Huai N Cheng

List of Publications by Year
in descending order

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106 papers	2,660 citations	185998 28 h-index	223531 46 g-index
107 all docs	107 docs citations	107 times ranked	2804 citing authors

#	Article	IF	Citations
1	Effects of ball milling on the structure of cotton cellulose. Cellulose, 2019, 26, 305-328.	2.4	253
2	Solution NMR Spectroscopy of Food Polysaccharides. Polymer Reviews, 2012, 52, 81-114.	5.3	215
3	Synthesis of cellulose acetate from cotton byproducts. Carbohydrate Polymers, 2010, 80, 449-452.	5.1	87
4	Investigation of modified cottonseed protein adhesives for wood composites. Industrial Crops and Products, 2013, 46, 399-403.	2.5	76
5	Soy and cottonseed protein blends as wood adhesives. Industrial Crops and Products, 2016, 85, 324-330.	2.5	75
6	Application of tung oil to improve adhesion strength and water resistance of cottonseed meal and protein adhesives on maple veneer. Industrial Crops and Products, 2014, 61, 398-402.	2.5	65
7	Preparation and evaluation of hemicellulose films and their blends. Food Hydrocolloids, 2017, 70, 181-190.	5.6	65
8	Morphological influence of cellulose nanoparticles (CNs) from cottonseed hulls on rheological properties of polyvinyl alcohol/CN suspensions. Carbohydrate Polymers, 2016, 153, 445-454.	5.1	63
9	Physical and mechanical testing of essential oil-embedded cellulose ester films. Polymer Testing, 2016, 49, 156-161.	2.3	59
10	Assessment and application of phosphorus/calcium-cottonseed protein adhesive for plywood production. Journal of Cleaner Production, 2019, 229, 454-462.	4.6	58
11	Novel alginate-cellulose nanofiber-poly(vinyl alcohol) hydrogels for carrying and delivering nitrogen, phosphorus and potassium chemicals. International Journal of Biological Macromolecules, 2021, 172, 330-340.	3.6	54
12	Use of Nutshells as Fillers in Polymer Composites. Journal of Polymers and the Environment, 2012, 20, 305-314.	2.4	53
13	Sequential Fractionation of Cottonseed Meal to Improve Its Wood Adhesive Properties. JAOCS, Journal of the American Oil Chemists' Society, 2014, 91, 151-158.	0.8	52
14	Evaluation of cotton byproducts as fillers for poly(lactic acid) and low density polyethylene. Industrial Crops and Products, 2012, 36, 127-134.	2.5	51
15	A Rapid and Specific Biosensor for Salmonella Typhimurium Detection in Milk. Food and Bioprocess Technology, 2018, 11, 748-756.	2.6	51
16	Soybean oil as a renewable feedstock for nitrogen-containing derivatives. Energy and Environmental Science, 2008, 1, 639.	15.6	50
17	Comparison of adhesive properties of water- and phosphate buffer-washed cottonseed meals with cottonseed protein isolate on maple and poplar veneers. International Journal of Adhesion and Adhesives, 2014, 50, 102-106.	1.4	47
18	Use of additives to enhance the properties of cottonseed protein as wood adhesives. International Journal of Adhesion and Adhesives, 2016, 68, 156-160.	1.4	47

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19	Cottonseed protein-based wood adhesive reinforced with nanocellulose. Journal of Adhesion Science and Technology, 2019, 33, 1357-1368.	1.4	47
20	Microwave-assisted extraction of soluble sugars from banana puree with natural deep eutectic solvents (NADES). LWT - Food Science and Technology, 2019, 107, 79-88.	2.5	46
21	13C-NMR sequence determination for multicomponent polymer mixtures. Journal of Applied Polymer Science, 1988, 35, 1639-1650.	1.3	45
22	Complexation and blending of starch, poly(acrylic acid), and poly(N-vinyl pyrrolidone). Carbohydrate Polymers, 2006, 65, 397-403.	5.1	42
23	Enzyme-Catalyzed Modifications of Polysaccharides and Poly(ethylene glycol). Polymers, 2012, 4, 1311-1330.	2.0	41
24	Electrochemical immunosensors for Salmonella detection in food. Applied Microbiology and Biotechnology, 2016, 100, 5301-5312.	1.7	38
25	Blending cottonseed meal products with different protein contents for cost-effective wood adhesive performances. Industrial Crops and Products, 2018, 126, 31-37.	2.5	36
26	Effects of Vigorous Blending on Yield and Quality of Protein Isolates Extracted From Cottonseed and Soy Flours. Modern Applied Science, 2013, 7, .	0.4	34
27	Transition-state geometry and stereochemistry of the ene reaction between olefins and maleic anhydride. Journal of Organic Chemistry, 1986, 51, 5093-5100.	1.7	30
28	Integrated approach for 13C nuclear magnetic resonance shift prediction, spectral simulation and library search. Analytica Chimica Acta, 1994, 285, 223-235.	2.6	29
29	Effects of phosphorus-containing additives on soy and cottonseed protein as wood adhesives. International Journal of Adhesion and Adhesives, 2017, 77, 51-57.	1.4	27
30	A Review of Cottonseed Protein Chemistry and Non-Food Applications. Sustainable Chemistry, 2020, 1, 256-274.	2.2	27
31	Chemical modification of cotton-based natural materials: Products from carboxymethylation. Carbohydrate Polymers, 2011, 84, 1004-1010.	5.1	26
32	Trends in shift rules in carbon-13 nuclear magnetic resonance spectroscopy and computer-aided shift prediction. Analytica Chimica Acta, 1991, 242, 43-56.	2.6	25
33	Conversion of cotton byproducts to mixed cellulose esters. Carbohydrate Polymers, 2011, 86, 1130-1136.	5.1	25
34	Room-temperature self-curing ene reactions involving soybean oil. Green Chemistry, 2008, 10, 290.	4.6	24
35	Microwave-assisted synthesis of cyclodextrin polyurethanes. Carbohydrate Polymers, 2015, 133, 74-79.	5.1	23
36	Physical Properties and Fatty Acid Profiles of Oils from Black, Kidney, Great Northern, and Pinto Beans. JAOCS, Journal of the American Oil Chemists' Society, 2011, 88, 193-200.	0.8	22

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37	NMR Analysis of Poly(Lactic Acid) via Statistical Models. Polymers, 2019, 11, 725.	2.0	22
38	Comparison of the Adhesive Performances of Soy Meal, Water Washed Meal Fractions, and Protein Isolates. Modern Applied Science, 2016, 10, 112.	0.4	21
39	Hydrophobic Modification of Cashew Gum with Alkenyl Succinic Anhydride. Polymers, 2020, 12, 514.	2.0	20
40	Preparation and characterization of carboxymethyl cashew gum grafted with immobilized antibody for potential biosensor application. Carbohydrate Polymers, 2020, 228, 115408.	5.1	19
41	13C NMR spectral simulation and shift prediction. TrAC - Trends in Analytical Chemistry, 1994, 13, 95-104.	5.8	16
42	Effects of pH and storage time on the adhesive and rheological properties of cottonseed mealâ€based products. Journal of Applied Polymer Science, 2016, 133, .	1.3	16
43	Surface modified cellulose nanocrystals for tailoring interfacial miscibility and microphase separation of polymer nanocomposites. Cellulose, 2019, 26, 4301-4312.	2.4	16
44	Performance of an amperometric immunosensor assembled on carboxymethylated cashew gum for Salmonella detection. Microchemical Journal, 2021, 167, 106268.	2.3	16
45	Stereoregularity of Poly(lactic acid) and their Model Compounds as studied by NMR and Quantum Chemical Calculations. Macromolecules, 2011, 44, 9247-9253.	2.2	15
46	Composition and Functional Properties of Salineâ€Soluble Protein Concentrates Prepared from Four Common Dry Beans (<scp>Phaseolus vulgaris</scp> L.). JAOCS, Journal of the American Oil Chemists' Society, 2018, 95, 1001-1012.	0.8	15
47	Electrosprayed cashew gum microparticles for the encapsulation of highly sensitive bioactive materials. Carbohydrate Polymers, 2021, 264, 118060.	5.1	15
48	Studies of solution dynamics of poly(N-vinyl pyrrolidone) and its iodine adduct. Journal of Polymer Science, Polymer Physics Edition, 1985, 23, 461-470.	1.0	14
49	Stereochemistry of vinyl polymers and NMR characterization. Journal of Applied Polymer Science, 1988, 36, 229-241.	1.3	14
50	NMR analysis and chemical shift calculations of poly(lactic acid) dimer model compounds with different tacticities. Polymer Journal, 2012, 44, 838-844.	1.3	14
51	Wood adhesive properties of cottonseed protein with denaturant additives. Journal of Adhesion Science and Technology, 2017, 31, 2657-2666.	1.4	14
52	Surface Characterization of Cottonseed Meal Products by SEM, SEM-EDS, XRD and XPS Analysis. Journal of Materials Science Research, 2017, 7, 28.	0.1	14
53	Optimization and practical application of cottonseed meal-based wood adhesive formulations for small wood item bonding. International Journal of Adhesion and Adhesives, 2019, 95, 102448.	1.4	14
54	Green Polymer Chemistry: Biocatalysis and Biomaterials(). ACS Symposium Series, 2010, , 1-14.	0.5	13

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55	Adhesive properties of water-washed cottonseed meal on four types of wood. Journal of Adhesion Science and Technology, 2016, 30, 2109-2119.	1.4	13
56	Optimization and characterization of a biosensor assembly for detection of Salmonella Typhimurium. Journal of Solid State Electrochemistry, 2018, 22, 1321-1330.	1.2	13
57	Preparation and Characterization of Carboxymethyl Cellulose Films with Embedded Essential Oils. Journal of Materials Science Research, 2018, 7, 16.	0.1	13
58	Use of cottonseed protein as a strength additive for nonwoven cotton. Textile Reseach Journal, 2019, 89, 1725-1733.	1.1	13
59	Preparation and evaluation of oxygen scavenging nanocomposite films incorporating cellulose nanocrystals and Pd nanoparticles in poly(ethylene-co-vinyl alcohol). Cellulose, 2019, 26, 7237-7251.	2.4	13
60	Evaluation of polyblends of cottonseed protein and polycaprolactone plasticized by cottonseed oil. International Journal of Polymer Analysis and Characterization, 2019, 24, 389-398.	0.9	13
61	Evaluation of the Properties of Cellulose Ester Films that Incorporate Essential Oils. International Journal of Polymer Science, 2020, 2020, 1-8.	1.2	13
62	Synthesis and Characterization of Hydrophobically Modified Xylans. Polymers, 2021, 13, 291.	2.0	13
63	NMR analysis and tacticity determination of poly(lactic acid) in C5D5N. Polymer Testing, 2014, 38, 35-39.	2.3	12
64	Evaluation of wood bonding performance of water-washed cottonseed meal-based adhesives with high solid contents and low press temperatures. Journal of Adhesion Science and Technology, 2017, 31, 2620-2629.	1.4	12
65	Evaluation of adhesion properties of blends of cottonseed protein and anionic water-soluble polymers. Journal of Adhesion Science and Technology, 2019, 33, 66-78.	1.4	12
66	Green Polymer Chemistry: A Brief Review. ACS Symposium Series, 2013, , 1-12.	0.5	11
67	Characterization of cottonseed protein isolate as a paper additive. International Journal of Polymer Analysis and Characterization, 2017, 22, 699-708.	0.9	11
68	Preparation and evaluation of composites containing polypropylene and cotton gin trash. Journal of Applied Polymer Science, 2020, 137, 49151.	1.3	11
69	Modified Triglyceride Oil Through Reactions with Phenyltriazolinedione. JAOCS, Journal of the American Oil Chemists' Society, 2014, 91, 125-131.	0.8	10
70	Evaluation of Composite Films Containing Poly(vinyl alcohol) and Cotton Gin Trash. Journal of Polymers and the Environment, 2020, 28, 1998-2007.	2.4	10
71	Comparison of the wood bonding performance of water- and alkali-soluble cottonseed protein fractions. Journal of Adhesion Science and Technology, 2021, 35, 1500-1517.	1.4	10
72	Microwave-Assisted Synthesis and Characterization of Polyurethanes from TDI and Starch. International Journal of Polymer Analysis and Characterization, 2015, 20, 1-9.	0.9	9

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73	Polymerization of epoxidized triglycerides with fluorosulfonic acid. International Journal of Polymer Analysis and Characterization, 2016, 21, 85-93.	0.9	9
74	Novel polyurethanes from xylan and TDI: Preparation and characterization. International Journal of Polymer Analysis and Characterization, 2017, 22, 35-42.	0.9	9
75	Microwave-Assisted Synthesis of Sucrose Polyurethanes and Their Semi-interpenetrating Polymer Networks with Polycaprolactone and Soybean Oil. Industrial & Engineering Chemistry Research, 2018, 57, 3227-3234.	1.8	9
76	Surface and Thermal Characterization of Cotton Fibers of Phenotypes Differing in Fiber Length. Polymers, 2021, 13, 994.	2.0	9
77	Effects of Particle Size on the Morphology and Water- and Thermo-Resistance of Washed Cottonseed Meal-Based Wood Adhesives. Polymers, 2017, 9, 675.	2.0	8
78	Improving adhesion performance of cottonseed protein by the synergy of phosphoric acid and water soluble calcium salts. International Journal of Adhesion and Adhesives, 2021, 108, 102867.	1.4	8
79	¹³C NMR sequence determination and modelling of polypropylene oils. Macromolecular Symposia, 1994, 86, 77-102.	0.4	7
80	Preparation and Characterization of Xylan Derivatives and Their Blends. Journal of Polymers and the Environment, 2018, 26, 4114-4123.	2.4	7
81	Effect of Nanocellulose on the Properties of Cottonseed Protein Isolate as a Paper Strength Agent. Materials, 2021, 14, 4128.	1.3	7
82	Statistical Models and NMR Analysis of Polymer Microstructure. ACS Symposium Series, 2011, , 371-382.	0.5	6
83	Metal chloride-catalyzed acetylation of starch: Synthesis and characterization. International Journal of Polymer Analysis and Characterization, 2018, 23, 577-589.	0.9	6
84	Preparation of sorbitolâ€based polyurethanes and their semiinterpenetrating polymer networks. Journal of Applied Polymer Science, 2019, 136, 47602.	1.3	6
85	Use of Cotton Gin Trash and Compatibilizers in Polyethylene Composites. ACS Symposium Series, 2013, , 423-431.	0.5	5
86	Direct Polymerization of Vernonia Oil through Cationic Means. JAOCS, Journal of the American Oil Chemists' Society, 2014, 91, 2111-2116.	0.8	5
87	Preparation of Hydrophobically Modified Cashew Gum Through Reaction with Alkyl Ketene Dimer. ACS Symposium Series, 2018, , 137-146.	0.5	5
88	Preparation of Xylan Esters with the Use of Selected Lewis Acids. ACS Symposium Series, 2020, , 33-42.	0.5	5
89	Mechanical, Thermal, and Moisture Properties of Plastics with Bean as Filler. Journal of Biobased Materials and Bioenergy, 2012, 6, 59-68.	0.1	4
90	Green Polymer Chemistry: Pipelines Toward New Products and Processes. ACS Symposium Series, 2018, , 1-11.	0.5	4

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91	Preparation and evaluation of catfish protein as a wood adhesive. International Journal of Polymer Analysis and Characterization, 2021, 26, 60-67.	0.9	4
92	<scp>3Dâ€printed woodâ€polylactic acidâ€thermoplastic</scp> starch composites: Performance features in relation to biodegradation treatment. Journal of Applied Polymer Science, 2021, 138, 50914.	1.3	4
93	Modeling and Thermodynamic Analysis of the Water Sorption Isotherms of Cottonseed Products. Foundations, 2021, 1, 32-44.	0.4	4
94	Sustainability and Green Polymer Chemistryâ€”An Overview. ACS Symposium Series, 2020, , 1-11.	0.5	4
95	Green Polymer Chemistry: Some Recent Developments and Examples. ACS Symposium Series, 2015, , 1-13.	0.5	3
96	Synthesis and Characterization of an Iron-Containing Fatty Acid-Based Ionomer. International Journal of Polymer Science, 2019, 2019, 1-9.	1.2	3
97	Adhesive performance of cottonseed protein modified by catechol-containing compounds. Journal of Adhesion Science and Technology, 2022, 36, 1781-1793.	1.4	3
98	Methods of Microencapsulation of Vegetable Oil: Principles, Stability and Applications - A Minireview. Food Technology and Biotechnology, 2022, 60, 308-320.	0.9	3
99	Novel Polymeric Products Derived from Biodiesel. ACS Symposium Series, 2017, , 207-220.	0.5	2
100	Application of Lignin-Containing Cellulose Nanofibers and Cottonseed Protein Isolate for Improved Performance of Paper. Polymers, 2022, 14, 2154.	2.0	2
101	Synthesis and analysis of lactose polyurethanes and their semi-interpenetrating polymer networks. International Journal of Polymer Analysis and Characterization, 2022, 27, 266-276.	0.9	1
102	Applications of Common Beans in Food and Biobased Materials. ACS Symposium Series, 2013, , 331-341.	0.5	0
103	Partners for Progress and Prosperity in the Global Chemistry Enterprise. ACS Symposium Series, 2014, , 3-13.	0.5	0
104	A Primer on Polymer Nomenclature: Structure-Based, Sourced-Based, and Trade Names. Journal of Chemical Education, 2017, 94, 1794-1797.	1.1	0
105	Changing the Landscape: An Introduction to the Agricultural and Food Chemistry Technical Program at the 258th American Chemical Society National Meeting in San Diego. Journal of Agricultural and Food Chemistry, 2020, 68, 12769-12772.	2.4	0
106	Effect of acid catalyst on pyroconversion of breadfruit (Artocarpus altilis) starch: Physicochemical and structural properties. Journal of Food Processing and Preservation, 0, , .	0.9	0