

Chuan-Fu Liu

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108
papers

3,060
citations

29
h-index

52
g-index

112
ext. papers

3,694
ext. citations

6.9
avg, IF

5.34
L-index

#	Paper	IF	Citations
108	A Supercompressible, Elastic, and Bendable Carbon Aerogel with Ultrasensitive Detection Limits for Compression Strain, Pressure, and Bending Angle. <i>Advanced Materials</i> , 2018 , 30, e1706705	24	174
107	An ultralight, elastic, cost-effective, and highly recyclable superabsorbent from microfibrillated cellulose fibers for oil spillage cleanup. <i>Journal of Materials Chemistry A</i> , 2015 , 3, 8772-8781	13	156
106	Fractionation of bagasse into cellulose, hemicelluloses, and lignin with ionic liquid treatment followed by alkaline extraction. <i>Journal of Agricultural and Food Chemistry</i> , 2011 , 59, 8691-701	5.7	145
105	Physicochemical characterization of cellulose from perennial ryegrass leaves (<i>Lolium perenne</i>). <i>Carbohydrate Research</i> , 2006 , 341, 2677-87	2.9	139
104	Ultrasound-assisted dissolution of cellulose in ionic liquid. <i>Carbohydrate Polymers</i> , 2011 , 86, 672-677	10.3	129
103	Acetylation of wheat straw hemicelluloses in ionic liquid using iodine as a catalyst. <i>Carbohydrate Polymers</i> , 2007 , 70, 406-414	10.3	104
102	Homogeneous modification of sugarcane bagasse cellulose with succinic anhydride using an ionic liquid as reaction medium. <i>Carbohydrate Research</i> , 2007 , 342, 919-26	2.9	97
101	Preparation of sugarcane bagasse cellulosic phthalate using an ionic liquid as reaction medium. <i>Carbohydrate Polymers</i> , 2007 , 68, 17-25	10.3	94
100	A mechanically strong and sensitive CNT/rGO/INF carbon aerogel for piezoresistive sensors. <i>Journal of Materials Chemistry A</i> , 2018 , 6, 23550-23559	13	93
99	A carbon aerogel with super mechanical and sensing performances for wearable piezoresistive sensors. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 8092-8100	13	90
98	Isolation and characterization of cellulose obtained from ultrasonic irradiated sugarcane bagasse. <i>Journal of Agricultural and Food Chemistry</i> , 2006 , 54, 5742-8	5.7	85
97	Self-Biotemplate Preparation of Hierarchical Porous Carbon with Rational Mesopore Ratio and High Oxygen Content for an Ultrahigh Energy-Density Supercapacitor. <i>ACS Sustainable Chemistry and Engineering</i> , 2018 , 6, 7138-7150	8.3	73
96	Xylan-based temperature/pH sensitive hydrogels for drug controlled release. <i>Carbohydrate Polymers</i> , 2016 , 151, 189-197	10.3	73
95	A feasible process for furfural production from the pre-hydrolysis liquor of corncob via biochar catalysts in a new biphasic system. <i>Bioresource Technology</i> , 2016 , 216, 754-60	11	68
94	Preparation and characterization of new quaternized carboxymethyl chitosan/rectorite nanocomposite. <i>Composites Science and Technology</i> , 2010 , 70, 1161-1167	8.6	66
93	Comparative study of water-soluble and alkali-soluble hemicelluloses from perennial ryegrass leaves (<i>Lolium perree</i>). <i>Carbohydrate Polymers</i> , 2007 , 67, 56-65	10.3	65
92	Synthesis and characterization of novel cationic SCB hemicelluloses with a low degree of substitution. <i>Carbohydrate Polymers</i> , 2007 , 67, 347-357	10.3	65

91	Chemical modification of ultrasound-pretreated sugarcane bagasse with maleic anhydride. <i>Industrial Crops and Products</i> , 2007 , 26, 212-219	5.9	63
90	Homogeneous modification of cellulose in ionic liquid with succinic anhydride using N-bromosuccinimide as a catalyst. <i>Journal of Agricultural and Food Chemistry</i> , 2009 , 57, 1814-20	5.7	59
89	Preparation and characterization of phthalated cellulose derivatives in room-temperature ionic liquid without catalysts. <i>Journal of Agricultural and Food Chemistry</i> , 2007 , 55, 2399-406	5.7	48
88	Production of xylooligosaccharides by microwave-induced, organic acid-catalyzed hydrolysis of different xylan-type hemicelluloses: Optimization by response surface methodology. <i>Carbohydrate Polymers</i> , 2017 , 157, 214-225	10.3	40
87	Superelastic Carbon Aerogel with Ultrahigh and Wide-Range Linear Sensitivity. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 40641-40650	9.5	40
86	Approach to Renewable Lignocellulosic Biomass Film Directly from Bagasse. <i>ACS Sustainable Chemistry and Engineering</i> , 2014 , 2, 1164-1168	8.3	38
85	Preparation and characterization of double crosslinked hydrogel films from carboxymethylchitosan and carboxymethylcellulose. <i>Carbohydrate Polymers</i> , 2014 , 110, 113-20	10.3	37
84	SO ₄ ²⁻ /Sn-MMT Solid Acid Catalyst for Xylose and Xylan Conversion into Furfural in the Biphasic System. <i>Catalysts</i> , 2017 , 7, 118	4	33
83	Amination of biorefinery technical lignins using Mannich reaction synergy with subcritical ethanol depolymerization. <i>International Journal of Biological Macromolecules</i> , 2018 , 107, 426-435	7.9	31
82	Preparation and Characterization of Regenerated Cellulose Film from a Solution in Lithium Bromide Molten Salt Hydrate. <i>Polymers</i> , 2018 , 10,	4.5	31
81	Graphene Oxide/Polyacrylamide/Aluminum Ion Cross-Linked Carboxymethyl Hemicellulose Nanocomposite Hydrogels with Very Tough and Elastic Properties. <i>Chemistry - an Asian Journal</i> , 2016 , 11, 1697-704	4.5	30
80	Structural variations of lignin macromolecule from different growth years of Triploid of <i>Populus tomentosa</i> Carr. <i>International Journal of Biological Macromolecules</i> , 2017 , 101, 747-757	7.9	29
79	Functional packaging films originating from hemicelluloses laurate by direct transesterification in ionic liquid. <i>Carbohydrate Polymers</i> , 2020 , 229, 115336	10.3	29
78	Per-O-acetylation of cellulose in dimethyl sulfoxide with catalyzed transesterification. <i>Journal of Agricultural and Food Chemistry</i> , 2014 , 62, 3446-52	5.7	28
77	Fabrication of a highly elastic nanocomposite hydrogel by surface modification of cellulose nanocrystals. <i>RSC Advances</i> , 2015 , 5, 13878-13885	3.7	27
76	Homogeneous Transesterification of Sugar Cane Bagasse toward Sustainable Plastics. <i>ACS Sustainable Chemistry and Engineering</i> , 2017 , 5, 360-366	8.3	27
75	Isolation and characterization of lignins from <i>Eucalyptus tereticornis</i> (12ABL). <i>Journal of Agricultural and Food Chemistry</i> , 2010 , 58, 11287-93	5.7	27
74	Fractional isolation and characterization of lignin and hemicelluloses from Triploid of <i>Populus tomentosa</i> Carr.. <i>Industrial Crops and Products</i> , 2010 , 31, 357-362	5.9	26

73	Synthesis of cationic hemicellulosic derivatives with a low degree of substitution in dimethyl sulfoxide media. <i>Journal of Applied Polymer Science</i> , 2008 , 109, 2711-2717	2.9	26
72	Fractional and structural characterization of hemicelluloses from perennial ryegrass (<i>Lolium perenne</i>) and cocksfoot grass (<i>Dactylis glomerata</i>). <i>Carbohydrate Research</i> , 2006 , 341, 2073-82	2.9	26
71	Assessment of integrated process based on autohydrolysis and robust delignification process for enzymatic saccharification of bamboo. <i>Bioresource Technology</i> , 2017 , 244, 717-725	11	25
70	Direct conversion of cellulose into sorbitol catalyzed by a bifunctional catalyst. <i>Bioresource Technology</i> , 2019 , 274, 190-197	11	25
69	Preparation and characterization of cellulose laurate ester by catalyzed transesterification. <i>Carbohydrate Polymers</i> , 2017 , 168, 247-254	10.3	24
68	Homogeneous modification of sugarcane bagasse with maleic anhydride in 1-butyl-3-methylimidazolium chloride without any catalysts. <i>Industrial Crops and Products</i> , 2013 , 46, 380-385	5.9	23
67	Ring-opening graft polymerization of propylene carbonate onto xylan in an ionic liquid. <i>Molecules</i> , 2015 , 20, 6033-47	4.8	22
66	Direct preparation of green and renewable aerogel materials from crude bagasse. <i>Cellulose</i> , 2016 , 23, 1325-1334	5.5	21
65	Influence of urea and glycerol on functional properties of biodegradable PVA/xylan composite films. <i>Cellulose</i> , 2014 , 21, 495-505	5.5	21
64	Extraction, Purification, and Characterization of Lignin Fractions from Sugarcane Bagasse. <i>BioResources</i> , 2013 , 8,	1.3	21
63	A super-resilient and highly sensitive graphene oxide/cellulose-derived carbon aerogel. <i>Journal of Materials Chemistry A</i> , 2020 , 8, 18376-18384	13	21
62	Preparation, characterization of carboxylated bamboo fibers and their adsorption for lead(II) ions in aqueous solution. <i>Cellulose</i> , 2013 , 20, 2091-2100	5.5	20
61	A foldable composite electrode with excellent electrochemical performance using microfibrillated cellulose fibers as a framework. <i>Journal of Materials Chemistry A</i> , 2018 , 6, 20338-20346	13	19
60	Acetylation of Microcrystalline Cellulose by Transesterification in AmimCl/DMSO Cosolvent System. <i>Molecules</i> , 2017 , 22,	4.8	18
59	Structural Changes of Bagasse during the Homogeneous Esterification with Maleic Anhydride in Ionic Liquid 1-Allyl-3-methylimidazolium Chloride. <i>Polymers</i> , 2018 , 10,	4.5	17
58	Characterization of Xylan-graft-Polycaprolactone Copolymers Prepared in Ionic Liquid. <i>Industrial & Engineering Chemistry Research</i> , 2015 , 54, 6282-6290	3.9	15
57	Salt-template assisted synthesis of cornstalk derived hierarchical porous carbon with excellent supercapacitance. <i>Industrial Crops and Products</i> , 2020 , 154, 112666	5.9	15
56	Linking Renewable Cellulose Nanocrystal into Lightweight and Highly Elastic Carbon Aerogel. <i>ACS Sustainable Chemistry and Engineering</i> , 2020 , 8, 11921-11929	8.3	15

55	Efficient base-free oxidation of monosaccharide into sugar acid under mild conditions using hierarchical porous carbon supported gold catalysts. <i>Green Chemistry</i> , 2020 , 22, 2588-2597	10	14
54	Monitoring the Crystalline Structure of Sugar Cane Bagasse in Aqueous Ionic Liquids. <i>ACS Sustainable Chemistry and Engineering</i> , 2017 , 5, 7278-7283	8.3	14
53	Homogeneous ring opening graft polymerization of ε-caprolactone onto xylan in dual polar aprotic solvents. <i>Carbohydrate Polymers</i> , 2015 , 117, 701-709	10.3	14
52	Synthesis of Thermoplastic Xylan-Lactide Copolymer with Amidine-Mediated Organocatalyst in Ionic Liquid. <i>Scientific Reports</i> , 2017 , 7, 551	4.9	13
51	Green and Controllable Synthesis of AuAg Bimetal Nanoparticles by Xylan for Surface-Enhanced Raman Scattering. <i>ACS Sustainable Chemistry and Engineering</i> , 2019 , 7, 15154-15162	8.3	13
50	Dual-component system dimethyl sulfoxide/LiCl as a solvent and catalyst for homogeneous ring-opening grafted polymerization of ε-caprolactone onto xylan. <i>Journal of Agricultural and Food Chemistry</i> , 2014 , 62, 682-90	5.7	13
49	Synthesis and Characterization of Xylan Grafted with Polyethylene Glycol in Ionic Liquid and Their Use as Moisture-Absorption/Retention Biomaterials. <i>Macromolecular Materials and Engineering</i> , 2016 , 301, 287-295	3.9	12
48	Cellulose 2010 , 131-167		12
47	Structural characterization of residual lignins isolated with cyanamide-activated hydrogen peroxide from various organosolvs pretreated wheat straw. <i>Journal of Applied Polymer Science</i> , 2008 , 109, 555-564	2.9	12
46	Synergistic effects of graft polymerization and polymer blending on the flexibility of xylan-based films. <i>Carbohydrate Polymers</i> , 2018 , 181, 1128-1135	10.3	12
45	A sandwich-like chitosan-based antibacterial nanocomposite film with reduced graphene oxide immobilized silver nanoparticles. <i>Carbohydrate Polymers</i> , 2021 , 260, 117835	10.3	11
44	A new and highly efficient conservation treatment for deacidification and strengthening of aging paper by in-situ quaternization. <i>Carbohydrate Polymers</i> , 2019 , 209, 250-257	10.3	10
43	Development of functional chitosan-based composite films incorporated with hemicelluloses: Effect on physicochemical properties. <i>Carbohydrate Polymers</i> , 2020 , 246, 116489	10.3	10
42	Click chemistry to synthesize exfoliated xylan-g-quaternized chitosan/montmorillonite nanocomposites for retention and drainage-aid. <i>Carbohydrate Polymers</i> , 2019 , 224, 115197	10.3	9
41	Homogeneous esterification mechanism of bagasse modified with phthalic anhydride in ionic liquid. Part 2: Reactive behavior of hemicelluloses. <i>Carbohydrate Polymers</i> , 2017 , 157, 1365-1373	10.3	9
40	A Feasible Way to Produce Carbon Nanofiber by Electrospinning from Sugarcane Bagasse. <i>Polymers</i> , 2019 , 11,	4.5	9
39	Per-O-acylation of xylan at room temperature in dimethylsulfoxide/N-methylimidazole. <i>Cellulose</i> , 2016 , 23, 2863-2876	5.5	8
38	Mechanocatalytic Solvent-Free Esterification of Sugarcane Bagasse. <i>Polymers</i> , 2018 , 10,	4.5	8

37	Construction of functional composite films originating from hemicellulose reinforced with poly(vinyl alcohol) and nano-ZnO. <i>Cellulose</i> , 2020 , 27, 1341-1355	5.5	8
36	Graphene Oxide Encapsulating Liquid Metal to Toughen Hydrogel. <i>Advanced Functional Materials</i> , 2016 , 2106761	5.6	8
35	Preparation of CMC/HEC Crosslinked Hydrogels for Drug Delivery. <i>BioResources</i> , 2015 , 10,	1.3	7
34	Construction of sugarcane bagasse-derived porous and flexible carbon nanofibers by electrospinning for supercapacitors. <i>Industrial Crops and Products</i> , 2021 , 170, 113700	5.9	7
33	Fabrication of Pd NPs-supported porous carbon by integrating the reducing reactivity and carbon-rich network of lignin. <i>Scientific Reports</i> , 2019 , 9, 7300	4.9	6
32	Hemicellulose-Based Hydrogels and Their Potential Application. <i>Gels Horizons: From Science To Smart Materials</i> , 2018 , 87-127		5
31	Synthesis and Characteristic of Xylan-grafted-polyacrylamide and Application for Improving Pulp Properties. <i>Materials</i> , 2017 , 10,	3.5	5
30	Organic Catalysis for Ring-Opening Graft Polymerization of p-Dioxanone with Xylan in Ionic liquid. <i>Polymers</i> , 2017 , 9,	4.5	5
29	DISSOLUTION OF HOLOCELLULOSE IN IONIC LIQUID ASSISTED WITH BALL-MILLING PRETREATMENT AND ULTRASOUND IRRADIATION. <i>BioResources</i> , 2012 , 7,	1.3	5
28	Production of Xylooligosaccharide, Nanolignin, and Nanocellulose through a Fractionation Strategy of Corncob for Biomass Valorization. <i>Industrial & Engineering Chemistry Research</i> , 2020 , 59, 17429-17439	3.9	5
27	Dissolution of less-processed wood fibers without bleaching in an ionic liquid: Effect of lignin condensation on wood component dissolution. <i>International Journal of Biological Macromolecules</i> , 2019 , 134, 740-748	7.9	4
26	Structural Features of Lignin Fractionated From Industrial Furfural Residue Using Alkaline Cooking Technology and Its Antioxidant Performance. <i>Frontiers in Energy Research</i> , 2020 , 8,	3.8	4
25	Esterification Mechanism of Bagasse Modified with Glutaric Anhydride in 1-Allyl-3-methylimidazolium Chloride. <i>Materials</i> , 2017 , 10,	3.5	4
24	Rapid Dissolution of Cellulose in Ionic Liquid with Different Methods 2013 ,		4
23	Antimicrobial Activity of Quaternized Chitosan/Organic Rectorite Nanocomposite. <i>Wuji Cailiao Xuebao/Journal of Inorganic Materials</i> , 2009 , 24, 1236-1242	1	4
22	Quaternized chitosan-assisted in situ synthesized CuS/cellulose nanofibers conductive paper for flexible electrode. <i>Nano Research</i> , 2020 , 14, 2390	10	4
21	Facial Synthesis of Adsorbent from Hemicelluloses for Cr(VI) Adsorption. <i>Molecules</i> , 2021 , 26,	4.8	4
20	Reaction Behavior of Cellulose in the Homogeneous Esterification of Bagasse Modified with Phthalic Anhydride in Ionic Liquid 1-Allyl-3-methylimidazolium Chloride. <i>International Journal of Polymer Science</i> , 2016 , 2016, 1-9	2.4	4

19	Co-production of functional xylo-oligosaccharides and fermentable sugars from corn stover through fast and facile ball mill-assisted alkaline peroxide pretreatment. <i>Bioresource Technology</i> , 2021 , 337, 125327	11	4
18	Aldehydes-Aided Lignin-First Deconstruction Strategy for Facilitating Lignin Monomers and Fermentable Glucose Production from Poplar Wood. <i>Energies</i> , 2020 , 13, 1113	3.1	3
17	Homogeneous Esterification Mechanism of Bagasse Modified with Phthalic Anhydride in Ionic Liquid, Part 3: Structural Transformation of Lignins. <i>BioResources</i> , 2017 , 12,	1.3	3
16	Enhancing the Mechanical Performance of Reduced Graphene Oxide Aerogel with Cellulose Nanofibers. <i>ChemNanoMat</i> , 2021 , 7, 950-957	3.5	3
15	Single-layered graphene quantum dots with self-passivated layer from xylan for visual detection of trace chromium(VI). <i>Chemical Engineering Journal</i> , 2021 , 131833	14.7	3
14	Homogeneous Esterification of Eucalyptus with Palmitoyl Chloride at Room Temperature. <i>BioResources</i> , 2013 , 8,	1.3	2
13	Homogeneous Modification of Sugarcane Bagasse by Graft Copolymerization in Ionic Liquid for Oil Absorption Application. <i>International Journal of Polymer Science</i> , 2016 , 2016, 1-7	2.4	2
12	Shape-Memory and Anisotropic Carbon Aerogel from Biomass and Graphene Oxide. <i>Molecules</i> , 2021 , 26,	4.8	2
11	Ammonia-assisted hydrothermal carbon material with schiff base structures synthesized from factory waste hemicelluloses for Cr(VI) adsorption. <i>Journal of Environmental Chemical Engineering</i> , 2021 , 9, 106187	6.8	2
10	Homogeneous Derivatization of Sugarcane Bagasse with Myristyl Chloride at Room Temperature to Prepare Bio-based Oil Absorbents. <i>BioResources</i> , 2014 , 10,	1.3	1
9	Green approach to produce xylo-oligosaccharides and glucose by mechanical-hydrothermal pretreatment. <i>Bioresource Technology</i> , 2022 , 344, 126298	11	1
8	One-step construction of Co2P nanoparticles encapsulated in N, P co-doped biomass-based porous carbon as bifunctional efficient electrocatalysts for overall water splitting. <i>Sustainable Energy and Fuels</i> , 2021 , 5, 2477-2485	5.8	1
7	Colloidal lignin nanoparticles from acid hydrotropic fractionation for producing tough, biodegradable, and UV blocking PVA nanocomposite. <i>Industrial Crops and Products</i> , 2021 , 168, 113584	5.9	1
6	Biomass-based protic ionic liquid derived N, P, co-doped porous carbon-coated CoP nanocrystals for efficient hydrogen evolution reaction. <i>Journal of Materials Science</i> , 2021 , 56, 18188-18199	4.3	1
5	Preparation and properties of epichlorohydrin-cross-linked chitosan/hydroxyethyl cellulose based CuO nanocomposite films. <i>Cellulose</i> , 1	5.5	1
4	Engineering of sugarcane bagasse based porous carbon nanofiber-supported the CoP/Co2P heterostructure for efficient overall water splitting. <i>Electrochimica Acta</i> , 2021 , 404, 139578	6.7	0
3	Highly selective oxidation of monosaccharides to sugar acids at room temperature over palladium supported on surface functionalized carbon nanotubes. <i>Green Chemistry</i> , 2021 , 23, 7084-7092	10	0
2	Emulsion templated advanced functional materials from emerging nano building blocks. <i>Journal of Materials Chemistry A</i> ,	13	0

1 Macromol. Mater. Eng. 3/2016. *Macromolecular Materials and Engineering*, **2016**, 301, 352-352

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