Kristiina Oksman

List of Publications by Citations

211 papers	17,543 citations	64 h-index	129 g-index
221 ext. papers	19,328 ext. citations	5.4 avg, IF	7.17 L-index

#	Paper	IF	Citations
211	Natural fibres as reinforcement in polylactic acid (PLA) composites. *Composites Science and Technology*, **2003**, 63, 1317-1324	8.6	1063
210	Optimization of the isolation of nanocrystals from microcrystalline cellulose by acid hydrolysis. *Cellulose*, **2006**, 13, 171-180	5.5	1028
209	Manufacturing process of cellulose whiskers/polylactic acid nanocomposites. *Composites Science and Technology*, **2006**, 66, 2776-2784	8.6	612
208	Mechanical properties of biodegradable composites from poly lactic acid (PLA) and microcrystalline cellulose (MCC). *Journal of Applied Polymer Science*, **2005**, 97, 2014-2025	2.9	609
207	Mechanical properties of cellulose nanofiber (CNF) reinforced polylactic acid (PLA) prepared by twin screw extrusion. *Composites Science and Technology*, **2010**, 70, 1742-1747	8.6	604
206	On the use of nanocellulose as reinforcement in polymer matrix composites. *Composites Science and Technology*, **2014**, 105, 15-27	8.6	554
205	Different preparation methods and properties of nanostructured cellulose from various natural resources and residues: a review. *Cellulose*, **2015**, 22, 935-969	5.5	493
204	Structure and thermal properties of poly(lactic acid)/cellulose whiskers nanocomposite materials. *Composites Science and Technology*, **2007**, 67, 2535-2544	8.6	484
203	Review of the recent developments in cellulose nanocomposite processing. *Composites Part A: Applied Science and Manufacturing*, **2016**, 83, 2-18	8.4	466
202	Biopolymer based nanocomposites: Comparing layered silicates and microcrystalline cellulose as nanoreinforcement. *Composites Science and Technology*, **2006**, 66, 2187-2196	8.6	392
201	Mechanical properties and morphology of impact modified polypropylene□wood flour composites. *Journal of Applied Polymer Science*, **1998**, 67, 1503-1513	2.9	348
200	Characterization of cellulose whiskers and their nanocomposites by atomic force and electron microscopy. *Biomacromolecules*, **2005**, 6, 3160-5	6.9	301
199	The effect of morphology and chemical characteristics of cellulose reinforcements on the crystallinity of polylactic acid. *Journal of Applied Polymer Science*, **2006**, 101, 300-310	2.9	288
198	Nanoporous membranes with cellulose nanocrystals as functional entity in chitosan: removal of dyes from water. *Carbohydrate Polymers*, **2014**, 112, 668-76	10.3	264
197	Study of Structural Morphology of Hemp Fiber from the Micro to the Nanoscale. *Applied Composite Materials*, **2007**, 14, 89-103	2	249
196	Novel nanocomposites based on polyurethane and micro fibrillated cellulose. *Composites Science and Technology*, **2008**, 68, 908-914	8.6	242
195	Polylactic acid/cellulose whisker nanocomposites modified by polyvinyl alcohol. *Composites Part A: Applied Science and Manufacturing*, **2007**, 38, 2486-2492	8.4	237

194	Dispersion and characteristics of surfactant modified cellulose whiskers nanocomposites. *Composite Interfaces*, **2007**, 14, 617-630	2.3	234
193	Preparation of cellulose nanofibers with hydrophobic surface characteristics. *Cellulose*, **2010**, 17, 299-307	5.5	224
192	Nanocelluloses and their phosphorylated derivatives for selective adsorption of Ag(+), Cu(2+) and Fe(3+) from industrial effluents. *Journal of Hazardous Materials*, **2015**, 294, 177-85	12.8	219
191	Utilization of various lignocellulosic biomass for the production of nanocellulose: a comparative study. *Cellulose*, **2015**, 22, 1075-1090	5.5	212
190	Preparation and characterization of water-redispersible nanofibrillated cellulose in powder form. *Cellulose*, **2010**, 17, 19-30	5.5	207
189	Electrospun chitosan-based nanocomposite mats reinforced with chitin nanocrystals for wound dressing. *Carbohydrate Polymers*, **2014**, 109, 7-15	10.3	178
188	Bionanocomposites of thermoplastic starch and cellulose nanofibers manufactured using twin-screw extrusion. *European Polymer Journal*, **2013**, 49, 950-956	5.2	175
187	Morphology and mechanical properties of unidirectional sisal□epoxy composites. *Journal of Applied Polymer Science*, **2002**, 84, 2358-2365	2.9	175
186	Cellulose and chitin nanomaterials for capturing silver ions (Ag+) from water via surface adsorption. *Cellulose*, **2014**, 21, 449-461	5.5	172
185	High Quality Flax Fibre Composites Manufactured by the Resin Transfer Moulding Process. *Journal of Reinforced Plastics and Composites*, **2001**, 20, 621-627	2.9	170
184	Producing low-cost cellulose nanofiber from sludge as new source of raw materials. *Industrial Crops and Products*, **2012**, 40, 232-238	5.9	163
183	Plasticized polylactic acid/cellulose nanocomposites prepared using melt-extrusion and liquid feeding: Mechanical, thermal and optical properties. *Composites Science and Technology*, **2015**, 106, 149-155	8.6	160
182	The influence of fibre microstructure on fibre breakage and mechanical properties of natural fibre reinforced polypropylene. *Composites Science and Technology*, **2009**, 69, 1847-1853	8.6	159
181	Crosslinked natural rubber nanocomposites reinforced with cellulose whiskers isolated from bamboo waste: Processing and mechanical/thermal properties. *Composites Part A: Applied Science and Manufacturing*, **2012**, 43, 735-741	8.4	157
180	Characteristics of cellulose nanofibers isolated from rubberwood and empty fruit bunches of oil palm using chemo-mechanical process. *Cellulose*, **2011**, 18, 1085-1095	5.5	153
179	The effect of crosslinking on the properties of polyethylene/wood flour composites. *Composites Science and Technology*, **2005**, 65, 1468-1479	8.6	147
178	Nanocellulose based functional membranes for water cleaning: Tailoring of mechanical properties, porosity and metal ion capture. *Journal of Membrane Science*, **2016**, 514, 418-428	9.6	138
177	Orientation of cellulose nanowhiskers in polyvinyl alcohol. *Applied Physics A: Materials Science and Processing*, **2007**, 87, 641-643	2.6	132

176	Cellulose nanowhiskers separated from a bio-residue from wood bioethanol production. *Biomass and Bioenergy*, **2011**, 35, 146-152	5.3	130
175	A Comparison of Modified and Unmodified Cellulose Nanofiber Reinforced Polylactic Acid (PLA) Prepared by Twin Screw Extrusion. *Journal of Polymers and the Environment*, **2012**, 20, 991-997	4.5	129
174	Extrusion and mechanical properties of highly filled cellulose fibre–polypropylene composites. *Composites Part A: Applied Science and Manufacturing*, **2007**, 38, 1922-1931	8.4	125
173	Nanofibers from bagasse and rice straw: process optimization and properties. *Wood Science and Technology*, **2012**, 46, 193-205	2.5	120
172	Nanocellulose-Based Interpenetrating Polymer Network (IPN) Hydrogels for Cartilage Applications. *Biomacromolecules*, **2016**, 17, 3714-3723	6.9	119
171	The use of silane technology in crosslinking polyethylene/wood flour composites. *Composites Part A: Applied Science and Manufacturing*, **2006**, 37, 752-765	8.4	118
170	Plasticized polylactic acid nanocomposite films with cellulose and chitin nanocrystals prepared using extrusion and compression molding with two cooling rates: Effects on mechanical, thermal and optical properties. *Composites Part A: Applied Science and Manufacturing*, **2016**, 83, 89-97	8.4	113
169	A novel nanocomposite film prepared from crosslinked cellulosic whiskers. *Carbohydrate Polymers*, **2009**, 75, 85-89	10.3	111
168	Characterization of starch based nanocomposites. *Journal of Materials Science*, **2007**, 42, 8163-8171	4.3	110
167	Mechanical Properties of Natural Fibre Mat Reinforced Thermoplastic. *Applied Composite Materials*, **2000**, 7, 403-414	2	110
166	All-cellulose composites by partial dissolution in the ionic liquid 1-butyl-3-methylimidazolium chloride. *Composites Part A: Applied Science and Manufacturing*, **2009**, 40, 2031-2037	8.4	100
165	Silane crosslinked wood plastic composites: Processing and properties. *Composites Science and Technology*, **2006**, 66, 2177-2186	8.6	100
164	Rheological properties of nanocellulose suspensions: effects of fibril/particle dimensions and surface characteristics. *Cellulose*, **2017**, 24, 2499-2510	5.5	99
163	Cross-linked nanocomposite hydrogels based on cellulose nanocrystals and PVA: Mechanical properties and creep recovery. *Composites Part A: Applied Science and Manufacturing*, **2016**, 88, 226-233	8.4	96
162	A comparative study on properties of micro and nanopapers produced from cellulose and cellulose nanofibres. *Carbohydrate Polymers*, **2015**, 118, 1-8	10.3	95
161	Influence of thermoplastic elastomers on adhesion in polyethylene–wood flour composites. *Journal of Applied Polymer Science*, **1998**, 68, 1845-1855	2.9	95
160	Biocomposite hydrogels with carboxymethylated, nanofibrillated cellulose powder for replacement of the nucleus pulposus. *Biomacromolecules*, **2011**, 12, 1419-27	6.9	94
159	Porous electrospun nanocomposite mats based on chitosan–cellulose nanocrystals for wound dressing: effect of surface characteristics of nanocrystals. *Cellulose*, **2015**, 22, 521-534	5.5	93

158	Cross-linked chitosan/chitin crystal nanocomposites with improved permeation selectivity and pH stability. *Biomacromolecules*, **2009**, 10, 1627-32	6.9	89
157	Dry-Spun Single-Filament Fibers Comprising Solely Cellulose Nanofibers from Bioresidue. *ACS Applied Materials & Interfaces*, **2015**, 7, 13022-8	9.5	86
156	Fibrous cellulose nanocomposite scaffolds prepared by partial dissolution for potential use as ligament or tendon substitutes. *Carbohydrate Polymers*, **2012**, 87, 2291-2298	10.3	86
155	The nature and location of SEBS□MA compatibilizer in polyethylene□wood flour composites. *Journal of Applied Polymer Science*, **1998**, 69, 201-209	2.9	86
154	Surface adsorption and self-assembly of Cu(II) ions on TEMPO-oxidized cellulose nanofibers in aqueous media. *Journal of Colloid and Interface Science*, **2016**, 464, 175-82	9.3	79
153	Production potential of cellulose nanofibers from industrial residues: Efficiency and nanofiber characteristics. *Industrial Crops and Products*, **2016**, 92, 84-92	5.9	79
152	3-Dimensional porous nanocomposite scaffolds based on cellulose nanofibers for cartilage tissue engineering: tailoring of porosity and mechanical performance. *RSC Advances*, **2016**, 6, 5999-6007	3.7	75
151	Process scale up and characterization of wood cellulose nanocrystals hydrolysed using bioethanol pilot plant. *Industrial Crops and Products*, **2014**, 58, 212-219	5.9	75
150	Functionalized blown films of plasticized polylactic acid/chitin nanocomposite: Preparation and characterization. *Materials and Design*, **2016**, 92, 846-852	8.1	69
149	Properties of as-prepared and freeze-dried hydrogels made from poly(vinyl alcohol) and cellulose nanocrystals using freeze-thaw technique. *European Polymer Journal*, **2016**, 81, 386-396	5.2	69
148	Tensile behavior, morphology and viscoelastic analysis of cellulose nanofiber-reinforced (CNF) polyvinyl acetate (PVAc). *Composites Part A: Applied Science and Manufacturing*, **2011**, 42, 1275-1282	8.4	68
147	Gas permeability and selectivity of cellulose nanocrystals films (layers) deposited by spin coating. *Carbohydrate Polymers*, **2014**, 112, 494-501	10.3	63
146	Synergy Effect of Nanocrystalline Cellulose for the Biosensing Detection of Glucose. *Sensors*, **2015**, 15, 24681-97	3.8	63
145	Semi-rigid biopolyurethane foams based on palm-oil polyol and reinforced with cellulose nanocrystals. *Composites Part A: Applied Science and Manufacturing*, **2016**, 83, 56-62	8.4	61
144	Crosslinked fibrous composites based on cellulose nanofibers and collagen with in situ pH induced fibrillation. *Cellulose*, **2012**, 19, 139-150	5.5	59
143	The Effect of Processing on Fiber Dispersion, Fiber Length, and Thermal Degradation of Bleached Sulfite Cellulose Fiber Polypropylene Composites. *Journal of Thermoplastic Composite Materials*, **2009**, 22, 115-133	1.9	59
142	Dispersion and properties of cellulose nanowhiskers and layered silicates in cellulose acetate butyrate nanocomposites. *Journal of Applied Polymer Science*, **2009**, 112, 2001-2009	2.9	59
141	Barrier and mechanical properties of plasticized and cross-linked nanocellulose coatings for paper packaging applications. *Cellulose*, **2017**, 24, 3969-3980	5.5	57

140	Poly(methyl vinyl ether-co-maleic acid)-polyethylene glycol nanocomposites cross-linked in situ with cellulose nanowhiskers. *Biomacromolecules*, **2010**, 11, 2660-6	6.9	56
139	Cross-linked polyvinyl alcohol (PVA) foams reinforced with cellulose nanocrystals (CNCs). *Cellulose*, **2016**, 23, 1925-1938	5.5	56
138	Biocompatible fibrous networks of cellulose nanofibres and collagen crosslinked using genipin: potential as artificial ligament/tendons. *Macromolecular Bioscience*, **2013**, 13, 289-98	5.5	54
137	Glucomannan composite films with cellulose nanowhiskers. *Cellulose*, **2010**, 17, 69-81	5.5	54
136	Reinforcing efficiency of nanocellulose in polymers. *Reactive and Functional Polymers*, **2014**, 85, 151-156	4.6	53
135	Poly(lactic acid) melt-spun fibers reinforced with functionalized cellulose nanocrystals. *RSC Advances*, **2016**, 6, 9221-9231	3.7	51
134	Novel bionanocomposites: processing, properties and potential applications. *Plastics, Rubber and Composites*, **2009**, 38, 396-405	1.5	51
133	Environmental friendly and sustainable gas barrier on porous materials: Nanocellulose coatings prepared using spin- and dip-coating. *Materials and Design*, **2016**, 93, 19-25	8.1	50
132	Comparison of cellulose nanowhiskers extracted from industrial bio-residue and commercial microcrystalline cellulose. *Materials Letters*, **2012**, 71, 28-31	3.3	50
131	Membranes Based on Cellulose Nanofibers and Activated Carbon for Removal of Escherichia coli Bacteria from Water. *Polymers*, **2017**, 9,	4.5	50
130	Mechanical properties and morphology of flax fiber reinforced melamine-formaldehyde composites. *Polymer Composites*, **2001**, 22, 568-578	3	50
129	Re-dispersible carrot nanofibers with high mechanical properties and reinforcing capacity for use in composite materials. *Composites Science and Technology*, **2016**, 123, 49-56	8.6	49
128	Melt-spun polylactic acid fibers: Effect of cellulose nanowhiskers on processing and properties. *Journal of Applied Polymer Science*, **2013**, 127, 274-281	2.9	49
127	Thermoplastic polymer impregnation of cellulose nanofibre networks: Morphology, mechanical and optical properties. *Composites Part A: Applied Science and Manufacturing*, **2014**, 58, 30-35	8.4	49
126	The effect of plasticizer and cellulose nanowhisker content on the dispersion and properties of cellulose acetate butyrate nanocomposites. *Journal of Applied Polymer Science*, **2009**, 114, 2723-2730	2.9	47
125	Crosslinked poly(vinyl acetate) (PVAc) reinforced with cellulose nanocrystals (CNC): Structure and mechanical properties. *Composites Science and Technology*, **2016**, 126, 35-42	8.6	46
124	Fabrication and characterization of novel bilayer scaffold from nanocellulose based aerogel for skin tissue engineering applications. *International Journal of Biological Macromolecules*, **2019**, 136, 796-803	7.9	45
123	Improved interaction between wood and synthetic polymers in wood/polymer composites. *Wood Science and Technology*, **1996**, 30, 197	2.5	45

122	Using maleic anhydride grafted poly(lactic acid) as a compatibilizer in poly(lactic acid)/layered-silicate nanocomposites. *Journal of Applied Polymer Science*, **2006**, 102, 1852-1862	2.9	43
121	Potential of municipal solid waste paper as raw material for production of cellulose nanofibres. *Waste Management*, **2018**, 80, 319-326	8.6	42
120	Processing of cellulose nanowhiskers/cellulose acetate butyrate nanocomposites using sol□gel process to facilitate dispersion. *Composites Science and Technology*, **2011**, 71, 1886-1892	8.6	41
119	Water resistant nanopapers prepared by lactic acid modified cellulose nanofibers. *Cellulose*, **2018**, 25, 259-268	5.5	39
118	Cellulose nanofibres and cellulose nanowhiskers based natural rubber composites: Diffusion, sorption, and permeation of aromatic organic solvents. *Journal of Applied Polymer Science*, **2012**, 124, 1614-1623	2.9	39
117	Structure property relation of hybrid biocomposites based on jute, viscose and polypropylene: The effect of the fibre content and the length on the fracture toughness and the fatigue properties. *Composites Part A: Applied Science and Manufacturing*, **2016**, 83, 169-175	8.4	38
116	Durability and mechanical properties of silane cross-linked wood thermoplastic composites. *Composites Science and Technology*, **2007**, 67, 2728-2738	8.6	38
115	All-cellulose nanocomposite fibers produced by melt spinning cellulose acetate butyrate and cellulose nanocrystals. *Cellulose*, **2014**, 21, 2665-2678	5.5	37
114	EFFECT OF CELLULOSE NANOFIBERS ISOLATED FROM BAMBOO PULP RESIDUE ON VULCANIZED NATURAL RUBBER. *BioResources*, **2012**, 7,	1.3	36
113	Profile extrusion and mechanical properties of crosslinked wood□hermoplastic composites. *Polymer Composites*, **2006**, 27, 184-194	3	36
112	Cellulose nanofiber aerogels impregnated with bio-based epoxy using vacuum infusion: Structure, orientation and mechanical properties. *Composites Science and Technology*, **2018**, 155, 64-71	8.6	35
111	Extrusion processing of green biocomposites: Compounding, fibrillation efficiency, and fiber dispersion. *Journal of Applied Polymer Science*, **2014**, 131, n/a-n/a	2.9	34
110	Effect of xylanase pretreatment of rice straw unbleached soda and neutral sulfite pulps on isolation of nanofibers and their properties. *Cellulose*, **2018**, 25, 2939-2953	5.5	33
109	Silane-crosslinking of recycled low-density polyethylene/wood composites. *Composites Part A: Applied Science and Manufacturing*, **2010**, 41, 678-683	8.4	33
108	Highly redispersible sugar beet nanofibers as reinforcement in bionanocomposites. *Cellulose*, **2017**, 24, 2177-2189	5.5	32
107	Multifunctional Carbon Aerogels with Hierarchical Anisotropic Structure Derived from Lignin and Cellulose Nanofibers for CO Capture and Energy Storage. *ACS Applied Materials & Interfaces*, **2020**, 12, 7432-7441	9.5	32
106	Reinforcing effect of carboxymethylated nanofibrillated cellulose powder on hydroxypropyl cellulose. *Cellulose*, **2010**, 17, 793-802	5.5	32
105	Aligned plasticized polylactic acid cellulose nanocomposite tapes: Effect of drawing conditions. *Composites Part A: Applied Science and Manufacturing*, **2018**, 104, 101-107	8.4	31

104	Dispersion and reinforcing effect of carrot nanofibers on biopolyurethane foams. *Materials and Design*, **2016**, 110, 526-531	8.1	31
103	A method for preparing epoxy-cellulose nanofiber composites with an oriented structure. *Composites Part A: Applied Science and Manufacturing*, **2019**, 125, 105515	8.4	30
102	Triethyl Citrate (TEC) as a Dispersing Aid in Polylactic Acid/Chitin Nanocomposites Prepared via Liquid-Assisted Extrusion. *Polymers*, **2017**, 9,	4.5	30
101	The effect of pre-softened wood chips on wood fibre aspect ratio and mechanical properties of woodpolymer composites. *Composites Part A: Applied Science and Manufacturing*, **2011**, 42, 2110-2116	8.4	30
100	The Structure and Mechanical Properties of Cellulose Nanocomposites Prepared by Twin Screw Extrusion. *ACS Symposium Series*, **2006**, 114-131	0.4	30
99	Improved antifungal activity and stability of chitosan nanofibers using cellulose nanocrystal on banknote papers. *Carbohydrate Polymers*, **2018**, 189, 229-237	10.3	29
98	High-Strength, High-Toughness Aligned Polymer-Based Nanocomposite Reinforced with Ultralow Weight Fraction of Functionalized Nanocellulose. *Biomacromolecules*, **2018**, 19, 4075-4083	6.9	29
97	Moisture absorption behavior and its impact on the mechanical properties of cellulose whiskers-based polyvinylacetate nanocomposites. *Polymer Engineering and Science*, **2011**, 51, 2136-2142	2.3	29
96	Regenerated cellulose fibers as impact modifier in long jute fiber reinforced polypropylene composites: Effect on mechanical properties, morphology, and fiber breakage. *Journal of Applied Polymer Science*, **2015**, 132, n/a-n/a	2.9	28
95	Use of Bacterial Cellulose and Crosslinked Cellulose Nanofibers Membranes for Removal of Oil from Oil-in-Water Emulsions. *Polymers*, **2017**, 9,	4.5	28
94	Polylactic acid/polyurethane blend reinforced with cellulose nanocrystals with semi-interpenetrating polymer network (S-IPN) structure. *European Polymer Journal*, **2017**, 86, 188-199	5.2	27
93	Well-dispersed cellulose nanocrystals in hydrophobic polymers by in situ polymerization for synthesizing highly reinforced bio-nanocomposites. *Nanoscale*, **2018**, 10, 11797-11807	7.7	27
92	Enhanced alignment and mechanical properties through the use of hydroxyethyl cellulose in solvent-free native cellulose spun filaments. *Composites Science and Technology*, **2017**, 150, 79-86	8.6	27
91	Randomly oriented and aligned cellulose fibres reinforced with cellulose nanowhiskers, prepared by electrospinning. *Plastics, Rubber and Composites*, **2011**, 40, 57-64	1.5	27
90	Isolation and characterization of cellulose nanofibers from aspen wood using derivatizing and non-derivatizing pretreatments. *Cellulose*, **2020**, 27, 185-203	5.5	27
89	Crosslinked poly(vinyl alcohol) composite films with cellulose nanocrystals: Mechanical and thermal properties. *Journal of Applied Polymer Science*, **2018**, 135, 45710	2.9	26
88	Sonication-assisted surface modification method to expedite the water removal from cellulose nanofibers for use in nanopapers and paper making. *Carbohydrate Polymers*, **2018**, 197, 92-99	10.3	26
87	Toughening effect of cellulose nanowhiskers on polyvinyl acetate: Fracture toughness and viscoelastic analysis. *Polymer Composites*, **2011**, 32, 1492-1498	3	25

86	A promising process to modify cellulose nanofibers for carbon dioxide (CO) adsorption. *Carbohydrate Polymers*, **2020**, 230, 115571	10.3	25
85	Nanocomposite Film Based on Cellulose Acetate and Lignin-Rich Rice Straw Nanofibers. *Materials*, **2019**, 12,	3.5	23
84	Synergistic effect of chitin nanocrystals and orientations induced by solid-state drawing on PLA-based nanocomposite tapes. *Composites Science and Technology*, **2018**, 162, 140-145	8.6	23
83	Improving cellulose/polypropylene nanocomposites properties with chemical modified bagasse nanofibers and maleated polypropylene. *Journal of Reinforced Plastics and Composites*, **2014**, 33, 26-36	2.9	23
82	Handbook of Green Materials. *Materials and Energy*, **2014**,		23
81	Biodegradation and ecotoxicological impact of cellulose nanocomposites in municipal solid waste composting. *International Journal of Biological Macromolecules*, **2018**, 111, 264-270	7.9	22
80	Vacuum infusion of cellulose nanofibre network composites: Influence of porosity on permeability and impregnation. *Materials and Design*, **2016**, 95, 204-211	8.1	22
79	Chitosan/rice straw nanofibers nanocomposites: Preparation, mechanical, and dynamic thermomechanical properties. *Journal of Applied Polymer Science*, **2012**, 125, E216-E222	2.9	22
78	Characterization of microcrystalline cellulose and cellulose long fiber modified by iron salt. *Carbohydrate Polymers*, **2010**, 80, 35-43	10.3	22
77	Plastics and Composites from Polylactic Acid **2004**, 149-165		22
76	Water purification ultrafiltration membranes using nanofibers from unbleached and bleached rice straw. *Scientific Reports*, **2020**, 10, 11278	4.9	22
75	Pelletized cellulose fibres used in twin-screw extrusion for biocomposite manufacturing: Fibre breakage and dispersion. *Composites Part A: Applied Science and Manufacturing*, **2018**, 109, 538-545	8.4	21
74	Switchable ionic liquids enable efficient nanofibrillation of wood pulp. *Cellulose*, **2017**, 24, 3265-3279	5.5	20
73	Introduction to Cellulose Nanocomposites. *ACS Symposium Series*, **2006**, 2-8	0.4	20
72	Electrospinnability of bionanocomposites with high nanocrystal loadings: The effect of nanocrystal surface characteristics. *Carbohydrate Polymers*, **2016**, 147, 464-472	10.3	20
71	Green Carbon Nanofiber Networks for Advanced Energy Storage. *ACS Applied Energy Materials*, **2020**, 3, 3530-3540	6.1	19
70	Properties of cellulose nanofibre networks prepared from never-dried and dried paper mill sludge. *Journal of Cleaner Production*, **2018**, 197, 765-771	10.3	19
69	Influence of wood flour moisture content on the degree of silane-crosslinking and its relationship to structure□property relations of wood□thermoplastic composites. *Composites Science and Technology*, **2009**, 69, 1045-1050	8.6	19

68	Melt spun cellulose nanocomposite fibres: comparison of two dispersion techniques. *Plastics, Rubber and Composites*, **2014**, 43, 15-24	1.5	18
67	Promoted hydrogel formation of lignin-containing arabinoxylan aerogel using cellulose nanofibers as a functional biomaterial.. *RSC Advances*, **2018**, 8, 38219-38228	3.7	18
66	Plasticizing and crosslinking effects of borate additives on the structure and properties of poly(vinyl acetate). *RSC Advances*, **2017**, 7, 7483-7491	3.7	17
65	Metallo-Terpyridine-Modified Cellulose Nanofiber Membranes for Papermaking Wastewater Purification. *Journal of Inorganic and Organometallic Polymers and Materials*, **2018**, 28, 439-447	3.2	17
64	Strategies for Preparation of Cellulose Whiskers from Microcrystalline Cellulose as Reinforcement in Nanocomposites. *ACS Symposium Series*, **2006**, 10-25	0.4	17
63	Crystallization of triethyl-citrate-plasticized poly(lactic acid) induced by chitin nanocrystals. *Journal of Applied Polymer Science*, **2019**, 136, 47936	2.9	16
62	Toward eco-efficient production of natural nanofibers from industrial residue: Eco-design and quality assessment. *Journal of Cleaner Production*, **2020**, 255, 120274	10.3	16
61	Lightweight, flexible, and multifunctional anisotropic nanocellulose-based aerogels for CO2 adsorption. *Cellulose*, **2020**, 27, 2695-2707	5.5	15
60	Adsorption isotherms and mechanisms of Cu(II) sorption onto TEMPO-mediated oxidized cellulose nanofibers. *RSC Advances*, **2016**, 6, 107759-107767	3.7	14
59	Processing of wood chip plastic composites: effect on wood particle size, microstructure and mechanical properties. *Plastics, Rubber and Composites*, **2011**, 40, 49-56	1.5	13
58	Improved durability of lignocellulose-polypropylene composites manufactured using twin-screw extrusion. *Composites Part A: Applied Science and Manufacturing*, **2017**, 101, 265-272	8.4	12
57	Strong Aqueous Gels of Cellulose Nanofibers and Nanowhiskers Isolated from Softwood Flour. *Tappi Journal*, **2011**, 10, 7-14	0.5	12
56	Effect of Unbleached Rice Straw Cellulose Nanofibers on the Properties of Polysulfone Membranes. *Polymers*, **2019**, 11,	4.5	11
55	Improving tensile strength and moisture barrier properties of gelatin using microfibrillated cellulose. *Journal of Composite Materials*, **2013**, 47, 1977-1985	2.7	11
54	Self-reinforced nanocomposite by partial dissolution of cellulose microfibrils in ionic liquid. *Journal of Composite Materials*, **2012**, 46, 1305-1311	2.7	11
53	Dielectric barrier discharge plasma treatment of cellulose nanofibre surfaces. *Surface Engineering*, **2018**, 34, 825-831	2.6	10
52	The Effect of Decreased Fiber Size in Wheat Straw/Polyvinyl Alcohol Composites. *Journal of Biobased Materials and Bioenergy*, **2009**, 3, 75-80	1.4	10
51	The Influence of a SBS Compatibilizer in Polyethylene-Wood Flour Composites. *Holzforschung*, **1998**, 52, 661-666	2	9

50	One-step twin-screw extrusion process of cellulose fibers and hydroxyethyl cellulose to produce fibrillated cellulose biocomposite. *Cellulose*, **2020**, 27, 8105-8119	5.5	9
49	The Effect of Recycling on Wood-Fiber Thermoplastic Composites. *Polymers*, **2020**, 12,	4.5	9
48	Effect of long fiber thermoplastic extrusion process on fiber dispersion and mechanical properties of viscose fiber/polypropylene composites. *Polymers for Advanced Technologies*, **2016**, 27, 685-692	3.2	9
47	Ice-Templated Cellulose Nanofiber Filaments as a Reinforcement Material in Epoxy Composites. *Nanomaterials*, **2021**, 11,	5.4	9
46	Large-scale manufacturing of ultra-strong, strain-responsive poly(lactic acid)-based nanocomposites reinforced with cellulose nanocrystals. *Composites Science and Technology*, **2020**, 194, 108144	8.6	8
45	Modification of cellulose nanofibre surfaces by He/NH3 plasma at atmospheric pressure. *Cellulose*, **2019**, 26, 7185-7194	5.5	8
44	Processing of Bionanocomposites: Solution Casting. *Materials and Energy*, **2014**, 35-52		7
43	Nanocelluloses and their use in composite materials. *EXPRESS Polymer Letters*, **2012**, 6, 687-687	3.4	7
42	Hetero-Porous, High-Surface Area Green Carbon Aerogels for the Next-Generation Energy Storage Applications. *Nanomaterials*, **2021**, 11,	5.4	7
41	Impact toughness, viscoelastic behavior, and morphology of polypropylene/jute/viscose hybrid composites. *Journal of Applied Polymer Science*, **2016**, 133, n/a-n/a	2.9	7
40	Investigation of Structure and Chemical Composition of Carbon Nanofibers Developed From Renewable Precursor. *Frontiers in Materials*, **2019**, 6,	4	7
39	One-Step Twin-Screw Extrusion Process to Fibrillate Deep Eutectic Solvent-Treated Wood to Be Used in Wood Fiber-Polypropylene Composites. *ACS Sustainable Chemistry and Engineering*, **2021**, 9, 883-893	8.2	7
38	Melt compounded nanocomposites with semi-interpenetrated network structure based on natural rubber, polyethylene, and carrot nanofibers. *Journal of Applied Polymer Science*, **2018**, 135, 45961	2.9	7
37	Effect of Chitin Nanocrystals on Crystallization and Properties of Poly(lactic acid)-Based Nanocomposites. *Polymers*, **2020**, 12,	4.5	6
36	Cellulose Nanocomposite Hydrogels: From Formulation to Material Properties. *Frontiers in Chemistry*, **2020**, 8, 655	5	6
35	Strategies to Improve the Properties of Amaranth Protein Isolate-Based Thin Films for Food Packaging Applications: Nano-Layering through Spin-Coating and Incorporation of Cellulose Nanocrystals. *Nanomaterials*, **2020**, 10,	5.4	6
34	Seaweed-Derived Alginate-Cellulose Nanofiber Aerogel for Insulation Applications. *ACS Applied Materials & Interfaces*, **2021**, 13, 34899-34909	9.5	6
33	Starch-Based Bionanocomposites: Processing and Properties287-306		6

32	Utilizing the Natural Composition of Brown Seaweed for the Preparation of Hybrid Ink for 3D Printing of Hydrogels.. *ACS Applied Bio Materials*, **2020**, 3, 6510-6520	4.1	5
31	Multifunctional Ginger Nanofiber Hydrogels with Tunable Absorption: The Potential for Advanced Wound Dressing Applications. *Biomacromolecules*, **2021**, 22, 3202-3215	6.9	5
30	Catalytically transformed low energy intensive 2D-layered and single crystal-graphitic renewable carbon cathode conductors. *Carbon*, **2021**, 183, 243-250	10.4	5
29	Effects of molding temperature, pressure and time on polyvinyl alcohol nanocomposites properties produced by freeze drying technique. *Industrial Crops and Products*, **2018**, 121, 1-9	5.9	4
28	Semi-IPN of biopolyurethane, benzyl starch, and cellulose nanofibers: Structure, thermal and mechanical properties. *Journal of Applied Polymer Science*, **2016**, 133,	2.9	4
27	Natural Resources and Residues for Production of Bionanomaterials. *Materials and Energy*, **2014**, 19-33		4
26	Melt Compounding Process of Cellulose Nanocomposites. *Materials and Energy*, **2014**, 53-68		3
25	Thermal characterization and electrical properties of Fe-modified cellulose long fibers and micro crystalline cellulose. *Journal of Thermal Analysis and Calorimetry*, **2011**, 104, 841-847	4.1	3
24	Comparison of tension wood and normal wood for oxidative nanofibrillation and network characteristics. *Cellulose*, **2021**, 28, 1085-1104	5.5	3
23	Bacterial Cellulose Network from Kombucha Fermentation Impregnated with Emulsion-Polymerized Poly(methyl methacrylate) to Form Nanocomposite. *Polymers*, **2021**, 13,	4.5	3
22	Technologies for Separation of Cellulose Nanofibers. *Materials and Energy*, **2014**, 53-71		2
21	Nanocellulose and Nanochitin in Membrane Applications. *Materials and Energy*, **2014**, 247-259		2
20	Thermal gravimetric analysis of in-situ crosslinked nanocellulose whiskers poly(methyl vinyl ether-co-maleic acid) polyethylene glycol. *Tappi Journal*, **2011**, 10, 29-33	0.5	2
19	Effect of pectin extraction method on properties of cellulose nanofibers isolated from sugar beet pulp. *Cellulose*, **2021**, 28, 10905-10920	5.5	2
18	The Effect of High Lignin Content on Oxidative Nanofibrillation of Wood Cell Wall. *Nanomaterials*, **2021**, 11,	5.4	2
17	Aligned-porous-structured poly(vinyl alcohol) foams with cellulose nanocrystals **2018**,		2
16	Functional Nanocomposite Films of Poly(Lactic Acid) with Well-Dispersed Chitin Nanocrystals Achieved Using a Dispersing Agent and Liquid-Assisted Extrusion Process. *Molecules*, **2021**, 26,	4.8	2
15	Monolithic carbon aerogels from bioresources and their application for CO2 adsorption. *Microporous and Mesoporous Materials*, **2021**, 323, 111236	5.3	2

14	Bionanomaterials: Separation Processes, Characterization, and Properties. *Materials and Energy*, **2014**, 1-3		1
13	Liquid Composite Molding. *Materials and Energy*, **2014**, 219-232		1
12	Characterization of Nanocomposites Structure. *Materials and Energy*, **2014**, 89-105		1
11	Electrochemical Properties of Biobased Carbon Aerogels Decorated with Graphene Dots Synthesized from Biochar. *ACS Applied Electronic Materials*, **2021**, 3, 4699-4710	4	1
10	Influence of Chitin Nanocrystals on the Crystallinity and Mechanical Properties of Poly(hydroxybutyrate) Biopolymer.. *Polymers*, **2022**, 14,	4.5	1
9	Thermal Conductivity of Cellulose Fibers in Different Size Scales and Densities. *Biomacromolecules*, **2021**, 22, 3800-3809	6.9	1
8	Thermoconformational Behavior of Cellulose Nanofiber Films as a Device Substrate and Their Superior Flexibility and Durability to Glass. *ACS Applied Materials & Interfaces*, **2021**, 13, 40853-40862	9.5	1
7	Oriented Carbon Fiber Networks by Design from Renewables for Electrochemical Applications. *ACS Sustainable Chemistry and Engineering*, **2021**, 9, 12142-12154	8.3	1
6	Size exclusion and affinity-based removal of nanoparticles with electrospun cellulose acetate membranes infused with functionalized cellulose nanocrystals. *Materials and Design*, **2022**, 217, 110654	8.1	1
5	Manufacture and application of lignin-based carbon fibers and lignin-based carbon nanofibers **2022** , 203-236		0
4	Nanofibre distribution in composites manufactured with epoxy reinforced with nanofibrillated cellulose: model prediction and verification. *IOP Conference Series: Materials Science and Engineering*, **2016**, 139, 012011	0.4	
3	Moisture and Gas Barrier Properties of Cellulose Nanocrystals in Thin Films. *Materials and Energy*, **2014**, 231-246		
2	Bionanocomposites: Processing Methods, Characterization, and Properties. *Materials and Energy*, **2014**, 1-5		
1	Reinforcing Efficiency of Nanocelluloses in Polymer Nanocomposites. *Materials and Energy*, **2014**, 131-145		