Kirsi S Mikkonen

List of Publications by Year
in descending order

73	2,841	126907 33	189892 50
papers	citations	h-index	g-index

76	76	76	2682
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Polysaccharides as wall materials in spray-dried microencapsulation of bioactive compounds: Physicochemical properties and characterization. Critical Reviews in Food Science and Nutrition, 2023, 63, 6983-7015.	10.3	20
2	An overview of nanoemulsion characterization <i>via</i> atomic force microscopy. Critical Reviews in Food Science and Nutrition, 2022, 62, 4908-4928.	10.3	23
3	Dense and continuous networks of aerial hyphae improve flexibility and shape retention of mycelium composite in the wet state. Composites Part A: Applied Science and Manufacturing, 2022, 152, 106688.	7.6	28
4	Emulsion characterization via microfluidic devices: A review on interfacial tension and stability to coalescence. Advances in Colloid and Interface Science, 2022, 299, 102541.	14.7	71
5	Valorization of cereal by-product hemicelluloses: Fractionation and purity considerations. Food Research International, 2022, 151, 110818.	6.2	29
6	Gut microbiota can utilize prebiotic birch glucuronoxylan in production of short-chain fatty acids in rats. Food and Function, 2022, 13, 3746-3759.	4.6	10
7	Valorization of Native Soluble and Insoluble Oat Side Streams for Stable Suspensions and Emulsions. Food and Bioprocess Technology, 2021, 14, 751-764.	4.7	11
8	Aerogels as porous structures for food applications: Smart ingredients and novel packaging materials. Food Structure, 2021, 28, 100188.	4.5	62
9	Kraft Processâ€”Formation of Secoisolariciresinol Structures and Incorporation of Fatty Acids in Kraft Lignin. Journal of Agricultural and Food Chemistry, 2021, 69, 5955-5965.	5.2	7
10	Green Fabrication Approaches of Lignin Nanoparticles from Different Technical Lignins: A Comparison Study. ChemSusChem, 2021, 14, 4718-4730.	6.8	32
11	Laccase as a Tool in Building Advanced Ligninâ€Based Materials. ChemSusChem, 2021, 14, 4615-4635.	6.8	59
12	Combining cellulose nanofibrils and galactoglucomannans for enhanced stabilization of future food emulsions. Cellulose, 2021, 28, 10485-10500.	4.9	2
13	Insight on Current Advances in Food Science and Technology for Feeding the World Population. Frontiers in Sustainable Food Systems, 2021, 5, .	3.9	32
14	Active role of lignin in anchoring wood-based stabilizers to the emulsion interface. Green Chemistry, 2021, 23, 9084-9098.	9.0	13
15	Valorization of Urban Street Tree Pruning Residues in Biorefineries by Steam Refining: Conversion Into Fibers, Emulsifiers, and Biogas. Frontiers in Chemistry, 2021, 9, 779609.	3.6	2
16	Active food packaging through controlled in situ production and release of hexanal. Food Chemistry: X, 2020, 5, 100074.	4.3	18
17	Time-dependent self-association of spruce galactoglucomannans depends on pH and mechanical shearing. Food Hydrocolloids, 2020, 102, 105607.	10.7	17
18	Sensory profile of hemicellulose-rich wood extracts in yogurt models. Cellulose, 2020, 27, 7607-7620.	4.9	11

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19	Enrichment and Identification of Ligninâ€"Carbohydrate Complexes in Softwood Extract. ACS Sustainable Chemistry and Engineering, 2020, 8, 11795-11804.	6.7	23
20	Fungal Cell Biomass From Enzyme Industry as a Sustainable Source of Hydrocolloids. Frontiers in Chemical Engineering, 2020, 2, .	2.7	4
21	Colloidal features of softwood galactoglucomannans-rich extract. Carbohydrate Polymers, 2020, 241, 116368.	10.2	9
22	Spruce Galactoglucomannan-Stabilized Emulsions Enhance Bioaccessibility of Bioactive Compounds. Foods, 2020, 9, 672.	4.3	6
23	Strategies for structuring diverse emulsion systems by using wood lignocellulose-derived stabilizers. Green Chemistry, 2020, 22, 1019-1037.	9.0	40
24	Comparison of novel fungal mycelia strains and sustainable growth substrates to produce humidity-resistant biocomposites. Materials and Design, 2020, 192, 108728.	7.0	46
25	Functionality of spruce galactoglucomannans in oil-in-water emulsions. Food Hydrocolloids, 2019, 86, 154-161.	10.7	33
26	Centrifugal fractionation of softwood extracts improves the biorefinery workflow and yields functional emulsifiers. Green Chemistry, 2019, 21, 4691-4705.	9.0	27
27	How properties of cellulose acetate films are affected by conditions of iodine-catalyzed acetylation and type of pulp. Cellulose, 2019, 26, 6119-6132.	4.9	10
28	Spruce galactoglucomannan-stabilized emulsions as essential fatty acid delivery systems for functionalized drinkable yogurt and oat-based beverage. European Food Research and Technology, 2019, 245, 1387-1398.	3.3	23
29	Rapid and Direct Preparation of Lignin Nanoparticles from Alkaline Pulping Liquor by Mild Ultrasonication. ACS Sustainable Chemistry and Engineering, 2019, 7, 19925-19934.	6.7	71
30	Effects of Enzymatic Hydrolysis of Fava Bean Protein Isolate by Alcalase on the Physical and Oxidative Stability of Oil-in-Water Emulsions. Journal of Agricultural and Food Chemistry, 2019, 67, 6625-6632.	5.2	59
31	Encapsulation of fish oil in protein aerogel micro-particles. Journal of Food Engineering, 2019, 260, 1-11.	5.2	39
32	Environmentally-compatible alkyd paints stabilized by wood hemicelluloses. Industrial Crops and Products, 2019, 133, 212-220.	5.2	37
33	Lignin-Rich PHWE Hemicellulose Extracts Responsible for Extended Emulsion Stabilization. Frontiers in Chemistry, 2019, 7, 871.	3.6	31
34	Emulsifier Composition of Solid Lipid Nanoparticles (SLN) Affects Mechanical and Barrier Properties of SLNâ€Protein Composite Films. Journal of Food Science, 2019, 84, 3642-3652.	3.1	9
35	The Hydrophobicity of Lignocellulosic Fiber Network Can Be Enhanced with Suberin Fatty Acids. Molecules, 2019, 24, 4391.	3.8	7
36	Safety considerations of plant polysaccharides for food use: a case study on phenolic-rich softwood galactoglucomannan extract. Food and Function, 2018, 9, 1931-1943.	4.6	33

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37	Novel nanobiocomposite hydrogels based on sage seed gum-laponite: Physico-chemical and rheological characterization. Carbohydrate Polymers, 2018, 192, 282-290.	10.2	22
38	Phenolic residues in spruce galactoglucomannans improve stabilization of oil-in-water emulsions. Journal of Colloid and Interface Science, 2018, 512, 536-547.	9.4	39
39	Transparent, Flexible, and Strong 2,3-Dialdehyde Cellulose Films with High Oxygen Barrier Properties. Biomacromolecules, 2018, 19, 2969-2978.	5.4	109
40	Physicochemical and rheo-mechanical properties of titanium dioxide reinforced sage seed gum nanohybrid hydrogel. International Journal of Biological Macromolecules, 2018, 118, 661-670.	7.5	17
41	Mesoporous guar galactomannan based biocomposite aerogels through enzymatic crosslinking. Composites Part A: Applied Science and Manufacturing, 2017, 94, 93-103.	7.6	30
42	Synchrotron Microtomography Reveals the Fine Three-Dimensional Porosity of Composite Polysaccharide Aerogels. Materials, 2017, 10, 871.	2.9	6
43	Determination of physical emulsion stabilization mechanisms of wood hemicelluloses via rheological and interfacial characterization. Soft Matter, 2016, 12, 8690-8700.	2.7	50
44	Softwood-based sponge gels. Cellulose, 2016, 23, 3221-3238.	4.9	17
45	Spruce galactoglucomannans inhibit lipid oxidation in rapeseed oil-in-water emulsions. Food Hydrocolloids, 2016, 58, 255-266.	10.7	42
46	Machine-coated starch-based dispersion coatings prevent mineral oil migration from paperboard. Progress in Organic Coatings, 2016, 99, 173-181.	3.9	10
47	Spruce galactoglucomannans in rapeseed oil-in-water emulsions: Efficient stabilization performance and structural partitioning. Food Hydrocolloids, 2016, 52, 615-624.	10.7	42
48	Composite films of nanofibrillated cellulose and O-acetyl galactoglucomannan (GGM) coated with succinic esters of GGM showing potential as barrier material in food packaging. Journal of Materials Science, 2015, 50, 3189-3199.	3.7	38
49	Butylamino-functionalized cellulose nanocrystal films: barrier properties and mechanical strength. RSC Advances, 2015, 5, 15140-15146.	3.6	39
50	Combination of internal and external plasticization of hydroxypropylated birch xylan tailors the properties of sustainable barrier films. European Polymer Journal, 2015, 66, 307-318.	5.4	36
51	Strengthening effect of nanofibrillated cellulose is dependent on enzymatically oxidized polysaccharide gel matrices. European Polymer Journal, 2015, 71, 171-184.	5.4	18
52	Biocomposites of Nanofibrillated Cellulose, Polypyrrole, and Silver Nanoparticles with Electroconductive and Antimicrobial Properties. Biomacromolecules, 2014, 15, 3655-3663.	5.4	106
53	Wood cell wall mimicking for composite films of spruce nanofibrillated cellulose with spruce galactoglucomannan and arabinoglucuronoxylan. Journal of Materials Science, 2014, 49, 5043-5055.	3.7	14
54	Enzymatic oxidation as a potential new route to produce polysaccharide aerogels. RSC Advances, 2014, 4, 11884.	3.6	44

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55	Nanofibrillated cellulose originated from birch sawdust after sequential extractions: a promising polymeric material from waste to films. Cellulose, 2014, 21, 2587-2598.	4.9	61
56	Carboxymethylation of alkali extracted xylan for preparation of bio-based packaging films. Carbohydrate Polymers, 2014, 100, 89-96.	10.2	80
57	Crosslinking with ammonium zirconium carbonate improves the formation and properties of spruce galactoglucomannan films. Journal of Materials Science, 2013, 48, 4205-4213.	3.7	32
58	Prospects of polysaccharide aerogels as modern advanced food materials. Trends in Food Science and Technology, 2013, 34, 124-136.	15.1	132
59	Specific enzymatic tailoring of wheat arabinoxylan reveals the role of substitution on xylan film properties. Carbohydrate Polymers, 2013, 92, 733-740.	10.2	36
60	Recent Studies on Hemicellulose-Based Blends, Composites and Nanocomposites. Advanced Structured Materials, 2013, , 313-336.	0.5	6
61	Long-Term Physical Stability of Plasticized Hemicellulose Films. BioResources, 2013, 9, .	1.0	4
62	Sustainable food-packaging materials based on future biorefinery products: Xylans and mannans. Trends in Food Science and Technology, 2012, 28, 90-102.	15.1	174
63	Films from Glyoxal-Crosslinked Spruce Galactoglucomannans Plasticized with Sorbitol. International Journal of Polymer Science, 2012, 2012, 1-8.	2.7	39
64	Arabinoxylan structure affects the reinforcement of films by microfibrillated cellulose. Cellulose, 2012, 19, 467-480.	4.9	54
65	Composite films from spruce galactoglucomannans with microfibrillated spruce wood cellulose. Cellulose, 2011, 18, 713-726.	4.9	58
66	Bacterial nanocelluloseâ€reinforced arabinoxylan films. Journal of Applied Polymer Science, 2011, 122, 1030-1039.	2.6	68
67	The effect of galactose side units and mannan chain length on the macromolecular characteristics of galactomannans. Carbohydrate Polymers, 2011, 86, 1230-1235.	10.2	19
68	Glucomannan composite films with cellulose nanowhiskers. Cellulose, 2010, 17, 69-81.	4.9	60
69	Spruce galactoglucomannan films show promising barrier properties. Carbohydrate Polymers, 2010, 79, 1107-1112.	10.2	82
70	Comparison of Microencapsulation Properties of Spruce Galactoglucomannans and Arabic Gum Using a Model Hydrophobic Core Compound. Journal of Agricultural and Food Chemistry, 2010, 58, 981-989.	5.2	12
71	Films from oat spelt arabinoxylan plasticized with glycerol and sorbitol. Journal of Applied Polymer Science, 2009, 114, 457-466.	2.6	100
72	Mannans as stabilizers of oil-in-water beverage emulsions. LWT - Food Science and Technology, 2009, 42, 849-855.	5.2	74

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73	Effect of Polysaccharide Structure on Mechanical and Thermal Properties of Galactomannan-Based Films. Biomacromolecules, 2007, 8, 3198-3205.	5.4	117