Bin Li

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/6655864/publications.pdf

Version: 2024-02-01

88 papers	5,432 citations	76322 40 h-index	85537 71 g-index
91 all docs	91 docs citations	91 times ranked	5325 citing authors

#	Article	IF	Citations
1	Cellulose nanocrystals and cellulose nanofibrils based hydrogels for biomedical applications. Carbohydrate Polymers, 2019, 209, 130-144.	10.2	647
2	Properties of nanocellulose isolated from corncob residue using sulfuric acid, formic acid, oxidative and mechanical methods. Carbohydrate Polymers, 2016, 151, 716-724.	10.2	278
3	A physically crosslinked polydopamine/nanocellulose hydrogel as potential versatile vehicles for drug delivery and wound healing. Carbohydrate Polymers, 2018, 188, 27-36.	10.2	246
4	A novel approach for the preparation of nanocrystalline cellulose by using phosphotungstic acid. Carbohydrate Polymers, 2014, 110, 415-422.	10.2	205
5	Cellulose nanocrystals prepared via formic acid hydrolysis followed by TEMPO-mediated oxidation. Carbohydrate Polymers, 2015, 133, 605-612.	10.2	184
6	Key process parameters for deep eutectic solvents pretreatment of lignocellulosic biomass materials: A review. Bioresource Technology, 2020, 310, 123416.	9.6	174
7	Brushing up from â€œanywhereâ€•under sunlight: a universal surface-initiated polymerization from polydopamine-coated surfaces. Chemical Science, 2015, 6, 2068-2073.	7.4	158
8	Preparation and characterization of thermally stable cellulose nanocrystals via a sustainable approach of FeCl3-catalyzed formic acid hydrolysis. Cellulose, 2016, 23, 2389-2407.	4.9	139
9	Physical and chemical characterizations of corn stalk resulting from hydrogen peroxide presoaking prior to ammonia fiber expansion pretreatment. Industrial Crops and Products, 2016, 83, 86-93.	5.2	132
10	Flexible cellulose nanopaper with high wet tensile strength, high toughness and tunable ultraviolet blocking ability fabricated from tobacco stalk via a sustainable method. Journal of Materials Chemistry A, 2018, 6, 13021-13030.	10.3	132
11	Review of Alkali-Based Pretreatment To Enhance Enzymatic Saccharification for Lignocellulosic Biomass Conversion. Industrial & Engineering Chemistry Research, 2016, 55, 8691-8705.	3.7	130
12	Conductive PEDOT:PSS/cellulose nanofibril paper electrodes for flexible supercapacitors with superior areal capacitance and cycling stability. Chemical Engineering Journal, 2022, 428, 131994.	12.7	130
13	Preparation and characterization of functional cellulose nanofibrils via formic acid hydrolysis pretreatment and the followed high-pressure homogenization. Industrial Crops and Products, 2016, 94, 736-745.	5.2	121
14	Effects of Cellulose Nanowhiskers on Mechanical, Dielectric, and Rheological Properties of Poly(3-hydroxybutyrate-co-3-hydroxyvalerate)/Cellulose Nanowhisker Composites. Industrial & Engineering Chemistry Research, 2012, 51, 2941-2951.	3.7	108
15	Biocompatible magnetic celluloseâ€“chitosan hybrid gel microspheres reconstituted from ionic liquids for enzyme immobilization. Journal of Materials Chemistry, 2012, 22, 15085.	6.7	108
16	Sustainable valorization of paper mill sludge into cellulose nanofibrils and cellulose nanopaper. Journal of Hazardous Materials, 2020, 400, 123106.	12.4	107
17	Consolidated bio-saccharification: Leading lignocellulose bioconversion into the real world. Biotechnology Advances, 2020, 40, 107535.	11.7	102
18	Comparison of different alkali-based pretreatments of corn stover for improving enzymatic saccharification. Bioresource Technology, 2012, 125, 193-199.	9.6	87

#	Article	IF	Citations
19	Tailored and Integrated Production of Functional Cellulose Nanocrystals and Cellulose Nanofibrils via Sustainable Formic Acid Hydrolysis: Kinetic Study and Characterization. ACS Sustainable Chemistry and Engineering, 2019, 7, 9449-9463.	6.7	78
20	Alkaline twin-screw extrusion pretreatment for fermentable sugar production. Biotechnology for Biofuels, 2013, 6, 97.	6.2	76
21	Pretreatment of Corn Stover with the Modified Hydrotropic Method To Enhance Enzymatic Hydrolysis. Energy & Fuels, 2014, 28, 4288-4293.	5.1	74
22	Comparative Evaluation of the Efficient Conversion of Corn Husk Filament and Corn Husk Powder to Valuable Materials via a Sustainable and Clean Biorefinery Process. ACS Sustainable Chemistry and Engineering, 2019, 7, 1327-1336.	6.7	73
23	Properties of Nanocelluloses and Their Application as Rheology Modifier in Paper Coating. Industrial & Engineering Chemistry Research, 2017, 56, 8264-8273.	3.7	72
24	Pure cellulose lithium-ion battery separator with tunable pore size and improved working stability by cellulose nanofibrils. Carbohydrate Polymers, 2021, 251, 116975.	10.2	72
25	Water and humidity-induced shape memory cellulose nanopaper with quick response, excellent wet strength and folding resistance. Chemical Engineering Journal, 2020, 392, 123673.	12.7	71
26	Construction of a Mesoporous Polydopamine@GO/Cellulose Nanofibril Composite Hydrogel with an Encapsulation Structure for Controllable Drug Release and Toxicity Shielding. ACS Applied Materials & Interfaces, 2020, 12, 57410-57420.	8.0	71
27	Effect and characterization of sodium lignosulfonate on alkali pretreatment for enhancing enzymatic saccharification of corn stover. Industrial Crops and Products, 2015, 76, 638-646.	5.2	67
28	Comprehensive analysis of important parameters of choline chloride-based deep eutectic solvent pretreatment of lignocellulosic biomass. Bioresource Technology, 2021, 319, 124209.	9.6	64
29	Effect of crystallinity on pretreatment and enzymatic hydrolysis of lignocellulosic biomass based on multivariate analysis. Bioresource Technology, 2019, 279, 271-280.	9.6	61
30	Falling Leaves Return to Their Roots: A Review on the Preparation of Î³â€Valerolactone from Lignocellulose and Its Application in the Conversion of Lignocellulose. ChemSusChem, 2020, 13, 6461-6476.	6.8	52
31	Bio-inspired lightweight pulp foams with improved mechanical property and flame retardancy via borate cross-linking. Chemical Engineering Journal, 2019, 371, 34-42.	12.7	51
32	Hemicellulose isolation, characterization, and the production of xylo-oligosaccharides from the wastewater of a viscose fiber mill. Carbohydrate Polymers, 2016, 141, 238-243.	10.2	49
33	A clean and effective potassium hydroxide pretreatment of corncob residue for the enhancement of enzymatic hydrolysis at high solids loading. RSC Advances, 2019, 9, 11558-11566.	3.6	48
34	Effect of regeneration solvent on the characteristics of regenerated cellulose from lithium bromide trihydrate molten salt. Cellulose, 2020, 27, 9243-9256.	4.9	48
35	Preparation of Concrete Superplasticizer by Oxidation-Sulfomethylation of Sodium Lignosulfonate. BioResources, 2012, 8, .	1.0	47
36	Mild Oxalicâ€Acidâ€Catalyzed Hydrolysis as a Novel Approach to Prepare Cellulose Nanocrystals. ChemNanoMat, 2017, 3, 109-119.	2.8	45

#	Article	IF	Citations
37	Organic solar cells based on cellulose nanopaper from agroforestry residues with an efficiency of over 16% and effectively wide-angle light capturing. Journal of Materials Chemistry A, 2020, 8, 5442-5448.	10.3	44
38	Acetoneâ€“butanolâ€“ethanol production from corn stover pretreated by alkaline twin-screw extrusion pretreatment. Bioprocess and Biosystems Engineering, 2014, 37, 913-921.	3.4	43
39	An efficient and magnetic adsorbent prepared in a dry process with enzymatic hydrolysis residues for wastewater treatment. Journal of Cleaner Production, 2021, 313, 127834.	9.3	43
40	Comparison of Hydrogen Peroxide and Ammonia Pretreatment of Corn Stover: Solid Recovery, Composition Changes, and Enzymatic Hydrolysis. Energy & Fuels, 2014, 28, 6392-6397.	5.1	42
41	Review: Effects of wood quality and refining process on TMP pulp and paper quality. BioResources, 2011, 6, 3569-3584.	1.0	42
42	Fractionation of the main components of corn stover by formic acid and enzymatic saccharification of solid residue. Industrial Crops and Products, 2013, 50, 750-757.	5.2	41
43	Hydrogen Peroxide-Assisted Sodium Carbonate Pretreatment for the Enhancement of Enzymatic Saccharification of Corn Stover. ACS Sustainable Chemistry and Engineering, 2015, 3, 3477-3485.	6.7	39
44	Two stages of treatments for upgrading bleached softwood paper grade pulp to dissolving pulp for viscose production. Biochemical Engineering Journal, 2014, 82, 183-187.	3.6	38
45	Mechanism of Deep Eutectic Solvent Delignification: Insights from Molecular Dynamics Simulations. ACS Sustainable Chemistry and Engineering, 2021, 9, 7101-7111.	6.7	38
46	Nanocellulose-Based Composite Materials Used in Drug Delivery Systems. Polymers, 2022, 14, 2648.	4.5	37
47	Quantitative characterization of the impact of pulp refining on enzymatic saccharification of the alkaline pretreated corn stover. Bioresource Technology, 2014, 169, 19-26.	9.6	33
48	In Situ Carbon Encapsulation Confined Nickel-Doped Indium Oxide Nanocrystals for Boosting CO₂ Electroreduction to the Industrial Level. ACS Catalysis, 2021, 11, 14596-14604.	11.2	33
49	Preparation of Concrete Water Reducer via Fractionation and Modification of Lignin Extracted from Pine Wood by Formic Acid. ACS Sustainable Chemistry and Engineering, 2017, 5, 4214-4222.	6.7	32
50	Combined Deacetylation and PFI Refining Pretreatment of Corn Cob for the Improvement of a Two-Stage Enzymatic Hydrolysis. Journal of Agricultural and Food Chemistry, 2014, 62, 4661-4667.	5.2	31
51	Techno-economic analysis of bioethanol preparation process via deep eutectic solvent pretreatment. Industrial Crops and Products, 2021, 172, 114036.	5.2	31
52	Impact of the Incorporation of Nano-Sized Cellulose Formate on the End Quality of Polylactic Acid Composite Film. Nanomaterials, 2022, 12, 1.	4.1	31
53	Conversion of biomass-derived sorbitol to glycols over carbon-materials supported Ru-based catalysts. Scientific Reports, 2015, 5, 16451.	3.3	30
54	Influence of the functional groups of multiwalled carbon nanotubes on performance of Ru catalysts in sorbitol hydrogenolysis to glycols. Journal of Molecular Catalysis A, 2017, 426, 79-87.	4.8	29

#	Article	IF	Citations
55	Bio-inspired water resistant and fast multi-responsive Janus actuator assembled by cellulose nanopaper and graphene with lignin adhesion. Chemical Engineering Journal, 2022, 433, 133672.	12.7	29
56	Life cycle assessment of common reed (Phragmites australis (Cav) Trin. ex Steud) cellulosic bioethanol in Jiangsu Province, China. Biomass and Bioenergy, 2016, 92, 40-47.	5.7	28
57	Valorization of Enzymatic Hydrolysis Residues from Corncob into Lignin-Containing Cellulose Nanofibrils and Lignin Nanoparticles. Frontiers in Bioengineering and Biotechnology, 2021, 9, 677963.	4.1	28
58	Tough and multi-responsive hydrogel based on the hemicellulose from the spent liquor of viscose process. International Journal of Biological Macromolecules, 2016, 88, 451-456.	7.5	27
59	Construction of consolidated bio-saccharification biocatalyst and process optimization for highly efficient lignocellulose solubilization. Biotechnology for Biofuels, 2019, 12, 35.	6.2	27
60	Fiber Quality Analysis: OpTest Fiber Quality Analyzer versus L&W Fiber Tester. Industrial & Engineering Chemistry Research, 2011, 50, 12572-12578.	3.7	25
61	Synthesis and Thermal Decomposition Behavior of Zircoaluminate Coupling Agents. Industrial & Engineering Chemistry Research, 2013, 52, 11980-11987.	3.7	23
62	A sustainable and effective potassium hydroxide pretreatment of wheat straw for the production of fermentable sugars. Bioresource Technology Reports, 2018, 3, 169-176.	2.7	23
63	Cellulose nanofibrils composite hydrogel with polydopamine@zeolitic imidazolate framework-8 encapsulated in used as efficient vehicles for controlled drug release. Journal of Industrial and Engineering Chemistry, 2021, 102, 343-350.	5.8	23
64	A pulp foam with highly improved physical strength, fire-resistance and antibiosis by incorporation of chitosan and CPAM. Carbohydrate Polymers, 2022, 278, 118963.	10.2	23
65	Magnetic cellulose nanocrystals: Synthesis by electrostatic self-assembly approach and efficient use for immobilization of papain. Journal of Molecular Catalysis B: Enzymatic, 2016, 134, 164-171.	1.8	22
66	Multivariate data analysis applied in alkali-based pretreatment of corn stover. Resources, Conservation and Recycling, 2017, 122, 307-318.	10.8	17
67	The spatial proximity effect of beta-glucosidase and cellulosomes on cellulose degradation. Enzyme and Microbial Technology, 2018, 115, 52-61.	3.2	17
68	Construction of nanocellulose-based composite hydrogel with a double packing structure as an intelligent drug carrier. Cellulose, 2021, 28, 6953-6966.	4.9	14
69	Integrated and sustainable preparation of functional nanocellulose via formic acid/choline chloride solvents pretreatment. Cellulose, 2021, 28, 9689-9703.	4.9	13
70	Characterization of the Detailed Relationships of the Key Variables in the Process of the Alkaline Sulfite Pretreatment of Corn Stover by Multivariate Analysis. BioResources, 2014, 9, .	1.0	12
71	Bacterial cellulose modification using static magnetic field. Cellulose, 2020, 27, 5581-5596.	4.9	11
72	Xylanase pretreatment of energy cane enables facile cellulose nanocrystal isolation. Cellulose, 2021, 28, 799-812.	4.9	10

#	Article	IF	Citations
73	Polydopamine/Cellulose Nanofibrils Composite Film as Potential Vehicle for Drug Delivery. ChemistrySelect, 2018, 3, 6852-6858.	1.5	9
74	Influence of drying methods on the structure and properties of cellulose formate and its application as a reducing agent. International Journal of Biological Macromolecules, 2021, 170, 397-405.	7.5	9
75	Probing the mechanism of green solvent solubilization of hemicellulose based on molecular dynamics simulations. Industrial Crops and Products, 2022, 186, 115159.	5.2	9
76	Enzymatic Hydrolysis and Physiochemical Characterization of Corn Leaf after H-AFEX Pretreatment. Energy & Fuels, 0, , .	5.1	7
77	Preparation of a magnetic responsive immobilized lipaseâ€“cellulose microgel catalyst system: role of the surface properties of the magnetic cellulose microgel. RSC Advances, 2016, 6, 7339-7347.	3.6	7
78	Improving the efficiency of enzymatic hydrolysis of Eucalyptus residues with a modified aqueous ammonia soaking method. Nordic Pulp and Paper Research Journal, 2018, 33, 165-174.	0.7	7
79	Amelioration of Physical Properties and Printability of Paper Coated with N-methylated Chitosan. Scientific Reports, 2020, 10, 9936.	3.3	7
80	Low Consistency Refining of Eucalyptus Pulp: Effects on Surface Chemistry and Interaction with FWAs. BioResources, 2013, 8, .	1.0	7
81	Ultrafast improvement of cellulose accessibility via non-dissolving pretreatment with LiBrÂ·3H2O under room temperature. Carbohydrate Polymers, 2022, 284, 119180.	10.2	7
82	Production of dissolving pulp from Eulaliopsis binata with the concept of integrated biorefinery. Cellulose, 2019, 26, 2087-2097.	4.9	6
83	Phase-selective cellulose nanofibril-based oil gelling agent for oil spill recovery. Environmental Science: Nano, 2022, 9, 489-498.	4.3	5
84	Impact of ammonium sulfite-based sequential pretreatment combinations on two distinct saccharifications of wheat straw. RSC Advances, 2020, 10, 17129-17142.	3.6	4
85	Acid-Alkaline Two-Stage Pretreatments of Corn Stover for Enhancing Enzymatic Saccharification. Advanced Materials Research, 0, 724-725, 207-211.	0.3	3
86	A handy skin wound dressing prepared by alginate and cationic nanofibrillated cellulose derived from solid residues of herbs. BioResources, 2021, 16, 5926-5946.	1.0	3
87	Facile Fabrication of Cellulose Nanofibrils/Chitosan Beads as the Potential pH-Sensitive Drug Carriers. Polymers, 2022, 14, 2286.	4.5	3
88	Ammonia-ethanol-water pretreatment of wheat straw for facilitating enzymatic saccharification integrated with the preparation of submicron lignin spheres. BioResources, 2020, 15, 5087-5109.	1.0	1