Tong-Qi Yuan

List of Publications by Year
in descending order

104 papers	7,178 citations	47006 47 h-index	60623 81 g-index
106 all docs	106 docs citations	106 times ranked	5922 citing authors

#	Article	IF	Citations
1	Lignin-derived materials and their applications in rechargeable batteries. Green Chemistry, 2022, 24, 565-584.	9.0	37
2	Ultrafast fractionation of wild-type and CSE down-regulated poplars by microwave-assisted deep eutectic solvents (DES) for cellulose bioconversion enhancement and lignin nanoparticles fabrication. Industrial Crops and Products, 2022, 176, 114275.	5.2	19
3	Recent Advances in the Catalytic Upgrading of Biomass Platform Chemicals Via Hydrotalcite-Derived Metal Catalysts. Transactions of Tianjin University, 2022, 28, 89-111.	6.4	17
4	The Chinese pine genome and methylome unveil key features of conifer evolution. Cell, 2022, 185, 204-217.e14.	28.9	151
5	Ultrafast alkaline deep eutectic solvent pretreatment for enhancing enzymatic saccharification and lignin fractionation from industrial xylose residue. Bioresource Technology, 2022, 352, 127065.	9.6	33
6	Exploration of deep eutectic solvent-based biphasic system for furfural production and enhancing enzymatic hydrolysis: Chemical, topochemical, and morphological changes. Bioresource Technology, 2022, 352, 127074.	9.6	15
7	A scalable and simple lignin-based polymer for ultra-efficient flocculation and sterilization. Separation and Purification Technology, 2022, 292, 120960.	7.9	7
8	Fractionation of technical lignin and its application on the lignin/poly-(butylene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 467 Td (adipate-co 209, 1065-1074.	7.5	25
9	Ultrastructural elucidation of lignin macromolecule from different growth stages of Chinese pine. International Journal of Biological Macromolecules, 2022, 209, 1792-1800.	7.5	6
10	Efficient fractionation of bamboo residue by autohydrolysis and deep eutectic solvents pretreatment. Bioresource Technology, 2022, 354, 127225.	9.6	23
11	Unveiling the Migration and Transformation Mechanism of Lignin in <i>Eucalyptus</i> During Deep Eutectic Solvent Pretreatment. ChemSusChem, 2022, 15, .	6.8	13
12	Performance regulation of lignin-based flocculant at the practical molecular level by fractionation. Separation and Purification Technology, 2022, 299, 121670.	7.9	4
13	Progress in microwave pyrolysis conversion of agricultural waste to value-added biofuels: A batch to continuous approach. Renewable and Sustainable Energy Reviews, 2021, 135, 110148.	16.4	206
14	Effect of integrated treatment on improving the enzymatic digestibility of poplar and the structural features of isolated hemicelluloses. Carbohydrate Polymers, 2021, 252, 117164.	10.2	27
15	Redox mediator assists electron transfer in lithiumâ€“sulfur batteries with sulfurized polyacrylonitrile cathodes. EcoMat, 2021, 3, e12066.	11.9	69
16	Recent Advances in Lignin Modification and Its Application in Wastewater Treatment. ACS Symposium Series, 2021, , 143-173.	0.5	3
17	Advanced and versatile lignin-derived biodegradable composite film materials toward a sustainable world. Green Chemistry, 2021, 23, 3790-3817.	9.0	114
18	A sustainable agricultural strategy integrating Cd-contaminated soils remediation and bioethanol production using sorghum cultivars. Industrial Crops and Products, 2021, 162, 113299.	5.2	16

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19	Microwave-assisted deep eutectic solvents (DES) pretreatment of control and transgenic poplars for boosting the lignin valorization and cellulose bioconversion. Industrial Crops and Products, 2021, 164, 113415.	5.2	79
20	Microwave-Assisted Sulfonation of Lignin for the Fabrication of a High-Performance Dye Dispersant. ACS Sustainable Chemistry and Engineering, 2021, 9, 9053-9061.	6.7	24
21	Technical Lignin Valorization in Biodegradable Polyester-Based Plastics (BPPs). ACS Sustainable Chemistry and Engineering, 2021, 9, 12017-12042.	6.7	33
22	Raney Ni as a Versatile Catalyst for Biomass Conversion. ACS Catalysis, 2021, 11, 10508-10536.	11.2	49
23	Short-time deep eutectic solvents pretreatment enhanced production of fermentable sugars and tailored lignin nanoparticles from abaca. International Journal of Biological Macromolecules, 2021, 192, 417-425.	7.5	46
24	Improved value and carbon footprint by complete utilization of corncob lignocellulose. Chemical Engineering Journal, 2021, 419, 129565.	12.7	50
25	Ultrastructural change in lignocellulosic biomass during hydrothermal pretreatment. Bioresource Technology, 2021, 341, 125807.	9.6	54
26	A synergistic hydrothermal-deep eutectic solvent (DES) pretreatment for rapid fractionation and targeted valorization of hemicelluloses and cellulose from poplar wood. Bioresource Technology, 2021, 341, 125828.	9.6	52
27	One-pot preparation and characterization of lignin-based cation exchange resin and its utilization in Pb (II) removal. Bioresource Technology, 2020, 295, 122297.	9.6	29
28	The direct transformation of bioethanol fermentation residues for production of high-quality resins. Green Chemistry, 2020, 22, 439-447.	9.0	26
29	Structural Variations of Lignin Macromolecules from Early Growth Stages of Poplar Cell Walls. ACS Sustainable Chemistry and Engineering, 2020, 8, 1813-1822.	6.7	56
30	Structural and Morphological Transformations of Lignin Macromolecules during Bio-Based Deep Eutectic Solvent (DES) Pretreatment. ACS Sustainable Chemistry and Engineering, 2020, 8, 2130-2137.	6.7	131
31	Lewis Acid-Facilitated Deep Eutectic Solvent (DES) Pretreatment for Producing High-Purity and Antioxidative Lignin. ACS Sustainable Chemistry and Engineering, 2020, 8, 1050-1057.	6.7	117
32	Green synthesis of chemical converted graphene sheets derived from pulping black liquor. Carbon, 2020, 158, 690-697.	10.3	45
33	Electrolyte Regulation towards Stable Lithiumâ€Metal Anodes in Lithiumâ€"Sulfur Batteries with Sulfurized Polyacrylonitrile Cathodes. Angewandte Chemie - International Edition, 2020, 59, 10732-10745.	13.8	108
34	Structural elucidation of lignin macromolecule from abaca during alkaline hydrogen peroxide delignification. International Journal of Biological Macromolecules, 2020, 144, 596-602.	7.5	51
35	Electrolyte Regulation towards Stable Lithiumâ€Metal Anodes in Lithiumâ€"Sulfur Batteries with Sulfurized Polyacrylonitrile Cathodes. Angewandte Chemie, 2020, 132, 10821-10834.	2.0	80
36	A review on production of lignin-based ï¬‚occulants: Sustainable feedstock and low carbon footprint applications. Renewable and Sustainable Energy Reviews, 2020, 134, 110384.	16.4	46

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37	Tunable, UV-shielding and biodegradable composites based on well-characterized lignins and poly(butylene adipate-<i>co</i>-terephthalate). Green Chemistry, 2020, 22, 8623-8632.	9.0	59
38	Insights into Structural Transformations of Lignin Toward High Reactivity During Choline Chloride/Formic Acid Deep Eutectic Solvents Pretreatment. Frontiers in Energy Research, 2020, 8, .	2.3	9
39	Downstream Processing Strategies for Ligninâ€First Biorefinery. ChemSusChem, 2020, 13, 5199-5212.	6.8	62
40	Structureâ€"function relationships of deep eutectic solvents for lignin extraction and chemical transformation. Green Chemistry, 2020, 22, 7219-7232.	9.0	151
41	In situ regulated solid electrolyte interphase via reactive separators for highly efficient lithium metal batteries. Energy Storage Materials, 2020, 30, 27-33.	18.0	90
42	Aldehydes-Aided Lignin-First Deconstruction Strategy for Facilitating Lignin Monomers and Fermentable Glucose Production from Poplar Wood. Energies, 2020, 13, 1113.	3.1	4
43	Economically Competitive Biodegradable PBAT/Lignin Composites: Effect of Lignin Methylation and Compatibilizer. ACS Sustainable Chemistry and Engineering, 2020, 8, 5338-5346.	6.7	113
44	Valorization of Technical Lignin for the Production of Desirable Resins with High Substitution Rate and Controllable Viscosity. ChemSusChem, 2020, 13, 4446-4454.	6.8	18
45	Recent progress on biomassâ€derived ecomaterials toward advanced rechargeable lithium batteries. EcoMat, 2020, 2, e12019.	11.9	117
46	In-depth interpretation of the structural changes of lignin and formation of diketones during acidic deep eutectic solvent pretreatment. Green Chemistry, 2020, 22, 1851-1858.	9.0	123
47	A Mixed Ether Electrolyte for Lithium Metal Anode Protection in Working Lithiumâ€"Sulfur Batteries. Energy and Environmental Materials, 2020, 3, 160-165.	12.8	85
48	Unmasking the heterogeneity of carbohydrates in heartwood, sapwood, and bark of Eucalyptus. Carbohydrate Polymers, 2020, 238, 116212.	10.2	14
49	Plasticized hemicelluloses/chitosan-based edible films reinforced by cellulose nanofiber with enhanced mechanical properties. Carbohydrate Polymers, 2019, 224, 115164.	10.2	93
50	Structural characterization of lignin in heartwood, sapwood, and bark of eucalyptus. International Journal of Biological Macromolecules, 2019, 138, 519-527.	7.5	36
51	Use of xylooligosaccharides (XOS) in hemicelluloses/chitosan-based films reinforced by cellulose nanofiber: Effect on physicochemical properties. Food Chemistry, 2019, 298, 125041.	8.2	35
52	Compressive Alginate Sponge Derived from Seaweed Biomass Resources for Methylene Blue Removal from Wastewater. Polymers, 2019, 11, 961.	4.5	21
53	Structural Features of Alkaline Dioxane Lignin and Residual Lignin from <i>Eucalyptus grandis Ã— E. urophylla</i>. Journal of Agricultural and Food Chemistry, 2019, 67, 968-974.	5.2	16
54	Facile fractionation of lignocelluloses by biomass-derived deep eutectic solvent (DES) pretreatment for cellulose enzymatic hydrolysis and lignin valorization. Green Chemistry, 2019, 21, 275-283.	9.0	445

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55	Green and Facile Preparation of Regular Lignin Nanoparticles with High Yield and Their Natural Broad-Spectrum Sunscreens. ACS Sustainable Chemistry and Engineering, 2019, 7, 2658-2666.	6.7	148
56	Selective precipitation and characterization of ligninâ€“carbohydrate complexes (LCCs) from Eucalyptus. Planta, 2018, 247, 1077-1087.	3.2	39
57	Effects of Hydrothermal Pretreatment on the Structural Characteristics of Organosolv Lignin from Triarrhena lutarioriparia. Polymers, 2018, 10, 1157.	4.5	19
58	Upgrading Traditional Pulp Mill into Biorefinery Platform: Wheat Straw as a Feedstock. ACS Sustainable Chemistry and Engineering, 2018, 6, 15284-15291.	6.7	9
59	Revealing the Topochemistry and Structural Features of Lignin during the Growth of <i>Eucalyptus grandis</i> Ã— <i>Eucalyptus urophylla</i>. ACS Sustainable Chemistry and Engineering, 2018, 6, 9198-9207.	6.7	13
60	Improvement in Wood Bonding Strength of Poly (Vinyl Acetate-Butyl Acrylate) Emulsion by Controlling the Amount of Redox Initiator. Materials, 2018, 11, 89.	2.9	25
61	Eco-Friendly Phenolâ€“Ureaâ€“Formaldehyde Co-condensed Resin Adhesives Accelerated by Resorcinol for Plywood Manufacturing. ACS Omega, 2018, 3, 8521-8528.	3.5	32
62	Effect of ultrasonic time on the structural and physico-chemical properties of hemicelluloses from Eucalyptus grandis. Carbohydrate Polymers, 2018, 195, 114-119.	10.2	34
63	Comparison of cellulose and chitin nanocrystals for reinforcing regenerated cellulose fibers. Journal of Applied Polymer Science, 2017, 134, .	2.6	11
64	A bio-based coating onto the surface Populus fiber for oil spillage cleanup applications. Industrial Crops and Products, 2017, 98, 38-45.	5.2	18
65	Effect of alkaline preswelling on the structure of lignins from Eucalyptus. Scientific Reports, 2017, 7, 45752.	3.3	7
66	Structural variations of lignin macromolecule from different growth years of Triploid of Populus tomentosa Carr.. International Journal of Biological Macromolecules, 2017, 101, 747-757.	7.5	54
67	Manufacture and application of lignin-based carbon fibers (LCFs) and lignin-based carbon nanofibers (LCNFs). Green Chemistry, 2017, 19, 1794-1827.	9.0	216
68	Structural Characteristics of Lignin Macromolecules from Different <i>Eucalyptus</i> Species. ACS Sustainable Chemistry and Engineering, 2017, 5, 11618-11627.	6.7	122
69	Effects of Various Surfactants on Alkali Lignin Electrospinning Ability and Spun Fibers. Industrial & Engineering Chemistry Research, 2017, 56, 9551-9559.	3.7	49
70	Heat Treatment of Industrial Alkaline Lignin and its Potential Application as an Adhesive for Green Woodâ€“Lignin Composites. ACS Sustainable Chemistry and Engineering, 2017, 5, 7269-7277.	6.7	63
71	Structure-property relationships for technical lignins for the production of lignin-phenol-formaldehyde resins. Industrial Crops and Products, 2017, 108, 316-326.	5.2	84
72	Effect of compression combined with steam treatment on the porosity, chemical compositon and cellulose crystalline structure of wood cell walls. Carbohydrate Polymers, 2017, 155, 163-172.	10.2	74

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73	Structural Variation of Lignin and Ligninâ€“Carbohydrate Complex in <i>Eucalyptus grandis Ã— E. urophylla</i> during Its Growth Process. ACS Sustainable Chemistry and Engineering, 2017, 5, 1113-1122.	6.7	53
74	A lignosulfonate-modified graphene hydrogel with ultrahigh adsorption capacity for Pb(<scp>ii</scp>) removal. Journal of Materials Chemistry A, 2016, 4, 11888-11896.	10.3	169
75	Valorization of lignin and cellulose in acid-steam-exploded corn stover by a moderate alkaline ethanol post-treatment based on an integrated biorefinery concept. Biotechnology for Biofuels, 2016, 9, 238.	6.2	38
76	Structural Elucidation of Whole Lignin in Cell Walls of Triploid of <i>Populus tomentosa</i> Carr.. ACS Sustainable Chemistry and Engineering, 2016, 4, 1006-1015.	6.7	29
77	Preparation of Lignin-Phenol-Formaldehyde Resin Adhesive Based on Active Sites of Technical Lignin. Journal of Biobased Materials and Bioenergy, 2015, 9, 266-272.	0.3	39
78	Ligninâ€“phenolâ€“formaldehyde resin adhesives prepared with biorefinery technical lignins. Journal of Applied Polymer Science, 2015, 132, .	2.6	72
79	Integrated Hot-Compressed Water and Laccase-Mediator Treatments of <i>Eucalyptus grandis</i> Fibers: Structural Changes of Fiber and Lignin. Journal of Agricultural and Food Chemistry, 2015, 63, 1763-1772.	5.2	19
80	Structural elucidation of whole lignin from Eucalyptus based on preswelling and enzymatic hydrolysis. Green Chemistry, 2015, 17, 1589-1596.	9.0	157
81	Hydrothermal degradation of lignin: Products analysis for phenol formaldehyde adhesive synthesis. International Journal of Biological Macromolecules, 2015, 72, 54-62.	7.5	44
82	Preparation and Characterization of Lignocellulosic Oil Sorbent by Hydrothermal Treatment of Populus Fiber. Materials, 2014, 7, 6733-6747.	2.9	27
83	Understanding the chemical and structural transformations of lignin macromolecule during torrefaction. Applied Energy, 2014, 121, 1-9.	10.1	190
84	Study on thermal degradation kinetics of cellulose-graft-poly(l-lactic acid) by thermogravimetric analysis. Polymer Degradation and Stability, 2014, 99, 233-239.	5.8	49
85	Understanding the chemical transformations of lignin during ionic liquid pretreatment. Green Chemistry, 2014, 16, 181-190.	9.0	260
86	Characterization and phenolation of biorefinery technical lignins for ligninâ€“phenolâ€“formaldehyde resin adhesive synthesis. RSC Advances, 2014, 4, 57996-58004.	3.6	103
87	Unraveling the structural characteristics of lignin in hydrothermal pretreated fibers and manufactured binderless boards from Eucalyptus grandis. Sustainable Chemical Processes, 2014, 2, .	2.3	52
88	Fractionation of bamboo culms by autohydrolysis, organosolv delignification and extended delignification: Understanding the fundamental chemistry of the lignin during the integrated process. Bioresource Technology, 2013, 150, 278-286.	9.6	95
89	Structural Elucidation of Lignin Polymers of <i>Eucalyptus</i> Chips during Organosolv Pretreatment and Extended Delignification. Journal of Agricultural and Food Chemistry, 2013, 61, 11067-11075.	5.2	109
90	Reconstitution of cellulose and lignin after [C₂mim][OAc] pretreatment and its relation to enzymatic hydrolysis. Biotechnology and Bioengineering, 2013, 110, 729-736.	3.3	24

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91	Effect of ionic liquid/organic solvent pretreatment on the enzymatic hydrolysis of corncob for bioethanol production. Part 1: Structural characterization of the lignins. Industrial Crops and Products, 2013, 43, 570-577.	5.2	97
92	Synergistic benefits of ionic liquid and alkaline pretreatments of poplar wood. Part 1: Effect of integrated pretreatment on enzymatic hydrolysis. Bioresource Technology, 2013, 144, 429-434.	9.6	34
93	Synergistic benefits of ionic liquid and alkaline pretreatments of poplar wood. Part 2: Characterization of lignin and hemicelluloses. Bioresource Technology, 2013, 136, 345-350.	9.6	33
94	Role of lignin in a biorefinery: separation characterization and valorization. Journal of Chemical Technology and Biotechnology, 2013, 88, 346-352.	3.2	120
95	Chemical Changes of Raw Materials and Manufactured Binderless Boards during Hot Pressing: Lignin Isolation and Characterization. BioResources, 2013, 9, .	1.0	30
96	SYNTHESIS AND CHARACTERIZATION OF CELLULOSE-GRAFT-POLY (L-LACTIDE) VIA RING-OPENING POLYMERIZATION. BioResources, 2012, 7, .	1.0	10
97	Structural Characterization of Lignin from Triploid of Populus tomentosa Carr.. Journal of Agricultural and Food Chemistry, 2011, 59, 6605-6615.	5.2	108
98	Characterization of Lignin Structures and Ligninâ€“Carbohydrate Complex (LCC) Linkages by Quantitative ¹³C and 2D HSQC NMR Spectroscopy. Journal of Agricultural and Food Chemistry, 2011, 59, 10604-10614.	5.2	483
99	Homogeneous butyrylation and lauroylation of poplar wood in the ionic liquid 1-butyl-3-methylimidazolium chloride. Bioresource Technology, 2011, 102, 4590-4593.	9.6	14
100	Isolation and physico-chemical characterization of lignins from ultrasound irradiated fast-growing poplar wood. BioResources, 2011, 6, 414-433.	1.0	48
101	Structural and physico-chemical characterization of hemicelluloses from ultrasound-assisted extractions of partially delignified fast-growing poplar wood through organic solvent and alkaline solutions. Biotechnology Advances, 2010, 28, 583-593.	11.7	112
102	Separation and Structural Characterization of Lignin from Hybrid Poplar Based on Complete Dissolution in DMSO/LiCl. Separation Science and Technology, 2010, 45, 2497-2506.	2.5	22
103	Homogeneous Esterification of Poplar Wood in an Ionic Liquid under Mild Conditions: Characterization and Properties. Journal of Agricultural and Food Chemistry, 2010, 58, 11302-11310.	5.2	34
104	Fractionation and physico-chemical analysis of degraded lignins from the black liquor of Eucalyptus pellita KP-AQ pulping. Polymer Degradation and Stability, 2009, 94, 1142-1150.	5.8	132