838.	2.4	57
68	Fractionation of Lignocellulosic Materials with Ionic Liquids. 1. Effect of Mechanical Treatment. Industrial & Engineering Chemistry Research, 2011, 50, 12349-12357.	1.8	30
69	MECHANICAL PULPING: Effect of autohydrolysis on the lignin structure and the kinetics of delignification of birch wood. Nordic Pulp and Paper Research Journal, 2011, 26, 386-391.	0.3	19
70	Distillable Acidâ€“Base Conjugate Ionic Liquids for Cellulose Dissolution and Processing. Angewandte Chemie - International Edition, 2011, 50, 6301-6305.	7.2	208
71	A new method for rapid degree of substitution and purity determination of chloroform-soluble cellulose esters, using 31P NMR. Analytical Methods, 2010, 2, 1499.	1.3	50
72	Highly compatible wood thermoplastic composites from lignocellulosic material modified in ionic liquids: Preparation and thermal properties. Journal of Applied Polymer Science, 2009, 111, 2468-2476.	1.3	36

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73	Hydrophobic Interactions Determining Functionalized Lignocellulose Solubility in Dialkylimidazolium Chlorides, as Probed by ³¹P NMR. Biomacromolecules, 2009, 10, 458-463.	2.6	38
74	In Situ Determination of Lignin Phenolics and Wood Solubility in Imidazolium Chlorides Using³¹P NMR. Journal of Agricultural and Food Chemistry, 2009, 57, 8236-8243.	2.4	72
75	Tosylation and acylation of cellulose in 1-allyl-3-methylimidazolium chloride. Cellulose, 2008, 15, 481-488.	2.4	76
76	Thorough Chemical Modification of Wood-Based Lignocellulosic Materials in Ionic Liquids. Biomacromolecules, 2007, 8, 3740-3748.	2.6	183
77	Dissolution of Wood in Ionic Liquids. Journal of Agricultural and Food Chemistry, 2007, 55, 9142-9148.	2.4	850
78	Stereoselective reductase-catalysed deoxygenation of sulfoxides in aerobic and anaerobic bacteria. Organic and Biomolecular Chemistry, 2004, 2, 554.	1.5	29
79	Dioxygenase-catalysed mono-, di- and tri-oxygenation of dialkyl sulfides and thioacetals: chemoenzymatic synthesis of enantiopure cis-diol sulfoxides. Journal of the Chemical Society, Perkin Transactions 1, 2001, , 3288-3296.	1.3	2
80	Enhanced activity of hyperthermostable Pyrococcus horikoshii endoglucanase in superbase ionic liquids. Biotechnology Letters, 0, , .	1.1	2