You-Lo Hsieh

List of Publications by Year
in descending order

125 papers	10,587 citations	28190 55 h-index	32761 100 g-index
128 all docs	128 docs citations	128 times ranked	11823 citing authors

#	Article	IF	Citations
1	Preparation and properties of cellulose nanocrystals: Rods, spheres, and network. Carbohydrate Polymers, 2010, 82, 329-336.	5.1	763
2	Ultrafine fibrous cellulose membranes from electrospinning of cellulose acetate. Journal of Polymer Science, Part B: Polymer Physics, 2002, 40, 2119-2129.	2.4	567
3	Preparation and characterization of cellulose nanocrystals from rice straw. Carbohydrate Polymers, 2012, 87, 564-573.	5.1	489
4	Chemically and mechanically isolated nanocellulose and their self-assembled structures. Carbohydrate Polymers, 2013, 95, 32-40.	5.1	472
5	Amphiphilic superabsorbent cellulose nanofibril aerogels. Journal of Materials Chemistry A, 2014, 2, 6337-6342.	5.2	375
6	Chitosan bicomponent nanofibers and nanoporous fibers. Carbohydrate Research, 2006, 341, 374-381.	1.1	259
7	Cellulose nanocrystal isolation from tomato peels and assembled nanofibers. Carbohydrate Polymers, 2015, 122, 60-68.	5.1	250
8	Super water absorbing and shape memory nanocellulose aerogels from TEMPO-oxidized cellulose nanofibrils via cyclic freezingâ€“thawing. Journal of Materials Chemistry A, 2014, 2, 350-359.	5.2	232
9	Liquid Transport in Fabric Structures. Textile Reseach Journal, 1995, 65, 299-307.	1.1	224
10	Adsorption and desorption of cationic malachite green dye on cellulose nanofibril aerogels. Carbohydrate Polymers, 2017, 173, 286-294.	5.1	217
11	High energy density supercapacitors from lignin derived submicron activated carbon fibers in aqueous electrolytes. Journal of Power Sources, 2014, 270, 106-112.	4.0	211
12	Title is missing!. Journal of Materials Science, 2003, 38, 2125-2133.	1.7	210
13	pH-responsive swelling behavior of poly(vinyl alcohol)/poly(acrylic acid) bi-component fibrous hydrogel membranes. Polymer, 2005, 46, 5149-5160.	1.8	179
14	Highly pure amorphous silica nano-disks from rice straw. Powder Technology, 2012, 225, 149-155.	2.1	166
15	Immobilization of lipase enzyme in polyvinyl alcohol (PVA) nanofibrous membranes. Journal of Membrane Science, 2008, 309, 73-81.	4.1	156
16	Ultra-fine polyelectrolyte fibers from electrospinning of poly(acrylic acid). Polymer, 2005, 46, 5133-5139.	1.8	149
17	Cellulose Nanofibril Aerogels: Synergistic Improvement of Hydrophobicity, Strength, and Thermal Stability via Cross-Linking with Diisocyanate. ACS Applied Materials & Interfaces, 2017, 9, 2825-2834.	4.0	146
18	Controlled defibrillation of rice straw cellulose and self-assembly of cellulose nanofibrils into highly crystalline fibrous materials. RSC Advances, 2013, 3, 12366.	1.7	141

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19	Cellulose isolation and coreâ€"shell nanostructures of cellulose nanocrystals from chardonnay grape skins. Carbohydrate Polymers, 2012, 87, 2546-2553.	5.1	135
20	Preparation of Amidoxime Polyacrylonitrile Chelating Nanofibers and Their Application for Adsorption of Metal Ions. Materials, 2013, 6, 969-980.	1.3	135
21	Enzymatic Scouring to Improve Cotton Fabric Wettability. Textile Reseach Journal, 1998, 68, 233-241.	1.1	126
22	Self-assembling of TEMPO Oxidized Cellulose Nanofibrils As Affected by Protonation of Surface Carboxyls and Drying Methods. ACS Sustainable Chemistry and Engineering, 2016, 4, 1041-1049.	3.2	123
23	Multiwalled Carbon Nanotube (MWCNT) Reinforced Cellulose Fibers by Electrospinning. ACS Applied Materials & Interfaces, 2010, 2, 2413-2420.	4.0	120
24	Coaxial Electrospun Cellulose-Core Fluoropolymer-Shell Fibrous Membrane from Recycled Cigarette Filter as Separator for High Performance Lithium-Ion Battery. ACS Sustainable Chemistry and Engineering, 2015, 3, 932-940.	3.2	119
25	Enzyme immobilization to ultra-fine cellulose fibers via amphiphilic polyethylene glycol spacers. Journal of Polymer Science Part A, 2004, 42, 4289-4299.	2.5	118
26	Liquid Wetting, Transport, and Retention Properties of Fibrous Assemblies: Part I: Water Wetting Properties of Woven Fabrics and Their Constituent Single Fibers. Textile Reseach Journal, 1992, 62, 677-685.	1.1	116
27	Dissolution behaviour and solubility of cellulose in NaOH complex solution. Carbohydrate Polymers, 2010, 81, 668-674.	5.1	116
28	Ultrafine microporous and mesoporous activated carbon fibers from alkali lignin. Journal of Materials Chemistry A, 2013, 1, 11279.	5.2	103
29	Ultrafine hydrogel fibers with dual temperature- and pH-responsive swelling behaviors. Journal of Polymer Science Part A, 2004, 42, 6331-6339.	2.5	102
30	Ultra-fine polyelectrolyte hydrogel fibres from poly(acrylic acid)/poly(vinyl alcohol). Nanotechnology, 2005, 16, 2852-2860.	1.3	99
31	Nanoporous ultrahigh specific surface polyacrylonitrile fibres. Nanotechnology, 2006, 17, 4416-4423.	1.3	99
32	Nanocellulose aerogel-based porous coaxial fibers for thermal insulation. Nano Energy, 2020, 68, 104305.	8.2	99
33	Surface modification of cellulose with plant triglycerides for hydrophobicity. Cellulose, 2007, 14, 469-480.	2.4	96
34	Cellulose nanocrystal-filled poly(acrylic acid) nanocomposite fibrous membranes. Nanotechnology, 2009, 20, 415604.	1.3	94
35	Enzymatic Hydrolysis to Improve Wetting and Absorbency of Polyester Fabrics. Textile Reseach Journal, 1998, 68, 311-319.	1.1	93
36	Chitosan-sheath and chitin-core nanowhiskers. Carbohydrate Polymers, 2014, 107, 158-166.	5.1	91

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37	Wetting and absorbency of nonionic surfactant solutions on cotton fabrics. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2001, 187-188, 385-397.	2.3	89
38	Cellulose/chitosan hybrid nanofibers from electrospinning of their ester derivatives. Cellulose, 2009, 16, 247-260.	2.4	88
39	Conductive Polymer Protonated Nanocellulose Aerogels for Tunable and Linearly Responsive Strain Sensors. ACS Applied Materials & Interfaces, 2018, 10, 27902-27910.	4.0	88
40	Nanofibrous membranes from aqueous electrospinning of carboxymethyl chitosan. Nanotechnology, 2008, 19, 125707.	1.3	85
41	Silver nanoparticle synthesis using lignin as reducing and capping agents: A kinetic and mechanistic study. International Journal of Biological Macromolecules, 2016, 82, 856-862.	3.6	85
42	Enzyme immobilization on ultrafine cellulose fibers via poly(acrylic acid) electrolyte grafts. Biotechnology and Bioengineering, 2005, 90, 405-413.	1.7	84
43	PEGylation of chitosan for improved solubility and fiber formation via electrospinning. Cellulose, 2007, 14, 543-552.	2.4	84
44	Assembling and Redispersibility of Rice Straw Nanocellulose: Effect of <i>tert</i>-Butanol. ACS Applied Materials & Interfaces, 2014, 6, 20075-20084.	4.0	82
45	Biocompatible sodium alginate fibers by aqueous processing and physical crosslinking. Carbohydrate Polymers, 2014, 102, 893-900.	5.1	78
46	Crystalline structure of developing cotton fibers. Journal of Polymer Science, Part B: Polymer Physics, 1996, 34, 1451-1459.	2.4	77
47	Cellulose nanocrystals and self-assembled nanostructures from cotton, rice straw and grape skin: a source perspective. Journal of Materials Science, 2013, 48, 7837-7846.	1.7	74
48	Lignin derived activated carbon particulates as an electric supercapacitor: carbonization and activation on porous structures and microstructures. RSC Advances, 2017, 7, 30459-30468.	1.7	71
49	Synthesis of surface bound silver nanoparticles on cellulose fibers using lignin as multi-functional agent. Carbohydrate Polymers, 2015, 131, 134-141.	5.1	65
50	Rice Straw Cellulose Nanofibrils via Aqueous Counter Collision and Differential Centrifugation and Their Self-Assembled Structures. ACS Sustainable Chemistry and Engineering, 2016, 4, 1697-1706.	3.2	65
51	Thermosensitive poly(n-isopropylacrylamide) hydrogels bonded on cellulose supports. Journal of Applied Polymer Science, 2003, 89, 999-1006.	1.3	64
52	1H NMR and 1Hâ€“13C HSQC surface characterization of chitosanâ€“chitin sheath-core nanowhiskers. Carbohydrate Polymers, 2015, 123, 46-52.	5.1	62
53	Carbon nanofibers with nanoporosity and hollow channels from binary polyacrylonitrile systems. European Polymer Journal, 2009, 45, 47-56.	2.6	60
54	Preparation of Activated Carbon and Silica Particles from Rice Straw. ACS Sustainable Chemistry and Engineering, 2014, 2, 726-734.	3.2	59

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55	Holocellulose Nanocrystals: Amphiphilicity, Oil/Water Emulsion, and Self-Assembly. Biomacromolecules, 2015, 16, 1433-1441.	2.6	59
56	Characterizing the Noncellulosics in Developing Cotton Fibers. Textile Reseach Journal, 2000, 70, 810-819.	1.1	57
57	1D Lignin-Based Solid Acid Catalysts for Cellulose Hydrolysis to Glucose and Nanocellulose. ACS Sustainable Chemistry and Engineering, 2015, 3, 2566-2574.	3.2	55
58	Effect of Fiber Swelling on the Structure of Lyocell Fabrics. Textile Reseach Journal, 2001, 71, 164-173.	1.1	54
59	Ultra-fine cellulose acetate/poly(ethylene oxide) bicomponent fibers. Carbohydrate Polymers, 2008, 71, 196-207.	5.1	53
60	Enzyme-catalyzed transesterification of vinyl esters on cellulose solids. Journal of Polymer Science Part A, 2001, 39, 1931-1939.	2.5	52
61	Macroporous Silicon Oxycarbide Fibers with Luffa-like Superhydrophobic Shells. Journal of the American Chemical Society, 2009, 131, 10346-10347.	6.6	52
62	Synthesis of polystyrene-supported dithiocarbamates and their complexation with metal ions. Journal of Applied Polymer Science, 2004, 92, 218-225.	1.3	49
63	Lipase bound cellulose nanofibrous membrane via Cibacron Blue F3GA affinity ligand. Journal of Membrane Science, 2009, 330, 288-296.	4.1	48
64	Holistic Rice Straw Nanocellulose and Hemicelluloses/Lignin Composite Films. ACS Sustainable Chemistry and Engineering, 2016, 4, 728-737.	3.2	48
65	Effects of polymer matrices to the formation of silicon carbide (SiC) nanoporous fibers and nanowires under carbothermal reduction. Journal of Materials Chemistry, 2011, 21, 1005-1012.	6.7	47
66	Structural transformation of ultra-high modulus and molecular weight polyethylene fibers by high-temperature wide-angle X-ray diffraction. Journal of Polymer Science, Part B: Polymer Physics, 1997, 35, 623-630.	2.4	46
67	Synthesis of Cellulose Nanofibril Bound Silver Nanoprism for Surface Enhanced Raman Scattering. Biomacromolecules, 2014, 15, 3608-3616.	2.6	46
68	Surface and Structure Characteristics, Self-Assembling, and Solvent Compatibility of Holocellulose Nanofibrils. ACS Applied Materials & Interfaces, 2015, 7, 4192-4201.	4.0	45
69	Cellulose nanofibrils improve dispersibility and stability of silver nanoparticles and induce production of bacterial extracellular polysaccharides. Journal of Materials Chemistry B, 2014, 2, 6226.	2.9	44
70	Liquid Wetting, Transport, and Retention Properties of Fibrous Assemblies: Part II: Water Wetting and Retention of 100% and Blended Woven Fabrics. Textile Reseach Journal, 1992, 62, 697-704.	1.1	43
71	Surface methacrylation and graft copolymerization of ultrafine cellulose fibers. Journal of Polymer Science, Part B: Polymer Physics, 2003, 41, 953-964.	2.4	43
72	Crosslinking of polyvinyl alcohol (PVA) fibrous membranes with glutaraldehyde and PEG diacylchloride. Journal of Applied Polymer Science, 2010, 116, 3249-3255.	1.3	43

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73	1D and 2D NMR of nanocellulose in aqueous colloidal suspensions. Carbohydrate Polymers, 2014, 110, 360-366.	5.1	41
74	Aqueous Synthesis of Compressible and Thermally Stable Cellulose Nanofibrilâ€"Silica Aerogel for CO₂ Adsorption. ACS Applied Nano Materials, 2018, 1, 6701-6710.	2.4	40
75	Residual reactivity for surface grafting of acrylic acid on argon glow-discharged poly(ethylene) Tj ETQq1 1 0.784314 rgBT /Overlock 10 T	1.3	39
76	Direct Scouring of Greige Cotton Fabrics with Proteases. Textile Reseach Journal, 2001, 71, 425-434.	1.1	39
77	First report of electrospun cellulose acetate nanofibers mats with chitin and chitosan nanowhiskers: Fabrication, characterization, and antibacterial activity. Carbohydrate Polymers, 2020, 250, 116954.	5.1	39
78	Synthesis and Properties of a Novel Water-Soluble Lactose-Containing Polymer and Its Cross-Linked Hydrogel. Macromolecules, 1997, 30, 7063-7068.	2.2	38
79	Synthesis and thermal properties of a novel lactose-containing poly(N-isopropylacrylamide-co-acrylamidolactamine) hydrogel. Journal of Polymer Science Part A, 1999, 37, 1393-1402.	2.5	36
80	Synthesis and Characterization of New Styrene Main-Chain Polymer with Pendant Lactose Moiety through Urea Linkage. Macromolecules, 1999, 32, 5507-5513.	2.2	36
81	Acrylonitrile graft copolymerization of casein proteins for enhanced solubility and thermal properties. Journal of Applied Polymer Science, 2000, 77, 2543-2551.	1.3	36
82	The adherence of <i>Staphylococcus aureus, Staphylococcus epidermidis</i> and <i>Escherichia coli</i> on cotton, polyester and their blends. Journal of Applied Bacteriology, 1986, 60, 535-544.	1.1	35
83	Absorption and transport properties of ultra-fine cellulose webs. Journal of Colloid and Interface Science, 2011, 353, 290-293.	5.0	35
84	Aqueous exfoliated graphene by amphiphilic nanocellulose and its application in moisture-responsive foldable actuators. Nanoscale, 2019, 11, 11719-11729.	2.8	35
85	Wetting characteristics of poly(p-phenylene terephthalamide) single fibers and their adhesion to epoxy. Journal of Colloid and Interface Science, 1991, 144, 127-144.	5.0	34
86	Dual temperature- and pH-sensitive hydrogels from interpenetrating networks and copolymerization ofN-isopropylacrylamide and sodium acrylate. Journal of Polymer Science Part A, 2004, 42, 3293-3301.	2.5	34
87	Preparation of Water-Absorbing Polyacrylonitrile Nanofibrous Membrane. Macromolecular Rapid Communications, 2006, 27, 142-145.	2.0	34
88	Study on molecular interaction behavior, and thermal and mechanical properties of polyacrylic acid and lactose blends. Journal of Applied Polymer Science, 2001, 82, 1921-1927.	1.3	31
89	Organic compatible polyacrylamide hydrogel fibers. Polymer, 2009, 50, 3670-3679.	1.8	31
90	Solvent- and glow-discharge-induced surface wetting and morphological changes of poly(ethylene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	1.3	30

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91	Proteases as Scouring Agents for Cotton. Textile Reseach Journal, 1999, 69, 590-597.	1.1	30
92	Ionic absorption of polypropylene functionalized by surface grafting and reactions. Journal of Polymer Science Part A, 1997, 35, 631-642.	2.5	28
93	Chlorine degradation of polyether-based polyurethane. Journal of Polymer Science Part A, 1997, 35, 3263-3273.	2.5	28
94	Melting behavior of ultra-high modulus and molecular weight polyethylene (UHMWPE) fibers. Journal of Applied Polymer Science, 1994, 53, 347-354.	1.3	27
95	Relationship of substratum wettability measurements and initial Staphylococcus aureau adhesion to films and fabrics. Journal of Colloid and Interface Science, 1988, 123, 275-286.	5.0	26
96	Alkaline Cellulose Nanofibrils from Streamlined Alkali Treated Rice Straw. ACS Sustainable Chemistry and Engineering, 2017, 5, 1730-1737.	3.2	26
97	Single Fiber Strength Variations of Developing Cotton Fibersâ€"Strength and Structure of G. hirsutum and G. barbedense. Textile Reseach Journal, 2000, 70, 682-690.	1.1	25
98	Lactitol-Based Poly(ether polyol) Hydrogels for Controlled Release Chemical and Drug Delivery Systems. Journal of Agricultural and Food Chemistry, 2000, 48, 5278-5282.	2.4	25
99	Dual Wet and Dry Resilient Cellulose II Fibrous Aerogel for Hydrocarbonâ€"Water Separation and Energy Storage Applications. ACS Omega, 2018, 3, 3530-3539.	1.6	25
100	Layer-by-layer self-assembly of Cibacron Blue F3GA and lipase on ultra-fine cellulose fibrous membrane. Journal of Membrane Science, 2010, 348, 21-27.	4.1	24
101	Sulfated Cellulose Nanofibrils from Chlorosulfonic Acid Treatment and Their Wet Spinning into High-Strength Fibers. Biomacromolecules, 2022, 23, 1269-1277.	2.6	24
102	Bacteriophages immobilized on electrospun cellulose microfibers by non-specific adsorption, proteinâ€"ligand binding, and electrostatic interactions. Cellulose, 2017, 24, 4581-4589.	2.4	20
103	Surface modification of flax nonwovens for the development of sustainable, high performance, and durable calcium aluminate cement composites. Composites Part B: Engineering, 2020, 191, 107955.	5.9	20
104	Kinetics of Metal Ion Absorption on Ion-Exchange and Chelating Fibers. Industrial & Engineering Chemistry Research, 1996, 35, 3817-3821.	1.8	18
105	Anisotropic Dimensional Swelling of Membranes of Ultrafine Hydrogel Fibers. Macromolecular Chemistry and Physics, 2005, 206, 1745-1751.	1.1	18
106	Tunable dialdehyde/dicarboxylate nanocelluloses by stoichiometrically optimized sequential periodateâ€"chlorite oxidation for tough and wet shape recoverable aerogels. Nanoscale Advances, 2020, 2, 5623-5634.	2.2	16
107	Ultrafine Cellulose Acetate Fibers with Nanoscale Structural Features. Journal of Nanoscience and Nanotechnology, 2008, 8, 4461-4469.	0.9	15
108	Self-assembled monolayer of 3-mercaptopropionic acid on electrospun polystyrene membranes for Cu2+ detection. Sensors and Actuators B: Chemical, 2012, 161, 322-328.	4.0	15

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109	Aldehyde functionalized cellulose support for hydrogels. Journal of Applied Polymer Science, 2010, 118, 2489-2495.	1.3	10
110	Tubular multiâ€bilayer polysaccharide biofilms on ultraâ€thin cellulose fibers. Journal of Applied Polymer Science, 2011, 121, 2526-2534.	1.3	8
111	Amphoteric Soy Protein-Rich Fibers for Rapid and Selective Adsorption and Desorption of Ionic Dyes. ACS Omega, 2020, 5, 634-642.	1.6	8
112	Hydrophilic polystyrene/maleic anhydride ultrafine fibrous membranes. Journal of Applied Polymer Science, 2010, 115, 723-730.	1.3	7
113	Synthesis of ultrafine poly(styreneâ€maleic anhydride) and polystyrene fibers by electrospinning. Journal of Applied Polymer Science, 2009, 113, 2709-2718.	1.3	6
114	Amphiphilic and amphoteric aqueous soy protein colloids and their cohesion and adhesion to cellulose. Industrial Crops and Products, 2020, 144, 112041.	2.5	6
115	Phosphorylated cellulose nanofibrils from sugarcane bagasse with pH tunable gelation. Carbohydrate Polymer Technologies and Applications, 2021, 2, 100085.	1.6	6
116	Almond shell nanocellulose: Characterization and self-assembling into fibers, films, and aerogels. Industrial Crops and Products, 2022, 186, 115188.	2.5	6
117	Amphiphilic Protein Microfibrils from Ice-Templated Self-Assembly and Disassembly of Pickering Emulsions. ACS Applied Bio Materials, 2020, 3, 2473-2481.	2.3	5
118	Rice Straw Nanocelluloses: Process-Linked Structures, Properties, and Self-Assembling into Ultra-Fine Fibers. ACS Symposium Series, 2017, , 133-150.	0.5	4
119	Synthesis and metal complexation of dihydroxyphosphino-functionalized crosslinked styrene/maleic anhydride copolymers. Journal of Polymer Science Part A, 2004, 42, 92-101.	2.5	3
120	Hydrophobic 2,7-Octadienyl Ether-Cellulose Nanofibrils Using Butadiene Sulfone as the Dual Reagent and Medium. ACS Sustainable Chemistry and Engineering, 2021, 9, 6489-6498.	3.2	3
121	One-pot synthesis of 2-bromopropionyl esterified cellulose nanofibrils as hydrophobic coating and film. RSC Advances, 2022, 12, 15070-15082.	1.7	3
122	Lipase Immobilization on Ultrafine Poly(acrylic acid)-Poly(vinyl alcohol) Hydrogel Fibers. ACS Symposium Series, 2008, , 129-143.	0.5	2
123	Tunable surface wettability and pH-responsive 2D structures from amphiphilic and amphoteric protein microfibrils. RSC Advances, 2020, 10, 33033-33039.	1.7	2
124	Photonic Thin Films Assembled from Amphiphilic Cellulose Nanofibrils Displaying Iridescent Full-Colors. ACS Applied Bio Materials, 2020, 3, 4522-4530.	2.3	2
125	Organic and aqueous compatible polystyrene-maleic anhydride copolymer ultra-fine fibrous membranes. Journal of Applied Polymer Science, 2009, 114, 784-793.	1.3	1