

# Charles E Frazier

## List of Publications by Year in descending order

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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	Molecular Weight Distribution of (Semi-) Commercial Lignin Derivatives. <i>Journal of Wood Chemistry and Technology</i> , 1993, 13, 545-559.	0.9	157
2	Chitin derivatives. I. Kinetics of the heat-induced conversion of chitosan to chitin. <i>Journal of Applied Polymer Science</i> , 1996, 60, 75-85.	1.3	79
3	The toxicity of constituents of cedar and pine woods to pulmonary epithelium. <i>Journal of Allergy and Clinical Immunology</i> , 1989, 83, 610-618.	1.5	57
4	On the occurrence of network interpenetration in the wood-isocyanate adhesive interphase. <i>International Journal of Adhesion and Adhesives</i> , 1998, 18, 81-87.	1.4	55
5	Dynamic mechanical analysis of dry wood: Linear viscoelastic response region and effects of minor moisture changes. <i>Holzforschung</i> , 2007, 61, 28-33.	0.9	46
6	All-Polysaccharide, Self-Healing Injectable Hydrogels Based on Chitosan and Oxidized Hydroxypropyl Polysaccharides. <i>Biomacromolecules</i> , 2020, 21, 4261-4272.	2.6	43
7	Structure-property behavior of moisture-cure polyurethane wood adhesives: Influence of hard segment content. <i>International Journal of Adhesion and Adhesives</i> , 2013, 45, 118-124.	1.4	42
8	Wood/adhesive interactions and the phase morphology of moisture-cure polyurethane wood adhesives. <i>International Journal of Adhesion and Adhesives</i> , 2012, 34, 55-61.	1.4	38
9	Curing behavior of melamine-urea-formaldehyde (MUF) resin adhesive. <i>International Journal of Adhesion and Adhesives</i> , 2015, 62, 40-44.	1.4	38
10	The effects of cure temperature and time on the isocyanate-wood adhesive bondline by 15N CP/MAS NMR. <i>International Journal of Adhesion and Adhesives</i> , 1996, 16, 179-186.	1.4	36
11	Double labeled isocyanate resins for the solid-state NMR detection of urethane linkages to wood. <i>International Journal of Adhesion and Adhesives</i> , 2001, 21, 259-264.	1.4	36
12	The effect of residual lignin on the rheological properties of cellulose nanofibril suspensions. <i>Journal of Wood Chemistry and Technology</i> , 2020, 40, 370-381.	0.9	34
13	Effect of moisture content on the isocyanate/wood adhesive bondline by 15N CP/MAS NMR. <i>Journal of Applied Polymer Science</i> , 1996, 61, 775-782.	1.3	32
14	A morphological study of the wood/phenol-formaldehyde adhesive interphase. <i>Journal of Adhesion Science and Technology</i> , 2006, 20, 729-741.	1.4	30
15	Novel cellulose derivatives. V. Synthesis and thermal properties of esters with trifluoroethoxy acetic acid. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2000, 38, 486-494.	2.4	29
16	Properties of compression-densified wood, Part II: surface energy. <i>Journal of Adhesion Science and Technology</i> , 2006, 20, 335-344.	1.4	28
17	Network characterization of phenol-formaldehyde thermosetting wood adhesive. <i>International Journal of Adhesion and Adhesives</i> , 1998, 18, 139-146.	1.4	24
18	Cure chemistry of wood/polymeric isocyanate (PMDI) bonds: Effect of wood species. <i>International Journal of Adhesion and Adhesives</i> , 2007, 27, 250-257.	1.4	22

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19	Revealing the thermal sensitivity of lignin during glycerol thermal processing through structural analysis. <i>RSC Advances</i> , 2016, 6, 30234-30246.	1.7	22
20	Lignin Acidolysis Predicts Formaldehyde Generation in Pine Wood. <i>ACS Sustainable Chemistry and Engineering</i> , 2017, 5, 4830-4836.	3.2	22
21	Cross-linking poly[(vinyl acetate)-co-N-methylolacrylamide] latex adhesive performance part I: N-methylolacrylamide (NMA) distribution. <i>International Journal of Adhesion and Adhesives</i> , 2007, 27, 547-553.	1.4	21
22	Advancing the dynamic mechanical analysis of biomass: comparison of tensile-torsion and compressive-torsion wood DMA. <i>Holzforschung</i> , 2010, 64, .	0.9	19
23	Biogenic Formaldehyde: Content and Heat Generation in the Wood of Three Tree Species. <i>ACS Sustainable Chemistry and Engineering</i> , 2017, 5, 4243-4248.	3.2	19
24	<sup>15</sup> N CP/MAS NMR Study of the Isocyanate/Wood Adhesive Bondline. Effects of Structural Isomerism. <i>Journal of Adhesion</i> , 1998, 66, 89-116.	1.8	18
25	Thermorheological Complexity and Fragility in Plasticized Lignocellulose. <i>Biomacromolecules</i> , 2013, 14, 1166-1173.	2.6	17
26	The <sup>15</sup> N CP/MAS NMR Characterization of the Isocyanate Adhesive Bondline for Cellulosic Substrates. <i>Journal of Adhesion</i> , 1995, 50, 135-153.	1.8	15
27	Properties of compression densified wood. Part I: bond performance. <i>Journal of Adhesion Science and Technology</i> , 2005, 19, 1249-1261.	1.4	15
28	Photo-curable, double-crosslinked, in situ-forming hydrogels based on oxidized hydroxypropyl cellulose. <i>Cellulose</i> , 2021, 28, 3903-3915.	2.4	15
29	Characterization of mixed-mode I/II fracture properties of adhesively bonded yellow-poplar by a dual actuator test frame instrument. <i>Holzforschung</i> , 2012, 66, 623-631.	0.9	14
30	Simple Milligram-Scale Extraction of Formaldehyde from Wood. <i>ACS Sustainable Chemistry and Engineering</i> , 2016, 4, 5041-5045.	3.2	13
31	Parallel-plate rheology of latex films bonded to wood. <i>Holzforschung</i> , 2005, 59, 435-440.	0.9	12
32	Compressive-torsion DMA of yellow-poplar wood in organic media. <i>Holzforschung</i> , 2013, 67, 161-168.	0.9	11
33	Intramolecular effects in cellulose mixed benzyl ethers blended with poly(É-caprolactone). <i>Journal of Applied Polymer Science</i> , 1995, 58, 1063-1075.	1.3	10
34	Cross-linking poly(vinyl acetate-co-N-methylolacrylamide) latex adhesive performance Part II: Fracture mechanics and microscopic durability studies. <i>International Journal of Adhesion and Adhesives</i> , 2007, 27, 554-561.	1.4	9
35	A dynamic mechanical analysis method for predicting the curing behavior of phenol-formaldehyde resin adhesive. <i>Journal of Adhesion Science and Technology</i> , 2015, 29, 981-990.	1.4	9
36	Probing Alignment and Phase Behavior in Intact Wood Cell Walls Using <sup>2</sup> H NMR Spectroscopy. <i>Biomacromolecules</i> , 2012, 13, 1043-1050.	2.6	8

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37	Rheology of transgenic switchgrass reveals practical aspects of biomass processing. <i>Biotechnology for Biofuels</i> , 2018, 11, 57.	6.2	8
38	Novel cellulose derivatives. I. Liquid crystal phase formation in tri-O- $\beta$ -naphthylmethyl cellulose solutions. <i>Journal of Applied Polymer Science</i> , 1993, 49, 1671-1678.	1.3	7
39	Pine Extractives Strongly Affect Lignin Thermochemical Pathways. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 17999-18004.	3.2	7
40	Formaldehyde from Lignin Acidolysis Might Be Useful for In-Line Control of Industrial Biomass Processing. <i>ACS Sustainable Chemistry and Engineering</i> , 2021, 9, 207-215.	3.2	7
41	Long chain branched celluloses by mild trans-glycosidation. <i>Carbohydrate Polymers</i> , 1996, 31, 11-18.	5.1	6
42	Biocomposite adhesion without added resin: understanding the chemistry of the direct conversion of wood into adhesives. <i>RSC Advances</i> , 2015, 5, 67267-67276.	1.7	6
43	Influence of organic fillers on surface tension of phenol-formaldehyde adhesives. <i>International Journal of Adhesion and Adhesives</i> , 2016, 66, 160-166.	1.4	6
44	Influence of organic fillers on rheological behavior in phenol-formaldehyde adhesives. <i>International Journal of Adhesion and Adhesives</i> , 2016, 66, 93-98.	1.4	6
45	Lab-Scale Synthesis of Isotopically Labeled Formaldehyde for the Production of Formaldehyde-Based Wood Adhesives. <i>Holzforschung</i> , 2000, 54, 98-100.	0.9	5
46	Cross-polarization studies of interphase morphology in the wood-pMDI adhesive bondline. <i>Composite Interfaces</i> , 2000, 7, 93-102.	1.3	5
47	Effects of systematic variation of wood adherend bending stiffness on fracture properties. Part 2. Revisiting traditional DCB analysis methods. <i>Holzforschung</i> , 2012, 66, 771-779.	0.9	5
48	Effects of systematic variation of wood adherend bending stiffness on fracture properties: Part 1. Influence of grain angle. <i>Holzforschung</i> , 2012, 66, 765-770.	0.9	5
49	Structure/durability relationships in polyurethane wood adhesives: Neat films or wood/polyurethane composite specimens?. <i>International Journal of Adhesion and Adhesives</i> , 2013, 45, 77-83.	1.4	5
50	Soybean hull pectin and nanocellulose: tack properties in aqueous pMDI dispersions. <i>Journal of Materials Science</i> , 2022, 57, 5022-5035.	1.7	5
51	Morphological Analysis of PF/pMDI Hybrid Wood Adhesives. <i>Journal of Adhesion Science and Technology</i> , 2008, 22, 1197-1208.	1.4	4
52	In situ forming hydrogels based on oxidized hydroxypropyl cellulose and Jeffamines. <i>Cellulose</i> , 2021, 28, 11367-11380.	2.4	4
53	Isothermal crystallization of blends containing two thermotropic liquid crystalline polymers. <i>Materials Today Communications</i> , 2016, 9, 16-21.	0.9	1
54	Rheology of moso bamboo stem determined by DMA in ethylene glycol. <i>Holzforschung</i> , 2019, 73, 171-179.	0.9	1

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55	Organic filler surface analysis by column wicking. Journal of Adhesion Science and Technology, 2016, 30, 607-620.	1.4	0