Ionic liquid processing of cellulose

Chemical Society Reviews

41, 1519

DOI: 10.1039/c2cs15311d

Citation Report

#	Article	IF	Citations
1	Structure of Regenerated Celluloses Treated with Ionic Liquids and Comparison of their Enzymatic Digestibility by Purified Cellulase Components. Australian Journal of Chemistry, 2012, 65, 1491.	0.5	7
2	Amino Acid Ionic Liquid as an Efficient Cosolvent of Dimethyl Sulfoxide to Realize Cellulose Dissolution at Room Temperature. Chemistry Letters, 2012, 41, 987-989.	0.7	46
3	Novel compatible system of [C2OHmim][OAc]-cellulases for the in situ hydrolysis of lignocellulosic biomass. RSC Advances, 2012, 2, 11712.	1.7	14
4	Macroscopic and Microscopic Study of 1-Ethyl-3-methyl-imidazolium Acetateâ€“Water Mixtures. Journal of Physical Chemistry B, 2012, 116, 12810-12818.	1.2	109
5	Ionic Liquids â€” Promising but Challenging Solvents for Homogeneous Derivatization of Cellulose. Molecules, 2012, 17, 7458-7502.	1.7	285
6	Viscosities and Conductivities of 1-Butyl-3-methylimidazolium Carboxylates Ionic Liquids at Different Temperatures. Journal of Chemical & Engineering Data, 2012, 57, 3102-3108.	1.0	46
7	Properties of alkylbenzimidazoles for CO2 and SO2 capture and comparisons to ionic liquids. Science China Chemistry, 2012, 55, 1638-1647.	4.2	29
8	Determining relative rates of cellulose dissolution in ionic liquids through in situ viscosity measurement. Chemical Communications, 2012, 48, 5620.	2.2	37
9	One-pot depolymerization of cellulose into glucose and levulinic acid by heteropolyacid ionic liquid catalysis. RSC Advances, 2012, 2, 9058.	1.7	108
10	The Interpretation of Diffraction Patterns of Two Prototypical Protic Ionic Liquids: a Challenging Task for Classical Molecular Dynamics Simulations. Journal of Physical Chemistry B, 2012, 116, 13024-13032.	1.2	60
11	Deep eutectic solvents: syntheses, properties and applications. Chemical Society Reviews, 2012, 41, 7108.	18.7	3,591
12	Interactions between Dendrimers and Ionic Liquids Revealed by Pulsed Field Gradient and Nuclear Overhauser Effect NMR Studies. Journal of Physical Chemistry B, 2012, 116, 7203-7212.	1.2	7
13	Ionic Liquids for Lignin Processing: Dissolution, Isolation, and Conversion. Australian Journal of Chemistry, 2012, 65, 1465.	0.5	91
14	New natural and renewable low transition temperature mixtures (LTTMs): screening as solvents for lignocellulosic biomass processing. Green Chemistry, 2012, 14, 2153.	4.6	615
15	The effect of C2 substitution on melting point and liquid phase dynamics of imidazolium based-ionic liquids: insights from molecular dynamics simulations. Physical Chemistry Chemical Physics, 2012, 14, 12157.	1.3	97
16	Simultaneous Reduction and Surface Functionalization of Graphene Oxide by Natural Cellulose with the Assistance of the Ionic Liquid. Journal of Physical Chemistry C, 2012, 116, 16294-16299.	1.5	77
17	Synthesis and properties of ammonium ionic liquids with cyclohexyl substituent and dissolution of cellulose. RSC Advances, 2012, 2, 8429.	1.7	29
18	Synthesis and Characterization of Thiazolium-Based Room Temperature Ionic Liquids for Gas Separations. Industrial & Engineering Chemistry Research, 2012, 51, 11530-11537.	1.8	44

#	Article	IF	Citations
19	Combination of ball-milling and non-thermal atmospheric plasma as physical treatments for the saccharification of microcrystalline cellulose. Green Chemistry, 2012, 14, 2212.	4.6	59
20	Direct Conversion of Cellulose to Glycolic Acid with a Phosphomolybdic Acid Catalyst in a Water Medium. ACS Catalysis, 2012, 2, 1698-1702.	5.5	126
21	Novel Cellulose/Polymer Blend Fibers Obtained Using Ionic Liquids. Macromolecular Materials and Engineering, 2012, 297, 585-594.	1.7	44
23	Effects of Cationic Structure on Cellulose Dissolution in Ionic Liquids: A Molecular Dynamics Study. ChemPhysChem, 2012, 13, 3126-3133.	1.0	101
24	The First Molecular Level Monitoring of Carbohydrate Conversion to 5â€Hydroxymethylfurfural in Ionic Liquids. B₂O₃â€"An Efficient Dualâ€Function Metalâ€Free Promoter for Environmentally Benign Applications. ChemSusChem, 2012, 5, 783-789.	3.6	64
25	Simulated Moving Bed Chromatography: Separation and Recovery of Sugars and Ionic Liquid from Biomass Hydrolysates. ChemSusChem, 2013, 6, 2083-2089.	3.6	27
26	Ionic liquids are compatible with on-water catalysis. Chemical Communications, 2013, 49, 8347.	2.2	12
27	Effect of Substituent Groups in Anions on Some Physicochemical Properties of 1-Butyl-3-methylimidazolium Carboxylate Ionic Liquids. Journal of Chemical & Engineering Data, 2013, 58, 2496-2501.	1.0	20
28	Insight into the Cosolvent Effect of Cellulose Dissolution in Imidazolium-Based Ionic Liquid Systems. Journal of Physical Chemistry B, 2013, 117, 9042-9049.	1.2	193
29	The effect of molecular solvents on the viscosity, conductivity and ionicity of mixtures containing chloride anion-based ionic liquid. Journal of Industrial and Engineering Chemistry, 2013, 19, 1708-1714.	2.9	38
30	Review of Cellulose Non-Derivatizing Solvent Interactions with Emphasis on Activity in Inorganic Molten Salt Hydrates. ACS Sustainable Chemistry and Engineering, 2013, 1, 858-870.	3.2	231
31	Concurrent formation of furan-2,5- and furan-2,4-dicarboxylic acid: unexpected aspects of the Henkel reaction. RSC Advances, 2013, 3, 15678-15686.	1.7	53
32	Synthesis of antibacterial cellulose materials using a â€œclickableâ€•quaternary ammonium compound. Cellulose, 2013, 20, 1187-1199.	2.4	30
33	Green Biomass Pretreatment for Biofuels Production. Springer Briefs in Molecular Science, 2013, , .	0.1	12
34	Supercritical CO2and ionic liquids for the pretreatment of lignocellulosic biomass in bioethanol production. Environmental Technology (United Kingdom), 2013, 34, 1735-1749.	1.2	72
35	Cellulose-TiO2 nanocomposite with enhanced UVâ€"Vis light absorption. Cellulose, 2013, 20, 1293-1300.	2.4	58
36	Viscoelasticity and rheology in the regimes from dilute to concentrated in cellulose 1-ethyl-3-methylimidazolium acetate solutions. Cellulose, 2013, 20, 1343-1352.	2.4	48
37	Conversion of carbohydrates to 5-hydroxymethylfurfural: the nature of the observed selectivity decrease and microwave radiation effect. Russian Chemical Bulletin, 2013, 62, 830-835.	0.4	10

#	Article	IF	Citations
38	Cosolvent or Antisolvent? A Molecular View of the Interface between Ionic Liquids and Cellulose upon Addition of Another Molecular Solvent. Journal of Physical Chemistry B, 2013, 117, 11780-11792.	1.2	81
39	From the dissolution to the extraction of carbohydrates using ionic liquids. RSC Advances, 2013, 3, 20219.	1.7	24
40	Efficient Sustainable Tool for Monitoring Chemical Reactions and Structure Determination in Ionic Liquids by ESIâ€MS. ChemistryOpen, 2013, 2, 208-214.	0.9	6
41	A convenient two-step synthesis of dialkylphosphate ionic liquids. Tetrahedron, 2013, 69, 9947-9950.	1.0	6
42	Interface-assisted ionothermal synthesis, phase tuning, surface modification and bioapplication of Ln3+-doped NaGdF4nanocrystals. Journal of Materials Chemistry B, 2013, 1, 179-185.	2.9	20
43	Highly efficient trimerization of isobutene over silica supported chloroaluminate ionic liquid using C4 feed. Catalysis Today, 2013, 200, 41-48.	2.2	27
44	Electrospinning of chitin nanofibers directly from an ionic liquid extract of shrimp shells. Green Chemistry, 2013, 15, 601.	4.6	145
45	Deconstruction of lignocellulosic biomass with ionic liquids. Green Chemistry, 2013, 15, 550.	4.6	1,243
46	Cellulose dissolution at ambient temperature: Role of preferential solvation of cations of ionic liquids by a cosolvent. Carbohydrate Polymers, 2013, 92, 540-544.	5.1	184
47	Quantum design of ionic liquids for extreme chemical inertness and a new theory of the glass transition. Journal of Solid State Electrochemistry, 2013, 17, 327-337.	1.2	18
48	Extraction of Lignocellulose and Synthesis of Porous Silica Nanoparticles from Rice Husks: A Comprehensive Utilization of Rice Husk Biomass. ACS Sustainable Chemistry and Engineering, 2013, 1, 254-259.	3.2	135
49	Toward Fully in Silico Melting Point Prediction Using Molecular Simulations. Journal of Chemical Theory and Computation, 2013, 9, 1592-1599.	2.3	14
50	Preparation and characterization of transparent silk fibroin/cellulose blend films. Polymer, 2013, 54, 5035-5042.	1.8	64
51	NMR Studies of Molten Salt and Room Temperature Ionic Liquids. Annual Reports on NMR Spectroscopy, 2013, , 149-207.	0.7	16
52	Green chemistry and the ocean-based biorefinery. Green Chemistry, 2013, 15, 860.	4.6	214
53	Adsorption of 1-Butyl-3-Methylimidazolium Chloride Ionic Liquid by Functional Carbon Microspheres from Hydrothermal Carbonization of Cellulose. Environmental Science & Technology, 2013, 47, 2792-2798.	4.6	88
54	Studies on the Dissolution of Glucose in Ionic Liquids and Extraction Using the Antisolvent Method. Environmental Science & Technology, 2013, 47, 2809-2816.	4.6	44
55	Comparison of direct solvents for regenerated cellulosic fibers via the lyocell process and by means of ionic liquids. Journal of Applied Polymer Science, 2013, 128, 4141-4150.	1.3	52

#	Article	IF	Citations
56	Pretreatment of Lignocellulosic Biomass Using Green Ionic Liquids. Springer Briefs in Molecular Science, 2013, , 127-153.	0.1	20
57	Peracetic acidâ€“ionic liquid pretreatment to enhance enzymatic saccharification of lignocellulosic biomass. Bioresource Technology, 2013, 138, 87-94.	4.8	26
58	Functional Cellulose Beads: Preparation, Characterization, and Applications. Chemical Reviews, 2013, 113, 4812-4836.	23.0	243
59	Observed Mechanism for the Breakup of Small Bundles of Cellulose Iβ and Iβ² in Ionic Liquids from Molecular Dynamics Simulations. Journal of Physical Chemistry B, 2013, 117, 3469-3479.	1.2	95
60	Effects of anionic structure on the dissolution of cellulose in ionic liquids revealed by molecular simulation. Carbohydrate Polymers, 2013, 94, 723-730.	5.1	77
61	Recent progress in G-quadruplex DNA in deep eutectic solvent. Methods, 2013, 64, 52-58.	1.9	21
62	Enhanced extraction of caffeine from guaranÃ¡ seeds using aqueous solutions of ionic liquids. Green Chemistry, 2013, 15, 2002.	4.6	127
63	Phase and morphology selective interface-assisted synthesis of highly luminescent Ln3+-doped NaGdF4 nanorods. RSC Advances, 2013, 3, 8172.	1.7	13
64	Cage-Like Local Structure of Ionic Liquids Revealed by a ¹²⁹Xe Chemical Shift. Journal of Physical Chemistry Letters, 2013, 4, 1608-1612.	2.1	31
65	Drug specific, tuning of an ionic liquid's hydrophilicâ€“lipophilic balance to improve water solubility of poorly soluble active pharmaceutical ingredients. New Journal of Chemistry, 2013, 37, 2196.	1.4	108
66	Direct HPILC analysis of cellulose depolymerisation in ionic liquids. Analytical Methods, 2013, 5, 3172.	1.3	15
67	Removal of Surface Contaminants Using Ionic Liquids. , 2013, , 1-63.		3
68	Physicochemical Properties of Tri-n-butylalkylphosphonium Cation-Based Room-Temperature Ionic Liquids. Journal of Physical Chemistry B, 2013, 117, 15051-15059.	1.2	32
69	Catalytic transformation of carbohydrates and lignin in ionic liquids. Wiley Interdisciplinary Reviews: Energy and Environment, 2013, 2, 655-672.	1.9	43
70	Conformational isomerisms and nano-aggregation in substituted alkylammonium nitrates ionic liquids: An x-ray and computational study of 2-methoxyethylammonium nitrate. Journal of Chemical Physics, 2013, 138, 184506.	1.2	28
71	Surface-active Ionic Liquids for Micellar Extraction of Piperine from Black Pepper. Zeitschrift Fur Naturforschung - Section B Journal of Chemical Sciences, 2013, 68, 1129-1137.	0.3	46
72	Ionic Liquids: Green Solvent for Pretreatment of Lingnocellulosic Biomass. Advanced Materials Research, 0, 701, 399-402.	0.3	15
73	A â€œgreenâ€•industrial revolution: Using chitin towards transformative technologies. Pure and Applied Chemistry, 2013, 85, 1693-1701.	0.9	23

#	Article	IF	Citations
74	Pressure effect on vibrational frequency and dephasing of 1-alkyl-3-methylimidazolium hexafluorophosphate ionic liquids. Journal of Chemical Physics, 2013, 139, 054510.	1.2	15
75	High-frequency acoustic modes in an ionic liquid. Journal of Chemical Physics, 2013, 139, 114505.	1.2	12
77	Temperatureâ€Dependent Surfaceâ€Enrichment Effects of Imidazoliumâ€Based Ionic Liquids. ChemPhysChem, 2013, 14, 3726-3730.	1.0	15
78	Coagulation of Chitin and Cellulose from 1â€Ethylâ€3â€methylimidazolium Acetate Ionicâ€Liquid Solutions Using Carbon Dioxide. Angewandte Chemie - International Edition, 2013, 52, 12350-12353.	7.2	56
79	Finally Dissolved! Activation Procedures to Dissolve Cellulose in DMAc/LiCl Prior to Size Exclusion Chromatography Analysis â€“ A Review. Current Chromatography, 2014, 1, 52-68.	0.1	24
80	Amino Acid-Derived Imidazolium Zwitterions: Building Blocks for Renewable Ionic Liquids and Materials. ACS Symposium Series, 2014, , 53-68.	0.5	3
81	Development, application and commercialization of transparent paper. Translational Materials Research, 2014, 1, 015004.	1.2	54
82	What Happens during Natural Protein Fibre Dissolution in Ionic Liquids. Materials, 2014, 7, 6158-6168.	1.3	46
83	Vibration Modes at Terahertz and Infrared Frequencies of Ionic Liquids Consisting of an Imidazolium Cation and a Halogen Anion. Materials, 2014, 7, 7409-7422.	1.3	17
84	Oxygen Enhances Polyoxometalate-based Catalytic Dissolution and Delignification of Woody Biomass in Ionic Liquids. ACS Sustainable Chemistry and Engineering, 2014, 2, 2859-2865.	3.2	26
86	Applications of Ionic Liquids in Spectroscopy. , 2014, , .		1
87	Catalytic Depolymerization of Microcrystalline Cellulose Accomplished in an Ionic Liquid. American Journal of Biomass and Bioenergy, 0, , .	0.0	0
88	Integrating medicinal plants extraction into a high-value biorefinery: An example of Artemisia annua L.. Comptes Rendus Chimie, 2014, 17, 232-241.	0.2	15
89	Improvement of enzymatic activity of Î²-glucosidase from Thermotoga maritima by 1-butyl-3-methylimidazolium acetate. Journal of Molecular Catalysis B: Enzymatic, 2014, 104, 17-22.	1.8	13
90	Bio(chemo)technological strategies for biomass conversion into bioethanol and key carboxylic acids. Green Chemistry, 2014, 16, 2386.	4.6	62
91	Amphiphilic and Phaseâ€Separable Ionic Liquids for Biomass Processing. ChemSusChem, 2014, 7, 1422-1434.	3.6	60
92	Extended scale for the hydrogen-bond basicity of ionic liquids. Physical Chemistry Chemical Physics, 2014, 16, 6593.	1.3	218
93	Cellulose dissolution in aqueous lithium bromide solutions. Cellulose, 2014, 21, 1175-1181.	2.4	87

#	Article	IF	Citations
94	Hydrolysis of cellulose to produce glucose with solid acid catalysts in 1-butyl-3-methyl-imidazolium chloride ([bmIm][Cl]) with sequential water addition. Biomass Conversion and Biorefinery, 2014, 4, 323-331.	2.9	12
95	Simulation of a cellulose fiber in ionic liquid suggests a synergistic approach to dissolution. Cellulose, 2014, 21, 983-997.	2.4	58
96	Preparation of cellulose particles using an ionic liquid. Journal of Colloid and Interface Science, 2014, 418, 126-131.	5.0	36
97	Potential halophilic cellulases for in situ enzymatic saccharification of ionic liquids pretreated lignocelluloses. Bioresource Technology, 2014, 155, 177-181.	4.8	78
98	Synthesis and thermophysical properties of imidazolate-based ionic liquids: Influences of different cations and anions. Journal of Chemical Thermodynamics, 2014, 74, 209-215.	1.0	26
99	Ionic liquid-based green processes for energy production. Chemical Society Reviews, 2014, 43, 7838-7869.	18.7	399
100	Assessment of phosphonium ionic liquid-dimethylformamide mixtures for dissolution of cellulose. Composite Interfaces, 2014, 21, 59-73.	1.3	14
101	Rheological behaviors of cellulose in 1-ethyl-3-methylimidazolium chloride/dimethylsulfoxide. Carbohydrate Polymers, 2014, 110, 292-297.	5.1	40
102	Aqueous ionic liquids and deep eutectic solvents for cellulosic biomass pretreatment and saccharification. RSC Advances, 2014, 4, 10586.	1.7	151
103	Cucurbit[6]uril in combination with guanidinium ionic liquid as a new type of stationary phase for capillary gas chromatography. Journal of Chromatography A, 2014, 1334, 112-117.	1.8	29
104	Synthesis of a novel acrylated abietic acid-g-bacterial cellulose hydrogel by gamma irradiation. Carbohydrate Polymers, 2014, 110, 505-512.	5.1	39
105	Ionic Liquids at Electrified Interfaces. Chemical Reviews, 2014, 114, 2978-3036.	23.0	1,101
106	Cation Alkyl Side Chain Length and Symmetry Effects on the Surface Tension of Ionic Liquids. Langmuir, 2014, 30, 6408-6418.	1.6	75
107	Enhanced Conversion of Carbohydrates to the Platform Chemical 5â€Hydroxymethylfurfural Using Designer Ionic Liquids. ChemSusChem, 2014, 7, 1647-1654.	3.6	65
108	Cation does matter: how cationic structure affects the dissolution of cellulose in ionic liquids. Green Chemistry, 2014, 16, 1326-1335.	4.6	199
109	Conversion of Biomass into Chemicals over Metal Catalysts. Chemical Reviews, 2014, 114, 1827-1870.	23.0	1,504
110	Cellulose aerogel regenerated from ionic liquid solution for immobilized metal affinity adsorption. Carbohydrate Polymers, 2014, 103, 62-69.	5.1	40
111	Mixing ionic liquids â€“ â€œsimple mixturesâ€•or â€œdouble saltsâ€?. Green Chemistry, 2014, 16, 2051.	4.6	289

#	Article	IF	Citations
112	Hydrogen-bonding interactions between [BMIM][BF4] and dimethyl sulfoxide. Journal of Molecular Structure, 2014, 1069, 140-146.	1.8	48
113	Review: Oxidation of Lignin Using Ionic Liquidsâ€"An Innovative Strategy To Produce Renewable Chemicals. ACS Sustainable Chemistry and Engineering, 2014, 2, 322-339.	3.2	290
114	The importance of timescale for hydrogen bonding in imidazolium chloride ionic liquids. Physical Chemistry Chemical Physics, 2014, 16, 3675.	1.3	78
115	Selective conversion of microcrystalline cellulose into hexitols over a Ru/[Bmim]3PW12O40 catalyst under mild conditions. Catalysis Today, 2014, 233, 70-76.	2.2	33
116	Understanding changes in cellulose crystalline structure of lignocellulosic biomass during ionic liquid pretreatment by XRD. Bioresource Technology, 2014, 151, 402-405.	4.8	160
117	Selective Depolymerization of Cellulose to Low Molecular Weight Cello-Oligomers Catalyzed by BetaÃ¯ne Hydrochloride. ACS Sustainable Chemistry and Engineering, 2014, 2, 2683-2689.	3.2	12
118	Ionic liquid as a recyclable and efficient medium for lipase-catalyzed asymmetric cross aldol reaction. Journal of Molecular Catalysis B: Enzymatic, 2014, 110, 100-110.	1.8	27
119	Toward a Materials Genome Approach for Ionic Liquids: Synthesis Guided by Ab Initio Property Maps. Journal of Physical Chemistry B, 2014, 118, 13609-13620.	1.2	19
120	Impact of non-solvents on the structural features and enzymatic digestibility of cellulose regenerated from an ionic liquid. RSC Advances, 2014, 4, 31226-31229.	1.7	15
121	Updating Biomass into Functional Carbon Material in Ionothermal Manner. ACS Applied Materials & Interfaces, 2014, 6, 12515-12522.	4.0	98
122	Physical Insight into Switchgrass Dissolution in Ionic Liquid 1-Ethyl-3-methylimidazolium Acetate. ACS Sustainable Chemistry and Engineering, 2014, 2, 1264-1269.	3.2	19
123	Precipitation of chitosan from ionic liquid solution by the compressed CO₂ anti-solvent method. Green Chemistry, 2014, 16, 2102-2106.	4.6	40
124	Hydrothermal decarboxylation of amino acid derived imidazolium zwitterions: a sustainable approach towards ionic liquids. Green Chemistry, 2014, 16, 3705.	4.6	44
125	The dynamic process of radioactive iodine removal by ionic liquid 1-butyl-3-methyl-imidazolium acetate: discriminating and quantifying halogen bonds versus induced force. RSC Advances, 2014, 4, 55417-55429.	1.7	23
126	Catalytic Hydrolysis of Cellulose to Glucose Using Weak-Acid Surface Sites on Postsynthetically Modified Carbon. ACS Sustainable Chemistry and Engineering, 2014, 2, 2866-2872.	3.2	61
127	Direct conversion of cellulose into C₆ alditols over Ru/C combined with H⁺-released boron phosphate in an aqueous phase. RSC Advances, 2014, 4, 52402-52409.	1.7	17
128	Transition of cellulose crystalline structure in biodegradable mixtures of renewably-sourced levulinate alkyl ammonium ionic liquids, Î³-valerolactone and water. Green Chemistry, 2014, 16, 2463-2471.	4.6	52
129	Molecular dynamics study of the effect of alkyl chain length on melting points of [C_nMIM][PF₆] ionic liquids. Physical Chemistry Chemical Physics, 2014, 16, 13489-13499.	1.3	68

#	Article	IF	Citations
130	Playing with ionic liquid mixtures to design engineered CO₂separation membranes. Physical Chemistry Chemical Physics, 2014, 16, 17172.	1.3	70
131	Studies on staged precipitation of cellulose from an ionic liquid by compressed carbon dioxide. Green Chemistry, 2014, 16, 2736-2744.	4.6	73
132	Strong Highly Anisotropic Magnetocellulose Nanocomposite Films Made by Chemical Peeling and In Situ Welding at the Interface Using an Ionic Liquid. ACS Applied Materials & Interfaces, 2014, 6, 8165-8172.	4.0	24
133	Refined Method for Predicting Electrochemical Windows of Ionic Liquids and Experimental Validation Studies. Journal of Physical Chemistry B, 2014, 118, 6250-6255.	1.2	51
134	Generating Ionic Liquids from Ionic Solids: An Investigation of the Melting Behavior of Binary Mixtures of Ionic Liquids. Crystal Growth and Design, 2014, 14, 4270-4277.	1.4	38
135	Selective conversion of lignin in corncob residue to monophenols with high yield and selectivity. Green Chemistry, 2014, 16, 4257-4265.	4.6	113
136	The Dynamic Process of Atmospheric Water Sorption in [BMIM][Ac]: Quantifying Bulk versus Surface Sorption and Utilizing Atmospheric Water as a Structure Probe. Journal of Physical Chemistry B, 2014, 118, 6896-6907.	1.2	25
137	The unexpected flexibility of natural cellulose at a single-chain level and its implications to the design of nano materials. Nanoscale, 2014, 6, 13421-13424.	2.8	22
138	Acidic ionic liquid as â€œquasi-homogeneousâ€•catalyst for controllable synthesis of cellulose acetate. Carbohydrate Polymers, 2014, 113, 83-90.	5.1	38
139	Dissolution enthalpies of cellulose in ionic liquids. Carbohydrate Polymers, 2014, 113, 67-76.	5.1	36
140	Diffusion of 1-Ethyl-3-methyl-imidazolium Acetate in Glucose, Cellobiose, and Cellulose Solutions. Biomacromolecules, 2014, 15, 609-617.	2.6	40
141	Enhancing the Basicity of Ionic Liquids by Tuning the Cationâ€“Anion Interaction Strength and via the Anion-Tethered Strategy. Journal of Physical Chemistry B, 2014, 118, 1071-1079.	1.2	68
142	An Abnormal Nâ€Heterocyclic Carbeneâ€“Carbon Dioxide Adduct from Imidazolium Acetate Ionic Liquids: The Importance of Basicity. Chemistry - A European Journal, 2014, 20, 13002-13008.	1.7	68
143	Chitinâ€“calcium alginate composite fibers for wound care dressings spun from ionic liquid solution. Journal of Materials Chemistry B, 2014, 2, 3924-3936.	2.9	109
144	Replica-Exchange Molecular Dynamics Simulations of Cellulose Solvated in Water and in the Ionic Liquid 1-Butyl-3-Methylimidazolium Chloride. Journal of Physical Chemistry B, 2014, 118, 11037-11049.	1.2	29
145	Synthesis, characterization and properties of novel cellulose derivatives containing phosphorus: cellulose diphenyl phosphate and its mixed esters. Cellulose, 2014, 21, 2369-2378.	2.4	34
146	1H NMR analysis of cellulose dissolved in non-deuterated ionic liquids. Cellulose, 2014, 21, 2199-2206.	2.4	35
147	Structure and properties of the regenerated cellulose membranes prepared from cellulose carbamate in NaOH/ZnO aqueous solution. Cellulose, 2014, 21, 2819-2830.	2.4	36

#	Article	IF	Citations
148	Ionic Liquid-Based Aqueous Biphasic Systems with Controlled Hydrophobicity: The Polar Solvent Effect. Journal of Chemical & Engineering Data, 2014, 59, 2150-2158.	1.0	12
149	Measurement of High-Pressure Densities and Atmospheric Viscosities of Ionic Liquids: 1-Hexyl-3-methylimidazolium Bis(trifluoromethylsulfonyl)imide and 1-Hexyl-3-methylimidazolium Chloride. Journal of Chemical & Engineering Data, 2014, 59, 709-717.	1.0	52
150	Simulating the vibrational spectra of ionic liquid systems: 1-Ethyl-3-methylimidazolium acetate and its mixtures. Journal of Chemical Physics, 2014, 141, 024510.	1.2	77
151	Synergistic effect of quaternary ammonium hydroxide and crown ether on the rapid and clear dissolution of cellulose at room temperature. RSC Advances, 2014, 4, 2523-2525.	1.7	34
152	Polycaprolactone grafting of cellulose nanocrystals in ionic liquid [BMIM]Cl. Wuhan University Journal of Natural Sciences, 2014, 19, 117-122.	0.2	5
153	Evaluation of four ionic liquids for pretreatment of lignocellulosic biomass. BMC Biotechnology, 2014, 14, 34.	1.7	46
154	Understanding cost drivers and economic potential of two variants of ionic liquid pretreatment for cellulosic biofuel production. Biotechnology for Biofuels, 2014, 7, 86.	6.2	120
155	Superbase/cellulose: an environmentally benign catalyst for chemical fixation of carbon dioxide into cyclic carbonates. Green Chemistry, 2014, 16, 3071.	4.6	180
156	Energetic Ionic Liquids as Explosives and Propellant Fuels: A New Journey of Ionic Liquid Chemistry. Chemical Reviews, 2014, 114, 10527-10574.	23.0	495
157	Selective Conversion of Cellulose in Corncob Residue to Levulinic Acid in an Aluminum Trichlorideâ€“Sodium Chloride System. ChemSusChem, 2014, 7, 2482-2488.	3.6	68
158	Intermolecular Interactions and 3D Structure in Celluloseâ€“NaOHâ€“Urea Aqueous System. Journal of Physical Chemistry B, 2014, 118, 10250-10257.	1.2	88
159	The Role of the Cation in the Solvation of Cellulose by Imidazolium-Based Ionic Liquids. Journal of Physical Chemistry B, 2014, 118, 1621-1629.	1.2	84
160	Degradation of imidazolium-based ionic liquids in aqueous solution using plasma electrolysis. Journal of Hazardous Materials, 2014, 265, 261-270.	6.5	45
161	Solubility of Poly(methyl methacrylate) in Ionic Liquids in Relation to Solvent Parameters. Langmuir, 2014, 30, 3228-3235.	1.6	47
162	Flow behavior and linear viscoelasticity of cellulose 1-allyl-3-methylimidazolium formate solutions. Carbohydrate Polymers, 2014, 99, 132-139.	5.1	18
163	Facile pulping of lignocellulosic biomass using choline acetate. Bioresource Technology, 2014, 164, 394-401.	4.8	53
164	Toxicity of Ionic Liquids: Eco(cyto)activity as Complicated, but Unavoidable Parameter for Taskâ€Specific Optimization. ChemSusChem, 2014, 7, 336-360.	3.6	377
165	Effect of alkyl chain length in anion on dissolution of cellulose in 1-butyl-3-methylimidazolium carboxylate ionic liquids. Journal of Molecular Liquids, 2014, 197, 211-214.	2.3	41

#	Article	IF	Citations
166	BrÃ¶nsted acid ionic liquids catalyzed Friedelâ€“Crafts Alkylations of electron-rich arenes with aldehydes. Applied Catalysis A: General, 2014, 482, 198-204.	2.2	14
167	True molecular solutions of natural cellulose in the binary ionic liquid-containing solvent mixtures. Carbohydrate Polymers, 2014, 112, 125-133.	5.1	58
168	Biocatalytic Synthesis of Polymers: A Contribution to Green Chemistry. , 2014, , 1137-1162.		0
171	A New Way to Interpret Perturbationâ€“Correlation Moving-Window Two-Dimensional Correlation Spectroscopy: Probing the Dynamic Interaction of Ionic Liquid 1-Ethyl-3-Methylimidazolium Acetate to Absorb Atmospheric Water. Applied Spectroscopy, 2015, 69, 130-142.	1.2	9
172	Understanding Cellulose Dissolution: Energetics of Interactions of Ionic Liquids and Cellobiose Revealed by Solution Microcalorimetry. ChemSusChem, 2015, 8, 1577-1584.	3.6	37
173	Current Pretreatment Technologies for the Development of Cellulosic Ethanol and Biorefineries. ChemSusChem, 2015, 8, 3366-3390.	3.6	321
174	Functionalized Agarose Selfâ€Healing Ionogels Suitable for Supercapacitors. ChemSusChem, 2015, 8, 3294-3303.	3.6	103
175	Solubility of Bioactive, Inorganic and Polymeric Solids in Ionic Liquids â€" Experimental and Prediction Perspectives. , 0, , .		2
176	critical review of ionic liquids for the pretreatment of lignocellulosic biomass. South African Journal of Science, 2015, 111, 9.	0.3	35
177	Improved Sugar Production by Optimizing Planetary Mill Pretreatment and Enzyme Hydrolysis Process. BioMed Research International, 2015, 2015, 1-5.	0.9	0
178	Optimization of [Amim]Cl Pretreatment Conditions for Maximum Glucose Recovery from Hybrid Pennisetum by Response Surface Methodology. BioResources, 2015, 10, .	0.5	8
179	Two-Dimensional FTIR as a Tool to Study the Chemical Interactions within Cellulose-Ionic Liquid Solutions. International Journal of Polymer Science, 2015, 2015, 1-9.	1.2	15
180	Dissolution Behavior of Cellulose in IL + DMSO Solvent: Effect of Alkyl Length in Imidazolium Cation on Cellulose Dissolution. Advances in Materials Science and Engineering, 2015, 2015, 1-4.	1.0	20
181	A Direct Sulfation Process of a Marine Polysaccharide in Ionic Liquid. BioMed Research International, 2015, 2015, 1-9.	0.9	16
182	Mechanisms of hydrogen bond formation between ionic liquids and cellulose and the influence of water content. Physical Chemistry Chemical Physics, 2015, 17, 5767-5775.	1.3	91
183	An unusual spherulite morphology induced by nano-fillers from a concentrated cellulose/ionic liquid solution. RSC Advances, 2015, 5, 44648-44651.	1.7	11
184	Graft modification of cellulose: Methods, properties and applications. Polymer, 2015, 70, A1-A16.	1.8	171
185	Characterization of ionic liquid pretreatment andÂthe bioconversion of pretreated mixed softwood biomass. Biomass and Bioenergy, 2015, 81, 1-8.	2.9	63

#	Article	IF	Citations
186	From cellulose fibrils to single chains: understanding cellulose dissolution in ionic liquids. Physical Chemistry Chemical Physics, 2015, 17, 31592-31607.	1.3	72
187	Terahertz and Infrared Spectroscopy of Room-Temperature Imidazolium-Based Ionic Liquids. Journal of Physical Chemistry B, 2015, 119, 15696-15705.	1.2	23
188	Ion pairing in ionic liquids. Journal of Physics Condensed Matter, 2015, 27, 463002.	0.7	108
189	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
190	Ionothermal Synthesis of Tetranuclear Borate Clusters Containing f- and p-Block Metals. Inorganic Chemistry, 2015, 54, 570-575.	1.9	13
191	Ionic liquid induced inactivation of cellobiohydrolase I from Trichoderma reesei. Green Chemistry, 2015, 17, 1618-1625.	4.6	22
192	Functionalized ionic liquids based on imidazolium cation: Synthesis, characterization and catalytic activity for N-alkylation reaction. Journal of Molecular Liquids, 2015, 204, 210-215.	2.3	15
193	Densities at Pressures up to 200 MPa and Atmospheric Pressure Viscosities of Ionic Liquids 1-Ethyl-3-methylimidazolium Methylphosphate, 1-Ethyl-3-methylimidazolium Diethylphosphate, 1-Butyl-3-methylimidazolium Acetate, and 1-Butyl-3-methylimidazolium Bis(trifluoromethylsulfonyl)imide. Journal of Chemical & Engineering Data, 2015, 60, 876-885.	1.0	59
194	Dissolution of Cellulose in Room Temperature Ionic Liquids: Anion Dependence. Journal of Physical Chemistry B, 2015, 119, 1654-1659.	1.2	44
195	From monomers to polymers from renewable resources: Recent advances. Progress in Polymer Science, 2015, 48, 1-39.	11.8	530
196	Ionic Liquid Pretreatment. , 2015, , 137-155.		5
197	Direct Correlation between Ionic Liquid Transport Properties and Ion Pair Lifetimes: A Molecular Dynamics Study. Journal of Physical Chemistry Letters, 2015, 6, 700-705.	2.1	211
198	First-Row Transition Metal-Containing Ionic Liquids as Highly Active Catalysts for the Glycolysis of Poly(ethylene terephthalate) (PET). ACS Sustainable Chemistry and Engineering, 2015, 3, 340-348.	3.2	151
199	Dissolution of cellulose in 1-allyl-3-methylimizodalium carboxylates at room temperature: A structureâ€“property relationship study. Carbohydrate Polymers, 2015, 117, 666-672.	5.1	70
200	Effect on aggregation behavior of long-chain spacers of dicationic imidazolium-based ionic liquids in aqueous solution. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2015, 468, 285-294.	2.3	53
201	Antimicrobial regenerated cellulose/nano-silver fiber without leaching. Journal of Bioactive and Compatible Polymers, 2015, 30, 17-33.	0.8	21
202	Evolutional mechanism of 1-ethyl-3-methyl-imdazolium acetate uptaking water from air detected with a new coupled method: Two-dimensional correlation difference spectroscopy. Journal of Molecular Liquids, 2015, 203, 169-180.	2.3	6
203	Insight into glass transition of cellulose based on direct thermal processing after plasticization by ionic liquid. Cellulose, 2015, 22, 89-99.	2.4	27

#	Article	IF	Citations
204	Transport Properties of Some 1-Butyl-3-methylimidazolium Carboxylate Ionic Liquids. Journal of Chemical & Engineering Data, 2015, 60, 580-585.	1.0	10
205	Modeling of the volumetric properties and estimation of the solubility parameters of ionic liquid+ethanol mixtures with the Sanchezâ€“Lacombe and Simhaâ€“Somcynsky equations of state: [EMIM]Ac+ethanol and [EMIM]Cl+ethanol mixtures. Journal of Supercritical Fluids, 2015, 98, 86-101.	1.6	16
206	Standard partial molar volumes and viscosity B-coefficients of ionic liquids [Cnmim]Br (n=4, 6, 8) in alcohols at 298.15K. Journal of Molecular Liquids, 2015, 209, 563-568.	2.3	14
207	Modern Room Temperature Ionic Liquids, a Simple Guide to Understanding Their Structure and How It May Relate to Dynamics. Journal of Physical Chemistry B, 2015, 119, 12727-12740.	1.2	266
208	Ammonium ionic liquids with anions of natural origin. RSC Advances, 2015, 5, 65471-65480.	1.7	30
209	Ionic Liquids Can Significantly Improve Textile Dyeing: An Innovative Application Assuring Economic and Environmental Benefits. ACS Sustainable Chemistry and Engineering, 2015, 3, 2303-2308.	3.2	38
210	Highly efficient synthesis of cyclic carbonates from carbon dioxide and epoxides catalyzed by ionic liquid [Heemim][ZrCl5]. RSC Advances, 2015, 5, 67886-67891.	1.7	13
211	Sustainable Catalysis Systems BasedÂonÂIonic Liquids. , 2015, , 61-98.		1
212	Dissolving process of a cellulose bunch in ionic liquids: a molecular dynamics study. Physical Chemistry Chemical Physics, 2015, 17, 17894-17905.	1.3	92
213	Recent Progress in Ionic Liquids and their Applications in Organic Synthesis. Organic Preparations and Procedures International, 2015, 47, 249-308.	0.6	114
214	Bioactive transparent films based on polysaccharides and cholinium carboxylate ionic liquids. Green Chemistry, 2015, 17, 4291-4299.	4.6	43
215	Highly rate and cycling stable electrode materials constructed from polyaniline/cellulose nanoporous microspheres. Journal of Materials Chemistry A, 2015, 3, 16424-16429.	5.2	47
216	Self-assembly induced solubilization of drug-like molecules in nanostructured ionic liquids. Chemical Communications, 2015, 51, 13170-13173.	2.2	37
217	Reversible and non-reactive cellulose separations from ionic liquid mixtures with compressed carbon dioxide. Chemical Communications, 2015, 51, 12649-12652.	2.2	11
218	Green Solvents in Carbohydrate Chemistry: From Raw Materials to Fine Chemicals. Chemical Reviews, 2015, 115, 6811-6853.	23.0	296
219	Promoting Effect of Sodium Chloride on the Solubilization and Depolymerization of Cellulose from Raw Biomass Materials in Water. ChemSusChem, 2015, 8, 1901-1907.	3.6	120
220	Theoretical studies on the dissolution of chitosan in 1-butyl-3-methylimidazolium acetate ionic liquid. Carbohydrate Research, 2015, 408, 107-113.	1.1	24
221	High concentration DNA solubility in bio-ionic liquids with long-lasting chemical and structural stability at room temperature. RSC Advances, 2015, 5, 40546-40551.	1.7	33

#	Article	IF	Citations
222	Communication: Unusual structure and transport in ionic liquid-hexane mixtures. Journal of Chemical Physics, 2015, 142, 121101.	1.2	29
223	Experimental and theoretical study of carbohydrateâ€“ionic liquid interactions. Carbohydrate Polymers, 2015, 127, 316-324.	5.1	24
224	Understanding the structural disorganization of starch in waterâ€“ionic liquid solutions. Physical Chemistry Chemical Physics, 2015, 17, 13860-13871.	1.3	73
225	Comparison testing of methods for gel permeation chromatography of cellulose: coming closer to a standard protocol. Cellulose, 2015, 22, 1591-1613.	2.4	112
226	Revealing the Hydrophobicity of Natural Cellulose by Single-Molecule Experiments. Macromolecules, 2015, 48, 3685-3690.	2.2	44
227	Microwave assisted immobilization of yeast in cellulose biopolymer as a green adsorbent for the sequestration of chromium. Chemical Engineering Journal, 2015, 279, 38-46.	6.6	53
228	Thermal behavior of cellulose diacetate melt using ionic liquids as plasticizers. RSC Advances, 2015, 5, 901-907.	1.7	21
229	Effects of polymorphs on dissolution of cellulose in NaOH/urea aqueous solution. Carbohydrate Polymers, 2015, 125, 85-91.	5.1	79
230	Facile cellulose dissolution without heating in [C 4 mim][CH 3 COO]/DMF solvent. Carbohydrate Polymers, 2015, 125, 249-254.	5.1	52
231	Dissolution and regeneration of hide powder/cellulose composite in Gemini imidazolium ionic liquid. International Journal of Biological Macromolecules, 2015, 76, 70-79.	3.6	13
232	Biodegradable betaine-based aprotic task-specific ionic liquids and their application in efficient SO₂ absorption. Green Chemistry, 2015, 17, 3798-3805.	4.6	40
233	Ionic Liquid and Cellulose Technologies: Dissolution, Modification and Composite Preparation. , 2015, , 135-152.		1
234	Deep Eutectic Solvents: Physicochemical Properties and Gas Separation Applications. Energy & Fuels, 2015, 29, 2616-2644.	2.5	777
235	A morpholinium ionic liquid for cellulose dissolution. Carbohydrate Polymers, 2015, 130, 18-25.	5.1	76
236	Ionic liquid-stabilized nanoparticles as catalysts for the conversion of biomass. Green Chemistry, 2015, 17, 3195-3206.	4.6	126
237	Key factors affecting the activity and stability of enzymes in ionic liquids and novel applications in biocatalysis. Biochemical Engineering Journal, 2015, 99, 67-84.	1.8	106
238	Gelation Mechanism of Tetra-armed Poly(ethylene glycol) in Aprotic Ionic Liquid Containing Nonvolatile Proton Source, Protic Ionic Liquid. Journal of Physical Chemistry B, 2015, 119, 4795-4801.	1.2	14
239	Contribution of Deep Eutectic Solvents for Biomass Processing: Opportunities, Challenges, and Limitations. ChemCatChem, 2015, 7, 1250-1260.	1.8	180

#	Article	IF	Citations
240	Chemocatalytic hydrolysis of cellulose into glucose over solid acid catalysts. Applied Catalysis B: Environmental, 2015, 174-175, 225-243.	10.8	216
241	Supramolecular Chemistry and Mechanochemistry of Macromolecules: Recent Advances by Single-Molecule Force Spectroscopy. Topics in Current Chemistry, 2015, 369, 97-134.	4.0	18
242	Insight into dissolution mechanism of cellulose in [C4mim][CH3COO]/DMSO solvent by 13C NMR spectra. Journal of Molecular Structure, 2015, 1088, 101-104.	1.8	36
243	Regulating effect of hemicelluloses on the preparation and properties of composite Lyocell fibers. Cellulose, 2015, 22, 1505-1516.	2.4	10
244	Preparation of neutral ionic liquid [2-Eim] OAc with dual catalytic-solvent system roles for the synthesis of 2-amino-3-cyano-7-hydroxy-4-(aryl)-4H-chromene derivatives. Journal of Molecular Liquids, 2015, 212, 291-300.	2.3	30
245	Multiscale modeling of the trihexyltetradecylphosphonium chloride ionic liquid. Physical Chemistry Chemical Physics, 2015, 17, 22125-22135.	1.3	18
246	Tailored one-pot production of furan-based fuels from fructose in an ionic liquid biphasic solvent system. Chinese Journal of Catalysis, 2015, 36, 1638-1646.	6.9	48
247	Theoretical Insights into the Role of Water in the Dissolution of Cellulose Using IL/Water Mixed Solvent Systems. Journal of Physical Chemistry B, 2015, 119, 14339-14349.	1.2	46
248	5-Hydroxymethylfurfural: A key intermediate for efficient biomass conversion. Journal of Energy Chemistry, 2015, 24, 548-551.	7.1	42
249	Biomass to Furanics: Renewable Routes to Chemicals and Fuels. ACS Sustainable Chemistry and Engineering, 2015, 3, 2591-2605.	3.2	207
250	Ionic Liquids for the Production of Man-Made Cellulosic Fibers: Opportunities and Challenges. Advances in Polymer Science, 2015, , 133-168.	0.4	58
251	Highly Efficient Dissolution of Wool Keratin by Dimethylphosphate Ionic Liquids. ACS Sustainable Chemistry and Engineering, 2015, 3, 2925-2932.	3.2	66
252	Gelation and decrystallization of cellulose by TAAHs/DMSO treatment and the role of anions and cations. Cellulose, 2015, 22, 3013-3025.	2.4	6
253	Advances in Lignite Extraction and Conversion under Mild Conditions. Energy & Fuels, 2015, 29, 6869-6886.	2.5	83
254	Influence of anion induced proton abstraction on Cu(II) adsorption by alginic acid. Reactive and Functional Polymers, 2015, 97, 48-55.	2.0	20
255	Investigations into Physicochemical Changes in Thermal Coals during Low-Temperature Ionic Liquid Treatment. Energy & Fuels, 2015, 29, 7080-7088.	2.5	29
256	Branched isomeric 1,2,3-triazolium-based ionic liquids: new insight into structureâ€“property relationships. Physical Chemistry Chemical Physics, 2015, 17, 29834-29843.	1.3	16
257	Utilising ionic liquids for the in situ swelling ofÂAvicel towards enhanced enzymatic saccharification. RSC Advances, 2015, 5, 58912-58915.	1.7	1

#	Article	IF	Citations
258	Mechanistic study on the cellulose dissolution in ionic liquids by density functional theory. Chinese Journal of Chemical Engineering, 2015, 23, 1894-1906.	1.7	34
259	Effect of Dimethyl Sulfoxide (DMSO) on Cellulose Solution with High Concentration. Advanced Materials Research, 0, 1095, 329-332.	0.3	0
260	Understanding the dissolution of cellulose in 1-butyl-3-methylimidazolium acetate + DMAc solvent. International Journal of Biological Macromolecules, 2015, 81, 1000-1004.	3.6	54
261	Utilization of Ionic Liquids in Lignocellulose Biorefineries as Agents for Separation, Derivatization, Fractionation, or Pretreatment. Journal of Agricultural and Food Chemistry, 2015, 63, 8093-8102.	2.4	59
262	Characterization of Oligocellulose Synthesized by Reverse Phosphorolysis Using Different Cellodextrin Phosphorylases. Analytical Chemistry, 2015, 87, 9639-9646.	3.2	33
263	Fast and efficient extraction of DNA from meat and meat derived products using aqueous ionic liquid buffer systems. New Journal of Chemistry, 2015, 39, 4994-5002.	1.4	20
264	Dissolution of cellulose with ionic liquid in pressurized cell. Journal of Molecular Liquids, 2015, 211, 370-372.	2.3	52
265	Effect of Water Content in N-Methylmorpholine N-Oxide/Cellulose Solutions on Thermodynamics, Structure, and Hydrogen Bonding. Journal of Physical Chemistry B, 2015, 119, 15014-15022.	1.2	38
266	Cellulose as a Source of Water Dispersible Renewable Film-Forming Materials. Macromolecules, 2015, 48, 8497-8508.	2.2	13
267	Molecular Extraction of Peptides in Ionic Liquid Systems. ACS Sustainable Chemistry and Engineering, 2015, 3, 357-364.	3.2	27
268	Development of a simple method for predicting CO2 enhancement of H2 gas solubility in ionic liquids. Journal of Supercritical Fluids, 2015, 96, 162-170.	1.6	13
269	Catalytic Dehydration of Carbohydrates Suspended in Organic Solvents Promoted by AlCl₃/SiO₂ Coated with Choline Chloride. ChemSusChem, 2015, 8, 269-274.	3.6	31
270	Improvement of halophilic cellulase production from locally isolated fungal strain. Saudi Journal of Biological Sciences, 2015, 22, 476-483.	1.8	31
271	Crystalline characteristics of cellulose fiber and film regenerated from ionic liquid solution. Carbohydrate Polymers, 2015, 118, 150-155.	5.1	57
272	Cellulose Amorphization by Swelling in Ionic Liquid/Water Mixtures: A Combined Macroscopic and Secondâ€Harmonic Microscopy Study. ChemSusChem, 2015, 8, 82-86.	3.6	13
273	Microwave heating and hydrolysis of rubber wood biomass in ionic liquids. Journal of Chemical Technology and Biotechnology, 2015, 90, 2050-2056.	1.6	22
274	Recent trends in ionic liquid (IL) tolerant enzymes and microorganisms for biomass conversion. Critical Reviews in Biotechnology, 2015, 35, 294-301.	5.1	17
275	Cellulose dissolution and regeneration in ionic liquids: A computational perspective. Chemical Engineering Science, 2015, 121, 180-189.	1.9	111

#	Article	IF	Citations
276	An unexpected increase of toxicity of amino acid-containing ionic liquids. Toxicology Research, 2015, 4, 152-159.	0.9	75
277	Factors governing dissolution process of lignocellulosic biomass in ionic liquid: Current status, overview and challenges. Bioresource Technology, 2015, 178, 2-18.	4.8	212
278	Ionic liquids: not always innocent solvents for cellulose. Green Chemistry, 2015, 17, 231-243.	4.6	159
279	Effect of anion structures on cholinium ionic liquids pretreatment of rice straw and the subsequent enzymatic hydrolysis. Biotechnology and Bioengineering, 2015, 112, 65-73.	1.7	120
280	[C4H8SO3Hmim]HSO4 as an efficient catalyst for direct liquefaction of bagasse lignin: Decomposition properties of the inner structural units. Chemical Engineering Science, 2015, 122, 24-33.	1.9	93
281	Ionic liquids as solvents for making composite materials from cellulose. Proceedings of the Estonian Academy of Sciences, 2016, 65, 255.	0.9	18
282	In Situ Saccharification of Cellulose using a Cellulase Mixture and Supplemental Î²-glucosidase in Aqueous-Ionic Liquid Media. BioResources, 2016, 11, .	0.5	2
283	The Properties of Choline Chloride-based Deep Eutectic Solvents and their Performance in the Dissolution of Cellulose. BioResources, 2016, 11, .	0.5	50
284	Synthesis of a Novel Allyl-Functionalized Deep Eutectic Solvent to Promote Dissolution of Cellulose. BioResources, 2016, 11, .	0.5	32
285	Direct Conversion of Monoâ€•and Polysaccharides into 5â€Hydroxymethylfurfural Using Ionicâ€Liquid Mixtures. ChemSusChem, 2016, 9, 2089-2096.	3.6	49
286	Selfâ€Healing Polysaccharide Hydrogel Based on Dynamic Covalent Enamine Bonds. Macromolecular Materials and Engineering, 2016, 301, 725-732.	1.7	90
287	Tuning the Hydrophilicity and Hydrophobicity of the Respective Cation and Anion: Reversible Phase Transfer of Ionic Liquids. Angewandte Chemie, 2016, 128, 8066-8070.	1.6	12
288	Fabrication of cellulose membrane with â€œimprinted morphologyâ€•and low crystallinity from spherulitic [Bmim]Cl. Journal of Applied Polymer Science, 2016, 133, .	1.3	4
289	Solutionâ€State Oneâ€•and Twoâ€Dimensional NMR Spectroscopy of Highâ€Molecularâ€Weight Cellulose. ChemSusChem, 2016, 9, 880-892.	3.6	29
290	Anion Bridging-Induced Structural Transformation of Cellulose Dissolved in Ionic Liquid. Journal of Physical Chemistry Letters, 2016, 7, 5156-5161.	2.1	27
291	Product as Reaction Solvent: An Unconventional Approach for Ionic Liquid Synthesis. Organic Process Research and Development, 2016, 20, 2080-2084.	1.3	25
293	Regioselectivity in Acetylation of Cellulose in Ionic Liquids. ChemistrySelect, 2016, 1, 2474-2478.	0.7	11
294	Impact of water dilution and cation tail length on ionic liquid characteristics: Interplay between polar and non-polar interactions. Journal of Chemical Physics, 2016, 145, 064504.	1.2	14

#	Article	IF	Citations
295	Communication: Nanoscale structure of tetradecyltrihexylphosphonium based ionic liquids. Journal of Chemical Physics, 2016, 144, 121102.	1.2	44
296	Enhancing the stability of ionic liquid media for cellulose processing: acetal protection or carbene suppression?. Green Chemistry, 2016, 18, 3758-3766.	4.6	32
297	Different characteristic effects of ageing on starch-based films plasticised by 1-ethyl-3-methylimidazolium acetate and by glycerol. Carbohydrate Polymers, 2016, 146, 67-79.	5.1	49
298	Local Structure in Terms of Nearest-Neighbor Approach in 1-Butyl-3-methylimidazolium-Based Ionic Liquids: MD Simulations. Journal of Physical Chemistry B, 2016, 120, 5029-5041.	1.2	30
299	Preparation of succinylated cellulose membranes for functionalization purposes. Carbohydrate Polymers, 2016, 148, 21-28.	5.1	25
300	Powerful peracetic acidâ€“ionic liquid pretreatment process for the efficient chemical hydrolysis of lignocellulosic biomass. Bioresource Technology, 2016, 214, 487-495.	4.8	36
301	Ionic liquid pretreatment of biomass for sugars production: Driving factors with a plausible mechanism for higher enzymatic digestibility. Carbohydrate Polymers, 2016, 149, 369-381.	5.1	66
302	Enhanced solubilization and extraction of hydrophobic bioactive compounds using water/ionic liquid mixtures. Green Chemistry, 2016, 18, 3549-3557.	4.6	40
303	Acidic Ionic Liquids. Chemical Reviews, 2016, 116, 6133-6183.	23.0	662
304	Ion-water wires in imidazolium-based ionic liquid/water solutions induce unique trends in density. Soft Matter, 2016, 12, 3032-3045.	1.2	30
305	Predictive screening of ionic liquids for dissolving cellulose and experimental verification. Green Chemistry, 2016, 18, 6246-6254.	4.6	110
306	Cellulose/microalgae composite films prepared in ionic liquids. Algal Research, 2016, 20, 135-141.	2.4	25
307	Synthesis and Characterization of Nitrile-functionalized Azepanium Ionic Liquids for the Dissolution of Cellulose. Procedia Engineering, 2016, 148, 385-391.	1.2	6
308	Natural Fiber Welding of Chitin and Chitosan on a Cotton Cloth Substrate: Novel Materials Displaying Antimicrobial Properties. ECS Transactions, 2016, 75, 693-700.	0.3	1
309	The enhancement of the hydrolysis of bamboo biomass in ionic liquid with chitosan-based solid acid catalysts immobilized with metal ions. Bioresource Technology, 2016, 220, 457-463.	4.8	17
310	Tuning phase behaviour of PEG-functionalized ionic liquids from UCST to LCST in alcoholâ€“water mixtures. Physical Chemistry Chemical Physics, 2016, 18, 29192-29198.	1.3	17
311	Pervaporation removal of water from ionic liquid solutions using Nafion membranes. Separation Science and Technology, 2016, 51, 2932-2939.	1.3	5
312	Volumetric, Ultrasonic and Viscometric Studies of Aspirin in the Presence of 1-Octyl-3-Methylimidazolium Bromide Ionic Liquid in Acetonitrile Solutions at T=(288.15â€“318.15) K. Zeitschrift Fur Physikalische Chemie, 2016, 230, 1773-1799.	1.4	16

#	Article	IF	Citations
313	Directed Discovery of Greener Cosolvents: New Cosolvents for Use in Ionic Liquid Based Organic Electrolyte Solutions for Cellulose Dissolution. ACS Sustainable Chemistry and Engineering, 2016, 4, 6200-6207.	3.2	36
314	Highly Ordered Rectangular Columnar Ionic Liquid Crystals: A More Efficient Medium for Intramolecular Diels Alder Reactions. ChemistrySelect, 2016, 1, 2448-2453.	0.7	9
315	High internal ionic liquid phase emulsion stabilized by metalâ€“organic frameworks. Soft Matter, 2016, 12, 8841-8846.	1.2	38
316	Green methods of lignocellulose pretreatment for biorefinery development. Applied Microbiology and Biotechnology, 2016, 100, 9451-9467.	1.7	225
317	Biofriendly ionic liquids for starch plasticization: a screening approach. RSC Advances, 2016, 6, 90331-90337.	1.7	36
318	In silico insights into the solvation characteristics of the ionic liquid 1-methyltriethoxy-3-ethylimidazolium acetate for cellulosic biomass. Physical Chemistry Chemical Physics, 2016, 18, 23715-23726.	1.3	17
319	Pulping of Crustacean Waste Using Ionic Liquids: To Extract or Not To Extract. ACS Sustainable Chemistry and Engineering, 2016, 4, 6072-6081.	3.2	73
320	Comparing the influence of acetate and chloride anions on the structure of ionic liquid pretreated lignocellulosic biomass. Biomass and Bioenergy, 2016, 93, 243-253.	2.9	49
321	Cellulose Solubility in Ionic Liquid Mixtures: Temperature, Cosolvent, and Antisolvent Effects. Journal of Physical Chemistry B, 2016, 120, 7906-7919.	1.2	129
322	Evaluation of novel applications of cellulose hydrogel films reconstituted from acetate and chloride of 1-butyl-3-methylimidazolium by comparing their optical, mechanical, and adsorption properties. Materials Today Communications, 2016, 8, 108-117.	0.9	12
324	Celluloseâ€Based Solid Fluorescent Materials. Advanced Optical Materials, 2016, 4, 2044-2050.	3.6	81
325	Extensional rheology of cellulose/NaOH/urea/H2O solutions. Cellulose, 2016, 23, 2877-2885.	2.4	6
326	Wood-Derived Materials for Green Electronics, Biological Devices, and Energy Applications. Chemical Reviews, 2016, 116, 9305-9374.	23.0	1,110
327	Renewability is not Enough: Recent Advances in the Sustainable Synthesis of Biomassâ€Derived Monomers and Polymers. Chemistry - A European Journal, 2016, 22, 11510-11521.	1.7	228
328	Influence of various anions and cations on electrochemical and physicochemical properties of the nanostructured Tunable Aryl Alkyl Ionic Liquids (TAAILs): A DFT M06-2X study. Thermochimica Acta, 2016, 639, 20-40.	1.2	20
329	Using a low melting solvent mixture to extract value from wood biomass. Scientific Reports, 2016, 6, 32420.	1.6	26
330	Understanding cellulose dissolution: effect of the cation and anion structure of ionic liquids on the solubility of cellulose. Science China Chemistry, 2016, 59, 1421-1429.	4.2	62
331	Synthesis of Highly Polymerized Water-soluble Cellulose Acetate by the Side Reaction in Carboxylate Ionic Liquid 1-ethyl-3-methylimidazolium Acetate. Scientific Reports, 2016, 6, 33725.	1.6	28

#	Article	IF	Citations
332	Cellulose as an adhesion agent for the synthesis of lignin aerogel with strong mechanical performance, Sound-absorption and thermal Insulation. Scientific Reports, 2016, 6, 32383.	1.6	70
333	Towards Better Understanding of Molecular Solvent Behavior in Ionic Liquid-Biopolymer Mixtures. ECS Transactions, 2016, 75, 677-683.	0.3	0
334	Electrodeposition in Ionic Liquids. ChemPhysChem, 2016, 17, 335-351.	1.0	117
335	Chitosan Containing Supported Ionic Liquid Phase Materials for CO₂ Absorption. Industrial & Engineering Chemistry Research, 2016, 55, 7052-7059.	1.8	30
336	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
337	Properties of Cellulose Regenerated from Powerful 1-Butyl-3-methylimidazolium Acetate/Dimethyl Sulfoxide Solvent. Journal of Macromolecular Science - Physics, 2016, 55, 559-565.	0.4	11
338	Green fabrication of cellulose/graphene composite in ionic liquid and its electrochemical and photothermal properties. Chemical Engineering Journal, 2016, 299, 45-55.	6.6	57
339	Tuning the Hydrophilicity and Hydrophobicity of the Respective Cation and Anion: Reversible Phase Transfer of Ionic Liquids. Angewandte Chemie - International Edition, 2016, 55, 7934-7938.	7.2	65
340	From models to lignin: Transition metal catalysis for selective bond cleavage reactions. Coordination Chemistry Reviews, 2016, 306, 510-532.	9.5	221
341	Transparent cellulose/Laponite nanocomposite films. Journal of Materials Science, 2016, 51, 4125-4133.	1.7	27
342	Three dimensional ink-jet printing of biomaterials using ionic liquids and co-solvents. Faraday Discussions, 2016, 190, 509-523.	1.6	47
343	Ionic liquid pretreatment as emerging approaches for enhanced enzymatic hydrolysis of lignocellulosic biomass. Biochemical Engineering Journal, 2016, 109, 252-267.	1.8	276
344	Prediction of cellulose dissolution in ionic liquids using molecular descriptors based QSAR model. Journal of Molecular Liquids, 2016, 215, 541-548.	2.3	16
345	Physicochemical and excess properties of binary mixtures of (1-alkyl-3-methylimidazoliumchloride/bromide + ethylene glycol) at T = (288.15 to 333.15) K. Chemical Papers, 2016, 70, .	1.0	2
346	Effects of spent tea leaf powder on the properties and functions of cellulose green composite films. Journal of Environmental Chemical Engineering, 2016, 4, 440-448.	3.3	64
347	Understanding the hydrogen bonds in ionic liquids and their roles in properties and reactions. Chemical Communications, 2016, 52, 6744-6764.	2.2	234
348	Solvent effects in catalysis: rational improvements of catalysts via manipulation of solvent interactions. Catalysis Science and Technology, 2016, 6, 3302-3316.	2.1	254
349	Efficient hydrolysis of cellulose over a magnetic lignin-derived solid acid catalyst in 1-butyl-3-methylimidazolium chloride. Korean Journal of Chemical Engineering, 2016, 33, 1232-1238.	1.2	16

#	Article	IF	Citations
350	Cellulose triacetate doped with ionic liquids for membrane gas separation. Polymer, 2016, 89, 1-11.	1.8	72
351	Spinodal Decomposition of a Polymer and Ionic Liquid Mixture: Effects of Electrostatic Interactions and Hydrogen Bonds on Phase Instability. Macromolecules, 2016, 49, 690-699.	2.2	21
352	Eco-friendly polysorbate aqueous solvents for efficient dissolution of lignin. RSC Advances, 2016, 6, 8377-8379.	1.7	15
353	Syntheses of flame-retardant cellulose esters and their fibers. Fibers and Polymers, 2016, 17, 1-8.	1.1	12
354	Effect of Alkyl Chain Branching on Physicochemical Properties of Imidazolium-Based Ionic Liquids. Journal of Chemical & Engineering Data, 2016, 61, 1078-1091.	1.0	84
355	Cellulose Chemistry and Properties: Fibers, Nanocelluloses and Advanced Materials. Advances in Polymer Science, 2016, , .	0.4	72
356	Room-Temperature Dissolution and Mechanistic Investigation of Cellulose in a Tetra-Butylammonium Acetate/Dimethyl Sulfoxide System. ACS Sustainable Chemistry and Engineering, 2016, 4, 2286-2294.	3.2	50
357	Ionic liquid-based materials: a platform to design engineered CO₂ separation membranes. Chemical Society Reviews, 2016, 45, 2785-2824.	18.7	347
358	Densities and conductivities of seven 1-allyl-3-methylimidazolium carboxylate ionic liquids. Journal of Molecular Liquids, 2016, 214, 192-195.	2.3	15
360	Leaching of Active Ingredients from Plants with Ionic Liquids. Green Chemistry and Sustainable Technology, 2016, , 135-165.	0.4	2
361	Extraction of Sandalwood Oil Using Ionic Liquids: Toward a â€œGreenerâ€•More Efficient Process. Green Chemistry and Sustainable Technology, 2016, , 121-133.	0.4	1
362	Nearly Ideal Polymer Network Ion Gel Prepared in pH-Buffering Ionic Liquid. Macromolecules, 2016, 49, 344-352.	2.2	48
363	Synthesis of hierarchical mesoporous Prussian blue analogues in ionic liquid/water/MgCl₂ and application in electrochemical reduction of CO₂. Green Chemistry, 2016, 18, 1869-1873.	4.6	22
364	Biochemical Conversion of Torrefied Norway Spruce After Pretreatment with Acid or Ionic Liquid. Bioenergy Research, 2016, 9, 355-368.	2.2	31
365	Application of tetra-n-methylammonium hydroxide on cellulose dissolution and isolation from sugarcane bagasse. Carbohydrate Polymers, 2016, 136, 979-987.	5.1	22
366	Hydrogels based on cellulose and chitin: fabrication, properties, and applications. Green Chemistry, 2016, 18, 53-75.	4.6	522
367	Synthesis of cellulose-derived carbon dots using acidic ionic liquid as a catalyst and its application for detection of Hg2+. Journal of Materials Science, 2016, 51, 861-867.	1.7	76
368	Highly efficient electrochemical reduction of CO₂ to CH₄ in an ionic liquid using a metalâ€“organic framework cathode. Chemical Science, 2016, 7, 266-273.	3.7	225

#	Article	IF	Citations
369	Computer-Aided Design of Ionic Liquids for High Cellulose Dissolution. ACS Sustainable Chemistry and Engineering, 2016, 4, 541-547.	3.2	51
370	Ionic liquids as solvents for PPTA oligomers. Green Chemistry, 2016, 18, 1639-1652.	4.6	54
371	Ionic liquids: A New Route for the Design of Epoxy Networks. ACS Sustainable Chemistry and Engineering, 2016, 4, 481-490.	3.2	56
372	Micron- and nano-cellulose fiber regenerated from ionic liquids. Journal of the Textile Institute, 2016, 107, 472-476.	1.0	12
373	Ionic liquid mediated technology for synthesis of cellulose acetates using different co-solvents. Carbohydrate Polymers, 2016, 135, 341-348.	5.1	51
374	Development of a rapid method for the quantification of cellulose in tobacco by 13 C CP/MAS NMR. Carbohydrate Polymers, 2016, 135, 121-127.	5.1	10
375	Kinetic analysis and process modeling for cellulose valorization in cooperative ionic liquid pairs. Catalysis Today, 2016, 264, 75-82.	2.2	3
376	Recent advances in regenerated cellulose materials. Progress in Polymer Science, 2016, 53, 169-206.	11.8	775
377	Cellulose gel dispersion: From pure hydrogel suspensions to encapsulated oil-in-water emulsions. Colloids and Surfaces B: Biointerfaces, 2016, 137, 70-76.	2.5	21
378	Electromechanical characterization of multilayer graphene-reinforced cellulose composite containing 1-ethyl-3-methylimidazolium diethylphosphonate ionic liquid. Science and Engineering of Composite Materials, 2017, 24, 289-295.	0.6	7
379	Competition between Cationâ€“Solvent and Cationâ€“Anion Interactions in Imidazolium Ionic Liquids with Polar Aprotic Solvents. ChemPhysChem, 2017, 18, 718-721.	1.0	21
380	Application of ionic liquids for dissolving cellulose and fabricating cellulose-based materials: state of the art and future trends. Materials Chemistry Frontiers, 2017, 1, 1273-1290.	3.2	304
381	Impact of Water-Dilution on the Solvation Properties of the Ionic Liquid 1-Methyltriethoxy-3-ethylimidazolium Acetate for Model Biomass Molecules. Journal of Physical Chemistry B, 2017, 121, 843-853.	1.2	23
382	Very High Concentration Solubility and Long-Term Stability of DNA in an Ammonium-Based Ionic Liquid: A Suitable Medium for Nucleic Acid Packaging and Preservation. ACS Sustainable Chemistry and Engineering, 2017, 5, 1998-2005.	3.2	49
383	A mechanistic insight into the organocatalytic properties of imidazolium-based ionic liquids and a positive co-solvent effect on cellulose modification reactions in an ionic liquid. RSC Advances, 2017, 7, 9423-9430.	1.7	41
384	Ionic-Liquid-Mediated Extraction and Separation Processes for Bioactive Compounds: Past, Present, and Future Trends. Chemical Reviews, 2017, 117, 6984-7052.	23.0	689
385	Interactions in Waterâ€“Ionic Liquid Mixtures: Comparing Protic and Aprotic Systems. Journal of Physical Chemistry B, 2017, 121, 599-609.	1.2	60
386	A facile and efficient route to hydrophilic ionic liquids through metathesis reaction performed in saturated aqueous solution. Green Chemistry, 2017, 19, 1303-1307.	4.6	8

#	Article	IF	Citations
387	GCâ€“MS study of thermochemical conversion of guaifenesin in the presence of 1-butyl-3-methylimidazolium-based ionic liquids. Research on Chemical Intermediates, 2017, 43, 4007-4021.	1.3	3
388	Biological Activity of Ionic Liquids and Their Application in Pharmaceutics and Medicine. Chemical Reviews, 2017, 117, 7132-7189.	23.0	1,201
389	Comparative study of the intermolecular dynamics of imidazolium-based ionic liquids with linear and branched alkyl chains: OHD-RIKES measurements. Physical Chemistry Chemical Physics, 2017, 19, 4661-4672.	1.3	4
390	Functionalization of cellulose nanocrystals for advanced applications. Journal of Colloid and Interface Science, 2017, 494, 397-409.	5.0	351
391	Plants to Polyelectrolytes: Theophylline Polymers and Their Microsphere Synthesis. Macromolecular Rapid Communications, 2017, 38, 1600748.	2.0	5
392	Ionic Liquid as Reaction Medium for Synthesis of Hierarchically Structured One-Dimensional MoO₂ for Efficient Hydrogen Evolution. ACS Applied Materials & Interfaces, 2017, 9, 7217-7223.	4.0	91
393	A 3D titanate aerogel with cellulose as the adsorption-aggregator for highly efficient water purification. Journal of Materials Chemistry A, 2017, 5, 5813-5819.	5.2	62
394	Are Ionic Liquids Chemically Stable?. Chemical Reviews, 2017, 117, 7113-7131.	23.0	463
395	Aqueous Biphasic Systems of Pyrrolidinium Ionic Liquids with Organic Acid-Derived Anions and K₃PO₄. Journal of Chemical & Engineering Data, 2017, 62, 1182-1188.	1.0	7
396	Why Only Ionic Liquids with Unsaturated Heterocyclic Cations Can Dissolve Cellulose: A Simulation Study. ACS Sustainable Chemistry and Engineering, 2017, 5, 3417-3428.	3.2	80
397	Solvent-based delignification and decrystallization of wheat straw for efficient enzymatic hydrolysis of cellulose and ethanol production with low cellulase loadings. RSC Advances, 2017, 7, 10609-10617.	1.7	26
398	Pretreatment of oil palm trunk in deep eutectic solvent and optimization of enzymatic hydrolysis of pretreated oil palm trunk. Renewable Energy, 2017, 107, 36-41.	4.3	107
399	Preparation of high purity silica originated from rice husks by chemically removing metallic impurities. Journal of Industrial and Engineering Chemistry, 2017, 50, 79-85.	2.9	59
400	Cellobiose as a model compound for cellulose to study the interactions in cellulose/lithium chloride/N-methyl-2-pyrrolidone systems. Cellulose, 2017, 24, 1621-1629.	2.4	20
401	Effective Dissolution of Biomass in Ionic Liquids by Irradiation of Non-Thermal Atmospheric Pressure Plasma. Australian Journal of Chemistry, 2017, 70, 731.	0.5	1
402	Nicotine-based surface active ionic liquids: Synthesis, self-assembly and cytotoxicity studies. Journal of Colloid and Interface Science, 2017, 496, 278-289.	5.0	41
403	Tetramethylguanidine-based gels and colloids of cellulose. Carbohydrate Polymers, 2017, 169, 58-64.	5.1	9
404	Cellulose acetate as a convenient intermediate for the preparation of 5-acetoxymethylfurfural from biomass. Green Chemistry, 2017, 19, 2496-2500.	4.6	20

#	Article	IF	Citations
405	Ionic liquids assisted processing of renewable resources for the fabrication of biodegradable composite materials. Green Chemistry, 2017, 19, 2051-2075.	4.6	118
406	Reutilization of discarded biomass for preparing functional polymer materials. Waste Management, 2017, 65, 11-21.	3.7	60
407	Is Carbene Formation Necessary for Dissolving Cellulose in Ionic Liquids?. Journal of Physical Chemistry B, 2017, 121, 4521-4529.	1.2	13
408	Polarization Effects on the Cellulose Dissolution in Ionic Liquids: Molecular Dynamics Simulations with Polarization Model and Integrated Tempering Enhanced Sampling Method. Journal of Physical Chemistry B, 2017, 121, 4319-4332.	1.2	10
409	Mechanical and electrical properties of calcinated tea-based cellulose composite films. Proceedings of SPIE, 2017, , .	0.8	0
410	One-pot integrated biofuel production using low-cost biocompatible protic ionic liquids. Green Chemistry, 2017, 19, 3152-3163.	4.6	115
411	The role and potential of morpholinium-based ionic liquids in dissolution of cellulose. European Polymer Journal, 2017, 92, 204-212.	2.6	15
412	Facile Preparation of Starch-Based Electroconductive Films with Ionic Liquid. ACS Sustainable Chemistry and Engineering, 2017, 5, 5457-5467.	3.2	58
413	Multiscale Studies on Ionic Liquids. Chemical Reviews, 2017, 117, 6636-6695.	23.0	584
414	Calcinated tea and cellulose composite films and its dielectric and lead adsorption properties. Carbohydrate Polymers, 2017, 171, 183-192.	5.1	36
415	The use of ionic liquid pretreatment of rye straw for bioethanol production. Fuel, 2017, 191, 266-274.	3.4	50
416	Quantum Chemical Modeling of Hydrogen Bonding in Ionic Liquids. Topics in Current Chemistry, 2017, 375, 59.	3.0	48
417	Microwave-assisted degradation of guaifenesin (GGE) to produce novel compounds in the presence of imidazolium-based ionic liquids. Journal of Thermal Analysis and Calorimetry, 2017, 130, 1513-1529.	2.0	1
418	Combining random walk and regression models to understand solvation in multi-component solvent systems. Physical Chemistry Chemical Physics, 2017, 19, 17805-17815.	1.3	2
419	Long-Chain Carboxylate Ionic Liquids Combining High Solubility and Low Viscosity for Light Hydrocarbon Separations. Industrial & Engineering Chemistry Research, 2017, 56, 7336-7344.	1.8	25
420	Self-aggregation of trehalose in the mixed solvents of 1,3-dimethylimidazolium ionic liquid and water. Molecular Simulation, 2017, 43, 1160-1171.	0.9	0
421	C2-Functionalized 1,3-dialkylimidazolium ionic liquids for efficient cellulose dissolution. Journal of Molecular Liquids, 2017, 234, 111-116.	2.3	9
422	Synthesis and characterization of a tin(<scp>iv</scp>) antimonophosphate nano-composite membrane incorporating 1-dodecyl-3-methylimidazolium bromide ionic liquid. RSC Advances, 2017, 7, 12561-12569.	1.7	8

#	Article	IF	Citations
423	Temperature-Responsive Ionic Liquids: Fundamental Behaviors and Catalytic Applications. Chemical Reviews, 2017, 117, 6881-6928.	23.0	264
424	Ionic liquids: Promising green solvents for lignocellulosic biomass utilization. Current Opinion in Green and Sustainable Chemistry, 2017, 5, 5-11.	3.2	238
425	Understanding the role of water in the interaction of ionic liquids with wood polymers. Carbohydrate Polymers, 2017, 168, 121-128.	5.1	16
426	Efficiency of hydrophobic phosphonium ionic liquids and DMSO as recyclable cellulose dissolution and regeneration media. RSC Advances, 2017, 7, 17451-17461.	1.7	36
427	Efficient conversion of fructose into 5-ethoxymethylfurfural with hydrogen sulfate ionic liquids as co-solvent and catalyst. Chemical Engineering Journal, 2017, 314, 508-514.	6.6	84
428	Ionic liquids and deep eutectic solvents for lignocellulosic biomass fractionation. Physical Chemistry Chemical Physics, 2017, 19, 2636-2665.	1.3	217
429	Theoretical Modeling of Vibrational Spectra in the Liquid Phase. Springer Theses, 2017, , .	0.0	8
430	Imidazolium-based ionic liquids for cellulose pretreatment: recent progresses and future perspectives. Applied Microbiology and Biotechnology, 2017, 101, 521-532.	1.7	98
431	Nanoconfined Ionic Liquids. Chemical Reviews, 2017, 117, 6755-6833.	23.0	499
432	Formation of cellulose-carbene complex via depolymerization in ILs: Dependence of IL types on kinetics, conformation and dispersity. Carbohydrate Polymers, 2017, 159, 86-93.	5.1	5
433	Cellulose dissolution: insights on the contributions of solvent-induced decrystallization and chain disentanglement. Cellulose, 2017, 24, 571-590.	2.4	48
434	On the Anion Exchange of PX₃ (X = Cl, Br, I) in Ionic Liquids comprising Halide Anions. Zeitschrift Fur Anorganische Und Allgemeine Chemie, 2017, 643, 20-24.	0.6	9
435	Breaking the paradigm: record quindecim charged magnetic ionic liquids. Materials Horizons, 2017, 4, 217-221.	6.4	20
436	Influence of an ionic liquid on the conformational sampling of Xaa-Pro dipeptides. Journal of Molecular Liquids, 2017, 227, 66-75.	2.3	7
437	Green and Efficient Processing of Cinnamomum cassia Bark by Using Ionic Liquids: Extraction of Essential Oil and Construction of UVâ€Resistant Composite Films from Residual Biomass. Chemistry - an Asian Journal, 2017, 12, 3150-3155.	1.7	18
438	Viscosity and Rheology of Ionic Liquid Mixtures Containing Cellulose and Cosolvents for Advanced Processing. ACS Symposium Series, 2017, , 189-208.	0.5	4
439	Biphasic Extraction, Recovery and Identification of Organic and Inorganic Compounds with Ionic Liquids. ACS Symposium Series, 2017, , 283-302.	0.5	2
440	Effect of coagulating agent viscosity on the kinetics of formation, morphology, and transport properties of cellulose nanofiltration membranes. Polymer Science - Series A, 2017, 59, 676-684.	0.4	10

#	Article	IF	Citations
441	Lactate-Based Ionic Liquid Catalyzed Reductive Amination/Cyclization of Keto Acids under Mild Conditions: A Metal-Free Route To Synthesize Lactams. ACS Catalysis, 2017, 7, 7772-7776.	5.5	51
442	Dissolution performance of cellulose in MIM plus tetrabutylammonium propionate solvent. Journal of Molecular Liquids, 2017, 246, 153-156.	2.3	12
443	Synthesis of Triazole Based Novel Ionic Liquids and Salts. Organic Preparations and Procedures International, 2017, 49, 370-376.	0.6	6
444	An insight into the influence of hydrogen bond acceptors on cellulose/1-allyl-3-methyl imidazolium chloride solution. Carbohydrate Polymers, 2017, 178, 295-301.	5.1	16
445	Investigation of accessibility and reactivity of cellulose pretreated by ionic liquid at high loading. Carbohydrate Polymers, 2017, 176, 365-373.	5.1	27
446	Organic electrolyte solutions as versatile media for the dissolution and regeneration of cellulose. Green Chemistry, 2017, 19, 4754-4768.	4.6	40
447	Mixtures of ionic liquids as more efficient media for cellulose dissolution. Carbohydrate Polymers, 2017, 178, 277-285.	5.1	58
448	Molecular weight fractionation of high polydispersity native celluloses. Cellulose, 2017, 24, 5261-5265.	2.4	5
449	Preparation of disk-like cellulose particles. Cellulose, 2017, 24, 3111-3118.	2.4	4
450	Prospective Symbiosis of Green Chemistry and Energetic Materials. ChemSusChem, 2017, 10, 3914-3946.	3.6	87
451	Green and combinational method towards clickable alkynylated cellulose fibers (ACFs). Cellulose, 2017, 24, 3219-3229.	2.4	10
452	Efficient and sustainable solvents for lignin dissolution: aqueous choline carboxylate solutions. Green Chemistry, 2017, 19, 4067-4073.	4.6	59
453	Nanoscopic Study on Aliphatic Choline-Based Naphthenic Acid Ionic Liquids: Structural and Dynamical Properties. Journal of Physical Chemistry B, 2017, 121, 7946-7962.	1.2	7
454	Design of celluloseâ€“alginate films using PEG/NaOH aqueous solution as co-solvent. Cellulose, 2017, 24, 4419-4431.	2.4	8
455	Accurate prediction of energetic properties of ionic liquid clusters using a fragment-based quantum mechanical method. Physical Chemistry Chemical Physics, 2017, 19, 20657-20666.	1.3	35
457	Poly(ether imide sulfone) Membranes from Solutions in Ionic Liquids. Industrial & Engineering Chemistry Research, 2017, 56, 14914-14922.	1.8	16
458	Transparent Woody Film Made by Dissolution of Finely Divided Japanese Beech in Formic Acid at Room Temperature. ACS Sustainable Chemistry and Engineering, 2017, 5, 11536-11542.	3.2	19
459	Cellulose/polyaniline derivatives nanocomposites: Synthesis and their performance in removal of anionic dyes from simulated industrial effluents. Journal of Applied Polymer Science, 2017, 134, 45352.	1.3	29

#	Article	IF	Citations
460	On the dissolution of cellulose in tetrabutylammonium acetate/dimethyl sulfoxide: a frustrated solvent. Cellulose, 2017, 24, 3645-3657.	2.4	36
461	Thermal and mechanical properties of chitosan nanocomposites with cellulose modified in ionic liquids. Journal of Thermal Analysis and Calorimetry, 2017, 130, 143-154.	2.0	59
462	Linking the structures, free volumes, and properties of ionic liquid mixtures. Chemical Science, 2017, 8, 6359-6374.	3.7	74
463	Freezing Point Determination of Waterâ€“Ionic Liquid Mixtures. Journal of Chemical & Engineering Data, 2017, 62, 2374-2383.	1.0	12
464	Ionic liquid mediated technology for fabrication of cellulose film using gutta percha as an additive. Industrial Crops and Products, 2017, 108, 140-148.	2.5	16
465	Thioglycolate-based task-specific ionic liquids: Metal extraction abilities vs acute algal toxicity. Journal of Hazardous Materials, 2017, 340, 113-119.	6.5	29
466	Assessing the reliability of computing ion pair lifetimes and self-diffusivity to predict experimental viscosity trends of ionic liquids. Molecular Systems Design and Engineering, 2017, 2, 293-300.	1.7	14
467	AIE-doped poly(ionic liquid) photonic spheres: a single sphere-based customizable sensing platform for the discrimination of multi-analytes. Chemical Science, 2017, 8, 6281-6289.	3.7	64
468	Room temperature dissolution of cellulose in tetra-butylammonium hydroxide aqueous solvent through adjustment of solvent amphiphilicity. Cellulose, 2017, 24, 49-59.	2.4	34
469	Direct Ethanol Production from Ionic Liquid-Pretreated Lignocellulosic Biomass by Cellulase-Displaying Yeasts. Applied Biochemistry and Biotechnology, 2017, 182, 229-237.	1.4	41
470	Morphological change of thermosensitive imidazoliumâ€based poly(ionic) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 347 Td (liquid)/poly(phe 28, 470-475.	1.6	0
471	Synthesis and spectroscopic properties of symmetrical ionic liquids based on (â^')-menthol. Journal of Molecular Liquids, 2017, 226, 63-70.	2.3	5
472	Catalytic Transformation of Lignocellulose into Chemicals and Fuel Products in Ionic Liquids. Chemical Reviews, 2017, 117, 6834-6880.	23.0	706
473	A facile and efficient strategy for the fabrication of porous linseed gum/cellulose superabsorbent hydrogels for water conservation. Carbohydrate Polymers, 2017, 157, 1830-1836.	5.1	53
474	Effect of cationic structure of ionic liquids on dissolution and regeneration of white hide powder. Fibers and Polymers, 2017, 18, 1512-1522.	1.1	5
475	Cellulose-xyloglucan composite film processing using ionic liquids as co-solvents. AIP Conference Proceedings, 2017, , .	0.3	1
476	Development of a biosensor for selective detection of phytopathogenic pythiums. , 2017, , .		2
477	Crystallinity of regenerated cellulose from [Bmim]Cl dependent on the hydrogen bond acidity/basicity of anti-solvents. RSC Advances, 2017, 7, 41004-41010.	1.7	18

#	Article	IF	Citations
478	Applications of Ionic Liquids for the Development of Optical Chemical Sensors and Biosensors. Analytical Sciences, 2017, 33, 261-265.	0.8	56
480	Ionic Liquids and Neutron Scattering. Experimental Methods in the Physical Sciences, 2017, 49, 213-278.	0.1	7
481	Modification of Cellulose with Succinic Anhydride in TBAA/DMSO Mixed Solvent under Catalyst-Free Conditions. Materials, 2017, 10, 526.	1.3	21
482	Nano-Structural Investigation on Cellulose Highly Dissolved in Ionic Liquid: A Small Angle X-ray Scattering Study. Molecules, 2017, 22, 178.	1.7	17
483	Pretreatment of Lignocellulosic Biomass with Ionic Liquids and Ionic Liquid-Based Solvent Systems. Molecules, 2017, 22, 490.	1.7	117
484	Sustainable and Low Viscous 1-Allyl-3-methylimidazolium Acetate + PEG Solvent for Cellulose Processing. Polymers, 2017, 9, 54.	2.0	9
485	Ionic Liquid as Reaction Media for the Production of Cellulose-Derived Polymers from Cellulosic Biomass. ChemEngineering, 2017, 1, 10.	1.0	28
486	Properties of Ionic Liquids. , 2017, , 45-110.		3
487	Bioplastics from agro-wastes for food packaging applications. , 2017, , 223-263.		25
488	Unraveling variations of crystalline cellulose induced by ionic liquid and their effects on enzymatic hydrolysis. Scientific Reports, 2017, 7, 10230.	1.6	83
489	THEORETICAL STUDY ON INTERACTIONS BETWEEN IONIC LIQUID AND CHITIN/CHITOSAN/CELLULOSE. Journal of the Chilean Chemical Society, 2017, 62, 3668-3676.	0.5	3
490	Use of Ionic Liquids for the Treatment of Biomass Materials and Biofuel Production. , 2017, , .		1
491	Biomass Utilization. , 2017, , 203-220.		1
492	Measurement and Correlation of CO₂ Solubility in 1-Ethyl-3-methylimidazolium ([EMIM]) Cation-Based Ionic Liquids: [EMIM][Ac], [EMIM][Cl], and [EMIM][MeSO₄]. Journal of Chemical & Engineering Data, 2018, 63, 508-518.	1.0	19
493	Conceptually Novel Black Phosphorus/Cellulose Hydrogels as Promising Photothermal Agents for Effective Cancer Therapy. Advanced Healthcare Materials, 2018, 7, e1701510.	3.9	188
494	Probing spatial locality in ionic liquids with the grand canonical adaptive resolution molecular dynamics technique. Journal of Chemical Physics, 2018, 148, 193804.	1.2	19
495	Converting Waste Papers to Fluorescent Carbon Dots in the Recycling Process without Loss of Ionic Liquids and Bioimaging Applications. ACS Sustainable Chemistry and Engineering, 2018, 6, 4510-4515.	3.2	75
496	Industrial uses and applications of ionic liquids. ChemistrySelect, 2018, 3, .	0.7	18

#	Article	IF	Citations
497	Emerging Thermalâ€Responsive Materials and Integrated Techniques Targeting the Energyâ€Efficient Smart Window Application. Advanced Functional Materials, 2018, 28, 1800113.	7.8	322
498	The Green ChemisTREE: 20 years after taking root with the 12 principles. Green Chemistry, 2018, 20, 1929-1961.	4.6	499
499	Development of Acidic Imidazolium Ionic Liquids for Activation of Kraft Lignin by Controlled Oxidation: Comprehensive Evaluation and Practical Utility. ChemPlusChem, 2018, 83, 361-374.	1.3	17
500	Ionic liquid: green solvent for the synthesis of cellulose/guar gum/PVA biocomposite. Green Materials, 2018, 6, 23-29.	1.1	18
501	â€œSolvent-in-saltâ€•systems for design of new materials in chemistry, biology and energy research. Chemical Society Reviews, 2018, 47, 1250-1284.	18.7	151
502	Lactic Acid Production from Renewable Feedstock: Fractionation, Hydrolysis, and Fermentation. Advanced Sustainable Systems, 2018, 2, 1700185.	2.7	4
503	Ionic liquids and derived materials for lithium and sodium batteries. Chemical Society Reviews, 2018, 47, 2020-2064.	18.7	452
504	Cellulose Dissolution in a Mixed Solvent of Tetra(n-butyl)ammonium Hydroxide/Dimethyl Sulfoxide via Radical Reactions. ACS Sustainable Chemistry and Engineering, 2018, 6, 2898-2904.	3.2	33
505	Optimization of Ionic Liquid Pretreatment of Mixed Softwood by Response Surface Methodology and Reutilization of Ionic Liquid from Hydrolysate. Biotechnology and Bioprocess Engineering, 2018, 23, 228-237.	1.4	29
506	Solvent Water Content as a Factor in the Design of Metal Ion Extraction Systems Employing Ionic Liquids. Solvent Extraction and Ion Exchange, 2018, 36, 191-205.	0.8	3
507	A molecular dynamics study of cellulose inclusion complexes in NaOH/urea aqueous solution. Carbohydrate Polymers, 2018, 185, 12-18.	5.1	14
508	Cellulose-based membranes via phase inversion using [EMIM]OAc-DMSO mixtures as solvent. Chemical Engineering Science, 2018, 178, 93-103.	1.9	49
509	Green profiling of aprotic versus protic ionic liquids: Synthesis and microbial toxicity of analogous structures. Sustainable Chemistry and Pharmacy, 2018, 7, 17-26.	1.6	32
510	Fabrication of Cellulose Aerogels Using a Green/Clean Procedure. Journal of Macromolecular Science - Physics, 2018, 57, 1-7.	0.4	10
511	Electronic structure, spectral characteristics and physicochemical properties of linear, branched and cyclic alkyl group substituted 1-alkyl-3-butylimidazolium cation based ionic liquids. Journal of Molecular Liquids, 2018, 251, 394-406.	2.3	11
512	Cellulose Crystal Dissolution in Imidazolium-Based Ionic Liquids: A Theoretical Study. Journal of Physical Chemistry B, 2018, 122, 258-266.	1.2	55
513	Ionic liquids in whole-cell biocatalysis: a compromise between toxicity and efficiency. Biophysical Reviews, 2018, 10, 881-900.	1.5	36
514	Extraction and recovery processes for cynaropicrin from Cynara cardunculus L. using aqueous solutions of surface-active ionic liquids. Biophysical Reviews, 2018, 10, 915-925.	1.5	18

#	Article	IF	Citations
515	Relationship between lignocellulosic biomass dissolution and physicochemical properties of ionic liquids composed of 3-methylimidazolium cations and carboxylate anions. Physical Chemistry Chemical Physics, 2018, 20, 2508-2516.	1.3	51
516	Separation and characterization of cellulose I material from corn straw by low-cost polyhydric protic ionic liquids. Cellulose, 2018, 25, 3241-3254.	2.4	30
517	Effects of Dielectric Inhomogeneity and Electrostatic Correlation on the Solvation Energy of Ions in Liquids. Journal of Physical Chemistry B, 2018, 122, 6064-6071.	1.2	20
518	Efficient pretreatment of bagasse at high loading in an ionic liquid. Industrial Crops and Products, 2018, 119, 243-248.	2.5	22
519	Structure, properties and interactions in ionomer/lignin blends. Materials and Design, 2018, 152, 129-139.	3.3	16
520	Computational solvation analysis of biomolecules in aqueous ionic liquid mixtures. Biophysical Reviews, 2018, 10, 825-840.	1.5	14
521	Ionic liquids: a brief history. Biophysical Reviews, 2018, 10, 691-706.	1.5	658
522	Multiscale modelling strategies and experimental insights for the solvation of cellulose and hemicellulose in ionic liquids. Molecular Physics, 2018, 116, 2108-2128.	0.8	28
523	Towards a molecular understanding of cellulose dissolution in ionic liquids: anion/cation effect, synergistic mechanism and physicochemical aspects. Chemical Science, 2018, 9, 4027-4043.	3.7	189
524	Voltammetric Perspectives on the Acidity Scale and H⁺/H₂ Process in Ionic Liquid Media. Annual Review of Analytical Chemistry, 2018, 11, 397-419.	2.8	8
525	Ionic Liquid Modified Poly(vinyl alcohol) with Improved Thermal Processability and Excellent Electrical Conductivity. Industrial & Engineering Chemistry Research, 2018, 57, 5472-5481.	1.8	43
526	In situ monitoring the moisture absorption of three ionic liquids with different halogen anions by ATR-FTIR spectroscopy. Journal of Molecular Structure, 2018, 1164, 297-302.	1.8	6
527	Preparation and Properties of Cellulose/Tamarind Nut Powder Green Composites. Journal of Natural Fibers, 2018, 15, 11-20.	1.7	33
528	Dissolution of antibiotics mycelium in ionic liquids: Performance and mechanism. Chinese Journal of Chemical Engineering, 2018, 26, 252-258.	1.7	4
529	Sustainable Production of Fine Chemicals and Materials Using Nontoxic Renewable Sources. Toxicological Sciences, 2018, 161, 214-224.	1.4	14
530	Adsorption of malachite green from aqueous solution by using novel chitosan ionic liquid beads. International Journal of Biological Macromolecules, 2018, 107, 1270-1277.	3.6	114
531	Novel dihydrogen-bonding deep eutectic solvents: Pretreatment of rice straw for butanol fermentation featuring enzyme recycling and high solvent yield. Chemical Engineering Journal, 2018, 333, 712-720.	6.6	106
532	Diffusion of redox active molecules in deep eutectic solvents. Journal of Electroanalytical Chemistry, 2018, 819, 214-219.	1.9	25

#	Article	IF	Citations
533	Green synthesis of monolithic column incorporated with graphene oxide using room temperature ionic liquid and eutectic solvents for capillary electrochromatography. Talanta, 2018, 178, 763-771.	2.9	33
534	Nucleation and growth of microdroplets of ionic liquids deposited by physical vapor method onto different surfaces. Applied Surface Science, 2018, 428, 242-249.	3.1	25
535	Ultrasound-ionic liquid enhanced enzymatic and acid hydrolysis of biomass cellulose. Ultrasonics Sonochemistry, 2018, 41, 410-418.	3.8	72
536	How Does a Smart Polymer Respond to Imidazolium-Based Ionic Liquids?. ACS Sustainable Chemistry and Engineering, 2018, 6, 1400-1410.	3.2	15
537	Manufacturing & characterization of regenerated cellulose/curcumin based sustainable composites fibers spun from environmentally benign solvents. Industrial Crops and Products, 2018, 111, 536-543.	2.5	17
538	Dissolution of oligo(tetrafluoroethylene) and preparation of poly(tetrafluoroethylene)-based composites by using fluorinated ionic liquids. Chemical Communications, 2018, 54, 409-412.	2.2	13
539	Pretreatment of Lignocellulosic Biomass Toward Biofuel Production. Biofuel and Biorefinery Technologies, 2018, , 203-221.	0.1	21
540	Mild condition dissolution of high molecular weight cotton cellulose in 1â€butylâ€3â€methylimidazolium acetate/N,Nâ€dimethylacetamide solvent system. Journal of Applied Polymer Science, 2018, 135, 45928.	1.3	14
541	Effect of Tetrahydrofuran on the Solubilization and Depolymerization of Cellulose in a Biphasic System. ChemSusChem, 2018, 11, 397-405.	3.6	36
542	Synthesis, characterization and cellulose dissolution capabilities of ammonium-based room temperature ionic liquids (RTILs). Pure and Applied Chemistry, 2018, 90, 1019-1034.	0.9	9
543	Recent advances of ionic liquids for transdermal drug delivery systems. Drug Delivery System, 2018, 33, 303-310.	0.0	0
544	Ionic Liquid- Mediated Pretreatment and Saccharification. , 2018, , 1-21.		0
546	Transformation of cellulosic saccharides into alkyl glucosides catalyzed by bifunctional ionic liquids. Chemical Communications, 2018, 54, 11969-11972.	2.2	2
548	4. Industrial uses and applications of ionic liquids. , 2018, , 43-58.		1
549	Morphology Control of Porous Cellulose Particles by Tuning the Surface Tension of Media during Drying. Langmuir, 2018, 34, 15490-15494.	1.6	8
550	Spinning Cellulose Hollow Fibers Using 1-Ethyl-3-methylimidazolium Acetateâ€“Dimethylsulfoxide Co-Solvent. Polymers, 2018, 10, 972.	2.0	24
554	Physicochemical Aspects of Cellulose Processing Using Ionic Solvents. Review. Fibre Chemistry, 2018, 50, 139-143.	0.0	2
555	Ionic Liquid Property Effects on the Natural Fiber Welding Process. ECS Transactions, 2018, 86, 249-255.	0.3	2

#	Article	IF	Citations
556	Biopolymer-Based Composite Materials Prepared Using Ionic Liquids. Advances in Biochemical Engineering/Biotechnology, 2018, 168, 133-176.	0.6	6
557	Organophosphate anion based low viscosity ionic liquids as oil-miscible additives for lubrication enhancement. Journal of Molecular Liquids, 2018, 272, 430-438.	2.3	26
558	Integration of Functional Nanomaterials in Biopolymer Composites Using Ionic Liquid Based Methods. ECS Transactions, 2018, 86, 287-296.	0.3	4
559	Review on the Production of Polysaccharide Aerogel Particles. Materials, 2018, 11, 2144.	1.3	181
561	Polyoxometalate catalysts for biomass dissolution: understanding and design. Physical Sciences Reviews, 2018, 3, .	0.8	0
563	Microscopic and Macroscopic Properties of Carbohydrate Solutions in the Ionic Liquid 1-Ethyl-3-methyl-imidazolium Acetate. Journal of Physical Chemistry B, 2018, 122, 8763-8771.	1.2	9
564	Superheated steam pretreatment of cellulose affects its electrospinnability for microfibrillated cellulose production. Cellulose, 2018, 25, 3853-3859.	2.4	40
565	Preparation of cellulose colloidal particles in aqueous solution with good photochromic and photoluminescent performances by grafting a spiropyran derivative onto filter paper cellulose. Cellulose, 2018, 25, 4067-4078.	2.4	7
566	Evaluation of six ionic liquids and application in pretreatment of sweet sorghum bagasse for bacterial nanocellulose production. Journal of Chemical Technology and Biotechnology, 2018, 93, 3452-3461.	1.6	6
567	Functionalized Imidazalium Carboxylates for Enhancing Practical Applicability in Cellulose Processing. Macromolecules, 2018, 51, 4158-4166.	2.2	55
568	Environmentally friendly pathways towards the synthesis of vinyl-based oligocelluloses. Carbohydrate Polymers, 2018, 193, 196-204.	5.1	24
569	Solvent processing of cellulose for effective bioresource utilization. Current Opinion in Green and Sustainable Chemistry, 2018, 14, 40-52.	3.2	31
570	Lowâ€energy collisionâ€induced dissociation (lowâ€energy CID), collisionâ€induced dissociation (CID), and higher energy collision dissociation (HCD) mass spectrometry for structural elucidation of saccharides and clarification of their dissolution mechanism in DMAc/LiCl. Journal of Mass Spectrometry, 2018, 53, 705-716.	0.7	15
571	Role of low-concentration acetic acid in promoting cellulose dissolution. Cellulose, 2018, 25, 4389-4405.	2.4	19
572	All-cellulose composites based on the self-reinforced effect. Composites Communications, 2018, 9, 42-53.	3.3	51
573	Dissolving process of bamboo powder analyzed by FT-IR spectroscopy. Journal of Molecular Structure, 2018, 1171, 639-643.	1.8	36
574	Ionic Liquid Stable Cellulases and Hemicellulases: Application in Biobased Production of Biofuels. , 2018, , 505-532.		3
575	Thermal stability of choline based amino acid ionic liquids. Journal of Molecular Liquids, 2018, 266, 597-602.	2.3	33

#	Article	IF	Citations
576	Raman Spectroscopy Characterization of Dissolved Polysilicon Byproduct SiCl₄ in Ionic Liquids. Journal of Spectroscopy, 2018, 2018, 1-5.	0.6	0
577	High strength cellulose/ATT composite films with good oxygen barrier property for sustainable packaging applications. Cellulose, 2018, 25, 4145-4154.	2.4	21
578	Mechanism of Glucose Conversion into 5-Ethoxymethylfurfural in Ethanol with Hydrogen Sulfate Ionic Liquid Additives and a Lewis Acid Catalyst. Energy & Fuels, 2018, 32, 8411-8419.	2.5	33
579	Comparison of the alkalinity of hydroxypyridine anion-based protic ionic liquids and their catalytic performance for Knoevenagel reaction: The effect of the type of cation and the position of nitrogen atom of anion. Journal of Molecular Liquids, 2018, 268, 610-616.	2.3	6
580	A synergetic effect of ionic liquid and microwave irradiation on the acid-catalyzed direct conversion of cellulose into methyl glucopyranoside. Holzforschung, 2018, 72, 1025-1030.	0.9	2
581	Recyclable Choline Nicotinate and Ferulate Aqueous Solutions as Efficient Lignin Solvents. Polymers, 2018, 10, 840.	2.0	4
582	Understanding dissolution process of chitin crystal in ionic liquids: theoretical study. Physical Chemistry Chemical Physics, 2018, 20, 20669-20677.	1.3	36
583	Computational prediction of cellulose solubilities in ionic liquids based on COSMO-RS. Fluid Phase Equilibria, 2018, 475, 25-36.	1.4	27
584	Ionic Liquids. , 2018, , 218-218.		7
585	Catalyst-free activation of kraft lignin in air using hydrogen sulfate ionic liquids. International Journal of Biological Macromolecules, 2018, 119, 431-437.	3.6	21
586	Characteristic Spectroscopic Features because of Cationâ€“Anion Interactions Observed in the 700â€“950 cm^{â€“1} Range of Infrared Spectroscopy for Various Imidazolium-Based Ionic Liquids. ACS Omega, 2018, 3, 8027-8035.	1.6	17
587	Binding characteristics of imidazolium-based ionic liquids with calf thymus DNA: Spectroscopy studies. Journal of Fluorine Chemistry, 2018, 213, 68-73.	0.9	15
588	Cellulose-Based Hydrogels for Medical/Pharmaceutical Applications. , 2018, , 401-439.		29
589	A Bibliometric Study of Scientific Publications regarding Hemicellulose Valorization during the 2000â€“2016 Period: Identification of Alternatives and Hot Topics. ChemEngineering, 2018, 2, 7.	1.0	26
590	Ionic Liquids Treated within the Grand Canonical Adaptive Resolution Molecular Dynamics Technique. Computation, 2018, 6, 23.	1.0	3
591	Recent Advances in Solvents for the Dissolution, Shaping and Derivatization of Cellulose: Quaternary Ammonium Electrolytes and their Solutions in Water and Molecular Solvents. Molecules, 2018, 23, 511.	1.7	56
592	A Novel Cellulose/Ionic Liquid Complex Crystal. Crystal Growth and Design, 2018, 18, 4260-4264.	1.4	13
593	Appraisal of 1â€Butylimidazoleâ€Derived Ionic Liquids as Anthelmintic Agents: An Experimental and In Silico Approach. ChemistrySelect, 2018, 3, 7518-7526.	0.7	4

#	Article	IF	Citations
594	Insights into the Inhibition of Acidic Hydrolysis of Cellulose by Its Solation. ACS Sustainable Chemistry and Engineering, 2018, 6, 10999-11007.	3.2	12
595	The performance of affordable and stable cellulose-based poly-ionic membranes in CO2/N2 and CO2/CH4 gas separation. Journal of Membrane Science, 2018, 564, 552-561.	4.1	69
596	Advances in Processing Chitin as a Promising Biomaterial from Ionic Liquids. Advances in Biochemical Engineering/Biotechnology, 2018, 168, 177-198.	0.6	9
597	Synthesis, structural characterization and luminescence properties of 1-carboxymethyl-3-ethylimidazolium chloride. Acta Crystallographica Section C, Structural Chemistry, 2018, 74, 653-658.	0.2	7
598	Determination of Extractant Solubility in Ionic Liquids by Thermogravimetric Analysis. Solvent Extraction and Ion Exchange, 2018, 36, 304-314.	0.8	3
599	Recent Advances of Multifunctional Cellulose-Based Hydrogels. Polymers and Polymeric Composites, 2018, , 1-28.	0.6	0
600	Structure-Property Relationships in Cellulose-Based Hydrogels. Polymers and Polymeric Composites, 2018, , 1-32.	0.6	4
601	Chemocatalytic Conversion of Cellulose into Key Platform Chemicals. International Journal of Polymer Science, 2018, 2018, 1-21.	1.2	21
602	Breaking down cellulose fibrils with a mid-infrared laser. Cellulose, 2018, 25, 5553-5568.	2.4	8
603	Toxicity of imidazoles ionic liquid [C16mim]Cl to HepG2 cells. Toxicology in Vitro, 2018, 52, 1-7.	1.1	39
604	High yield hydrolysis of seaweed-waste biomass using peracetic acid and ionic liquid treatments. AIP Conference Proceedings, 2018, , .	0.3	2
605	Amphiphilic Ionic Liquid-Induced Membrane Permeabilization: Binding Is Not Enough. Journal of Physical Chemistry B, 2018, 122, 6763-6770.	1.2	25
606	Unconventional synthesis, characterization and theoretical study (HF and DFT computations) of new cellulosic copper complex: benzyloxyethyl cellulose copper (CuBEC). Cellulose, 2018, 25, 4375-4388.	2.4	7
607	Anti-solvents tuning cellulose nanoparticles through two competitive regeneration routes. Cellulose, 2018, 25, 4513-4523.	2.4	21
608	Using cupriethylenediamine (CED) solution to decrease cellulose fibre network strength for removal of pulp fibre plugs. Canadian Journal of Chemical Engineering, 2019, 97, 662-667.	0.9	0
609	Production of high-yield short-chain oligomers from cellulose via selective hydrolysis in molten salt hydrates and separation. Green Chemistry, 2019, 21, 5030-5038.	4.6	32
610	Direct one-step synthesis of a formally fully bio-based polymer from cellulose and cinnamon flavor. Green Chemistry, 2019, 21, 4927-4931.	4.6	17
611	Alternative to the Popular Imidazolium Ionic Liquids: 1,2,4-Triazolium Ionic Liquids with Enhanced Thermal and Chemical Stability. ACS Sustainable Chemistry and Engineering, 2019, 7, 15995-16006.	3.2	20

#	Article	IF	Citations
612	Chitosan dissolution with sulfopropyl imidazolium BrÃ¶nsted acidic ionic liquids. Journal of Molecular Liquids, 2019, 293, 111533.	2.3	13
613	Separation of cellulose from industrial paper mill wastewater dried sludge using a commercial and cheap ionic liquid. Water Science and Technology, 2019, 79, 1897-1904.	1.2	7
614	Enhanced through-thickness thermal conductivity of epoxy with cellulose-supported boron nitride nanosheets. Polymer, 2019, 179, 121653.	1.8	12
615	Dissolution performance of cellulose in [A₂im][MOA]/MIM solvents. RSC Advances, 2019, 9, 20976-20981.	1.7	3
616	New dual functionalized zwitterions and ionic liquids; Synthesis and cellulose dissolution studies. Journal of Molecular Liquids, 2019, 292, 111353.	2.3	24
617	Solubilization and recovery of heat-aggregated cytochrome c using alkylammonium nitrate. Journal of Molecular Liquids, 2019, 291, 111239.	2.3	7
618	Screening Cellulose Spinning Parameters for Fabrication of Novel Carbon Hollow Fiber Membranes for Gas Separation. Industrial & Engineering Chemistry Research, 2019, 58, 13330-13339.	1.8	45
619	Study on ionic liquid/cellulose/coagulator phase diagram and its application in green spinning process. Journal of Molecular Liquids, 2019, 289, 111127.	2.3	20
620	Application of Ionic Liquids in Biotechnology. Advances in Biochemical Engineering/Biotechnology, 2019, , .	0.6	14
621	Insights into the levulinate-based ionic liquid class: synthesis, cellulose dissolution evaluation and ecotoxicity assessment. New Journal of Chemistry, 2019, 43, 13010-13019.	1.4	32
622	Rheology of Pure Ionic Liquids and Their Complex Fluids: A Review. ACS Sustainable Chemistry and Engineering, 2019, 7, 13586-13626.	3.2	76
623	The validity of high pressure IR for detecting the interactions between Î²-cyclodextrin and imidazolium based ionic liquids. AIP Advances, 2019, 9, 075007.	0.6	3
624	Dissolution of cellulose in ionic liquids and their mixed cosolvents: A review. Sustainable Chemistry and Pharmacy, 2019, 13, 100162.	1.6	76
625	Effect of Alkyl Chain Length on Derived Thermodynamic Properties of 1-Alkyl-3-methylimidizolium Chloride Ionic Liquids and Their Mixtures with Ethanol. Industrial & Engineering Chemistry Research, 2019, 58, 15649-15665.	1.8	2
626	Unique gelation and rheological properties of the cellulose/CO2-based reversible ionic liquid/DMSO solutions. Carbohydrate Polymers, 2019, 222, 115024.	5.1	13
627	Conversion of residue biomass into value added carbon materials: utilisation of sugarcane bagasse and ionic liquids. Journal of Materials Science, 2019, 54, 12476-12487.	1.7	16
628	Elucidation of the Relationship between Intrinsic Viscosity and Molecular Weight of Cellulose Dissolved in Tetra-N-Butyl Ammonium Hydroxide/Dimethyl Sulfoxide. Polymers, 2019, 11, 1605.	2.0	10
629	Recent progress in theoretical and computational studies on the utilization of lignocellulosic materials. Green Chemistry, 2019, 21, 9-35.	4.6	96

#	Article	IF	Citations
630	An Improved Design of the Substrate of Stretchable Gallium Arsenide Photovoltaics. Journal of Applied Mechanics, Transactions ASME, 2019, 86, .	1.1	10
631	Enhanced Dissolution of Cotton Cellulose in 1-Allyl-3-methylimidazolium Chloride by the Addition of Metal Chlorides. ACS Sustainable Chemistry and Engineering, 2019, 7, 19176-19184.	3.2	46
632	Transport and Mechanical Properties of ABA-type Triblock Copolymer Ion Gels Correlated with Their Microstructures. Macromolecules, 2019, 52, 8430-8439.	2.2	20
633	Recent Advances of Using Ionic Liquids for Biopolymer Extraction and Processing. Biotechnology Journal, 2019, 14, e1900072.	1.8	25
634	The Application of a Novel Infrared Temperature Measurement System in HVDC Converter Valve Equipment Connector Overheat Failure Prevention. Procedia Computer Science, 2019, 154, 267-273.	1.2	3
635	The Shallow Decay Segment of GRB X-Ray Afterglow Revisited. Astrophysical Journal, 2019, 883, 97.	1.6	23
636	Biocatalytic oligomerization-induced self-assembly of crystalline cellulose oligomers into nanoribbon networks assisted by organic solvents. Beilstein Journal of Nanotechnology, 2019, 10, 1778-1788.	1.5	14
637	Dissolution Behavior of Maize Starch in Aqueous Ionic Liquids: Effect of Anionic Structure and Water/Ionic Liquid Ratio. ACS Omega, 2019, 4, 14981-14986.	1.6	13
638	The Relationship between the Structure and Properties of Amino Acid Ionic Liquids. Molecules, 2019, 24, 3252.	1.7	21
639	Cellulose dissolution in diallylimidazolium methoxyacetateâ€‰+â€‰N-methylpyrrolidinone mixture. Scientific Reports, 2019, 9, 11518.	1.6	5
640	Wheat Bran Pretreatment by Room Temperature Ionic Liquid-Water Mixture: Optimization of Process Conditions by PLS-Surface Response Design. Frontiers in Chemistry, 2019, 7, 585.	1.8	15
641	Simple lysis of bacterial cells for DNA-based diagnostics using hydrophilic ionic liquids. Scientific Reports, 2019, 9, 13994.	1.6	31
642	Zn-Acetate-Containing ionic liquid as highly active catalyst for fast and mild methanolysis of Poly(lactic acid). Polymer Degradation and Stability, 2019, 168, 108937.	2.7	35
643	Fast prediction of the replacement process of oil vapor in horizontal tank and its improved safety evaluation method. Chemical Engineering Research and Design, 2019, 122, 298-306.	2.7	4
644	Synthesis of magnesium complexes of ionic liquids with highly coordinating anions. Dalton Transactions, 2019, 48, 982-988.	1.6	4
645	Flame-retardant thermoplastics derived from plant cell wall polymers by single ionic liquid substitution. New Journal of Chemistry, 2019, 43, 2057-2064.	1.4	11
646	Surfactant-assisted fabrication of ultra-permeable cellulose gels with macro channels and insights on regeneration of cellulose from ionic liquids. Journal of Molecular Liquids, 2019, 280, 64-70.	2.3	4
647	Dissolution of cellulose in 1-allyl-3-methylimidazolium methyl phosphonate ionic liquid and its composite system with Na2PHO3. Carbohydrate Polymers, 2019, 209, 382-388.	5.1	20

#	Article	IF	Citations
648	Temperature-dependent structure and transport of ionic liquids with short-and intermediate-chain length pyrrolidinium cations. Journal of Molecular Liquids, 2019, 279, 23-31.	2.3	15
649	Measurement and modeling of infinite dilution activity coefficients of organic compounds in an equimolar ionic liquid mixture of [Bmim]Cl and [Bmim][Tf2N]. Fluid Phase Equilibria, 2019, 488, 72-78.	1.4	9
650	Dissolution of cellulose in novel carboxylate-based ionic liquids and dimethyl sulfoxide mixed solvents. European Polymer Journal, 2019, 113, 89-97.	2.6	45
651	Cellulose-starch Hybrid Films Plasticized by Aqueous ZnCl2 Solution. International Journal of Molecular Sciences, 2019, 20, 474.	1.8	14
652	The solubility of cellulose in binary mixtures of ionic liquids and dimethyl sulfoxide: Influence of the anion. Journal of Molecular Liquids, 2019, 279, 120-126.	2.3	37
653	Cellulose/calcium phosphate hybrids: New materials for biomedical and environmental applications. International Journal of Biological Macromolecules, 2019, 127, 606-617.	3.6	88
654	Ionic liquid assisted silver-catalyzed one-pot A3-coupling reactions for the synthesis of propargylamines. Journal of Molecular Liquids, 2019, 279, 289-293.	2.3	15
655	MoDoop: An Automated Computational Approach for COSMO-RS Prediction of Biopolymer Solubilities in Ionic Liquids. ACS Omega, 2019, 4, 2337-2343.	1.6	25
656	Possible contamination of ionic liquids upon dissolution and absorption of rubber and resin components. Journal of Molecular Liquids, 2019, 278, 78-85.	2.3	2
657	Cellulose solvent-based pretreatment for enhanced second-generation biofuel production: a review. Sustainable Energy and Fuels, 2019, 3, 11-62.	2.5	164
658	Molecular partitioning in ternary solutions of cellulose. Carbohydrate Polymers, 2019, 220, 157-162.	5.1	4
659	A fundamental understanding of whole biomass dissolution in ionic liquid for regeneration of fiber by solution-spinning. Green Chemistry, 2019, 21, 4354-4367.	4.6	22
660	Which Variables Matter for Process Design and Scale-Up? A Study of Sugar Cane Straw Pretreatment Using Low-Cost and Easily Synthesizable Ionic Liquids. ACS Sustainable Chemistry and Engineering, 2019, 7, 12779-12788.	3.2	22
661	Effect of Imidazolium-Based Ionic Liquids on the Structure and Phase Behavior of Palmitoyl-oleoyl-phosphatidylethanolamine. Journal of Physical Chemistry B, 2019, 123, 5474-5482.	1.2	21
662	Evidence of CT complex formation between a probe and unreacted methylimidazole in imidazolium cation based ionic liquids: sensing by functionalised 2-benzyledinemalononitrile. Analyst, The, 2019, 144, 4432-4438.	1.7	1
663	Insights from molecular dynamics simulations on structural organization and diffusive dynamics of an ionic liquid at solid and vacuum interfaces. Journal of Colloid and Interface Science, 2019, 553, 350-363.	5.0	23
664	Dissolution of cotton cellulose in 1:1 mixtures of 1-butyl-3-methylimidazolium methylphosphonate and 1-alkylimidazole co-solvents. Carbohydrate Polymers, 2019, 221, 63-72.	5.1	20
665	Two-dimensional molybdenum disulfide based membranes for ionic liquids separation. Separation and Purification Technology, 2019, 226, 109-116.	3.9	6

#	Article	IF	Citations
666	Crystal Solvates of Energetic 2,4,6,8,10,12-Hexanitro-2,4,6,8,10,12-hexaazaisowurtzitane Molecule with [bmim]-Based Ionic Liquids. Crystal Growth and Design, 2019, 19, 3660-3669.	1.4	15
667	Poly(ionic liquid)s as a distinct receptor material to create a highly-integrated sensing platform for efficiently identifying numerous saccharides. Chemical Science, 2019, 10, 6617-6623.	3.7	29
668	Thermophysical characterization of sorbitol and 1â€“ethylâ€“3â€“methylimidazolium acetate mixtures. Fluid Phase Equilibria, 2019, 497, 140-150.	1.4	6
669	Improving affinity of imprinted monolithic polymer prepared in deep eutectic solvent by metallic pivot. Journal of Chromatography A, 2019, 1602, 48-55.	1.8	16
670	Development of Diallylimidazolium Methoxyacetate/DMSO (DMF/DMA) Solvents for Improving Cellulose Dissolution and Fabricating Porous Material. Polymers, 2019, 11, 845.	2.0	14
671	Dissolution and Hydrolysis of Bleached Kraft Pulp Using Ionic Liquids. Polymers, 2019, 11, 673.	2.0	21
672	Fractionation of Lignocellulosic Biomass by Selective Precipitation from Ionic Liquid Dissolution. Applied Sciences (Switzerland), 2019, 9, 1862.	1.3	41
673	Extension of TEAM Force-Field Database to Ionic Liquids. Journal of Chemical & Engineering Data, 2019, 64, 3718-3730.	1.0	10
674	Non-covalent interactions in bmimCl/co-solvent mixtures: A FTIR spectroscopy and computational study. Journal of Molecular Liquids, 2019, 285, 688-696.	2.3	9
675	Dissolution capacity and rheology of cellulose in ionic liquids composed of imidazolium cation and phosphate anions. Polymers for Advanced Technologies, 2019, 30, 1751-1758.	1.6	14
676	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
677	Enhanced heavy metal adsorption ability of lignocellulosic hydrogel adsorbents by the structural support effect of lignin. Cellulose, 2019, 26, 4005-4019.	2.4	27
679	Anionic reverse microemulsion grafting of acrylamide (AM) on HydroxyEthylCellulose (HEC): Synthesis, characterization and application as new ecofriendly low-cost flocculant. Journal of Water Process Engineering, 2019, 31, 100807.	2.6	23
680	Preparation of epoxy resins derived from lignin solubilized in tetrabutylphosphonium hydroxide aqueous solutions. International Journal of Biological Macromolecules, 2019, 132, 585-591.	3.6	14
681	Generation of Spherical Cellulose Nanoparticles from Ionic Liquid Processing via Novel Nonsolvent Addition and Drying. Advances in Materials Science and Engineering, 2019, 2019, 1-6.	1.0	18
682	Ionic Liquid Assisted Gelatin Films: Green, UV Shielding, Antioxidant, and Antibacterial Food Packaging Materials. ACS Sustainable Chemistry and Engineering, 2019, 7, 8631-8636.	3.2	66
683	Biopolymer-Based Materials from Polysaccharides: Properties, Processing, Characterization and Sorption Applications. , 0, , .		27
685	Applications of Ionic Liquids in Removal of Surface Contaminants. , 2019, , 619-680.		16

#	Article	IF	Citations
686	Progress on the pre-treatment of lignocellulosic biomass employing ionic liquids. Renewable and Sustainable Energy Reviews, 2019, 105, 268-292.	8.2	154
687	A novel strategy to utilize ethylene glycolâ€ionic liquids for the selective precipitation of polysaccharides. Journal of Separation Science, 2019, 42, 1757-1767.	1.3	3
688	Mesoporous Polymer Loading Heteropolyacid Catalysts: One-Step Strategy To Manufacture High Value-Added Cellulose Acetate Propionate. ACS Sustainable Chemistry and Engineering, 2019, 7, 4975-4982.	3.2	14
689	Triazolium-Based Ionic Liquids: A Novel Class of Cellulose Solvents. Journal of Physical Chemistry B, 2019, 123, 3994-4003.	1.2	43
690	Influences of diffusion coefficient of 1â€allylâ€3â€methylimidazolium chloride on structure and properties of regenerated cellulose fiber obtained via dryâ€jetâ€wet spinning. Journal of Applied Polymer Science, 2019, 136, 47609.	1.3	9
691	Pressure-Dependent Stability of Imidazolium-Based Ionic Liquid/DNA Materials Investigated by High-Pressure Infrared Spectroscopy. Materials, 2019, 12, 4202.	1.3	5
692	Effect of ionic liquid pretreatment on paper physical property and pulp refining performance. Nordic Pulp and Paper Research Journal, 2019, 34, 495-506.	0.3	2
693	8. Recent advances in the electrospinning of biopolymers. , 2019, , 189-216.		1
694	Stability of cellulase in ionic liquids: correlations between enzyme activity and COSMO-RS descriptors. Scientific Reports, 2019, 9, 17479.	1.6	16
695	Microbial cellulose: production and application. , 2019, , 309-322.		3
696	Assessing cellulose dissolution efficiency in solvent systems based on a robust experimental quantification protocol and enthalpy data. Holzforschung, 2019, 73, 1103-1112.	0.9	10
697	Design of Acyl Donor for Environmentally Benign Acylation of Cellulose Using an Ionic Liquid. Australian Journal of Chemistry, 2019, 72, 61.	0.5	9
698	Aqueous acidified ionic liquid pretreatment for bioethanol production and concentration of produced ethanol by pervaporation. Journal of Industrial and Engineering Chemistry, 2019, 69, 57-65.	2.9	42
699	Cellulose an ageless renewable green nanomaterial for medical applications: An overview of ionic liquids in extraction, separation and dissolution of cellulose. International Journal of Biological Macromolecules, 2019, 129, 750-777.	3.6	110
700	Theoretical Aspects of Ionic Liquids for Softâ€Matter Sciences. Israel Journal of Chemistry, 2019, 59, 813-823.	1.0	3
701	Ionic Liquids in Biomass Processing. Israel Journal of Chemistry, 2019, 59, 789-802.	1.0	20
702	Dimethyl sulfoxide assisted dissolution of cellulose in 1-ethyl-3-methylimidazoium acetate: small angle neutron scattering and rheological studies. Cellulose, 2019, 26, 2243-2253.	2.4	14
703	Application of ionic liquids in separation and analysis of carbohydrates: State of the art and future trends. TrAC - Trends in Analytical Chemistry, 2019, 111, 148-162.	5.8	26

#	Article	IF	Citations
704	Preparation of carbon molecular sieve membranes from an optimized ionic liquid-regenerated cellulose precursor. Journal of Membrane Science, 2019, 572, 390-400.	4.1	43
705	Deep eutectic solvents (DESs) for cellulose dissolution: a mini-review. Cellulose, 2019, 26, 205-213.	2.4	134
706	Oilâ€“Water Separation using Membranes Manufactured from Cellulose/Ionic Liquid Solutions. ACS Sustainable Chemistry and Engineering, 2019, 7, 5649-5659.	3.2	49
707	Starchâ€“zinc complex and its reinforcement effect on starch-based materials. Carbohydrate Polymers, 2019, 206, 528-538.	5.1	29
708	Carbohydrates of the Kernel. , 2019, , 305-318.		16
709	Processing of Cellulose Using Ionic Liquids. Macromolecular Materials and Engineering, 2019, 304, 1800450.	1.7	73
710	Recent Advances of Multifunctional Cellulose-Based Hydrogels. Polymers and Polymeric Composites, 2019, , 37-64.	0.6	2
711	Structure-Property Relationships in Cellulose-Based Hydrogels. Polymers and Polymeric Composites, 2019, , 65-95.	0.6	3
712	Ionic liquid as an effective solvent for cell wall deconstructing through astaxanthin extraction from Haematococcus pluvialis. International Journal of Food Science and Technology, 2019, 54, 583-590.	1.3	34
713	Hydrogen gas-free processes for single-step preparation of transition-metal bifunctional catalysts and one-pot Î³-valerolactone synthesis in supercritical CO2-ionic liquid systems. Journal of Supercritical Fluids, 2019, 147, 263-270.	1.6	26
714	Eco-friendly modification of a regenerated cellulose based film by silicon, carbon and N-doped carbon quantum dots. Carbohydrate Polymers, 2019, 206, 238-244.	5.1	38
715	Cellulose porosity improves its dissolution by facilitating solvent diffusion. International Journal of Biological Macromolecules, 2019, 123, 1289-1296.	3.6	19
716	Double-Chitinase Hydrolysis of Crab Shell Chitin Pretreated by Ionic Liquid to Generate Chito-Oligosaccharide. ACS Sustainable Chemistry and Engineering, 2019, 7, 1683-1691.	3.2	19
717	Water Clathrates in Nanostructural Organization of Hydrated Ionic Liquids Manifest a Peculiar Density Trend. Journal of Physical Chemistry B, 2019, 123, 1592-1601.	1.2	4
718	Dryâ€jet wet electrospinning of native cellulose microfibers with macroporous structures from ionic liquids. Journal of Applied Polymer Science, 2019, 136, 47153.	1.3	16
719	Development of cellulose based aerogel utilizing waste denimâ€”A Morphology study. Carbohydrate Polymers, 2019, 205, 1-7.	5.1	26
720	Preparation of transparent film via cellulose regeneration: Correlations between ionic liquid and film properties. Carbohydrate Polymers, 2019, 203, 214-218.	5.1	53
721	Dissolution of cellulose using a combination of hydroxide bases in aqueous solution. Cellulose, 2020, 27, 101-112.	2.4	19

#	Article	IF	Citations
722	Highly efficient cellulose dissolution by alkaline ionic liquids. Carbohydrate Polymers, 2020, 229, 115594.	5.1	44
723	Designing Lipaseâ€Compatible Ionic Liquids as Novel Solvents for Starch Ester Biosynthesis. Starch/Staerke, 2020, 72, 1900120.	1.1	4
724	Enhanced phosphate removal using zirconium hydroxide encapsulated in quaternized cellulose. Journal of Environmental Sciences, 2020, 89, 102-112.	3.2	32
725	Rheology of Cellulose/Alginic Acid Blends with 1â€Allylâ€3â€Methylimidazolium Chloride as Solvent. Polymer Engineering and Science, 2020, 60, 243-249.	1.5	1
726	Cellulose/biopolymer/Fe3O4 hydrogel microbeads for dye and protein adsorption. Cellulose, 2020, 27, 2757-2773.	2.4	25
727	Room-temperature dissolution and chemical modification of cellulose in aqueous tetraethylammonium hydroxideâ€“carbamide solutions. Cellulose, 2020, 27, 1933-1950.	2.4	34
728	Recent developments in modification of lignin using ionic liquids for the fabrication of advanced materialsâ€“A review. Journal of Molecular Liquids, 2020, 301, 112417.	2.3	74
729	Kinetic analysis of microwave-enhanced cellulose dissolution in ionic solvents. Physical Chemistry Chemical Physics, 2020, 22, 1003-1010.	1.3	21
730	Formation and in situ separation of oligomeric products from complete depolymerization of pubescens using a catalyst-free biphasic system. Cellulose, 2020, 27, 1951-1964.	2.4	7
731	Enhanced denitrification and power generation of municipal wastewater treatment plants (WWTPs) effluents with biomass in microbial fuel cell coupled with constructed wetland. Science of the Total Environment, 2020, 709, 136159.	3.9	60
732	Highly efficient and sustainable carboxylated cellulose filters for removal of cationic dyes/heavy metals ions. Chemical Engineering Journal, 2020, 389, 123458.	6.6	88
733	The effect of Ru/C and MgCl2 on the cleavage of inter- and intra-molecular linkages during cornstalk hydrolysis residue valorization. Cellulose, 2020, 27, 799-823.	2.4	9
734	Preparation of choline sulfate ionic liquid supported on porous graphitic carbon nitride nanosheets by simple surface modification for enhanced catalytic properties. Journal of Molecular Liquids, 2020, 300, 112263.	2.3	27
735	Enzymatic hydrolysis of cellulose recovered from ionic liquid-salt aqueous two-phase system. Journal of Bioscience and Bioengineering, 2020, 129, 624-631.	1.1	6
736	Structural Consequences of Halogen Bonding in Dialkylimidazolium: A New Design Strategy for Ionic Liquids Illustrated with the I₂ Cocrystal and Acetonitrile Solvate of 1,3-Dimethylimidazolium Iodide. Crystal Growth and Design, 2020, 20, 498-505.	1.4	4
737	Insight into the interaction between arabinoxylan and imidazolium acetate-based ionic liquids. Carbohydrate Polymers, 2020, 231, 115699.	5.1	12
738	Moving municipal WWTP towards circular economy: Cellulose recovery from primary sludge with ionic liquid. Resources, Conservation and Recycling, 2020, 154, 104626.	5.3	19
739	Electroanalytical Investigation of the Electrodeâ€“Electrolyte Interface of Quaternary Ammonium Ionic Liquids: Impact of Alkyl Chain Length and Ether Functionality. Journal of Physical Chemistry C, 2020, 124, 5613-5623.	1.5	25

#	Article	IF	Citations
740	Mechanical and biological properties of chitin/polylactide (PLA)/hydroxyapatite (HAP) composites cast using ionic liquid solutions. International Journal of Biological Macromolecules, 2020, 151, 1213-1223.	3.6	34
741	A luminescent cellulose ether with a regenerated crystal form obtained in tetra(n-butyl)ammonium hydroxide/dimethyl sulfoxide. Carbohydrate Polymers, 2020, 230, 115649.	5.1	6
742	Eco-fabrication of antibacterial nanofibrous membrane with high moisture permeability from wasted wool fabrics. Waste Management, 2020, 102, 404-411.	3.7	32
743	On the Effect of Hot-Water Pretreatment in Sulfur-Free Pulping of Aspen and Wheat Straw. ACS Omega, 2020, 5, 265-273.	1.6	12
744	Synthesis of Carbon Nanomaterials from Biomass Utilizing Ionic Liquids for Potential Application in Solar Energy Conversion and Storage. Materials, 2020, 13, 3945.	1.3	16
745	Cellulose/silk fibroin assisted calcium phosphate growth: Novel biocomposite for dye adsorption. International Journal of Biological Macromolecules, 2020, 165, 1970-1977.	3.6	42
746	Effective carbon dioxide stabilization of nanofibers electrospun from raw coal tar and polyacrylonitrile. Journal of Cleaner Production, 2020, 276, 123229.	4.6	7
747	Phosphorylase-catalyzed bottom-up synthesis of short-chain soluble cello-oligosaccharides and property-tunable cellulosic materials. Biotechnology Advances, 2021, 51, 107633.	6.0	32
748	Biocompatible Ionic Liquid Enhances Transdermal Antigen Peptide Delivery and Preventive Vaccination Effect. Molecular Pharmaceutics, 2020, 17, 3845-3856.	2.3	37
749	Heteropoly Acid-Based Catalysts for Hydrolytic Depolymerization of Cellulosic Biomass. Frontiers in Chemistry, 2020, 8, 580146.	1.8	23
750	Recent advances in the coupling of CO2 and epoxides into cyclic carbonates under halogen-free condition. Green Chemical Engineering, 2020, 1, 82-93.	3.3	57
751	Plant celluloses, hemicelluloses, lignins, and volatile oils for the synthesis of nanoparticles and nanostructured materials. Nanoscale, 2020, 12, 22845-22890.	2.8	108
752	Ionothermal carbonization in [Bmim][FeCl₄]: an opportunity for the valorization of raw lignocellulosic agrowastes into advanced porous carbons for CO₂ capture. Green Chemistry, 2020, 22, 5423-5436.	4.6	24
753	Neoteric Solvent Systems as Sustainable Media for Dissolution and Film Preparation of Poly-[(R)-3-hydroxybutyrate]. ACS Sustainable Chemistry and Engineering, 2020, 8, 12005-12013.	3.2	14
754	Insight into the Specific Adsorption Properties of Pristine Ionic Liquid: Temperature Dependent Flatband Potential Study. ECS Transactions, 2020, 97, 731-736.	0.3	0
755	Recent Progress in Highâ€Strength and Robust Regenerated Cellulose Materials. Advanced Materials, 2021, 33, e2000682.	11.1	244
756	Microgel-Catalyzed Hydrolysis of Nonactivated Disaccharides. ACS Catalysis, 2020, 10, 14451-14456.	5.5	8
757	Recent Trends in Elaboration, Processing, and Derivatization of Cellulosic Materials Using Ionic Liquids. ACS Sustainable Chemistry and Engineering, 2020, 8, 17893-17907.	3.2	44

#	Article	IF	Citations
758	Multienzyme Cellulose Films as Sustainable and Self-Degradable Hydrogen Peroxide-Producing Material. Biomacromolecules, 2020, 21, 5315-5322.	2.6	4
759	Dissolving Cellulose in 1,2,3-Triazolium- and Imidazolium-Based Ionic Liquids with Aromatic Anions. Molecules, 2020, 25, 3539.	1.7	23
760	Microphase-separated structures of ion gels consisting of ABA-type block copolymers and an ionic liquid: A key to escape from the trade-off between mechanical and transport properties. Polymer, 2020, 206, 122849.	1.8	14
761	Glycerin/NaOH Aqueous Solution as a Green Solvent System for Dissolution of Cellulose. Polymers, 2020, 12, 1735.	2.0	9
762	Pretreatment of plant feedstocks and agrofood waste using ionic liquids. , 2020, , 393-413.		0
763	Cellulose and its derivatives for lithium ion battery separators: A review on the processing methods and properties. Carbohydrate Polymer Technologies and Applications, 2020, 1, 100001.	1.6	45
764	Modulating Effect of Drug Chloramphenicol on the Aggregation Behavior of the Ionic Liquid 1-tetradecyl-3-methylimidazolium Bromide: A Conductometric Study. Journal of Physics: Conference Series, 2020, 1531, 012101.	0.3	1
765	Cellulose-Multiwall Carbon Nanotube Fiber Actuator Behavior in Aqueous and Organic Electrolyte. Materials, 2020, 13, 3213.	1.3	9
766	Carbonization of polysaccharides in FeCl3/BmimCl ionic liquids: Breaking the capacity barrier of carbon negative electrodes in lithium ion batteries. Journal of Power Sources, 2020, 474, 228575.	4.0	15
767	Ionic Liquid (1-Ethyl-3-methylimidazolium Acetate) Plasticization of Chitosan-Based Bionanocomposites. ACS Omega, 2020, 5, 19070-19081.	1.6	14
768	Determination of intrinsic viscosity of native cellulose solutions in ionic liquids. Journal of Rheology, 2020, 64, 1063-1073.	1.3	13
769	Tungstate ion (WO42-) confined in hydrophilic/hydrophobic nanomaterials functionalized brÃ¶nsted acidic ionic liquid as highly active catalyst in the selective aerobic oxidation of alcohols in water. Molecular Catalysis, 2020, 497, 111202.	1.0	4
770	Physicochemical characterisation of novel tetrabutylammonium aryltrifluoroborate ionic liquids. Physical Chemistry Chemical Physics, 2020, 22, 23374-23384.	1.3	1
771	Carboxylate ionic liquid solvent systems from 2006 to 2020: thermal properties and application in cellulose processing. Green Chemistry, 2020, 22, 7622-7664.	4.6	75
772	Incorporating Functionalized Cellulose to Increase the Toughness of Covalent Adaptable Networks. ACS Applied Materials & Interfaces, 2020, 12, 44110-44116.	4.0	21
773	Recent advances in the use of catalysts based on natural products for the conversion of CO₂into cyclic carbonates. Green Chemistry, 2020, 22, 7665-7706.	4.6	110
774	Self-Assembly and Complexation of Cellulose/Ionic Liquid at High Cellulose Concentration: Anion Dependence. Crystal Growth and Design, 2020, 20, 6267-6271.	1.4	4
775	Cellulose dissolution and regeneration using a non-aqueous, non-stoichiometric protic ionic liquid system. Cellulose, 2020, 27, 9593-9603.	2.4	19

#	Article	IF	Citations
776	Green and Economical Strategy for Spinning Robust Cellulose Filaments. ACS Sustainable Chemistry and Engineering, 2020, 8, 14927-14937.	3.2	20
777	Sugar dehydration to 5-hydroxymethylfurfural in mixtures of water/[Bmim]Cl catalyzed by iron sulfate. New Journal of Chemistry, 2020, 44, 16877-16890.	1.4	8
778	Use of Ionic Liquids and Deep Eutectic Solvents in Polysaccharides Dissolution and Extraction Processes towards Sustainable Biomass Valorization. Molecules, 2020, 25, 3652.	1.7	99
779	Ionic Liquid-Assisted Extraction of Essential Oils from Thujopsis dolobrata (Hiba). ACS Omega, 2020, 5, 29618-29622.	1.6	9
780	Structural characterisation of new ionic liquids via X-ray crystallography. Journal of Molecular Liquids, 2020, 319, 114091.	2.3	1
781	Limitations of Cellulose Dissolution and Fiber Spinning in the Lyocell Process Using [mTBDH][OAc] and [DBNH][OAc] Solvents. Industrial & Engineering Chemistry Research, 2020, 59, 20211-20220.	1.8	13
782	Linker Regulation: Synthesis and Electrochemical Properties of Ferrocene-Decorated Cellulose. Journal of Inorganic and Organometallic Polymers and Materials, 2020, 30, 3771-3780.	1.9	6
783	Highly Efficient and Recyclable Catalysts for Cellobiose Hydrolysis: Systematic Comparison of Carbon Nanomaterials Functionalized With Benzyl Sulfonic Acids. Frontiers in Chemistry, 2020, 8, 347.	1.8	16
784	Practical guide to designing safer ionic liquids for cellulose dissolution using a tiered computational framework. Green Chemistry, 2020, 22, 3626-3637.	4.6	18
785	Developing New Inexpensive Room-Temperature Ionic Liquids with High Thermal Stability and a Greener Synthetic Profile. ACS Omega, 2020, 5, 12637-12648.	1.6	22
786	The effect of ionic liquid on the structure of active site pocket and catalytic activity of a Î²-glucosidase from Halothermothrix orenii. Journal of Molecular Liquids, 2020, 306, 112879.	2.3	20
787	Asymmetric effects of anions in magnetic ionic liquids. Chemical Physics Letters, 2020, 748, 137389.	1.2	5
788	Non-covalent interactions of imidazolium-based ionic liquids with model pyrrolidones revealed by FTIR spectroscopy and quantum chemical model calculations. Journal of Molecular Liquids, 2020, 312, 113445.	2.3	2
789	Novel BrÃ¸nstedâ€“Lewis acidic di-cationic ionic liquid for efficient conversion carbohydrate to platform compound. Cellulose, 2020, 27, 6897-6908.	2.4	14
790	Hevea brasiliensis mediated synthesis of nanocellulose: Effect of preparation methods on morphology and properties. International Journal of Biological Macromolecules, 2020, 160, 1021-1028.	3.6	23
791	Development of Nanoscale Hybrids from Ionic Liquidâ€“Peptide Amphiphile Assemblies as New Functional Materials. ACS Omega, 2020, 5, 14543-14554.	1.6	10
792	A comprehensive study on the impact of chemical structures of ionic liquids on the solubility of ethane. New Journal of Chemistry, 2020, 44, 11155-11163.	1.4	12
793	Hydrogen bonding of ionic liquids in the groove region of DNA controls the extent of its stabilization: synthesis, spectroscopic and simulation studies. Physical Chemistry Chemical Physics, 2020, 22, 15582-15591.	1.3	10

#	Article	IF	Citations
794	Insight into Cellulose Dissolution with the Tetrabutylphosphonium Chlorideâ€“Water Mixture using Molecular Dynamics Simulations. Polymers, 2020, 12, 627.	2.0	9
795	Dependence of cellulose dissolution in quaternary ammonium acetates/DMSO on the molecular structure of the electrolyte: use of solvatochromism, micro-calorimetry, and molecular dynamics simulations. Cellulose, 2020, 27, 3565-3580.	2.4	13
796	Glucose in dry and moist ionic liquid: vibrational circular dichroism, IR, and possible mechanisms. Physical Chemistry Chemical Physics, 2020, 22, 10726-10737.	1.3	15
797	Cellulose valorization to potential platform chemicals. , 2020, , 433-457.		8
798	Environment-dependent single-chain mechanics of synthetic polymers and biomacromolecules by atomic force microscopy-based single-molecule force spectroscopy and the implications for advanced polymer materials. Chemical Society Reviews, 2020, 49, 2799-2827.	18.7	82
799	The effects of the position of the ether oxygen atom in pyrrolidinium-based room temperature ionic liquids on their physicochemical properties. Physical Chemistry Chemical Physics, 2020, 22, 19480-19491.	1.3	23
800	Degradation mechanism of Saccharomyces cerevisiae Î²-D-glucan by ionic liquid and dynamic high pressure microfluidization. Carbohydrate Polymers, 2020, 241, 116123.	5.1	9
801	Biomimetic Amyloid-like Protein/Laponite Nanocomposite Thin Film through Regulating Protein Conformation. ACS Applied Materials & Interfaces, 2020, 12, 35435-35444.	4.0	16
802	Cholinium dipeptide as the cornerstone to build promising separation processes: A simultaneous recovery strategy for microalgae biorefineries. Separation and Purification Technology, 2020, 250, 117288.	3.9	7
803	Synthesis and characterization of nanocellulose using renewable resources through Ionic liquid medium. Advances in Natural Sciences: Nanoscience and Nanotechnology, 2020, 11, 035001.	0.7	10
804	Carbon membranes for CO2 removal: Status and perspectives from materials to processes. Chemical Engineering Journal, 2020, 401, 126084.	6.6	124
805	Synthesis and biological evaluation of some novel 1â€alkylâ€3â€methylimidazolium carboxylate ionic liquids as potential antifungal agents. Journal of the Chinese Chemical Society, 2020, 67, 1270-1277.	0.8	5
806	Cellulose Regeneration and Chemical Recycling: Closing the â€œCellulose Gapâ€•Using Environmentally Benign Solvents. Macromolecular Materials and Engineering, 2020, 305, 1900832.	1.7	46
807	Preparation of cellulose film in ionic liquid by high shearing and application in pineapple preservation. Materials Research Express, 2020, 7, 025313.	0.8	8
808	Pretreatment technologies for anaerobic digestion of lignocelluloses and toxic feedstocks. Bioresource Technology, 2020, 304, 122998.	4.8	104
809	How Molecular Chiralities of Bis(mandelato)borate Anions Affect Their Binding Structures With Alkali Metal Ions and Microstructural Properties in Tetraalkylphosphonium Ionic Liquids. Frontiers in Chemistry, 2020, 8, 65.	1.8	2
810	How imidazoliumâ€based ionic liquids solubilize the poorly soluble ibuprofen? A theoretical study. AICHE Journal, 2020, 66, e16940.	1.8	13
811	Commercial Applications of Ionic Liquids. Green Chemistry and Sustainable Technology, 2020, , .	0.4	44

#	Article	IF	Citations
812	A Review on the Partial and Complete Dissolution and Fractionation of Wood and Lignocelluloses Using Imidazolium Ionic Liquids. Polymers, 2020, 12, 195.	2.0	82
813	Osmotic pressure as driving force for recovering ionic liquids from aqueous solutions. Journal of Membrane Science, 2020, 599, 117835.	4.1	16
814	Biopolymeric photonic structures: design, fabrication, and emerging applications. Chemical Society Reviews, 2020, 49, 983-1031.	18.7	138
815	X-ray scattering investigation of ion aggregation in imidazolium-based ionic liquids upon doping with lithium, sodium, potassium, rubidium and cesium salts. Journal of Molecular Liquids, 2020, 302, 112540.	2.3	3
816	Impact of Cellulose Dissolution on 1-Butyl-3-Methylimidazolium Chloride Crystallization Studied by Raman Spectroscopy, Wide-Angle X-ray Scattering, and Solid-State NMR. Crystal Growth and Design, 2020, 20, 1706-1715.	1.4	7
817	Preparation of Cellulose/Silver Composite Particles Having a Recyclable Catalytic Property. ACS Omega, 2020, 5, 1919-1926.	1.6	22
818	Current advances in ionic liquid-based pre-treatment and depolymerization of macroalgal biomass. Renewable Energy, 2020, 152, 283-299.	4.3	26
819	Green aerobic oxidative desulfurization of diesel by constructing an Fe-Anderson type polyoxometalate and benzene sulfonic acid-based deep eutectic solvent biomimetic cycle. Chinese Journal of Catalysis, 2020, 41, 868-876.	6.9	36
820	Lignin solvation by ionic liquids: The role of cation. Journal of Molecular Liquids, 2020, 303, 112588.	2.3	17
821	Applications of ionic liquids in starch chemistry: a review. Green Chemistry, 2020, 22, 2162-2183.	4.6	101
822	Room-Temperature Superbase-Derived Ionic Liquids with Facile Synthesis and Low Viscosity: Powerful Solvents for Cellulose Dissolution by Destroying the Cellulose Aggregate Structure. Macromolecules, 2020, 53, 3284-3295.	2.2	41
823	Structure and dynamics of ionic liquid tolerant hyperthermophilic endoglucanase Cel12A from Rhodothermus marinus. RSC Advances, 2020, 10, 7933-7947.	1.7	22
824	Preparation of Nanocellulose Using Ionic Liquids: 1-Propyl-3-Methylimidazolium Chloride and 1-Ethyl-3-Methylimidazolium Chloride. Molecules, 2020, 25, 1544.	1.7	39
825	Stimuli-responsive self-assembly of cellulose nanocrystals (CNCs): Structures, functions, and biomedical applications. International Journal of Biological Macromolecules, 2020, 155, 456-469.	3.6	42
826	Synthesis of 5-HMF from an ultrasound-ionic liquid pretreated sugarcane bagasse by using a microwave-solid acid/ionic liquid system. Industrial Crops and Products, 2020, 149, 112361.	2.5	44
827	Novel chemically cross-linked chitosan-cellulose based ionogel with self-healability, high ionic conductivity, and high thermo-mechanical stability. Cellulose, 2020, 27, 5121-5133.	2.4	30
828	Development of a novel cellulose solvent based on pyrrolidinium hydroxide and reliable solubility analysis. RSC Advances, 2020, 10, 11475-11480.	1.7	15
829	Solvent structural effects on the solubility of bis(2-ethylhexyl)phosphoric acid (HDEHP) in room-temperature ionic liquids. Separation Science and Technology, 2021, 56, 800-810.	1.3	3

#	Article	IF	Citations
830	Transparent films by ionic liquid welding of cellulose nanofibers and polylactide: Enhanced biodegradability in marine environments. Journal of Hazardous Materials, 2021, 402, 124073.	6.5	24
831	Molecularâ€Scale Design of Celluloseâ€Based Functional Materials for Flexible Electronic Devices. Advanced Electronic Materials, 2021, 7, 2000944.	2.6	68
832	Hydolysis of multi substrate biomass using para-toluenesulphonic acid for bioethanol production: A promising option over the sulfuric acid treatment. Biomass and Bioenergy, 2021, 144, 105922.	2.9	7
833	Transforming lignocellulosic biomass into biofuels enabled by ionic liquid pretreatment. Bioresource Technology, 2021, 322, 124522.	4.8	83
834	Highly flexible, transparent film prepared by upcycle of wasted jute fabrics with functional properties. Chemical Engineering Research and Design, 2021, 146, 718-725.	2.7	11
835	Advances in the use of microgels as emulsion stabilisers and as a strategy for cellulose functionalisation. Cellulose, 2021, 28, 647-670.	2.4	22
836	Superbase-based protic ionic liquids for cellulose filament spinning. Cellulose, 2021, 28, 533-547.	2.4	25
837	Hydrogen production from cellulose catalyzed by an iridium complex in ionic liquid under mild conditions. Catalysis Science and Technology, 2021, 11, 2273-2279.	2.1	5
838	Comparison between pyrrolidinium-based and imidazolium-based dicationic ionic liquids: intermolecular interaction, structural organization, and solute dynamics. Physical Chemistry Chemical Physics, 2021, 23, 21029-21041.	1.3	6
839	Advanced and versatile lignin-derived biodegradable composite film materials toward a sustainable world. Green Chemistry, 2021, 23, 3790-3817.	4.6	114
840	Self-assembly of cellulose for creating green materials with tailor-made nanostructures. Journal of Materials Chemistry B, 2021, 9, 3944-3966.	2.9	14
841	The effect of cellulose molecular weight on internal structure and properties of regenerated cellulose fibers as spun from the alkali/urea aqueous system. Polymer, 2021, 215, 123379.	1.8	22
842	High-performance cellulosic filament fibers prepared via dry-jet wet spinning from ionic liquids. Cellulose, 2021, 28, 3055-3067.	2.4	23
843	A Feasibility Study about Cellulosic Ethanol Industrialization. IOP Conference Series: Earth and Environmental Science, 2021, 680, 012056.	0.2	2
844	Nanocellulose-Graphene Hybrids: Advanced Functional Materials as Multifunctional Sensing Platform. Nano-Micro Letters, 2021, 13, 94.	14.4	37
845	Structure and Properties of Regenerated Cellulose Fibers Based on Dissolution of Cellulose in a CO₂ Switchable Solvent. ACS Sustainable Chemistry and Engineering, 2021, 9, 4744-4754.	3.2	27
846	Deconstruction of Woody Biomass via Protic and Aprotic Ionic Liquid Pretreatment for Ethanol Production. ACS Sustainable Chemistry and Engineering, 2021, 9, 4422-4432.	3.2	34
847	Flexible cellulose/polyvinyl alcohol/PEDOT:PSS electrodes for ECG monitoring. Cellulose, 2021, 28, 4913-4926.	2.4	18

#	Article	IF	Citations
848	Molecularly Imprinted Synthetic Glucosidase for the Hydrolysis of Cellulose in Aqueous and Nonaqueous Solutions. Journal of the American Chemical Society, 2021, 143, 5172-5181.	6.6	47
849	Molecular simulations of charged complex fluids: A review. Chinese Journal of Chemical Engineering, 2021, 31, 206-226.	1.7	11
850	Ionic Liquid-Based Surfactants: Recent Advances in Their Syntheses, Solution Properties, and Applications. Polymers, 2021, 13, 1100.	2.0	61
851	An Overview of the Antimicrobial Properties of Lignocellulosic Materials. Molecules, 2021, 26, 1749.	1.7	27
852	Functionalization of Silk by AIEgens through Facile Bioconjugation: Fullâ€Color Fluorescence and Longâ€Term Bioimaging. Angewandte Chemie, 2021, 133, 12532-12538.	1.6	6
853	Functionalization of Silk by AIEgens through Facile Bioconjugation: Fullâ€Color Fluorescence and Longâ€Term Bioimaging. Angewandte Chemie - International Edition, 2021, 60, 12424-12430.	7.2	46
854	Cellulose cryogels prepared by regeneration from phosphoric acid solutions. Cellulose, 2021, 28, 4975-4989.	2.4	17
855	Cellulose-based polymers. ChemistrySelect, 2023, 8, 2001-2048.	0.7	2
856	Release property of red ginger essential oil in silica-nanocellulose composite based sachet. IOP Conference Series: Earth and Environmental Science, 2021, 749, 012045.	0.2	0
857	Synthesis and Characterization of Macrocyclic Ionic Liquids for CO₂ Separation. Industrial & Engineering Chemistry Research, 2021, 60, 8218-8226.	1.8	6
858	A biaxially stretched cellulose film prepared from ionic liquid solution. Carbohydrate Polymers, 2021, 260, 117816.	5.1	12
859	Structured liquids with interfacial robust assemblies of a nonionic crystalline surfactant. Journal of Colloid and Interface Science, 2021, 590, 487-494.	5.0	13
860	Binary mixtures of ionic liquids: Ideal, non-ideal, or quasi-ideal?. Journal of Chemical Physics, 2021, 154, 224507.	1.2	6
861	Evaluating the hazardous impact of ionic liquids â€“ Challenges and opportunities. Journal of Hazardous Materials, 2021, 412, 125215.	6.5	82
862	Direct Synthesis of Full-Biobased Cellulose Esters from Essential Oil Component Î±,Î²-Unsaturated Aldehydes. ACS Sustainable Chemistry and Engineering, 2021, 9, 8450-8457.	3.2	10
863	Differential effects of inorganic salts on cellulase kinetics in enzymatic saccharification of cellulose and lignocellulosic biomass. Bioprocess and Biosystems Engineering, 2021, 44, 2331-2344.	1.7	9
864	Cellulose Preferentially Dissolved over Xylan in Ionic Liquids through Precise Anion Interaction Regulated by Bulky Cations. ACS Sustainable Chemistry and Engineering, 2021, 9, 8686-8691.	3.2	6
865	Solvent behavior of an ionic liquid set around a cellulose Iβ crystallite model through molecular dynamics simulations. Cellulose, 2021, 28, 6767-6795.	2.4	7

#	Article	IF	Citations
866	Facile in situ fabrication of ZnO-embedded cellulose nanocomposite films with antibacterial properties and enhanced mechanical strength via hydrogen bonding interactions. International Journal of Biological Macromolecules, 2021, 183, 760-771.	3.6	26
867	Effective Extraction of Limonene and Hibaene from Hinoki (Chamaecyparis obtusa) Using Ionic Liquid and Deep Eutectic Solvent. Molecules, 2021, 26, 4271.	1.7	2
868	Deuterated Bacterial Cellulose Dissolution in Ionic Liquids. Macromolecules, 2021, 54, 6982-6989.	2.2	7
869	Study on the mechanism of hydrogen bonding interactions between poly(vinyl alcohol) and ionic liquid. Polymers for Advanced Technologies, 2021, 32, 4869-4879.	1.6	3
870	Adsorption-Enhanced Glucan Oligomer Production from Cellulose Hydrolysis over Hyper-Cross-Linked Polymer in Molten Salt Hydrate. ACS Applied Materials & Interfaces, 2021, 13, 52082-52091.	4.0	12
871	Grafting polymers from cellulose nanocrystals via surfaceâ€initiated atom transfer radical polymerization. Journal of Applied Polymer Science, 2021, 138, 51458.	1.3	20
872	Xenon Diffusion in Ionic Liquids with Blurred Nanodomain Separation. ChemPhysChem, 2021, 22, 1880-1890.	1.0	6
873	The study of interactions in aqueous solutions of 1-alkyl-3-(3-butenyl)imidazolium bromide ionic liquids. Journal of Chemical Thermodynamics, 2021, 159, 106479.	1.0	6
874	Practical Online Monitoring of Ionic Liquid Fiber Welding Solvent. ACS Omega, 2021, 6, 22367-22373.	1.6	1
875	Nucleic Acids Based Polyelectrolyte Complexes: Their Complexation Mechanism, Morphology, and Stability. Chemistry of Materials, 2021, 33, 7923-7943.	3.2	20
876	Ionic liquid coupled with nickel salt for enhancing the hydro-liquefaction efficiency of the major biomass components. Renewable Energy, 2021, 175, 296-306.	4.3	3
877	Structure Development of the Interphase between Drying Cellulose Materials Revealed by In Situ Grazing-Incidence Small-Angle X-ray Scattering. Biomacromolecules, 2021, 22, 4274-4283.	2.6	8
878	Ionic Liquid-Based Materials for Biomedical Applications. Nanomaterials, 2021, 11, 2401.	1.9	52
879	Heterometallic Pd^{II}â€“Clâ€“Cu^I Catalyst for Efficient Hydrolysis of Î²-1,4-Glycosidic Bonds in 1-Butyl-3-methylimidazolium Chloride. ACS Catalysis, 2021, 11, 11774-11785.	5.5	9
880	Highly transparent conductive ionohydrogel for all-climate wireless human-motion sensor. Chemical Engineering Journal, 2021, 420, 129865.	6.6	47
881	Processing of lignocellulose in ionic liquids: A cleaner and sustainable approach. Journal of Cleaner Production, 2021, 323, 129189.	4.6	25
882	Polymerizable Choline- and Imidazolium-Based Ionic Liquids Reinforced with Bacterial Cellulose for 3D-Printing. Polymers, 2021, 13, 3044.	2.0	13
883	Synthesis of a cellulose dissolving liquid zwitterion from general and low-cost reagents. Cellulose, 2022, 29, 3017-3024.	2.4	6

#	Article	IF	Citations
884	Bioplastics: A boon or bane?. Renewable and Sustainable Energy Reviews, 2021, 147, 111237.	8.2	76
885	Ionic Liquids based Acidâ€base Indicators for Aqueous to the Nonâ€Aqueous Medium: An Overview. ChemistrySelect, 2021, 6, 9164-9174.	0.7	2
886	Progress in the catalytic glycolysis of polyethylene terephthalate. Journal of Environmental Management, 2021, 296, 113267.	3.8	79
887	In-situ anodic precipitation process for highly efficient separation of aluminum alloys. Nature Communications, 2021, 12, 5777.	5.8	36
888	An insight into the dissolution of cellulose in 1-butyl-3-methylimidazolium chloride-DMSO binary Mixture: Exploring the dynamics of rhodamine 6G and fluorescein. Journal of Molecular Liquids, 2021, 339, 116817.	2.3	9
889	Room temperature dissolving cellulose with a metal salt hydrate-based deep eutectic solvent. Carbohydrate Polymers, 2021, 272, 118473.	5.1	37
890	Dissolution and functionalization of celluloses using 1,2,3-triazolium ionic liquid. Carbohydrate Polymer Technologies and Applications, 2021, 2, 100109.	1.6	4
891	Preparation and dielectric relaxation of a novel ionocellulose derivative. Carbohydrate Polymer Technologies and Applications, 2021, 2, 100087.	1.6	4
892	Production of rayon fibres from cellulosic pulps: State of the art and current developments. Carbohydrate Polymers, 2021, 273, 118466.	5.1	35
893	Guiding cellular channels of artificial nanohybrid woods for anisotropic properties and solar-thermal evaporation. Chemical Engineering Journal, 2022, 428, 132060.	6.6	13
894	Heterogeneous heteropolyacid-based catalysts for hydrolysis of cellulosic biomass. , 2022, , 117-154.		0
895	Dyes and dyeing processes for natural textiles and their key sustainability issues. , 2021, , 439-472.		2
896	Alteration and enhancing the properties of natural fibres. , 2021, , 367-405.		3
897	Designing novel biocompatible oligopeptide-based ionic liquids for greener downstream processes. Journal of Cleaner Production, 2021, 279, 123356.	4.6	10
898	Evaluating the potential of a novel hardwood biomass using a superbase ionic liquid. RSC Advances, 2021, 11, 19095-19105.	1.7	15
899	Ionic liquids: prospects for nucleic acid handling and delivery. Nucleic Acids Research, 2021, 49, 1201-1234.	6.5	31
900	Carbon hollow fiber membranes for a molecular sieve with precise-cutoff ultramicropores for superior hydrogen separation. Nature Communications, 2021, 12, 268.	5.8	133
901	NMR study on the cellulose dissolution mechanism in CaCl₂Â·6H₂Oâ€“LiCl molten salt hydrate. Physical Chemistry Chemical Physics, 2021, 23, 20489-20495.	1.3	5

#	Article	IF	Citations
902	Regenerated cellulose in textiles: rayon, lyocell, modal and other fibres. , 2021, , 87-110.		6
903	Unique CO₂-switched cellulose solution properties in the CO₂/DBU/DMSO solvent system and the preparation of regenerated materials. Green Chemistry, 2021, 23, 5856-5865.	4.6	11
904	Conversion of low-quality cotton to bioplastics. Cellulose, 2021, 28, 2021-2038.	2.4	19
905	Development of New Cellulosic Fibers and Composites Using Ionic Liquid Technology. Green Chemistry and Sustainable Technology, 2020, , 227-259.	0.4	5
906	Fundamentals of Ionic Liquids. Biofuels and Biorefineries, 2014, , 3-28.	0.5	3
907	General introduction on sustainable nanocellulose and nanohydrogel matrices. , 2020, , 1-31.		5
908	Aqueous-phase green synthesis of formate-based ionic liquids and their thermophysical properties. Journal of Molecular Liquids, 2019, 279, 370-377.	2.3	2
909	Conversion of Glucose to 5-Hydroxymethylfurfural at High Substrate Loading: Effect of Catalyst and Solvent on the Stability of 5-Hydroxymethylfurfural. Energy & Fuels, 2020, 34, 16240-16249.	2.5	22
910	In Situ Modification of Regenerated Cellulose Beads: Creating All-Cellulose Composites. Industrial & Engineering Chemistry Research, 2020, 59, 2968-2976.	1.8	13
911	Design of Wall-Destructive but Membrane-Compatible Solvents. Journal of the American Chemical Society, 2017, 139, 16052-16055.	6.6	57
912	CHAPTER 2. Sustainability, Green Chemistry and White Biotechnology. RSC Green Chemistry, 2015, , 9-35.	0.0	1
913	Novel Analytical Techniques for Smart Ionic Liquid Materials. RSC Smart Materials, 2017, , 1-29.	0.1	4
914	Recognition-based Smart Ionic Liquids. RSC Smart Materials, 2017, , 272-295.	0.1	1
915	Diffusion and Relaxometry to Study Carbohydrates Dissolved in Ionic Liquids. New Developments in NMR, 2019, , 36-62.	0.1	1
916	Chapter 7. Room-Temperature Ionic Liquids and Eutectic Mixtures. RSC Green Chemistry, 0, , 175-209.	0.0	2
917	Probing the solvation structure and dynamics in ionic liquids by time-resolved infrared spectroscopy of 4-(dimethylamino)benzonitrile. Physical Chemistry Chemical Physics, 2017, 19, 25151-25157.	1.3	5
918	Sustainable functionalization of cellulose and starch with diallyl carbonate in ionic liquids. Green Chemistry, 2017, 19, 3899-3907.	4.6	35
919	Effect of anion in carboxylate-based ionic liquids on catalytic activity of transesterification with vinyl esters and the solubility of cellulose. RSC Advances, 2019, 9, 4048-4053.	1.7	26

#	Article	IF	Citations
920	The role of urea in the solubility of cellulose in aqueous quaternary ammonium hydroxide. RSC Advances, 2020, 10, 5919-5929.	1.7	9
921	Humidity-responsive molecular gate-opening mechanism for gas separation in ultraselective nanocellulose/IL hybrid membranes. Green Chemistry, 2020, 22, 3546-3557.	4.6	35
922	Solubility of Cellulose in Binary Mixtures of 1-Alkyl-3-methylimidazolium Acetate and Dimethyl Sulfoxide: Influence of Alkyl Chain Length in the Cation. Australian Journal of Chemistry, 2019, 72, 669.	0.5	7
924	Effect of antisolvents on the structure of regenerated cellulose: development of an efficient regeneration process. Holzforschung, 2020, 74, 881-890.	0.9	3
925	Ionic Liquid Assisted C-C Bond Formation. Current Organic Chemistry, 2020, 24, 1853-1875.	0.9	3
926	Dissociation of intra/inter-molecular hydrogen bonds of cellulose molecules in the dissolution process: a mini review. Journal of Bioresources and Bioproducts, 1996, 1, .	11.8	5
927	Cellulase immobilization on superparamagnetic nanoparticles for reuse in cellulosic biomass conversion. AIMS Bioengineering, 2016, 3, 264-276.	0.6	35
928	Ionic liquids, a Potential Solution for Cellulose Processing?. Journal of Biocatalysis & Biotransformation, 2012, 1, .	0.4	1
929	Efficient Extraction of Agarose from Red Algae Using Ionic Liquids. Green and Sustainable Chemistry, 2014, 04, 190-201.	0.8	42
930	Preliminary Characterization of a Cellulase Producing Bacterial Strain Isolated from a Romanian Hypersaline Lake. Journal of Environmental Protection, 2018, 09, 1066-1081.	0.3	5
931	Emerging iongel materials towards applications in energy and bioelectronics. Materials Horizons, 2021, 8, 3239-3265.	6.4	25
932	Ionic liquid-assisted bioconversion of lignocellulosic biomass for the development of value-added products. Journal of Cleaner Production, 2021, 326, 129275.	4.6	49
933	Dissolution of Cellulose in Ionic Liquidâ€“DMSO Mixtures: Roles of DMSO/IL Ratio and the Cation Alkyl Chain Length. ACS Omega, 2021, 6, 27225-27232.	1.6	10
934	Carboxylate functionalized imidazolium-based zwitterions as benign and sustainable solvent for cellulose dissolution: Synthesis and characterization. Journal of Molecular Liquids, 2021, 344, 117724.	2.3	3
935	Invoking chemical principles to predict the anions of dihydrooxazole family as prospective carbon capture moieties. Computational and Theoretical Chemistry, 2021, 1206, 113472.	1.1	0
937	Green Processes for Lignin Conversion. Green Chemistry and Sustainable Technology, 2016, , 263-300.	0.4	0
938	Environmental Materials. Seikei-Kakou, 2016, 28, 283-287.	0.0	0
940	Doping Polymers with Ionic Liquids to Manipulate Their Morphology and Membrane Gas Separation Properties. RSC Smart Materials, 2017, , 262-279.	0.1	0

#	Article	IF	Citations
941	Ionic Liquids as Tools in the Production of Smart Polymeric Hydrogels. RSC Smart Materials, 2017, , 304-318.	0.1	0
942	1-Allyl-2-methylpyridinium chloride. IUCrData, 2017, 2, .	0.1	1
943	1-Allyl-2,3-cyclopentenopyridinium chloride. IUCrData, 2017, 2, .	0.1	1
944	Use of Ionic Liquids for the Biorefinery. , 2018, , 1-33.		0
945	Use of Ionic Liquids for the Biorefinery. , 2019, , 223-255.		0
946	Dissolution of Cellulosic Material with Glycol Ether/NaOH Aqueous Solution. Palpu Chongi Gisul/Journal of Korea Technical Association of the Pulp and Paper Industry, 2019, 51, 19-27.	0.1	3
947	Utilization of Deep Eutectic Solvents to Reduce the Release of Hazardous Gases to the Atmosphere: A Critical Review. Molecules, 2021, 26, 75.	1.7	40
948	DMSO/IL solvent systems for cellulose dissolution: Binary or ternary mixtures?. Journal of Molecular Liquids, 2022, 345, 117810.	2.3	6
949	Recycling of natural fiber composites: Challenges and opportunities. Resources, Conservation and Recycling, 2022, 177, 105962.	5.3	62
950	Production of chemicals from marine biomass catalysed by acidic ionic liquids. Green Chemistry, 2021, 23, 9800-9814.	4.6	13
951	Screening Ionic Liquids by the COSMO-RS Method for the Preparation of Antibacterial Cellulose Fibers. ACS Sustainable Chemistry and Engineering, 2021, 9, 15525-15536.	3.2	11
952	Pickering emulsions stabilized by metalâ€“organic frameworks, graphitic carbon nitride and graphene oxide. Soft Matter, 2021, 18, 10-18.	1.2	12
953	Regioselective Protection and Deprotection of Nanocellulose Molecular Design Architecture: Robust Platform for Multifunctional Applications. Biomacromolecules, 2021, , .	2.6	2
954	Highly Dispersed Ionic Liquids in Mesoporous Molecular Sieves Enable a Record NH₃ Absorption. ACS Sustainable Chemistry and Engineering, 2021, 9, 16363-16372.	3.2	14
955	Reaction-Controlled Phase-Transfer Process of Polyoxometalate-Based Catalyst for Cellulose Esterification: A Molecular Dynamics Study. Journal of Physical Chemistry C, 2021, 125, 25478-25487.	1.5	3
956	An electrostatic-variable coarse-grained model for predicting enthalpy of vaporization, surface tension, diffusivity, conductivity, and dielectric constant of aqueous ionic liquid. Journal of Molecular Liquids, 2022, 346, 118230.	2.3	6
957	Development of cellulose-based polymeric structures using dual functional ionic liquids. RSC Advances, 2021, 11, 39278-39286.	1.7	2
958	Combined ionic liquid and supercritical carbon dioxide based dynamic extraction of six cannabinoids from Cannabis sativa L.. Green Chemistry, 2021, 23, 10079-10089.	4.6	13

#	Article	IF	Citations
959	Optical properties of an organic-inorganic hybrid film made of regenerated cellulose doped with light-scattering TiO2 particles. Optical Materials, 2022, 123, 111882.	1.7	11
960	Rapid dissolution of cellulose in an AlCl₃/ZnCl₂ aqueous system at room temperature and its versatile adaptability in functional materials. Green Chemistry, 2022, 24, 885-897.	4.6	54
961	Cellulose blends with polylactic acid or polyamide 6 from solution blending: Microstructure and polymer interactions. Materials Today Communications, 2022, 30, 103074.	0.9	11
962	Green fractionation approaches for isolation of biopolymers and the critical technical challenges. Industrial Crops and Products, 2022, 177, 114451.	2.5	19
963	Mechanistic insights on CO₂ utilization using sustainable catalysis. New Journal of Chemistry, 2021, 45, 22280-22288.	1.4	11
964	Rheological study of microcrystalline cellulose/pyridinium-based ionic liquids solutions. Polymer Bulletin, 2022, 79, 8987-8999.	1.7	6
965	Comparison of corncob-derived solid acids and evaluation of catalytic cellulose hydrolysis performance in LiBr. Biomass Conversion and Biorefinery, 2024, 14, 2019-2031.	2.9	1
966	Deep eutectic solvents boosting solubilization and Se-functionalization of heteropolysaccharide: Multiple hydrogen bonds modulation. Carbohydrate Polymers, 2022, 284, 119159.	5.1	12
967	The choice of ionic liquid ions to mitigate corrosion impacts: the influence of superbase cations and electron-donating carboxylate anions. Green Chemistry, 2022, 24, 2114-2128.	4.6	9
968	Progress on chemical modification of cellulose in â€œgreenâ€•solvents. Polymer Chemistry, 2022, 13, 359-372.	1.9	34
969	Synthesis of bamboo-derived porous carbon: exploring structure change, pore formation and supercapacitor application. Journal of Porous Materials, 2022, 29, 559-569.	1.3	27
970	Ionic liquids and lignin interaction: An overview. Bioresource Technology Reports, 2022, 17, 100958.	1.5	11
971	Easy and Efficient Recovery of EMIMCl from Cellulose Solutions by Addition of Acetic Acid and the Transition from the Original Ionic Liquid to an Eutectic Mixture. Molecules, 2022, 27, 987.	1.7	3
972	Sustainable, superfast deconstruction of natural cellulosic aggregates toward intrinsically green, multifunctional gel. Chemical Engineering Journal, 2022, 435, 134856.	6.6	8
973	Sustainable approaches to selective hydrolysis of cellulose with robust crystalline structure into glucose promoted by heterogeneous acid catalysts. , 2022, , 309-338.		3
974	Theoretical Mechanism on the Cellulose Regeneration from a Cellulose/EmimOAc Mixture in Anti-Solvents. Materials, 2022, 15, 1158.	1.3	4
975	Plasticizing Effect of Ionic Liquid on Poly (vinyl alcohol) with Different Degrees of Polymerization. ChemistrySelect, 2022, 7, .	0.7	3
976	Cellulose Amphiphilic Materials: Chemistry, Process and Applications. Pharmaceutics, 2022, 14, 386.	2.0	20

#	Article	IF	Citations
978	Sprayable hydrogel for biomedical applications. Biomaterials Science, 2022, 10, 2759-2771.	2.6	11
979	Ionic Liquid (Il) Dissolution Utilized for Biomass Conversion into Biofuels, Value-Added Chemicals and Advanced Materials: A Comprehensive Review. SSRN Electronic Journal, 0, , .	0.4	0
980	Experimental study on pretreatment effects of [BMIM]HSO₄/ethanol on the thermal behavior of cellulose. RSC Advances, 2022, 12, 10366-10373.	1.7	2
981	Recent advances in the chemical valorization of cellulose and its derivatives into ester compounds. Green Chemistry, 2022, 24, 3895-3921.	4.6	15
982	Conversion of bleached soda bagasse paper-grade pulp to dissolving-grade pulp using different hemicelluloses removing post-treatments with emphasis on IONCELL-P process. Holzforschung, 2022, 76, 473-483.	0.9	2
983	Cellulose Cryogels as Promising Materials for Biomedical Applications. International Journal of Molecular Sciences, 2022, 23, 2037.	1.8	30
984	Introduction of Ionic Liquids as Highly Efficient Plasticizers and Flame Retardants of Cellulose Triacetate Films. Journal of Polymers and the Environment, 2022, 30, 2905-2918.	2.4	13
985	Dissolution of Cellulose and Lignin with Biobased Ionic Liquids. Journal of Solution Chemistry, 2022, 51, 345-356.	0.6	3
986	Dual function composite fibers of cellulose with activated carbon aerogel and carbide derived carbon. Journal of Applied Polymer Science, 0, , 52297.	1.3	1
987	Cellulose-based fiber spinning processes using ionic liquids. Cellulose, 2022, 29, 3079-3129.	2.4	47
988	The role of hydrogenâ€bond in solubilizing drugs by ionic liquids: A molecular dynamics and density functional theory study. AICHE Journal, 2022, 68, .	1.8	14
989	Leak-free, high latent heat and self-cleaning phase change materials supported by layered cellulose/Fe3O4 skeleton for light-to-thermal energy conversion. Energy Conversion and Management, 2022, 256, 115357.	4.4	23
990	Application of New Energy Thermochromic Composite Thermosensitive Materials of Smart Windows in Recent Years. Molecules, 2022, 27, 1638.	1.7	25
991	Stretch-Induced Crystallization of Cellulose Spun from Ionic Liquid Solution. Biomacromolecules, 2022, 23, 2264-2271.	2.6	10
993	Cellulosic fraction from agricultural biomass as a viable alternative for plastics and plastic products. Industrial Crops and Products, 2022, 179, 114692.	2.5	27
994	Characterization and application of carboxylate-type zwitterions synthesized by one-step. Journal of Ionic Liquids, 2022, 2, 100027.	1.0	0
995	Fiber-welded polyionic biocomposites using 1-alkyl-3-vinylimidazolium alkylphosphonate ionic liquids. Journal of Ionic Liquids, 2022, 2, 100024.	1.0	2
996	Imidazolium room-temperature ionic liquids with alkoxymethyl substituent: A quest for improved microbiological selectivity. Chemical Engineering Journal, 2022, 442, 136062.	6.6	7

#	Article	IF	Citations
997	Application of Porous Materials for CO2 Reutilization: A Review. Energies, 2022, 15, 63.	1.6	13
998	Surface Interaction of Ionic Liquids: Stabilization of Polyethylene Terephthalate-Degrading Enzymes in Solution. Molecules, 2022, 27, 119.	1.7	2
999	Utilization of Cellulose to Its Full Potential: A Review on Cellulose Dissolution, Regeneration, and Applications. Polymers, 2021, 13, 4344.	2.0	53
1000	Ionic liquids: Implementing objectives of sustainability for the next generation chemical processes and industrial applications. Current Opinion in Green and Sustainable Chemistry, 2022, 35, 100625.	3.2	4
1001	Understanding the Dynamics of Cellulose Dissolved in an Ionic Liquid Solvent Under Shear and Extensional Flows. Biomacromolecules, 2022, 23, 1958-1969.	2.6	6
1004	In silico COSMO-RS predictive screening of ionic liquids for the dissolution of plastic. Green Chemistry, 2022, 24, 4140-4152.	4.6	33
1005	Molecularly imprinted materials for glycan recognition and processing. Journal of Materials Chemistry B, 2022, 10, 6607-6617.	2.9	5
1006	Extraction of Metal Palladium(Ii) from Acidic Medium Based on Two-Phase Aqueous Ionic Liquid. SSRN Electronic Journal, 0, , .	0.4	0
1007	Liquid Systems Based on Tetra(n-butyl)phosphonium Acetate for the Non-dissolving Pretreatment of a Microcrystalline Cellulose (Avicel PH-101). Biomacromolecules, 2022, 23, 1970-1980.	2.6	0
1008	Preparation of Degradable Wood Cellulose Films Using Ionic Liquids. ACS Applied Polymer Materials, 2022, 4, 3598-3607.	2.0	9
1009	Molecular Insights into the Interfacial Properties of Cellulose Surfaces with Varying Types of Ionic Liquid Epoxies. ACS Applied Polymer Materials, 2022, 4, 3734-3742.	2.0	0
1010	Ionic liquid dissolution utilized for biomass conversion into biofuels, value-added chemicals and advanced materials: A comprehensive review. Chemical Engineering Journal, 2022, 445, 136733.	6.6	32
1011	An interpenetrating-network-like structure in cellulose nanocrystal/polyurethane composites and the relative strengthening mechanism. Cellulose, 2022, 29, 5007-5019.	2.4	2
1013	Reducing Cellulose Crystallinity with a Noncellulose-Dissolving Solid Zwitterion and Its Application for Biomass Pretreatment. ACS Sustainable Chemistry and Engineering, 2022, 10, 6919-6924.	3.2	2
1014	Solubility and solvation features of native cyclodextrins in 1-ethyl-3-methylimidazolium acetate. Carbohydrate Polymers, 2022, 291, 119622.	5.1	1
1015	Mechanism and conformation changes for the whole regeneration process of cellulose in pyridinium-based ionic liquids. Cellulose, 2022, 29, 5479-5492.	2.4	7
1016	Bioethanol ÂProduction from Corn Straw ÂPretreated with Novel Deep Eutectic Solvents. SSRN Electronic Journal, 0, , .	0.4	0
1017	Closing the Carbon Loop in the Circular Plastics Economy. Macromolecular Rapid Communications, 2022, 43, .	2.0	21

#	Article	IF	Citations
1018	Cellulose Structures as a Support or Template for Inorganic Nanostructures and Their Assemblies. Nanomaterials, 2022, 12, 1837.	1.9	15
1019	Screening ionic liquids for dissolving hemicellulose by COSMO-RS based on the selective model. RSC Advances, 2022, 12, 16517-16529.	1.7	7
1020	Insights on the cellulose pretreatment at room temperature by choline-chloride-based deep eutectic solvents: an atomistic study. Cellulose, 2022, 29, 6517-6548.	2.4	8
1021	Relaxation of the Plant Cell Wall Barrier via Zwitterionic Liquid Pretreatment for Micelleâ€Complexâ€Mediated DNA Delivery to Specific Plant Organelles. Angewandte Chemie - International Edition, 2022, 61, .	7.2	13
1022	Enhanced dissolution of cellulose in CO2 switchable system by solvent with low Henry's constants as CO2 absorbent. Cellulose, 2022, 29, 6745-6758.	2.4	4
1023	Relaxation of the Plant Cell Wall Barrier via Zwitterionic Liquid Pretreatment for Micelleâ€Complexâ€Mediated DNA Delivery to Specific Plant Organelles. Angewandte Chemie, 0, , .	1.6	0
1024	Ionic liquids, the mixture of ionic liquids and their co-solvent with N, N-dimethylformamide as solvents for cellulose using experimental and COSMO study. Results in Engineering, 2022, 15, 100484.	2.2	6
1025	Miscanthus and Sorghum as sustainable biomass sources for nanocellulose production. Industrial Crops and Products, 2022, 186, 115177.	2.5	12
1026	Roles of Ionic Liquids in Adjusting Nature of Ionogels: A Mini Review. Advanced Functional Materials, 2022, 32, .	7.8	71
1027	Global Trends in Natural Biopolymers in the 21st Century: A Scientometric Review. Frontiers in Chemistry, 0, 10, .	1.8	9
1028	Fundamental investigations at the nexus of ionic liquids and mass spectrometry. International Journal of Mass Spectrometry, 2022, 479, 116896.	0.7	0
1029	Super solvent of cellulose with extra high solubility for tunable cellulose structure with versatile application. Carbohydrate Polymers, 2022, 296, 119917.	5.1	11
1030	Self-assembled coreâ€“shell clusters in deep eutectic solvents based on tetra-n-alkylammonium cations for high dissolution of strongly hydrogen-bonded small molecules. Journal of Colloid and Interface Science, 2022, 628, 426-436.	5.0	6
1031	Green Blends Based on Ionic Liquids with Improved Performance for Membrane Technology: Perspectives for Environmental Applications. International Journal of Molecular Sciences, 2022, 23, 7961.	1.8	4
1032	N2-selective adsorbents and membranes for natural gas purification. Separation and Purification Technology, 2022, 300, 121808.	3.9	9
1033	Enhanced cello-oligosaccharides production from cellulose hydrolysis in molten salt hydrate over lignin-based hyper-cross-linked polymer (LHCP) adsorption. Applied Catalysis A: General, 2022, 644, 118808.	2.2	5
1035	Infrared and Terahertz Spectroscopic Investigation of Imidazolium, Pyridinium, and Tetraalkylammonium Tetrafluoroborate Ionic Liquids. ACS Omega, 2022, 7, 29804-29812.	1.6	1
1036	Low-Temperature Catalytic Pyrolysis of Cellulose to Directional Products 5-Methylfurfural by Magnetic Ionic Liquid. Bioenergy Research, 2023, 16, 1108-1120.	2.2	2

#	Article	IF	Citations
1037	Application of Ionic Liquids and Derived Materials to High-Efficiency and Stable Perovskite Solar Cells. , 2022, 4, 1684-1715.		18
1038	Achieving a Superhydrophobic, Moisture, Oil and Gas Barrier Film Using a Regenerated Celluloseâ€"Calcium Carbonate Composite Derived from Paper Components or Waste. Sustainability, 2022, 14, 10425.	1.6	3
1039	Recent progress in regenerated cellulose-based fibers from alkali/urea system via spinning process. Carbohydrate Polymers, 2022, 296, 119942.	5.1	27
1040	A simple overview of toxicity of ionic liquids and designs of biocompatible ionic liquids. New Journal of Chemistry, 2022, 46, 20047-20052.	1.4	15
1041	Biotransformations of carbohydrates in ionic liquids. , 2022, , 209-231.		0
1042	Applications of deep eutectic solvents (DESs) in CO2 mitigation technologies. , 2022, , 319-343.		0
1043	A novel cost-effective choline chloride/ionic liquid solvent for all-cellulose composite production. Cellulose, 0, , .	2.4	0
1044	Synthesis of N-oxyethylene substituted imidazolium-based zwitterions as a recyclable solvent for cellulose dissolution. Cellulose, 2023, 30, 87-109.	2.4	1
1045	Effect of Oil on Cellulose Dissolution in the Ionic Liquid 1-Butyl-3-methyl Imidazolium Acetate. ACS Omega, 2022, 7, 37532-37545.	1.6	1
1046	Effect of ionic liquid on the enzymatic synthesis of cello-oligosaccharides and their assembly into cellulose materials. Carbohydrate Polymers, 2023, 301, 120302.	5.1	1
1047	Ultrastretchable Ionogel with Extreme Environmental Resilience through Controlled Hydration Interactions. Advanced Functional Materials, 2023, 33, .	7.8	54
1048	Nanospiked paper: Microfibrous cellulose materials nanostructured via partial hydrolysis and self-assembly. Carbohydrate Polymers, 2023, 300, 120257.	5.1	5
1049	[Review] Deconstruction of the Hierarchical Structure of Cellulose and Its Enzymatic Hydrolysis. Bulletin of Applied Glycoscience, 2017, 7, 10-15.	0.0	0
1050	Heatâ€Resistant, Robust, and Hydrophilic Separators Based on Regenerated Cellulose for Advanced Supercapacitors. Small, 2023, 19, .	5.2	5
1051	Cellulose Regeneration in Imidazolium-Based Ionic Liquids and Antisolvent Mixtures: A Density Functional Theory Study. ACS Omega, 2022, 7, 42170-42180.	1.6	3
1052	Chemical transformations of 5-hydroxymethylfurfural into highly added value products: present and future. Green Chemistry, 2023, 25, 871-892.	4.6	51
1053	Two-Step Pretreatment of Lignocellulosic Biomass for High-Sugar Recovery from the Structural Plant Polymers Cellulose and Hemicellulose. Energies, 2022, 15, 8898.	1.6	8
1054	Nanocellulose: A Fundamental Material for Science and Technology Applications. Molecules, 2022, 27, 8032.	1.7	12

#	Article	IF	Citations
1055	Synthesis and application of functionalized ionic liquids-based imidazolium as solvent for cotton fibre cellulose dissolution. Cellulose, 2023, 30, 1467-1481.	2.4	3
1056	Preparation and Properties of Cellulose Nanofiber-Reinforced Ionic Conductive Hydrogels Sensor. Polymer Science - Series A, 2022, 64, 765-774.	0.4	2
1057	Biomass and Cellulose Dissolutionâ€"The Important Issue in Renewable Materials Treatment. Applied Sciences (Switzerland), 2023, 13, 1055.	1.3	6
1058	Extraction techniques for bioactive compounds of cannabis. Natural Product Reports, 2023, 40, 676-717.	5.2	6
1059	Palladium(II) extraction from acidic chloride media using an ionic liquid-based aqueous two-phase system (IL-ATPS) in the presence of dipotassium hydrogen phosphate salting-out agent and reductive stripping with hydrazine hydrate to recover palladium metal. Hydrometallurgy, 2023, 216, 106017.	1.8	7
1060	Synthesis and Morphological Studies of Nanocellulose Fibers from Lignocellulosic Biomass in Ionic Liquid. Asian Journal of Chemistry, 2023, 35, 83-88.	0.1	0
1061	Ionic Liquids for Light Hydrocarbon Separation. , 2022, , 702-713.		0
1062	Closing the Nutrient Loopâ€"The New Approaches to Recovering Biomass Minerals during the Biorefinery Processes. International Journal of Environmental Research and Public Health, 2023, 20, 2096.	1.2	2
1063	Flame-Retardant Foamed Material Based on Modified Corn Straw Using Two Nitrogenous Layers. Materials, 2023, 16, 952.	1.3	2
1064	Role of ionic liquids in bioactive compounds extractions and applications. , 2023, , 247-284.		0
1065	Ionic liquids as valuable assets in extraction techniques. , 2023, , 199-221.		0
1066	Dissolution kinetics of cellulose in ionic solvents by polarized light microscopy. Cellulose, 2023, 30, 3027-3039.	2.4	1
1067	Magnetic hydroxyethyl cellulose spheres with efficient congo red removal. Journal of Porous Materials, 2023, 30, 1735-1751.	1.3	1
1068	Hemicellulose: Structure, chemical modification, and application. Progress in Polymer Science, 2023, 140, 101675.	11.8	53
1069	Recoverable cellulose composite adsorbents for anionic/cationic dyes removal. International Journal of Biological Macromolecules, 2023, 238, 124022.	3.6	7
1070	Ionic Liquids and their Application to a More Sustainable Chemistry. , 2014, , 552-581.		0
1071	Complete Lowâ€Temperature Transformation and Dissolution of the Three Main Components in Corn Straw. ChemistryOpen, 2023, 12, .	0.9	1
1072	Interaction between DNA and cationic metalloporphyrins in ionic liquid solutions. Journal of Porphyrins and Phthalocyanines, 0, , A-J.	0.4	0

#	Article	IF	Citations
1073	Bioethanol production from corn straw pretreated with deep eutectic solvents. Electronic Journal of Biotechnology, 2023, 62, 27-35.	1.2	5
1074	Influence of gelation temperature on physicochemical properties of cellulose hydrogels prepared from ionic liquid/DMSO solution. Journal of Molecular Liquids, 2023, 376, 121465.	2.3	1
1075	Probing the evolutionary mechanism of the hydrogen bond network of cellulose nanofibrils using three DESs. International Journal of Biological Macromolecules, 2023, 234, 123694.	3.6	6
1076	Cellulose Gel Mechanoreceptors â€“ Principles, Applications and Prospects. Advanced Functional Materials, 2023, 33, .	7.8	9
1077	Organized mineralized cellulose nanostructures for biomedical applications. Journal of Materials Chemistry B, 2023, 11, 5321-5349.	2.9	2
1078	Nanofibers and Nanomembranes of Biopolymers. , 2023, , 1-27.		0
1079	Celluloseâ€based Conductive Gels and Their Applications. ChemNanoMat, 2023, 9, .	1.5	6
1080	Effects of Glucose and Coagulant on the Structure and Properties of Regenerated Cellulose Fibers. Biomacromolecules, 2023, 24, 1810-1818.	2.6	4
1081	For efficient treatment of starch using aqueous ionic liquid at room temperature. Sustainable Materials and Technologies, 2023, 36, e00592.	1.7	0
1082	Hydrolysis of regenerated cellulose from ionic liquids and deep eutectic solvent over sulfonated carbon catalysts. RSC Advances, 2023, 13, 8153-8162.	1.7	0
1083	A low-energy and sustainable pulping technology for eucalyptus slabs using a deep eutectic solvent. Green Chemistry, 2023, 25, 3256-3266.	4.6	5
1084	Microstructures of Choline Amino Acid based Biocompatible Ionic Liquids. Chemical Record, 2023, 23, .	2.9	5
1085	A comprehensive review on how ionic liquids enhance the pyrolysis of cellulose, lignin, and lignocellulose toward a circular economy. Wiley Interdisciplinary Reviews: Energy and Environment, 2023, 12, .	1.9	2
1086	Synthesis of easily-processable collagen bio-inks using ionic liquid for 3D bioprinted liver tissue models with branched vascular networks. Science China Chemistry, 2023, 66, 1489-1499.	4.2	1
1087	Assessing the recyclability of superbase-derived ionic liquids in cellulose processing: An insight from degradation mechanisms. Chemical Engineering Journal, 2023, 465, 142718.	6.6	3
1088	Ionothermal carbonization of sugarcane bagasse in imidazolium tetrachloroferrate ionic liquids: effect of the cation on textural and morphological properties. Green Chemistry, 2023, 25, 3533-3542.	4.6	1
1089	Influence of hydrostatic pressure during gelation on physicochemical properties of cellulose hydrogels prepared from ionic liquid/DMSO solution. Journal of Molecular Liquids, 2023, 381, 121810.	2.3	1
1093	Nanofibers and Nanomembranes of Biopolymers. , 2023, , 579-605.		1

#	Article	IF	Citations
1109	Cellulose processing in ionic liquids from a materials science perspective: turning a versatile biopolymer into the cornerstone of our sustainable future. Green Chemistry, 2023, 25, 5338-5389.	4.6	8
1111	Cellulose-Based Ionic Conductor: An Emerging Material toward Sustainable Devices. Chemical Reviews, 2023, 123, 9204-9264.	23.0	30
1122	From green to circular chemistry paved by biocatalysis. Green Chemistry, 2023, 25, 7041-7057.	4.6	5
1123	Comprehensive advances in the synthesis, fluorescence mechanism and multifunctional applications of red-emitting carbon nanomaterials. Nanoscale Advances, 2023, 5, 5717-5765.	2.2	1
1138	An overview of the development status and applications of cellulose-based functional materials. Cellulose, 0, , .	2.4	0
1144	Alkyl-templated cocrystallization of long-chain 1-bromoalkanes by lipid-like ionic liquids. Chemical Communications, 2024, 60, 1723-1726.	2.2	1
1151	Modification of Cellulose. , 2024, , 1-37.		0