Charles E Frazier

List of Publications by Year
in descending order

55 papers	1,188 citations	361045 20 h-index	395343 33 g-index
55 all docs	55 docs citations	55 times ranked	1123 citing authors

#	Article	IF	Citations
1	Soybean hull pectin and nanocellulose: tack properties in aqueous pMDI dispersions. Journal of Materials Science, 2022, 57, 5022-5035.	1.7	5
2	Photo-curable, double-crosslinked, in situ-forming hydrogels based on oxidized hydroxypropyl cellulose. Cellulose, 2021, 28, 3903-3915.	2.4	15
3	In situ forming hydrogels based on oxidized hydroxypropyl cellulose and Jeffamines. Cellulose, 2021, 28, 11367-11380.	2.4	4
4	Formaldehyde from Lignin Acidolysis Might Be Useful for In-Line Control of Industrial Biomass Processing. ACS Sustainable Chemistry and Engineering, 2021, 9, 207-215.	3.2	7
5	The effect of residual lignin on the rheological properties of cellulose nanofibril suspensions. Journal of Wood Chemistry and Technology, 2020, 40, 370-381.	0.9	34
6	All-Polysaccharide, Self-Healing Injectable Hydrogels Based on Chitosan and Oxidized Hydroxypropyl Polysaccharides. Biomacromolecules, 2020, 21, 4261-4272.	2.6	43
7	Rheology of moso bamboo stem determined by DMA in ethylene glycol. Holzforschung, 2019, 73, 171-179.	0.9	1
8	Pine Extractives Strongly Affect Lignin Thermochemical Pathways. ACS Sustainable Chemistry and Engineering, 2019, 7, 17999-18004.	3.2	7
9	Rheology of transgenic switchgrass reveals practical aspects of biomass processing. Biotechnology for Biofuels, 2018, 11, 57.	6.2	8
10	Lignin Acidolysis Predicts Formaldehyde Generation in Pine Wood. ACS Sustainable Chemistry and Engineering, 2017, 5, 4830-4836.	3.2	22
11	Biogenic Formaldehyde: Content and Heat Generation in the Wood of Three Tree Species. ACS Sustainable Chemistry and Engineering, 2017, 5, 4243-4248.	3.2	19
12	Organic filler surface analysis by column wicking. Journal of Adhesion Science and Technology, 2016, 30, 607-620.	1.4	0
13	Isothermal crystallization of blends containing two thermotropic liquid crystalline polymers. Materials Today Communications, 2016, 9, 16-21.	0.9	1
14	Simple Milligram-Scale Extraction of Formaldehyde from Wood. ACS Sustainable Chemistry and Engineering, 2016, 4, 5041-5045.	3.2	13
15	Revealing the thermal sensitivity of lignin during glycerol thermal processing through structural analysis. RSC Advances, 2016, 6, 30234-30246.	1.7	22
16	Influence of organic fillers on surface tension of phenol-formaldehyde adhesives. International Journal of Adhesion and Adhesives, 2016, 66, 160-166.	1.4	6
17	Influence of organic fillers on rheological behavior in phenol-formaldehyde adhesives. International Journal of Adhesion and Adhesives, 2016, 66, 93-98.	1.4	6
18	Curing behavior of melamine-urea-formaldehyde (MUF) resin adhesive. International Journal of Adhesion and Adhesives, 2015, 62, 40-44.	1.4	38

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19	A dynamic mechanical analysis method for predicting the curing behavior of phenol-formaldehyde resin adhesive. Journal of Adhesion Science and Technology, 2015, 29, 981-990.	1.4	9
20	Biocomposite adhesion without added resin: understanding the chemistry of the direct conversion of wood into adhesives. RSC Advances, 2015, 5, 67267-67276.	1.7	6
21	Structure/durability relationships in polyurethane wood adhesives: Neat films or wood/polyurethane composite specimens?. International Journal of Adhesion and Adhesives, 2013, 45, 77-83.	1.4	5
22	Thermorheological Complexity and Fragility in Plasticized Lignocellulose. Biomacromolecules, 2013, 14, 1166-1173.	2.6	17
23	Structureâ€"property behavior of moisture-cure polyurethane wood adhesives: Influence of hard segment content. International Journal of Adhesion and Adhesives, 2013, 45, 118-124.	1.4	42
24	Compressive-torsion DMA of yellow-poplar wood in organic media. Holzforschung, 2013, 67, 161-168.	0.9	11
25	Characterization of mixed-mode I/II fracture properties of adhesively bonded yellow-poplar by a dual actuator test frame instrument. Holzforschung, 2012, 66, 623-631.	0.9	14
26	Effects of systematic variation of wood adherend bending stiffness on fracture properties. Part 2. Revisiting traditional DCB analysis methods. Holzforschung, 2012, 66, 771-779.	0.9	5
27	Effects of systematic variation of wood adherend bending stiffness on fracture properties: Part 1. Influence of grain angle. Holzforschung, 2012, 66, 765-770.	0.9	5
28	Probing Alignment and Phase Behavior in Intact Wood Cell Walls Using2H NMR Spectroscopy. Biomacromolecules, 2012, 13, 1043-1050.	2.6	8
29	Wood/adhesive interactions and the phase morphology of moisture-cure polyurethane wood adhesives. International Journal of Adhesion and Adhesives, 2012, 34, 55-61.	1.4	38
30	Advancing the dynamic mechanical analysis of biomass: comparison of tensile-torsion and compressive-torsion wood DMA. Holzforschung, 2010, 64, .	0.9	19
31	Morphological Analysis of PF/pMDI Hybrid Wood Adhesives. Journal of Adhesion Science and Technology, 2008, 22, 1197-1208.	1.4	4
32	Dynamic mechanical analysis of dry wood: Linear viscoelastic response region and effects of minor moisture changes. Holzforschung, 2007, 61, 28-33.	0.9	46
33	Cure chemistry of wood/polymeric isocyanate (PMDI) bonds: Effect of wood species. International Journal of Adhesion and Adhesives, 2007, 27, 250-257.	1.4	22
34	Cross-linking poly[(vinyl acetate)-co-N-methylolacrylamide] latex adhesive performance part I: N-methylolacrylamide (NMA) distribution. International Journal of Adhesion and Adhesives, 2007, 27, 547-553.	1.4	21
35	Cross-linking poly(vinyl acetate-co-N-methylolacrylamide) latex adhesive performance Part II: Fracture mechanics and microscopic durability studies. International Journal of Adhesion and Adhesives, 2007, 27, 554-561.	1.4	9
36	Properties of compression-densified wood, Part II: surface energy. Journal of Adhesion Science and Technology, 2006, 20, 335-344.	1.4	28

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37	A morphological study of the wood/phenol-formaldehyde adhesive interphase. Journal of Adhesion Science and Technology, 2006, 20, 729-741.	1.4	30
38	Parallel-plate rheology of latex films bonded to wood. Holzforschung, 2005, 59, 435-440.	0.9	12
39	Properties of compression densified wood. Part I: bond performance. Journal of Adhesion Science and Technology, 2005, 19, 1249-1261.	1.4	15
40	Double labeled isocyanate resins for the solid-state NMR detection of urethane linkages to wood. International Journal of Adhesion and Adhesives, 2001, 21, 259-264.	1.4	36
41	Novel cellulose derivatives. V. Synthesis and thermal properties of esters with trifluoroethoxy acetic acid. Journal of Polymer Science, Part B: Polymer Physics, 2000, 38, 486-494.	2.4	29
42	Lab-Scale Synthesis of Isotopically Labeled Formaldehyde for the Production of Formaldehyde-Based Wood Adhesives. Holzforschung, 2000, 54, 98-100.	0.9	5
43	Cross-polarization studies of interphase morphology in the wood-pMDI adhesive bondline. Composite Interfaces, 2000, 7, 93-102.	1.3	5
44	Network characterization of phenolâ€"formaldehyde thermosetting wood adhesive. International Journal of Adhesion and Adhesives, 1998, 18, 139-146.	1.4	24
45	On the occurrence of network interpenetration in the wood-isocyanate adhesive interphase. International Journal of Adhesion and Adhesives, 1998, 18, 81-87.	1.4	55
46	¹⁵N CP/MAS NMR Study of the Isocyanate/Wood Adhesive Bondline. Effects of Structural Isomerism. Journal of Adhesion, 1998, 66, 89-116.	1.8	18
47	Chitin derivatives. I. Kinetics of the heat-induced conversion of chitosan to chitin. Journal of Applied Polymer Science, 1996, 60, 75-85.	1.3	79
48	Effect of moisture content on the isocyanate/wood adhesive bondline by15N CP/MAS NMR. Journal of Applied Polymer Science, 1996, 61, 775-782.	1.3	32
49	The effects of cure temperature and time on the isocyanate-wood adhesive bondline by 15N CP/MAS NMR. International Journal of Adhesion and Adhesives, 1996, 16, 179-186.	1.4	36
50	Long chain branched celluloses by mild trans-glycosidation. Carbohydrate Polymers, 1996, 31, 11-18.	5.1	6
51	Intramolecular effects in cellulose mixed benzyl ethers blended with poly(É›-caprolactone). Journal of Applied Polymer Science, 1995, 58, 1063-1075.	1.3	10
52	The¹⁵N CP/MAS NMR Characterization of the Isocyanate Adhesive Bondline for Cellulosic Substrates. Journal of Adhesion, 1995, 50, 135-153.	1.8	15
53	Novel cellulose derivatives. I. Liquid crystal phase formation in tri-O-Î±-naphthylmethyl cellulose solutions. Journal of Applied Polymer Science, 1993, 49, 1671-1678.	1.3	7
54	Molecular Weight Distribution of (Semi-) Commercial Lignin Derivatives. Journal of Wood Chemistry and Technology, 1993, 13, 545-559.	0.9	157

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55	The toxicity of constituents of cedar and pine woods to pulmonary epithelium. Journal of Allergy and Clinical Immunology, 1989, 83, 610-618.	1.5	57