Ru Liu

List of Publications by Year
in descending order

50 papers	1,281 citations	331670 21 h-index	377865 34 g-index
50 all docs	50 docs citations	50 times ranked	1245 citing authors

#	Article	IF	Citations
1	Preparation, physical, mechanical, and interfacial morphological properties of engineered bamboo scrimber. Construction and Building Materials, 2017, 157, 1032-1039.	7.2	143
2	Comparison on properties of lignocellulosic flour/polymer composites by using wood, cellulose, and lignin flours as fillers. Composites Science and Technology, 2014, 103, 1-7.	7.8	107
3	Effects of UV weathering on surface properties of polypropylene composites reinforced with wood flour, lignin, and cellulose. Applied Surface Science, 2014, 317, 385-392.	6.1	96
4	Characterization of surface chemistry and crystallization behavior of polypropylene composites reinforced with wood flour, cellulose, and lignin during accelerated weathering. Applied Surface Science, 2015, 332, 253-259.	6.1	91
5	Incorporation of microencapsulated dodecanol into wood flour/high-density polyethylene composite as a phase change material for thermal energy storage. Materials and Design, 2016, 89, 1325-1334.	7.0	63
6	Characterization of organo-montmorillonite (OMMT) modified wood flour and properties of its composites with poly(lactic acid). Composites Part A: Applied Science and Manufacturing, 2013, 51, 33-42.	7.6	59
7	Preparation of a kind of novel sustainable mycelium/cotton stalk composites and effects of pressing temperature on the properties. Industrial Crops and Products, 2019, 141, 111732.	5.2	42
8	The reinforcing mechanism of mechanical properties of bamboo fiber bundleâ€reinforced composites. Polymer Composites, 2019, 40, 1463-1472.	4.6	41
9	Resistance to fungal decay of paraffin wax emulsion/copper azole compound system treated wood. International Biodeterioration and Biodegradation, 2018, 129, 61-66.	3.9	40
10	Effects of Modifier Type on Properties of in Situ Organo-Montmorillonite Modified Wood Flour/Poly(lactic acid) Composites. ACS Applied Materials & Interfaces, 2016, 8, 161-168.	8.0	37
11	Assessing the impact of wood decay fungi on the modulus of elasticity of slash pine (Pinus elliottii) by stress wave non-destructive testing. International Biodeterioration and Biodegradation, 2017, 117, 123-127.	3.9	30
12	Characterization of Odors of Wood by Gas Chromatography-Olfactometry with Removal of Extractives as Attempt to Control Indoor Air Quality. Molecules, 2018, 23, 203.	3.8	29
13	Improvement of the water repellency, dimensional stability, and biological resistance of bambooâ€based fiber reinforced composites. Polymer Composites, 2019, 40, 506-513.	4.6	29
14	Thermal stability of organoâ€montmorilloniteâ€modified wood flour/poly(lactic acid) composites. Polymer Composites, 2016, 37, 1971-1977.	4.6	28
15	Dialdehyde modified cellulose nanofibers enhanced the physical properties of decorative paper impregnated by aldehyde-free adhesive. Carbohydrate Polymers, 2020, 250, 116941.	10.2	28
16	Identification of Three Dalbergia Species Based on Differences in Extractive Components. Molecules, 2018, 23, 2163.	3.8	27
17	Measurement of three wood materials against weathering during long natural sunlight exposure. Measurement: Journal of the International Measurement Confederation, 2017, 102, 179-185.	5.0	24
18	Effects of two types of clay on physical and mechanical properties of poly(lactic acid)/wood flour composites at various wood flour contents. Journal of Applied Polymer Science, 2013, 127, 2566-2573.	2.6	23

#	Article	IF	Citations
19	Improvement of dimensional stability of wood by in situ synthesis of organo-montmorillonite: preparation and properties of modified Southern pine wood. Holzforschung, 2014, 68, 29-36.	1.9	23
20	Analysis of Chemical Composition of Extractives by Acetone and the Chromatic Aberration of Teak (Tectona Grandis L.F.) from China. Molecules, 2019, 24, 1989.	3.8	23
21	Comparison on the Aging of Woods Exposed to Natural Sunlight and Artificial Xenon Light. Polymers, 2019, 11, 709.	4.5	23
22	Surface properties of in situ organo-montmorillonite modified wood flour and the influence on mechanical properties of composites with polypropylene. Applied Surface Science, 2016, 361, 234-241.	6.1	22
23	Improvement of mechanical properties of mycelium/cotton stalk composites by water immersion. Composite Interfaces, 2020, 27, 953-966.	2.3	18
24	Synergistic effect of montmorillonite/lignin on improvement of water resistance and dimensional stability of Populus cathayana. Industrial Crops and Products, 2019, 141, 111747.	5.2	17
25	Preparation of a Fast Water-Based UV Cured Polyurethane-Acrylate Wood Coating and the Effect of Coating Amount on the Surface Properties of Oak (Quercus alba L.). Polymers, 2019, 11, 1414.	4.5	17
26	Physical, mechanical, and thermal properties of micronized organo-montmorillonite suspension modified wood flour/poly(lactic acid) composites. Polymer Composites, 2015, 36, 731-738.	4.6	14
27	Effect of MAPP on interfacial compatibility of wood flour/polypropylene composite evaluated with dielectric approach. Polymer Composites, 2014, 35, 489-494.	4.6	13
28	Effects of vitamin E combined with antioxidants on wood flour/polypropylene composites during accelerated weathering. Holzforschung, 2015, 69, 113-120.	1.9	13
29	Characterization and properties of organo-montmorillonite modified lignocellulosic fibers and their interaction mechanisms. RSC Advances, 2015, 5, 76708-76717.	3.6	13
30	Mechanical properties of wood flour/poly (lactic acid) composites coupled with waterborne silane-polyacrylate copolymer emulsion. Holzforschung, 2016, 70, 439-447.	1.9	13
31	Comparison of six WPCs made of organo-montmorillonite-modified fibers of four trees, moso bamboo and wheat straw and poly(lactic acid) (PLA). Holzforschung, 2018, 72, 735-744.	1.9	13
32	Dialdehyde starch reinforced polyacrylate-polyethylene glycol resin for impregnated decorative paper with improved toughness and ultra-low formaldehyde emission. Industrial Crops and Products, 2022, 176, 114390.	5.2	13
33	Antiweathering effects of vitamin E on wood flour/polypropylene composites. Polymer Composites, 2014, 35, 2085-2093.	4.6	12
34	Identification of odorous constituents of southern yellow pine and China fir wood: the effects of extractive removal. Analytical Methods, 2018, 10, 2115-2122.	2.7	12
35	A comparison of various ionic surfactant modifiers used in in situ synthesis of organo-montmorillonite inside wood flour. Industrial Crops and Products, 2014, 62, 387-394.	5.2	11
36	A Comparison of the Performance of Two Kinds of Waterborne Coatings on Bamboo and Bamboo Scrimber. Coatings, 2019, 9, 161.	2.6	10

#	Article	IF	Citations
37	Preparation and properties of high-performance fast-growing wood modified by exfoliated organo-montmorillonite in waterborne hyperbranched polyacrylate emulsion. Construction and Building Materials, 2021, 298, 123868.	7.2	9
38	Stress relaxation of composites made of polypropylene and organo-montmorillonite modified wood flour during water immersion. Holzforschung, 2017, 71, 163-170.	1.9	6
39	Preparation of Organo-Montmorillonite Modified Poly(lactic acid) and Properties of Its Blends with Wood Flour. Polymers, 2019, 11, 204.	4.5	6
40	Organoâ€montmorillonite modified wood flour/poly (lactic acid) composites via different modification process. Polymer Composites, 2021, 42, 987-994.	4.6	6
41	Tensile behavior and water absorption of innovative composites from natural cork granules and bamboo particles. Composite Structures, 2021, 258, 113376.	5.8	6
42	Coating Performance of Water-Based Polyurethane-Acrylate Coating on Bamboo/Bamboo Scrimber Substrates. Advances in Polymer Technology, 2019, 2019, 1-8.	1.7	5
43	Wood composites modified with waterborne hyperbranched polyacrylate dispersed organoâ€montmorillonite emulsion and the permeability investigations by surface characterizations. Polymer Composites, 2020, 41, 3798-3806.	4.6	5
44	Preparation and properties of light-resistant printing UV ink modified with nano-TiO₂ on wood substrate. Surface Engineering, 2019, 35, 557-564.	2.2	4
45	Preparation of small particle diameter thermally expandable microspheres under atmospheric pressure for potential utilization in wood. Journal of Applied Polymer Science, 2021, 138, 49734.	2.6	4
46	Enhancement of the physical and mechanical properties of wood using a novel organo-montmorillonite/hyperbranched polyacrylate emulsion. Holzforschung, 2021, 75, 545-554.	1.9	4
47	Comparison on Reduction of VOCs Emissions from Radiata Pine (Pinus Radiata D. Don) between Sodium Bicarbonate and Ozone Treatments. Molecules, 2020, 25, 471.	3.8	3
48	Protection of wood in ancient timber construction by surface painting of waterborne siloxane-modified polyurethane against water destroy. Wood Material Science and Engineering, 2023, 18, 314-321.	2.3	3
49	Fungi resistance of organoâ€montmorillonite modified lignocellulosic flour/polypropylene composites. Polymer Composites, 2018, 39, 3831-3840.	4.6	2
50	Aging performance of nanoâ€Zno modified polyurethaneâ€acrylic UV ink composites on wood and the degradation mechanism. Polymer Composites, 2019, 40, 3533-3540.	4.6	1