Yulin Deng

List of Publications by Year in Descending Order

124 papers	4,480 citations	38 h-index	62 g-index
129 ext. papers	5,175 ext. citations	6.6 avg, IF	6.01 L-index

#	Paper	IF	Citations
124	Enabling direct ink write edible 3D printing of food purees with cellulose nanocrystals. *Journal of Food Engineering*, **2022**, 111086	6	2
123	Superhydrophobic elastomer with leaf-spring microstructure made from natural wood without any modification chemicals. *Chemical Engineering Journal*, **2022**, 442, 136338	14.7	4
122	Advances in Versatile Nanoscale Catalyst for the Reductive Catalytic Fractionation of Lignin. *ChemSusChem*, **2021**, 14, 2268-2294	8.3	5
121	Natural Wood Structure Inspires Practical Lithium Metal Batteries. *ACS Energy Letters*, **2021**, 6, 2103-2110	20.1	10
120	Towards sustainable production and utilization of plant-biomass-based nanomaterials: a review and analysis of recent developments. *Biotechnology for Biofuels*, **2021**, 14, 114	7.8	22
119	Oxidative Catalytic Fractionation and Depolymerization of Lignin in a One-Pot Single-Catalyst System. *ACS Sustainable Chemistry and Engineering*, **2021**, 9, 7719-7727	8.3	5
118	Cellulose- and nanocellulose-based dielectric materials **2021**, 73-100		1
117	Selective hydrodeoxygenation of lignin model compound (3,4-dimethoxybenzyl alcohol) by Pd/CN catalyst. *International Journal of Biological Macromolecules*, **2021**, 169, 274-281	7.9	5
116	Overview of Biomass Conversion to Electricity and Hydrogen and Recent Developments in Low-Temperature Electrochemical Approaches. *Engineering*, **2020**, 6, 1351-1363	9.7	19
115	Fundamental Study toward Improving the Performance of a High-Moisture Biomass-Fueled Redox Flow Fuel Cell. *Industrial & Engineering Chemistry Research*, **2020**, 59, 4817-4828	3.9	5
114	High-efficiency electrochemical hydrodeoxygenation of bio-phenols to hydrocarbon fuels by a superacid-noble metal particle dual-catalyst system. *Energy and Environmental Science*, **2020**, 13, 917-927	35.4	29
113	High dielectric thin films based on barium titanate and cellulose nanofibrils.. *RSC Advances*, **2020**, 10, 5758-5765	3.7	9
112	Ferric-ferrous redox couple mediated low temperature symmetric flow fuel cell for direct conversion of biomass residues into electricity. *Journal of Power Sources*, **2020**, 448, 227441	8.9	4
111	Electrochemical Lignin Conversion. *ChemSusChem*, **2020**, 13, 4318-4343	8.3	25
110	Ambient-pressure and low-temperature upgrading of lignin bio-oil to hydrocarbons using a hydrogen buffer catalytic system. *Nature Energy*, **2020**, 5, 759-767	62.3	25
109	Expanded polystyrene via stabilized water droplet by in-situ modified starch nanocrystals. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2019**, 582, 123863	5.1	10
108	Lignin-polystyrene composite foams through high internal phase emulsion polymerization. *Polymer Engineering and Science*, **2019**, 59, 964-972	2.3	7

107	Flexible and Conductive Carbonized Cotton Fabrics Coupled with a Nanostructured Ni(OH)2 Coating for High Performance Aqueous Symmetric Supercapacitors. *ACS Sustainable Chemistry and Engineering*, **2019**, 7, 5231-5239	8.3	17
106	Highly Efficient Lignin Depolymerization via Effective Inhibition of Condensation during Polyoxometalate-Mediated Oxidation. *Energy & Fuels*, **2019**, 33, 6483-6490	4.1	16
105	Facile preparation of high dielectric flexible films based on titanium dioxide and cellulose nanofibrils. *Cellulose*, **2019**, 26, 6087-6098	5.5	9
104	Pickering emulsion stabilized by amphiphilic pH-sensitive starch nanoparticles as therapeutic containers. *Colloids and Surfaces B: Biointerfaces*, **2019**, 181, 244-251	6	31
103	Surface Structure Patterning for Fabricating Non-fluorinated Superhydrophobic Cellulosic Membranes. *ACS Applied Polymer Materials*, **2019**, 1, 1220-1229	4.3	13
102	Effective low-temperature hydrogenolysis of lignin using carbon-supported ruthenium and formic acid as reducing agent. *Catalysis Communications*, **2019**, 126, 30-34	3.2	13
101	Cellulose nanocrystals support material for 3D printing complexly shaped structures via multi-materials-multi-methods printing. *Additive Manufacturing*, **2019**, 28, 14-22	6.1	24
100	3D printed cellulose nanocrystal composites through digital light processing. *Cellulose*, **2019**, 26, 3973-3985	5.5	41
99	Low energy electro-reduction of carbon dioxide coupling with anodic glycerol oxidation catalyzed by chemical regenerative phosphomolybdic acids. *Journal of Power Sources*, **2019**, 420, 99-107	8.9	9
98	Thermally-induced cellulose nanofibril films with near-complete ultraviolet-blocking and improved water resistance. *Carbohydrate Polymers*, **2019**, 223, 115050	10.3	16
97	A self-powered electrolytic process for glucose to hydrogen conversion. *Communications Chemistry*, **2019**, 2,	6.3	9
96	Direct Valorization of Lignocellulosic Biomass into Value-Added Chemicals by Polyoxometalate Catalyzed Oxidation under Mild Conditions. *Industrial & Engineering Chemistry Research*, **2019**, 58, 22996-23004	3.9	10
95	Flow fuel cell powered by combustible agricultural waste. *Clean Energy*, **2018**, 2, 20-28	4.7	5
94	Ferric ion pair mediated biomass redox flow fuel cell and related chemical reaction kinetics study. *Chemical Engineering Journal*, **2018**, 348, 476-484	14.7	16
93	Low-temperature, Low-Energy, and High-Efficiency Pretreatment Technology for Large Wood Chips with a Redox Couple Catalyst. *ChemSusChem*, **2018**, 11, 1121-1131	8.3	8
92	Direct Ink Write 3D Printed Cellulose Nanofiber Aerogel Structures with Highly Deformable, Shape Recoverable, and Functionalizable Properties. *ACS Sustainable Chemistry and Engineering*, **2018**, 6, 2011-2022	8.3	63
91	Morphology control for tunable optical properties of cellulose nanofibrils films. *Cellulose*, **2018**, 25, 5909-5918	5.5	16
90	Efficient Biomass Fuel Cell Powered by Sugar with Photo- and Thermal-Catalysis by Solar Irradiation. *ChemSusChem*, **2018**, 11, 2229-2238	8.3	11

89	A Self-Powered Nanophotodetector System with High UV Photocurrent. *ACS Applied Energy Materials*, **2018**, 1, 6851-6856	6.1	4
88	Highly transparent 100% cellulose nanofibril films with extremely high oxygen barriers in high relative humidity. *Cellulose*, **2018**, 25, 4057-4066	5.5	23
87	Low-Energy Catalytic Electrolysis for Simultaneous Hydrogen Evolution and Lignin Depolymerization. *ChemSusChem*, **2017**, 10, 847-854	8.3	40
86	Cellulose Nanofibril Based-Aerogel Microreactors: A High Efficiency and Easy Recoverable W/O/W Membrane Separation System. *Scientific Reports*, **2017**, 7, 40096	4.9	31
85	Butyric anhydride modified lignin and its oil-water interfacial properties. *Chemical Engineering Science*, **2017**, 165, 55-64	4.4	14
84	Micro□nano structural engineering of filter paper surface for high selective oil□water separation. *Cellulose*, **2017**, 24, 2913-2924	5.5	10
83	Innovative design of coal utilization □A green pathway for direct conversion of coal to electricity through flow fuel cell technology. *Applied Energy*, **2017**, 200, 226-236	10.7	21
82	Nanocellulose-based conductive materials and their emerging applications in energy devices - A review. *Nano Energy*, **2017**, 35, 299-320	17.1	264
81	Low-temperature microbial and direct conversion of lignocellulosic biomass to electricity: Advances and challenges. *Renewable and Sustainable Energy Reviews*, **2017**, 71, 268-282	16.2	39
80	Direct Conversion of Wheat Straw into Electricity with a Biomass Flow Fuel Cell Mediated by Two Redox Ion Pairs. *ChemSusChem*, **2017**, 10, 506-513	8.3	23
79	Direct conversion of sewage sludge to electricity using polyoxomatelate catalyzed flow fuel cell. *Energy*, **2017**, 141, 1019-1026	7.9	14
78	Highly Ordered, Ultralong Mn-Based Nanowire Films with Low Contact Resistance as Freestanding Electrodes for Flexible Supercapacitors with Enhanced Performance. *ChemElectroChem*, **2017**, 4, 3061-3067	4.3	4
77	Direct Ink Write (DIW) 3D Printed Cellulose Nanocrystal Aerogel Structures. *Scientific Reports*, **2017**, 7, 8018	4.9	110
76	High wet-strength, thermally stable and transparent TEMPO-oxidized cellulose nanofibril film via cross-linking with poly-amide epichlorohydrin resin. *RSC Advances*, **2017**, 7, 31567-31573	3.7	45
75	One-Step Fabrication of Fe(OH)@Cellulose Hollow Nanofibers with Superior Capability for Water Purification. *ACS Applied Materials & Interfaces*, **2017**, 9, 25339-25349	9.5	29
74	Hydrogen Evolution from Native Biomass with Fe3+/Fe2+ Redox Couple Catalyzed Electrolysis. *Electrochimica Acta*, **2017**, 246, 1163-1173	6.7	35
73	Surface modification of cellulose nanofibrils by maleated styrene block copolymer and their composite reinforcement application. *Cellulose*, **2016**, 23, 519-528	5.5	19
72	Ultra-lightweight poly (sodium acrylate) modified TEMPO-oxidized cellulose nanofibril aerogel spheres and their superabsorbent properties. *Cellulose*, **2016**, 23, 3665-3676	5.5	29

71	Water expandable polystyrene containing cellulose nanofibrils: Expansion behavior and morphology. *Chemical Engineering Science*, **2016**, 156, 56-63	4.4	10
70	Recyclable magnetic-Pickering emulsion liquid membrane for extracting phenol compounds from wastewater. *Journal of Materials Science*, **2016**, 51, 6370-6378	4.3	13
69	Fluorine-Free Oil Absorbents Made from Cellulose Nanofibril Aerogels. *ACS Applied Materials & Interfaces*, **2016**, 8, 2732-40	9.5	143
68	High efficiency hydrogen evolution from native biomass electrolysis. *Energy and Environmental Science*, **2016**, 9, 467-472	35.4	85
67	Temperature-sensitive poly-NIPAm modified cellulose nanofibril cryogel microspheres for controlled drug release. *Cellulose*, **2016**, 23, 415-425	5.5	54
66	Polyoxymetalate liquid-catalyzed polyol fuel cell and the related photoelectrochemical reaction mechanism study. *Journal of Power Sources*, **2016**, 318, 86-92	8.9	27
65	Freezing-mediated polymerization of Ag nanoparticle-embedded polyaniline belts with polyoxometalate as doping acid exhibiting UV-photosensitivity. *RSC Advances*, **2016**, 6, 46475-46478	3.7	3
64	Water-Expandable Polystyrene Using Cross-Linked Starch Nanoparticle as Water-Stabilizing Agent. *Industrial & Engineering Chemistry Research*, **2015**, 54, 6627-6633	3.9	11
63	Characterization of micro fibrillation process of cellulose and mercerized cellulose pulp. *RSC Advances*, **2015**, 5, 63111-63122	3.7	28
62	Thermo-responsive and fluorescent cellulose nanocrystals grafted with polymer brushes. *Journal of Materials Chemistry A*, **2015**, 3, 1995-2005	13	60
61	High Performance All-solid Supercapacitors Based on the Network of Ultralong Manganese dioxide/Polyaniline Coaxial Nanowires. *Scientific Reports*, **2015**, 5, 17858	4.9	34
60	Fast solvent removal by mechanical twisting for gel spinning of ultrastrong fibers. *Polymer Engineering and Science*, **2015**, 55, 745-752	2.3	6
59	Surfactant free Pickering emulsion polymerization of styrene in w/o/w system using cellulose nanofibrils. *European Polymer Journal*, **2015**, 64, 179-188	5.2	48
58	Solar-induced direct biomass-to-electricity hybrid fuel cell using polyoxometalates as photocatalyst and charge carrier. *Nature Communications*, **2014**, 5, 3208	17.4	99
57	Cross-linked starch nanoparticles stabilized Pickering emulsion polymerization of styrene in w/o/w system. *Colloid and Polymer Science*, **2014**, 292, 599-612	2.4	34
56	Reinforcement of all-cellulose nanocomposite films using native cellulose nanofibrils. *Carbohydrate Polymers*, **2014**, 104, 143-50	10.3	64
55	Characterization of cellulose nanofibrillation by micro grinding. *Journal of Nanoparticle Research*, **2014**, 16, 1	2.3	82
54	High-performance liquid-catalyst fuel cell for direct biomass-into-electricity conversion. *Angewandte Chemie - International Edition*, **2014**, 53, 13558-62	16.4	47

53	Noble metal catalyzed aqueous phase hydrogenation and hydrodeoxygenation of lignin-derived pyrolysis oil and related model compounds. *Bioresource Technology*, **2014**, 173, 6-10	11	62
52	High performance poly (vinyl alcohol)/cellulose nanocrystals nanocomposites manufactured by injection molding. *Cellulose*, **2014**, 21, 485-494	5.5	56
51	Thermally enhanced high performance cellulose nano fibril barrier membranes. *RSC Advances*, **2014**, 4, 45136-45142	3.7	48
50	Aerogel microspheres from natural cellulose nanofibrils and their application as cell culture scaffold. *Biomacromolecules*, **2014**, 15, 2540-7	6.9	149
49	High-Performance Liquid-Catalyst Fuel Cell for Direct Biomass-into-Electricity Conversion. *Angewandte Chemie*, **2014**, 126, 13776-13780	3.6	32
48	Effect of disperse dye on the preparation of poly(vinyl acetate)/poly(vinyl alcohol)/disperse dye composite microspheres. *Journal of Composite Materials*, **2014**, 48, 2265-2271	2.7	
47	Solid-state flexible polyaniline/silver cellulose nanofibrils aerogel supercapacitors. *Journal of Power Sources*, **2014**, 246, 283-289	8.9	103
46	The formation of asymmetric polystyrene/saponite composite nanoparticles via miniemulsion polymerization. *Journal of Applied Polymer Science*, **2013**, 127, 3916-3922	2.9	7
45	Nanoindentation study of individual cellulose nanowhisker-reinforced PVA electrospun fiber. *Polymer Bulletin*, **2013**, 70, 1205-1219	2.4	28
44	In situ self-assembly synthesis of gold nanoparticle arrays on polystyrene microspheres and their surface plasmon resonance. *Colloid and Polymer Science*, **2013**, 291, 239-244	2.4	14
43	Poly(vinyl alcohol)/montmorillonite/silver hybrid nanoparticles prepared from aqueous solutions by the electrospraying method. *Journal of Composite Materials*, **2013**, 47, 3367-3378	2.7	9
42	Solid-state, flexible, high strength paper-based supercapacitors. *Journal of Materials Chemistry A*, **2013**, 1, 5835	13	62
41	Lignin Pyrolysis Components and Upgrading Technology Review. *Bioenergy Research*, **2013**, 6, 1183-1204	3.1	230
40	Increased mechanical properties of aligned and isotropic electrospun PVA nanofiber webs by cellulose nanowhisker reinforcement. *Macromolecular Research*, **2012**, 20, 76-83	1.9	52
39	Opposite photocurrent response to ultraviolet and visible light. *Journal of Materials Chemistry*, **2012**, 22, 24522		15
38	A sandwich-structured ultraviolet photodetector driven only by opposite heterojunctions. *Journal of Materials Chemistry*, **2012**, 22, 13899		61
37	Aerogels from crosslinked cellulose nano/micro-fibrils and their fast shape recovery property in water. *Journal of Materials Chemistry*, **2012**, 22, 11642		175
36	Electrospraying Fabrication and Characterization of Low Molecular Weight Poly(vinyl alcohol)/Silver Composite Nanospheres for Antibacterial Applications. *Polymers and Polymer Composites*, **2012**, 20, 253-260	0.8	3

35	Janus particles with tunable coverage of zinc oxide nanowires. *Journal of Materials Chemistry*, **2011**, 21, 2067		26
34	The morphology and mechanical properties of layer structured cellulose microfibril foams from ice-templating methods. *Soft Matter*, **2011**, 7, 6034	3.6	95
33	General approach for fabricating nanoparticle arrays via patterned block copolymer nanoreactors. *Journal of Nanoparticle Research*, **2011**, 13, 1-13	2.3	27
32	ZnO spheres and nanorods formation: their dependence on agitation in solution synthesis. *Journal of Nanoparticle Research*, **2011**, 13, 1689-1696	2.3	17
31	Evolution of the zinc compound nanostructures in zinc acetate single-source solution. *Journal of Nanoparticle Research*, **2011**, 13, 5193-5202	2.3	40
30	Selective and Sequential Re-Assembly of Patterned Block Copolymer Thin Film for Fabricating Polymeric, Inorganic, and Their Composite Nanostructured Arrays. *Macromolecular Rapid Communications*, **2011**, 32, 1526-32	4.8	7
29	Fusion bonding of supercooled poly(ethylene terephthalate) between Tg and Tm. *Journal of Applied Polymer Science*, **2011**, 119, 3101-3112	2.9	3
28	Electrospinning fabrication and characterization of poly(vinyl alcohol)/waterborne polyurethane nanofiber membranes in aqueous solution. *Journal of Applied Polymer Science*, **2011**, 120, 2337-2345	2.9	18
27	Rheological study of self-crosslinking and co-crosslinking of ammonium zirconium carbonate and starch in aqueous solutions. *Journal of Applied Polymer Science*, **2011**, 122, 1019-1029	2.9	21
26	Preparation of Starch□Fatty Acid Modified Clay and Its Application in Packaging Papers. *Industrial & Engineering Chemistry Research*, **2011**, 50, 5628-5633	3.9	22
25	Superhydrophobic Surface Fabricated from Fatty Acid-Modified Precipitated Calcium Carbonate. *Industrial & Engineering Chemistry Research*, **2010**, 49, 5625-5630	3.9	60
24	Poly(vinyl alcohol)/chitosan oligosaccharide blend submicrometer fibers prepared from aqueous solutions by the electrospinning method. *Journal of Applied Polymer Science*, **2009**, 111, 132-140	2.9	37
23	Surface modification of cellulose fibers by starch grafting with crosslinkers. *Journal of Applied Polymer Science*, **2009**, 113, 3019-3026	2.9	27
22	Electrospinning and characterization of poly(vinyl alcohol)/chitosan oligosaccharide/clay nanocomposite nanofibers in aqueous solutions. *Colloid and Polymer Science*, **2009**, 287, 943-950	2.4	65
21	Synthesis of Needle-like Aragonite from Limestone without Calcinations in the Presence of Magnesium Sulfate. *Advanced Composite Materials*, **2009**, 18, 187-195	2.8	1
20	Synthesis of Needle-Like Aragonite Crystals in the Presence of Magnesium Chloride and Their Application in Papermaking. *Advanced Composite Materials*, **2009**, 18, 315-326	2.8	11
19	Kinetics Study of ZnO Nanorod Growth in Solution. *Journal of Physical Chemistry C*, **2009**, 113, 19853-19858	3.6	60
18	Tribology Passive Protection of Friction Pair with Polystyrene. *Tribology Transactions*, **2009**, 52, 191-196	1.8	

17	Energy Saving in Papermaking through Filler Addition. *Industrial & Engineering Chemistry Research*, **2008**, 47, 8430-8435	3.9	52
16	Multihollow structured poly(methyl methacrylate)/silver nanocomposite microspheres prepared by suspension polymerization in the presence of dual dispersion agents. *Colloid and Polymer Science*, **2008**, 286, 1379-1385	2.4	21
15	Kinetics of Miniemulsion Polymerization of Styrene in the Presence of Organoclays. *Macromolecular Materials and Engineering*, **2008**, 293, 529-537	3.9	23
14	Enhanced enzymatic hydrolysis of spruce by alkaline pretreatment at low temperature. *Biotechnology and Bioengineering*, **2008**, 99, 1320-8	4.9	246
13	Enhanced bondability between inorganic particles and a polysaccharide substrate by encapsulation with regenerated cellulose. *Journal of Applied Polymer Science*, **2008**, 107, 2830-2836	2.9	14
12	Polymer clay self-assembly complexes on paper. *Journal of Applied Polymer Science*, **2007**, 105, 1987-1992	2.9	20
11	Encapsulation of Inorganic Particles with Nanostructured Cellulose. *Macromolecular Materials and Engineering*, **2007**, 292, 1158-1163	3.9	18
10	Polyaniline Microspheres Consisting of Highly Crystallized Nanorods. *Macromolecular Rapid Communications*, **2007**, 28, 1237-1242	4.8	41
9	Poly(vinyl acetate)/poly(vinyl alcohol)/montmorillonite nanocomposite microspheres prepared by suspension polymerization and saponification. *Colloid and Polymer Science*, **2007**, 285, 705-710	2.4	39
8	Clay□starch composites and their application in papermaking. *Journal of Applied Polymer Science*, **2006**, 100, 1032-1038	2.9	71
7	Improvement of Peroxide Bleaching Yield and Efficiency of TMP Using Glyoxal Crosslink Agents. *Industrial & Engineering Chemistry Research*, **2006**, 45, 5813-5818	3.9	7
6	Improvement of paper strength with starch modified clay. *Journal of Applied Polymer Science*, **2005**, 97, 44-50	2.9	60
5	Poly(vinyl acetate)/Silver Nanocomposite Microspheres Prepared by Suspension Polymerization at Low Temperature. *Macromolecular Materials and Engineering*, **2005**, 290, 78-84	3.9	33
4	Synthesis of high molecular weight poly(methyl methacrylate) microspheres by suspension polymerization in the presence of silver nanoparticles. *Colloid and Polymer Science*, **2005**, 283, 1172-1179	2.4	38
3	Low temperature suspension polymerization of methyl methacrylate for the preparation of high molecular weight poly(methyl methacrylate)/silver nanocomposite microspheres. *Fibers and Polymers*, **2005**, 6, 277-283	2	14
2	Synthesis of precipitated calcium carbonate nanoparticles using a two-membrane system. *Colloid Journal*, **2004**, 66, 745-750	1.1	19
1	The effects of lignocellulosic fiber surface area on the dynamics of lignin oxidation and diffusion. *Journal of Applied Polymer Science*, **2004**, 94, 177-181	2.9	1