Yanjun Xie

List of Publications by Year
in descending order

105 papers	5,082 citations	136950 32 h-index	95266 68 g-index
107 all docs	107 docs citations	107 times ranked	5052 citing authors

#	Article	IF	Citations
1	Silane coupling agents used for natural fiber/polymer composites: A review. Composites Part A: Applied Science and Manufacturing, 2010, 41, 806-819.	7.6	1,677
2	Functional nanomaterials through esterification of cellulose: a review of chemistry and application. Cellulose, 2018, 25, 3703-3731.	4.9	160
3	Effects of chemical modification on the mechanical properties of wood. European Journal of Wood and Wood Products, 2013, 71, 401-416.	2.9	126
4	Grafting effects of polypropylene/polyethylene blends with maleic anhydride on the properties of the resulting woodâ€“plastic composites. Composites Part A: Applied Science and Manufacturing, 2012, 43, 150-157.	7.6	123
5	The water vapour sorption behaviour of acetylated birch wood: how acetylation affects the sorption isotherm and accessible hydroxyl content. Journal of Materials Science, 2014, 49, 2362-2371.	3.7	108
6	The dynamic water vapour sorption behaviour of natural fibres and kinetic analysis using the parallel exponential kinetics model. Journal of Materials Science, 2011, 46, 479-489.	3.7	102
7	Thermal, antioxidant and swelling behaviour of transparent polyvinyl (alcohol) films in presence of hydrophobic citric acid-modified lignin nanoparticles. International Journal of Biological Macromolecules, 2019, 127, 665-676.	7.5	100
8	Morphology, mechanical properties, and dimensional stability of wood particle/high density polyethylene composites: Effect of removal of wood cell wall composition. Materials & Design, 2014, 58, 339-345.	5.1	97
9	Lignin-coated cellulose nanocrystal filled methacrylate composites prepared via 3D stereolithography printing: Mechanical reinforcement and thermal stabilization. Carbohydrate Polymers, 2017, 169, 272-281.	10.2	89
10	Weathering of wood modified with the N-methylol compound 1,3-dimethylol-4,5-dihydroxyethyleneurea. Polymer Degradation and Stability, 2005, 89, 189-199.	5.8	86
11	Wood-Based Mesoporous Filter Decorated with Silver Nanoparticles for Water Purification. ACS Sustainable Chemistry and Engineering, 2019, 7, 5134-5141.	6.7	85
12	Effect of wood cell wall composition on the rheological properties of wood particle/high density polyethylene composites. Composites Science and Technology, 2014, 93, 68-75.	7.8	84
13	Transparent wood bearing a shielding effect to infrared heat and ultraviolet via incorporation of modified antimony-doped tin oxide nanoparticles. Composites Science and Technology, 2019, 172, 43-48.	7.8	77
14	Citric Acid as Green Modifier for Tuned Hydrophilicity of Surface Modified Cellulose and Lignin Nanoparticles. ACS Sustainable Chemistry and Engineering, 2018, 6, 9966-9978.	6.7	72
15	Low-value wood for sustainable high-performance structural materials. Nature Sustainability, 2022, 5, 628-635.	23.7	72
16	Effects of chemical modification of wood particles with glutaraldehyde and 1,3-dimethylol-4,5-dihydroxyethyleneurea on properties of the resulting polypropylene composites. Composites Science and Technology, 2010, 70, 2003-2011.	7.8	67
17	Dynamic water vapour sorption properties of wood treated with glutaraldehyde. Wood Science and Technology, 2011, 45, 49-61.	3.2	66
18	Effect of treatments with 1,3-dimethylol-4,5-dihydroxy-ethyleneurea (DMDHEU) on the tensile properties of wood. Holzforschung, 2007, 61, 43-50.	1.9	64

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19	Highly Efficient, Stable, and Recyclable Hydrogen Manganese Oxide/Cellulose Film for the Extraction of Lithium from Seawater. ACS Applied Materials & Interfaces, 2020, 12, 9775-9781.	8.0	59
20	The water vapour sorption behaviour of three celluloses: analysis using parallel exponential kinetics and interpretation using the Kelvin-Voigt viscoelastic model. Cellulose, 2011, 18, 517-530.	4.9	57
21	Analysis of the water vapour sorption isotherms of thermally modified acacia and sesendok. Wood Material Science and Engineering, 2010, 5, 194-203.	2.3	56
22	Carbonized Wood Decorated with Cobaltâ€Nickel Binary Nanoparticles as a Lowâ€Cost and Efficient Electrode for Water Splitting. Advanced Functional Materials, 2021, 31, 2010951.	14.9	54
23	Lightweight, Flexible, Thermally-Stable, and Thermally-Insulating Aerogels Derived from Cotton Nanofibrillated Cellulose. ACS Sustainable Chemistry and Engineering, 2019, 7, 9202-9210.	6.7	52
24	Cellulose-Based Superhydrophobic Surface Decorated with Functional Groups Showing Distinct Wetting Abilities to Manipulate Water Harvesting. ACS Applied Materials & Interfaces, 2020, 12, 40968-40978.	8.0	49
25	Esterification of wood with citric acid: The catalytic effects of sodium hypophosphite (SHP). Holzforschung, 2014, 68, 427-433.	1.9	47
26	Weathering of uncoated and coated wood treated with methylated 1,3-dimethylol-4,5-dihydroxyethyleneurea (mDMDHEU). European Journal of Wood and Wood Products, 2008, 66, 455-464.	2.9	46
27	Fire retardancy of an aqueous, intumescent, and translucent wood varnish based on guanylurea phosphate and melamine-urea-formaldehyde resin. Progress in Organic Coatings, 2018, 121, 64-72.	3.9	44
28	Sulfhydryl-Modified Chitosan Aerogel for the Adsorption of Heavy Metal Ions and Organic Dyes. Industrial & Engineering Chemistry Research, 2020, 59, 14531-14536.	3.7	40
29	Fire performance of oak wood modified with N-methylol resin and methylolated guanylurea phosphate/boric acid-based fire retardant. Construction and Building Materials, 2014, 72, 1-6.	7.2	39
30	Magnetically Driven 3D Cellulose Film for Improved Energy Efficiency in Solar Evaporation. ACS Applied Materials & Interfaces, 2021, 13, 7756-7765.	8.0	38
31	Solid biopolymer electrolytes based on all-cellulose composites prepared by partially dissolving cellulosic fibers in the ionic liquid 1-butyl-3-methylimidazolium chloride. Journal of Materials Science, 2012, 47, 5978-5986.	3.7	34
32	Effects of ionic liquid on the rheological properties of wood flour/high density polyethylene composites. Composites Part A: Applied Science and Manufacturing, 2014, 61, 134-140.	7.6	34
33	Sustainable and antibacterial sandwich-like Ag-Pulp/CNF composite paper for oil/water separation. Carbohydrate Polymers, 2020, 245, 116587.	10.2	34
34	Sandwich-structured wood flour/HDPE composite panels: Reinforcement using a linear low-density polyethylene core layer. Construction and Building Materials, 2018, 164, 489-496.	7.2	33
35	Coating performance of finishes on wood modified with an N-methylol compound. Progress in Organic Coatings, 2006, 57, 291-300.	3.9	32
36	Transparent wood with thermo-reversible optical properties based on phase-change material. Composites Science and Technology, 2020, 200, 108407.	7.8	32

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37	Sandwich-structural Ni/Fe3O4/Ni/cellulose paper with a honeycomb surface for improved absorption performance of electromagnetic interference. Carbohydrate Polymers, 2021, 260, 117840.	10.2	32
38	Analysis of water vapour sorption of oleo-thermal modified wood of Acacia mangium and Endospermum malaccense by a parallel exponential kinetics model and according to the Hailwood-Horrobin model. Holzforschung, 2010, 64, .	1.9	31
39	Developing a Superhydrophobic Absorption-Dominated Electromagnetic Shielding Material by Building Clustered Fe₃O₄ Nanoparticles on the Copper-Coated Cellulose Paper. ACS Sustainable Chemistry and Engineering, 2021, 9, 6574-6585.	6.7	29
40	Effect of glutaraldehyde on water related properties of solid wood. Holzforschung, 2010, 64, .	1.9	28
41	Thermoplastic deformation of poplar wood plasticized by ionic liquids measured by a nonisothermal compression technique. Holzforschung, 2014, 68, 555-566.	1.9	28
42	Thermal decomposition of fire-retarded wood flour/polypropylene composites. Journal of Thermal Analysis and Calorimetry, 2016, 123, 309-318.	3.6	28
43	The reinforcement efficacy of nano- and microscale silica for extruded wood flour/HDPE composites: the effects of dispersion patterns and interfacial modification. Journal of Materials Science, 2018, 53, 1899-1910.	3.7	27
44	Enhanced heavy metal adsorption ability of lignocellulosic hydrogel adsorbents by the structural support effect of lignin. Cellulose, 2019, 26, 4005-4019.	4.9	27
45	The dynamic water vapour sorption properties of natural fibres and viscoelastic behaviour of the cell wall: is there a link between sorption kinetics and hysteresis?. Journal of Materials Science, 2011, 46, 3738-3748.	3.7	26
46	Structural, mechanical, and thermal properties of 3D printed Lâ€CNC/acrylonitrile butadiene styrene nanocomposites. Journal of Applied Polymer Science, 2017, 134, 45082.	2.6	26
47	Conductive and fire-retardant wood/polyethylene composites based on a continuous honeycomb-like nanoscale carbon black network. Construction and Building Materials, 2020, 233, 117369.	7.2	26
48	Modification of poplar wood with glucose crosslinked with citric acid and 1,3-dimethylol-4,5-dihydroxy ethyleneurea. Holzforschung, 2016, 70, 47-53.	1.9	25
49	Water vapor sorption kinetics of wood modified with glutaraldehyde. Journal of Applied Polymer Science, 2010, 117, 1674-1682.	2.6	23
50	Thermo-oxidative decomposition and combustion behavior of Scots pine (Pinus sylvestris L.) sapwood modified with phenol- and melamine-formaldehyde resins. Wood Science and Technology, 2016, 50, 1125-1143.	3.2	23
51	The influence of double-layered distribution of fire retardants on the fire retardancy and mechanical properties of wood fiber polypropylene composites. Construction and Building Materials, 2020, 242, 118047.	7.2	23
52	Superhydrophobic Hierarchical Structures from Self-Assembly of Cellulose-Based Nanoparticles. ACS Sustainable Chemistry and Engineering, 2021, 9, 14101-14111.	6.7	23
53	Effects of chemical modification with glutaraldehyde on the weathering performance of Scots pine sapwood. Wood Science and Technology, 2012, 46, 749-767.	3.2	21
54	Thermal degradation and flammability properties of multilayer structured wood fiber and polypropylene composites with fire retardants. RSC Advances, 2016, 6, 13890-13897.	3.6	21

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55	Cellulose nanocrystal reinforced poly(lactic acid) nanocomposites prepared by a solution precipitation approach. Cellulose, 2020, 27, 7489-7502.	4.9	21
56	Multifunctional Reversible Selfâ€Assembled Structures of Celluloseâ€Derived Phaseâ€Change Nanocrystals. Advanced Materials, 2021, 33, e2005263.	21.0	21
57	The fungal resistance of wood modified with glutaraldehyde. Holzforschung, 2012, 66, 237-243.	1.9	20
58	Effects of hydrophobation treatments of wood particles with an amino alkylsiloxane co-oligomer on properties of the ensuing polypropylene composites. Composites Part A: Applied Science and Manufacturing, 2013, 44, 32-39.	7.6	20
59	Reinforcing 3D printed acrylonitrile butadiene styrene by impregnation of methacrylate resin and cellulose nanocrystal mixture: Structural effects and homogeneous properties. Materials and Design, 2018, 138, 62-70.	7.0	20
60	Combustion behavior of oak wood (<i>Quercus mongolica</i> L.) modified by 1,3-dimethylol-4,5-dihydroxyethyleneurea (DMDHEU). Holzforschung, 2014, 68, 881-887.	1.9	19
61	Effects of modification with a combination of styrene-acrylic copolymer dispersion and sodium silicate on the mechanical properties of wood. Journal of Wood Science, 2019, 65, .	1.9	19
62	Modification of Scots pine with activated glucose and citric acid: Physical and mechanical properties. BioResources, 2019, 14, 3445-3458.	1.0	19
63	Degradation of wood veneers by Fenton's reagents: Effects of wood constituents and low molecular weight phenolic compounds on hydrogen peroxide decomposition and wood tensile strength loss. Holzforschung, 2010, 64, .	1.9	18
64	Effects of use of coupling agents on the properties of microfibrillar composite based on high-density polyethylene and polyamide-6. Polymer Bulletin, 2014, 71, 685-703.	3.3	18
65	Aliphatic chains grafted cellulose nanocrystals with core-corona structures for efficient toughening of PLA composites. Carbohydrate Polymers, 2022, 285, 119200.	10.2	18
66	Rheological behavior and mechanical properties of wood flour/high density polyethylene blends: Effects of esterification of wood with citric acid. Polymer Composites, 2016, 37, 553-560.	4.6	17
67	Cellulose-derived solid-solid phase change thermal energy storage membrane with switchable optical transparency. Chemical Engineering Journal, 2022, 435, 134851.	12.7	17
68	Combustion behavior of Scots pine (<i>Pinus sylvestris</i> L.) sapwood treated with a dispersion of aluminum oxychloride-modified silica. Holzforschung, 2016, 70, 1165-1173.	1.9	16
69	Mechanical reinforcement and creep resistance of coextruded wood flour/polyethylene composites by shellâ€layer treatment with nanoâ€•and microâ€SiO₂ particles. Polymer Composites, 2019, 40, 1576-1584.	4.6	16
70	Reinforcing effects of modified KevlarÂ® fiber on the mechanical properties of wood-flour/polypropylene composites. Journal of Forestry Research, 2013, 24, 149-153.	3.6	15
71	Radiata pine wood treatment with a dispersion of aqueous styrene/acrylic acid copolymer. Holzforschung, 2018, 72, 387-396.	1.9	15
72	Impact of Dmdheu Resin Treatment on the Mechanical Properties of Poplar. Polymers and Polymer Composites, 2014, 22, 669-674.	1.9	14

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73	Thermal, crystallization, and dynamic rheological behavior of wood particle/HDPE composites: Effect of removal of wood cell wall composition. Journal of Applied Polymer Science, 2014, 131, .	2.6	14
74	HTO/Cellulose Aerogel for Rapid and Highly Selective Li+ Recovery from Seawater. Molecules, 2021, 26, 4054.	3.8	14
75	Effects of modification with glutaraldehyde on the mechanical properties of wood. Holzforschung, 2010, 64, .	1.9	13
76	Coupling pattern and efficacy of organofunctional silanes in wood flour-filled polypropylene or polyethylene composites. Journal of Composite Materials, 2015, 49, 677-684.	2.4	13
77	Degradation of chemically modified Scots pine (<i>Pinus sylvestris</i> L.) with Fenton reagent. Holzforschung, 2015, 69, 153-161.	1.9	13
78	Flexible cellulose-based material with a higher conductivity and electromagnetic shielding performance from electroless nickel plating. Wood Science and Technology, 2021, 55, 1693-1710.	3.2	12
79	Material pocket dynamic mechanical analysis: a novel tool to study thermal transition in wood fibers plasticized by an ionic liquid (IL). Holzforschung, 2015, 69, 223-232.	1.9	11
80	Thermal degradation and flammability behavior of fire-retarded wood flour/polypropylene composites. Journal of Fire Sciences, 2016, 34, 226-239.	2.0	11
81	End effect on determining shear modulus of timber beams in torsion tests. Construction and Building Materials, 2018, 164, 442-450.	7.2	10
82	Vaporization heat of bound water in wood chemically modified via grafting and crosslinking patterns by DSC and NMR analysis. Holzforschung, 2018, 72, 1043-1049.	1.9	10
83	Reinforcing 3D print methacrylate resin/cellulose nanocrystal composites: Effect of cellulose nanocrystal modification. BioResources, 2019, 14, 3701-3716.	1.0	10
84	Impacts of freezing and thermal treatments on dimensional and mechanical properties of wood flour-HDPE composite. Journal of Forestry Research, 2013, 24, 143-147.	3.6	9
85	Effects of chemical modification of wood flour on the rheological properties of highâ€density polyethylene blends. Journal of Applied Polymer Science, 2014, 131, .	2.6	9
86	Anodic oxidation growth of lanthanum/manganese-doped TiO2 nanotube arrays for photocatalytic degradation of various organic dyes. Journal of Materials Science: Materials in Electronics, 2020, 31, 8844-8851.	2.2	9
87	Degradation of wood veneers by Fenton reagents: Effects of 2,3-dihydroxybenzoic acid on mineralization of wood. Polymer Degradation and Stability, 2012, 97, 1270-1277.	5.8	8
88	Isothermal crystallization kinetics of Kevlar fiberâ€reinforced wood flour/highâ€density polyethylene composites. Journal of Applied Polymer Science, 2012, 126, E2.	2.6	8
89	A Coral Reef-like Structure Fabricated on Cellulose Paper for Simultaneous Oilâ€"Water Separation and Electromagnetic Shielding Protection. ACS Omega, 2020, 5, 18105-18113.	3.5	8
90	Fabrication of a laminated felt-like electromagnetic shielding material based on nickel-coated cellulose fibers via self-foaming effect in electroless plating process. International Journal of Biological Macromolecules, 2020, 154, 954-961.	7.5	8

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91	Multifunctional composite film based on biodegradable grape skin and polyvinyl alcohol. Cellulose, 2021, 28, 6467-6479.	4.9	8
92	Compression rheological behavior of ultrahighly filled wood flour-polyethylene composites. Composites Part B: Engineering, 2021, 215, 108766.	12.0	7
93	Distribution of blue stain in untreated and DMDHEU treated Scots pine sapwood panels after six years of outdoor weathering. European Journal of Wood and Wood Products, 2011, 69, 333-336.	2.9	6
94	Enhanced Weathering Resistance of Radiata Pine Wood by Treatment with an Aqueous Styrene/Acrylic Acid Copolymer Dispersion. Journal of Wood Chemistry and Technology, 2019, 39, 421-435.	1.7	6
95	Combustion behavior of poplar (Populus adenopoda Maxim.) and radiata pine (Pinus radiata Don.) treated with a combination of styrene-acrylic copolymer and sodium silicate. European Journal of Wood and Wood Products, 2019, 77, 439-452.	2.9	6
96	Incorporation effect of enzymatic hydrolysis lignin on the mechanical and rheological properties of the resulting wood flour/highâ€density polyethylene composites. Polymer Composites, 2016, 37, 379-384.	4.6	5
97	A Comparative Study of Selfâ€Assembled Superstructures from Cellulose Stearoyl Ester and Poly(Vinyl) Tj ETQq1 1 0.784314 rgBT /Ov	2.2	5
98	Characterization of the structural rheological properties of wood flourâ€“polyethylene composites with ultrahigh filling on the basis of uniaxial cyclic compression method. Composites Part A: Applied Science and Manufacturing, 2022, 153, 106724.	7.6	5
99	Wood Protection with Dimethyloldihydroxy-Ethyleneurea and Its Derivatives. ACS Symposium Series, 2014, , 287-299.	0.5	4
100	Improved Acetylation Efficacy of Wood Fibers by Ionic Liquid Pretreatment. BioResources, 2016, 12, .	1.0	2
101	Reinforcement of wood flour/HDPE composite with a copolyester of <i>p</i>â€hydroxy benzoic acid and 2â€hydroxyâ€6â€naphthoic acid. Journal of Applied Polymer Science, 2019, 136, 47338.	2.6	2
102	Activation of glucose with Fentonâ€™s reagent: chemical structures of activated products and their reaction efficacy toward cellulosic material. Holzforschung, 2019, 73, 579-587.	1.9	2
103	Effects of Geometrical Shapes of Wood Particles on the Mechanical and Water-Uptake Properties of the Resulting Wood/High Density Polyethylene Composites. Advanced Materials Research, 2010, 113-116, 674-678.	0.3	1
104	Coating performance on glutaraldehyde-modified wood. Journal of Forestry Research, 2019, 30, 353-361.	3.6	1
105	Study of Vinyltrimethoxysilane Modified Wood Flour/HDPE Composites. Advanced Materials Research, 2011, 183-185, 2148-2153.	0.3	0