Hongming Lou

List of Publications by Year
in descending order

102 papers	4,176 citations	87888 38 h-index	128289 60 g-index
102 all docs	102 docs citations	102 times ranked	3886 citing authors

#	Article	IF	Citations
1	pHâ€Induced Lignin Surface Modification to Reduce Nonspecific Cellulase Binding and Enhance Enzymatic Saccharification of Lignocelluloses. ChemSusChem, 2013, 6, 919-927.	6.8	219
2	A Quadrupleâ€Hydrogenâ€Bonded Supramolecular Binder for Highâ€Performance Silicon Anodes in Lithiumâ€Ion Batteries. Small, 2018, 14, e1801189.	10.0	171
3	Properties of sodium lignosulfonate as dispersant of coal water slurry. Energy Conversion and Management, 2007, 48, 2433-2438.	9.2	166
4	Enzymatic Saccharification of Lignocelluloses Should be Conducted at Elevated pH 5.2â€"6.2. Bioenergy Research, 2013, 6, 476-485.	3.9	146
5	Thermoresponsive Melamine Sponges with Switchable Wettability by Interface-Initiated Atom Transfer Radical Polymerization for Oil/Water Separation. ACS Applied Materials & Interfaces, 2017, 9, 8967-8974.	8.0	138
6	Lignin-based Pickering HIPEs for macroporous foams and their enhanced adsorption of copper(ii) ions. Chemical Communications, 2013, 49, 7144.	4.1	136
7	Lignosulfonate To Enhance Enzymatic Saccharification of Lignocelluloses: Role of Molecular Weight and Substrate Lignin. Industrial & Engineering Chemistry Research, 2013, 52, 8464-8470.	3.7	118
8	High-performance dispersant of coalâ€"water slurry synthesized from wheat straw alkali lignin. Fuel Processing Technology, 2007, 88, 375-382.	7.2	104
9	Reducing non-productive adsorption of cellulase and enhancing enzymatic hydrolysis of lignocelluloses by noncovalent modification of lignin with lignosulfonate. Bioresource Technology, 2013, 146, 478-484.	9.6	104
10	Maleic acid as a dicarboxylic acid hydrotrope for sustainable fractionation of wood at atmospheric pressure and â‰100 Â°C: mode and utility of lignin esterification. Green Chemistry, 2020, 22, 1605-1617.	9.0	103
11	Corrosion and Scale Inhibition Properties of Sodium Lignosulfonate and Its Potential Application in Recirculating Cooling Water System. Industrial & Engineering Chemistry Research, 2006, 45, 5716-5721.	3.7	98
12	Dynamic Supramolecular Hydrogels: Regulating Hydrogel Properties through Self-Complementary Quadruple Hydrogen Bonds and Thermo-Switch. ACS Macro Letters, 2017, 6, 641-646.	4.8	90
13	Synthesis, Structure, and Dispersion Property of a Novel Lignin-Based Polyoxyethylene Ether from Kraft Lignin and Poly(ethylene glycol). ACS Sustainable Chemistry and Engineering, 2014, 2, 1902-1909.	6.7	80
14	Preparation of Lignin-Based Superplasticizer by Graft Sulfonation and Investigation of the Dispersive Performance and Mechanism in a Cementitious System. Industrial & Engineering Chemistry Research, 2013, 52, 16101-16109.	3.7	74
15	Selfâ€Healing Gelatin Hydrogels Crossâ€Linked by Combining Multiple Hydrogen Bonding and Ionic Coordination. Macromolecular Rapid Communications, 2017, 38, 1700018.	3.9	74
16	Nonionic surfactants enhanced enzymatic hydrolysis of cellulose by reducing cellulase deactivation caused by shear force and air-liquid interface. Bioresource Technology, 2018, 249, 1-8.	9.6	71
17	Evaluation of sulphonated acetoneâ€"formaldehyde (SAF) used in coal water slurries prepared from different coals. Fuel, 2007, 86, 1439-1445.	6.4	70
18	Highly Efficient Inverted Perovskite Solar Cells With Sulfonated Lignin Doped PEDOT as Hole Extract Layer. ACS Applied Materials & Interfaces, 2016, 8, 12377-12383.	8.0	69

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19	Evaluation of treated black liquor used as dispersant of concentrated coalâ€“water slurry. Fuel, 2010, 89, 716-723.	6.4	68
20	Novel Lignin-Derived Water-Soluble Binder for Micro Silicon Anode in Lithium-Ion Batteries. ACS Sustainable Chemistry and Engineering, 2018, 6, 12621-12629.	6.7	68
21	Facile and Green Preparation of High UV-Blocking Lignin/Titanium Dioxide Nanocomposites for Developing Natural Sunscreens. Industrial & Engineering Chemistry Research, 2018, 57, 15740-15748.	3.7	67
22	In-situ Mo doped ZnIn2S4 wrapped MoO3 S-scheme heterojunction via Mo-S bonds to enhance photocatalytic HER. Chemical Engineering Journal, 2022, 430, 132770.	12.7	66
23	Understanding the effects of lignosulfonate on enzymatic saccharification of pure cellulose. Cellulose, 2014, 21, 1351-1359.	4.9	60
24	Properties of Different Molecular Weight Sodium Lignosulfonate Fractions as Dispersant of Coalâ€Water Slurry. Journal of Dispersion Science and Technology, 2006, 27, 851-856.	2.4	59
25	Direct Construction of Catechol Lignin for Engineering Longâ€Acting Conductive, Adhesive, and UVâ€Blocking Hydrogel Bioelectronics. Small Methods, 2021, 5, e2001311.	8.6	59
26	Enhancing the Broad-Spectrum Adsorption of Lignin through Methoxyl Activation, Grafting Modification, and Reverse Self-Assembly. ACS Sustainable Chemistry and Engineering, 2019, 7, 15966-15973.	6.7	54
27	Lignin-based polyoxyethylene ether enhanced enzymatic hydrolysis of lignocelluloses by dispersing cellulase aggregates. Bioresource Technology, 2015, 185, 165-170.	9.6	53
28	Preparation of Lignin/Sodium Dodecyl Sulfate Composite Nanoparticles and Their Application in Pickering Emulsion Template-Based Microencapsulation. Journal of Agricultural and Food Chemistry, 2017, 65, 11011-11019.	5.2	49
29	An Injectable Hydrogel with Excellent Selfâ€Healing Property Based on Quadruple Hydrogen Bonding. Macromolecular Chemistry and Physics, 2016, 217, 2172-2181.	2.2	48
30	Using recyclable pH-responsive lignin amphoteric surfactant to enhance the enzymatic hydrolysis of lignocelluloses. Green Chemistry, 2017, 19, 5479-5487.	9.0	48
31	Effect of lignin-based amphiphilic polymers on the cellulase adsorption and enzymatic hydrolysis kinetics of cellulose. Carbohydrate Polymers, 2019, 207, 52-58.	10.2	48
32	Using polyvinylpyrrolidone to enhance the enzymatic hydrolysis of lignocelluloses by reducing the cellulase non-productive adsorption on lignin. Bioresource Technology, 2017, 227, 74-81.	9.6	45
33	Lignin-polyurea microcapsules with anti-photolysis and sustained-release performances synthesized via pickering emulsion template. Reactive and Functional Polymers, 2018, 123, 115-121.	4.1	45
34	Light Color Dihydroxybenzophenone Grafted Lignin with High UVA/UVB Absorbance Ratio for Efficient and Safe Natural Sunscreen. Industrial & Engineering Chemistry Research, 2020, 59, 17057-17068.	3.7	43
35	Effect of molecular weight of sulphonated acetone-formaldehyde condensate on its adsorption and dispersion properties in cementitious system. Cement and Concrete Research, 2012, 42, 1043-1048.	11.0	42
36	Recovering cellulase and increasing glucose yield during lignocellulosic hydrolysis using lignin-MPEG with a sensitive pH response. Green Chemistry, 2019, 21, 1141-1151.	9.0	42

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37	Improving enzymatic hydrolysis of lignocellulosic substrates with pre-hydrolysates by adding cetyltrimethylammonium bromide to neutralize lignosulfonate. Bioresource Technology, 2016, 216, 968-975.	9.6	40
38	Hollow nanotubular clay composited comb-like methoxy poly(ethylene glycol) acrylate polymer as solid polymer electrolyte for lithium metal batteries. Electrochimica Acta, 2020, 340, 135995.	5.2	39
39	Comparison of Two Acid Hydrotropes for Sustainable Fractionation of Birch Wood. ChemSusChem, 2020, 13, 4649-4659.	6.8	37
40	Influence of sulfonated acetoneâ€“formaldehyde condensation used as dispersant on low rank coalâ€“water slurry. Energy Conversion and Management, 2012, 64, 139-144.	9.2	36
41	Palladium-Catalyzed Highly Regioselective Hydrocarboxylation of Alkynes with Carbon Dioxide. ACS Catalysis, 2020, 10, 7968-7978.	11.2	36
42	Mo-Doped/Ni-supported ZnIn₂S₄-wrapped NiMoO₄ S-scheme heterojunction photocatalytic reforming of lignin into hydrogen. Green Chemistry, 2022, 24, 2027-2035.	9.0	36
43	Multifunctional and Efficient Air Filtration: A Natural Nanofilter Prepared with Zein and Polyvinyl Alcohol. Macromolecular Materials and Engineering, 2020, 305, 2000239.	3.6	35
44	A Triblock Copolymer Design Leads to Robust Hybrid Hydrogels for High-Performance Flexible Supercapacitors. ACS Applied Materials & Interfaces, 2017, 9, 36301-36310.	8.0	34
45	Polymerization reactivity of sulfomethylated alkali lignin modified with horseradish peroxidase. Bioresource Technology, 2014, 155, 418-421.	9.6	31
46	Synthesis of triblock copolymer polydopamine-polyacrylic-polyoxyethylene with excellent performance as a binder for silicon anode lithium-ion batteries. RSC Advances, 2018, 8, 4604-4609.	3.6	31
47	High voltage, solvent-free solid polymer electrolyte based on a star-comb PDLLAâ€“PEG copolymer for lithium ion batteries. RSC Advances, 2018, 8, 6373-6380.	3.6	30
48	An<i>in situ</i>photopolymerized composite solid electrolyte from halloysite nanotubes and comb-like polycaprolactone for high voltage lithium metal batteries. Journal of Materials Chemistry A, 2021, 9, 9826-9836.	10.3	29
49	Recycling Cellulase by a pH-Responsive Lignin-Based Carrier through Electrostatic Interaction. ACS Sustainable Chemistry and Engineering, 2018, 6, 10679-10686.	6.7	28
50	Effect of calcium lignosulfonate on the hydration of the tricalcium aluminateâ€“anhydrite system. Cement and Concrete Research, 2012, 42, 1549-1554.	11.0	27
51	Effect of the molecular structure of lignin-based polyoxyethylene ether on enzymatic hydrolysis efficiency and kinetics of lignocelluloses. Bioresource Technology, 2015, 193, 266-273.	9.6	27
52	Enhancement of lignosulfonate-based polyoxyethylene ether on enzymatic hydrolysis of lignocelluloses. Industrial Crops and Products, 2016, 80, 86-92.	5.2	26
53	Modifying sulfomethylated alkali lignin by horseradish peroxidase to improve the dispersibility and conductivity of polyaniline. Applied Surface Science, 2017, 426, 287-293.	6.1	26
54	Synthesis of Quaternized Lignin and Its Clay-Tolerance Properties in Montmorillonite-Containing Cement Paste. ACS Sustainable Chemistry and Engineering, 2017, 5, 7743-7750.	6.7	26

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55	â€œNano-lymphaticâ€•photocatalytic water-splitting for relieving tumor interstitial fluid pressure and achieving hydrodynamic therapy. Materials Horizons, 2020, 7, 3266-3274.	12.2	26
56	Enhancement and Mechanism of a Lignin Amphoteric Surfactant on the Production of Cellulosic Ethanol from a High-Solid Corncob Residue. Journal of Agricultural and Food Chemistry, 2019, 67, 6248-6256.	5.2	25
57	Visible Light-Driven Reforming of Lignocellulose into H₂ by Intrinsic Monolayer Carbon Nitride. ACS Applied Materials & Interfaces, 2021, 13, 44243-44253.	8.0	24
58	Long-Acting Ultraviolet-Blocking Mechanism of Lignin: Generation and Transformation of Semiquinone Radicals. ACS Sustainable Chemistry and Engineering, 2022, 10, 5421-5429.	6.7	22
59	Preparation of Light-Colored Lignosulfonate Sunscreen Microcapsules with Strengthened UV-Blocking and Adhesion Performance. ACS Sustainable Chemistry and Engineering, 2022, 10, 9381-9388.	6.7	22
60	Effect of Urea on the Enzymatic Hydrolysis of Lignocellulosic Substrate and Its Mechanism. Bioenergy Research, 2018, 11, 456-465.	3.9	21
61	Effect of the isoelectric point of pH-responsive lignin-based amphoteric surfactant on the enzymatic hydrolysis of lignocellulose. Bioresource Technology, 2019, 283, 112-119.	9.6	21
62	Hyperbranched PCL/PS Copolymer-Based Solid Polymer Electrolytes Enable Long Cycle Life of Lithium Metal Batteries. Journal of the Electrochemical Society, 2020, 167, 110532.	2.9	21
63	Preparation and application performance of lignin-polyurea composite microcapsule with controlled release of avermectin. Colloid and Polymer Science, 2020, 298, 1001-1012.	2.1	21
64	Influence of modified lignosulfonate GCL4-1 with different molecular weight on the stability of dimethomorph water based suspension. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2014, 441, 664-668.	4.7	20
65	Fabrication of High-Concentration Aqueous Graphene Suspensions Dispersed by Sodium Lignosulfonate and Its Mechanism. Journal of Physical Chemistry C, 2015, 119, 23221-23230.	3.1	20
66	Effect of cationic surfactant cetyltrimethylammonium bromide on the enzymatic hydrolysis of cellulose. Cellulose, 2017, 24, 61-68.	4.9	19
67	Study on the Antioxidant Activity of Lignin and Its Application Performance in SBS Elastomer. Industrial & Engineering Chemistry Research, 2021, 60, 790-797.	3.7	19
68	Modification of sulfomethylated alkali lignin catalyzed by horseradish peroxidase. RSC Advances, 2014, 4, 53855-53863.	3.6	18
69	Rheological Behavior Investigation of Concentrated Coal-Water Suspension. Journal of Dispersion Science and Technology, 2010, 31, 838-843.	2.4	16
70	Preparation of novel all-lignin microcapsules via interfacial cross-linking of pickering emulsion. Industrial Crops and Products, 2021, 167, 113468.	5.2	16
71	Improving Rheology and Enzymatic Hydrolysis of High-Solid Corncob Slurries by Adding Lignosulfonate and Long-Chain Fatty Alcohols. Journal of Agricultural and Food Chemistry, 2014, 62, 8430-8436.	5.2	15
72	Enhancing enzymatic hydrolysis of xylan by adding sodium lignosulfonate and long-chain fatty alcohols. Bioresource Technology, 2016, 200, 48-54.	9.6	15

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73	Essential work of fracture analysis for surface modified carbon fiber/polypropylene composites with different interfacial adhesion. Polymer Composites, 2020, 41, 3541-3551.	4.6	15
74	Lignin â€" a promising biomass resource. Tappi Journal, 2018, 17, 125-141.	0.5	15
75	Pretreatment of Miscanthus by NaOH/Urea Solution at Room Temperature for Enhancing Enzymatic Hydrolysis. Bioenergy Research, 2016, 9, 335-343.	3.9	14
76	Using temperature-responsive zwitterionic surfactant to enhance the enzymatic hydrolysis of lignocelluloses and recover cellulase by cooling. Bioresource Technology, 2017, 243, 1141-1148.	9.6	14
77	Effect of sodium dodecyl sulfate and cetyltrimethylammonium bromide catanionic surfactant on the enzymatic hydrolysis of Avicel and corn stover. Cellulose, 2017, 24, 669-676.	4.9	13
78	Understanding the Effect of the Complex of Lignosulfonate and Cetyltrimethylammonium Bromide on the Enzymatic Digestibility of Cellulose. Energy & Fuels, 2017, 31, 672-678.	5.1	13
79	Fabrication and properties of low crystallinity nanofibrillar cellulose and a nanofibrillar celluloseâ€"graphene oxide composite. RSC Advances, 2015, 5, 67568-67573.	3.6	12
80	Enhancement of Recyclable pH-Responsive Lignin-Grafted Phosphobetaine on Enzymatic Hydrolysis of Lignocelluloses. ACS Sustainable Chemistry and Engineering, 2019, 7, 7926-7931.	6.7	11
81	Effects of sacrificial coordination bonds on the mechanical performance of lignin-based thermoplastic elastomer composites. International Journal of Biological Macromolecules, 2021, 183, 1450-1458.	7.5	11
82	Thermo-Responsive Behavior of Enzymatic Hydrolysis Lignin in the Ethanol/Water Mixed Solvent and Its Application in the Controlled Release of Pesticides. ACS Sustainable Chemistry and Engineering, 2021, 9, 15634-15640.	6.7	10
83	Slow relaxation mode of sodium lignosulfonate in saline solutions. Holzforschung, 2015, 69, 17-23.	1.9	9
84	Pickering Emulsion-Based Marbles for Cellular Capsules. Materials, 2016, 9, 572.	2.9	9
85	Using highly recyclable sodium caseinate to enhance lignocellulosic hydrolysis and cellulase recovery. Bioresource Technology, 2020, 304, 122974.	9.6	9
86	Enhancing enzymatic hydrolysis of crystalline cellulose and lignocellulose by adding long-chain fatty alcohols. Cellulose, 2014, 21, 3361-3369.	4.9	8
87	Tracing cellulase components in hydrolyzate during the enzymatic hydrolysis of corncob residue and its analysis. Bioresource Technology Reports, 2018, 4, 137-144.	2.7	8
88	Enhanced mechanical and thermal properties of polyurethaneâ€imide foams with the addition of expended vermiculite. Polymer Composites, 2020, 41, 886-892.	4.6	8
89	Preparation of high molecular weight pH-responsive lignin-polyethylene glycol (L-PEG) and its application in enzymatic saccharification of lignocelluloses. Cellulose, 2020, 27, 755-767.	4.9	8
90	Mechanical and flameâ€resistance properties of polyurethaneâ€imide foams with differentâ€sized expandable graphite. Polymer Engineering and Science, 2020, 60, 2324-2332.	3.1	8

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91	The synthesis of a UCST-type zwitterionic polymer for the efficient recycling of cellulase at room temperature. Green Chemistry, 2021, 23, 2738-2746.	9.0	8
92	Synergetic Effect of Perfluorooctanoic Acid on the Preparation of Poly(3,4â€ethylenedioxythiophene): Lignosulfonate Aqueous Dispersions with High Film Conductivity. ChemistrySelect, 2019, 4, 11406-11412.	1.5	7
93	A Simple and Rapid Method to Determine Sulfonation Degree of Lignosulfonates. Bioenergy Research, 2019, 12, 260-266.	3.9	7
94	Roomâ€Temperature Solidâ€State Lithium Metal Batteries Using Metal Organic Framework Composited Combâ€Like Methoxy Poly(ethylene glycol) Acrylate Solid Polymer Electrolytes. Macromolecular Materials and Engineering, 2021, 306, 2100336.	3.6	7
95	LiCoO2/Graphite Cells with Localized High Concentration Carbonate Electrolytes for Higher Energy Density. Liquids, 2021, 1, 60-74.	2.5	5
96	Coupling piezo-photocatalysis to imitate lymphoid reflux for enhancing antitumor hydrodynamics therapy. Chemical Engineering Journal, 2022, 450, 137981.	12.7	5
97	Using a linear pH-responsive zwitterionic copolymer to recover cellulases in enzymatic hydrolysate and to enhance the enzymatic hydrolysis of lignocellulose. Cellulose, 2019, 26, 6725-6738.	4.9	3
98	Green chemical engineering in China. Reviews in Chemical Engineering, 2019, 35, 995-1077.	4.4	3
99	Effect of cellulase on the UCST behavior of sulfobetaine zwitterionic surfactants and the cellulase recovery mechanism. Sustainable Energy and Fuels, 2021, 5, 750-757.	4.9	3
100	Photocatalysis/enzymolysis-based biomimetic Schottky junction reduces tumor interstitial solid and fluid phases for deep-penetrating tumor therapy. Chemical Engineering Journal, 2022, 446, 137196.	12.7	3
101	Effect of superplasticisers on the surface characteristics of fly ash. Magazine of Concrete Research, 2013, 65, 623-628.	2.0	0
102	MoS2 armored polystyrene particles with a narrow size distribution via membrane-assisted Pickering emulsions for monolayer-shelled liquid marbles. RSC Advances, 2015, 5, 80424-80427.	3.6	0