Green composites from sustainable cellulose nanofibrils: A review

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#	Paper	IF	Citations
1154	12 Conclusions, applications and likely future trends.		
1153	Nanocomposites Based on ZnO Modified Polymer Blends. **2012**, 321-322, 130-134		1
1152	Self-assembly of amylose-grafted carboxymethyl cellulose. *Carbohydrate Polymers*, **2012**, 90, 1371-7	10.3	23
1151	Physical, chemical and mechanical properties of pehuen cellulosic husk and its pehuen-starch based composites. *Carbohydrate Polymers*, **2012**, 90, 1550-6	10.3	33
1150	Utilization of peanut husks as a filler in aliphaticâ□romatic polyesters: Preparation, characterization, and biodegradability. **2012**, 97, 2388-2395		30
1149	Recycled Polycarbonate Blend as Matrix for Development of Polymer Nanocomposite. **2012**, 321-322, 221-224		4
1148	Recent Development in Applications of Cellulose Nanocrystals for Advanced Polymer-Based Nanocomposites by Novel Fabrication Strategies. **2012**,		23
1147	Viscoelastic Properties of Water Suspensions of Polymer Nanofibers Synthesized via RAFT-Mediated Emulsion Polymerization. **2012**, 45, 5273-5280		39
1146	Bionanocomposites from lignocellulosic resources: Properties, applications and future trends for their use in the biomedical field. **2013**, 38, 1415-1441		179
1145	Soy proteinâ□anocellulose composite aerogels. **2013**, 20, 2417-2426		71
1144	Behaviour of luffa sponge material under dynamic loading. **2013**, 57, 17-26		50
1143	Hydrophobic Polymers from Food Waste: Resources and Synthesis. **2013**, 53, 627-694		56
1142	Biodegradable self-adhesive tapes with starch carrier. **2013**, 44, 195-199		30
1141	One-step production of nanofibrillated bacterial cellulose (NFBC) from waste glycerol using Gluconacetobacter intermedius NEDO-01. **2013**, 20, 2971-2979		36
1140	Comparative effect of mechanical beating and nanofibrillation of cellulose on paper properties made from bagasse and softwood pulps. *Carbohydrate Polymers*, **2013**, 97, 725-30	10.3	83
1139	Influence of cotton variety on compression and destructuration abilities under elevated pressure. **2013**, 20, 1013-1022		
1138	Cation-induced hydrogels of cellulose nanofibrils with tunable moduli. **2013**, 14, 3338-45		236

1137	Mechanical Properties of Cellulose-Based Bionanocomposites. **2013**, 437-460		2
1136	Rheological and thermal characteristics of three-phase eco-composites. *Carbohydrate Polymers*, **2013**, 92, 1006-11	10.3	17
1135	Evaluation of thermodynamic parameters of some amphiphilic drugs in presence of sugars at the cloud point. **2013**, 105, 236-45		31
1134	Reinforcement of wet milled jute nano/micro particles in polyvinyl alcohol films. **2013**, 14, 133-137		56
1133	Dynamic behavior of crosslinked amphiphilic block copolymer nanofibers dispersed in liquid poly(ethylene oxide) below and above their glass transition temperature. **2013**, 9, 2197		23
1132	Production of nanocrystalline cellulose from lignocellulosic biomass: technology and applications. *Carbohydrate Polymers*, **2013**, 94, 154-69	10.3	743
1131	"Smart" Materials Based on Cellulose: A Review of the Preparations, Properties, and Applications. **2013**, 6, 738-781		336
1130	Unexplored possibilities of all-polysaccharide composites. *Carbohydrate Polymers*, **2013**, 95, 697-715	10.3	80
1129	Importance of the structure of paper support in gas transfer properties of protein-coated paper. **2013**, 130, 2848-2858		2
1128	Cellulose/iron oxide hybrids as multifunctional pigments in thermoplastic starch based materials. **2013**, 20, 861-871		6
1127	Biocompatible bacterial cellulose-poly(2-hydroxyethyl methacrylate) nanocomposite films. **2013**, 2013, 698141		32
1126	Electrospun cellulosic structure nanofibre based on rice straw. **2013**, 33, 857-873		8
1125	Barrier and mechanical properties of biodegradable poly(ε-caprolactone)/cellophane multilayer film. **2013**, 130, 1805-1811		10
1124	Morphological and Thermal Investigations of Cellulosic Bionanocomposites. **2013**, 411-436		5
1123	Compressive Behavior of Luffa Sponge Material at High Strain Rate. **2013**, 535-536, 465-468		5
1122	Valorization of agroindustrial solid residues and residues from biofuel production chains by thermochemical conversion: a review, citing Brazil as a case study. **2013**, 30, 197-230		44
1121	Conversion of lignocellulosic biomass to nanocellulose: structure and chemical process. **2014**, 2014, 631013		235
1120	Biodegradable Composite Films based on κ-carrageenan Reinforced by Cellulose Nanocrystal from Kenaf Fibers. **2014**, 10,		19

1119	Hierarchically Self-Assembled Nanofiber Films from Amylose-Grafted Carboxymethyl Cellulose. **2014**, 2, 34-44		17
1118	Catalytic Extraction of Microcrystalline Cellulose (MCC) from Elaeis guineensis using Central Composite Design (CCD). **2014**, 9,		10
1117	Cellulose Nanocrystals Obtained from Cynara Cardunculus and Their Application in the Paper Industry. **2014**, 6, 5252-5264		19
1116	Cellulose from Lignocellulosic Waste. **2014**, 1-33		6
1115	Microemulsion systems for fiber deconstruction into cellulose nanofibrils. **2014**, 6, 22622-7		48
1114	Development, application and commercialization of transparent paper. **2014**, 1, 015004		42
1113	Preparation and Interaction of Modified PHS and CMC Liquid Composites. **2014**, 1035, 204-211		3
1112	Exploration of a Chemo-Mechanical Technique for the Isolation of Nanofibrillated Cellulosic Fiber from Oil Palm Empty Fruit Bunch as a Reinforcing Agent in Composites Materials. **2014**, 6, 2611-2624		102
1111	Advanced Bacterial Cellulose Composites. **2014**, 147-164		1
1110	A review of poly(lactic acid)-based materials for antimicrobial packaging. **2014**, 79, R1477-90		161
1109	The Synthesis of Cellulose Nanofibers from Sesbania Javanica for Filler in Thermoplastic Starch. **2014**, 56, 318-325		8
1108	Nanocellulose-Based Polymer Nanocomposite: Isolation, Characterization and Applications. **2014**, 273-309		8
1107	Gelling of cellulose nanowhiskers in aqueous suspension. **2014**, 131, n/a-n/a		7
1106	Bacterial Cellulose and its Use in Renewable Composites. **2014**, 89-130		3
1105	Cellulose Nano/Microfibers-Reinforced Polymer Composites: Processing Aspects. **2014**, 255-271		
1104	Cellulose-Based Liquid Crystalline Composite Systems. **2014**, 215-235		2
1103	Superabsorbent hydrogel composites with a focus on hydrogels containing nanofibers or nanowhiskers of cellulose and chitin. **2014**, 131, n/a-n/a		56
1102	Characterization of bionanocomposite films prepared with agar and paper-mulberry pulp nanocellulose. *Carbohydrate Polymers*, **2014**, 110, 480-8	10.3	212

1101	Bamboo fibers for composite applications: a mechanical and morphological investigation. **2014**, 49, 2559-2566		75
1100	Processing and characterization of natural cellulose fibers/thermoset polymer composites. *Carbohydrate Polymers*, **2014**, 109, 102-17	10.3	641
1099	Development of bacterial cellulose and poly(vinylidene fluoride) binary blend system: Structure and properties. **2014**, 237, 396-402		19
1098	Ultra-lightweight paper foams: processing and properties. **2014**, 21, 2023-2031		45
1097	Synthesis, Characterization and Nanocomposite Formation of Poly(glycerol succinate-co-maleate) with Nanocrystalline Cellulose. **2014**, 22, 219-226		16
1096	Effect of additives on the cloud point of mixed surfactant (non-ionic Triton X-114+cationic gemini 16-6-16) solutions. **2014**, 194, 206-211		41
1095	Production and modification of nanofibrillated cellulose using various mechanical processes: a review. *Carbohydrate Polymers*, **2014**, 99, 649-65	10.3	821
1094	Preparation and characterization of conductive nanostructured particles based on polyaniline and cellulose nanofibers. **2014**, 21, 1641-8		36
1093	Mechanical Performance and Transparency of Nanocellulose Reinforced Polymer Nanocomposites. **2014**, 299, 560-568		77
1092	The effect of Fenton chemistry on the properties of microfibrillated cellulose. **2014**, 21, 1489-1503		22
1091	Hydrophobic-modified nano-cellulose fiber/PLA biodegradable composites for lowering water vapor transmission rate (WVTR) of paper. *Carbohydrate Polymers*, **2014**, 111, 442-8	10.3	162
1090	Preparation of a cellulose and water-based resin composite. **2014**, 123, 70-74		6
1089	Solvent-free acetylation of cellulose nanofibers for improving compatibility and dispersion. *Carbohydrate Polymers*, **2014**, 102, 369-75	10.3	111
1088	Green Composite of Poly(3-hydroxybutyrate-co-3-hydroxyhexanoate) Reinforced with Porous Cellulose. **2014**, 2, 248-253		37
1087	Microfibrillated Cellulose. **2014**, 1-34		17
1086	Enhancement of nanofibrillation of softwood cellulosic fibers by oxidation and sulfonation. *Carbohydrate Polymers*, **2014**, 111, 514-23	10.3	14
1085	Nanofibrillated cellulose: surface modification and potential applications. **2014**, 292, 5-31		294
1084	Novel nanostructured paper with ultrahigh transparency and ultrahigh haze for solar cells. **2014**, 14, 765-73		348

1083	Biocomposite cellulose-alginate films: promising packaging materials. **2014**, 151, 343-51		140
1082	Progress Report on Natural Fiber Reinforced Composites. **2014**, 299, 9-26		533
1081	Nanofibrillated Cellulose: Sustainable Nanofiller with Broad Potentials Use. **2014**, 267-305		1
1080	Well defined thermostable cellulose nanocrystals via two-step ionic liquid swelling-hydrolysis extraction. **2014**, 21, 4195-4207		44
1079	Nanocellulose properties and applications in colloids and interfaces. **2014**, 19, 383-396		415
1078	Effect of organic additives and temperature on the micellization of cationic surfactant cetyltrimethylammonium chloride: Evaluation of thermodynamics. **2014**, 199, 511-517		28
1077	Microfibrillated cellulose (MFC): pullulan bionanocomposite films. **2014**, 21, 4323-4335		29
1076	Effect of kenaf fibre loading and thymol concentration on the mechanical and thermal properties of PLA/kenaf/thymol composites. **2014**, 61, 74-83		96
1075	Comparison between coconut and curaua fibers chemically treated for compatibility with PP matrixes. **2014**, 33, 430-439		10
1074	Starch based Active Packaging Film Reinforced with Empty Fruit Bunch (EFB) Cellulose Nanofiber. **2014**, 9, 23-33		41
1073	Enhanced thermal and mechanical properties of PVA composites formed with filamentous nanocellulose fibrils. *Carbohydrate Polymers*, **2014**, 113, 403-10	10.3	71
1072	Fiber based enzyme-linked immunosorbent assay for C-reactive protein. **2014**, 205, 50-60		24
1071	The state of carboxymethylated nanofibrils after homogenization-aided dilution from concentrated suspensions: a rheological perspective. **2014**, 21, 2357-2368		56
1070	Nanocrystalline cellulose acetate (NCCA)/graphene oxide (GO) nanocomposites with enhanced mechanical properties and barrier against water vapor. **2014**, 21, 3527-3539		70
1069	Agricultural Biomass Raw Materials: The Current State and Future Potentialities. **2014**, 77-100		1
1068	Correlation of the thermal stability and the decomposition kinetics of six different vegetal fibers. **2014**, 21, 177-188		82
1067	Dispersion study of nanofibrillated cellulose based poly(butylene adipate-co-terephthalate) composites. *Carbohydrate Polymers*, **2014**, 102, 537-42	10.3	51
1066	The use of biomass for packaging films and coatings. **2014**, 819-874		21

1065	Development of a novel controlled-release nanocomposite based on poly(lactic acid) to increase the oxidative stability of soybean oil. **2014**, 31, 1586-97		26
1064	Cellulose acetate and short curau fibers biocomposites prepared by large scale processing: Reinforcing and thermal insulating properties. **2014**, 52, 363-372		17
1063	Thermoset nanocomposites from two-component waterborne polyurethanes and cellulose whiskers. *Carbohydrate Polymers*, **2014**, 105, 207-13	10.3	45
1062	Surface grafting of reduced graphene oxide using nanocrystalline cellulose via click reaction. **2014**, 16, 1		49
1061	Isolation and characterization of cellulose nanofibers from banana peels. **2014**, 21, 417-432		174
1060	Atomic force microscopic study of chitinase binding onto chitin and cellulose surfaces. **2014**, 15, 1074-7		10
1059	Nanofibrillated cellulose originated from birch sawdust after sequential extractions: a promising polymeric material from waste to films. **2014**, 21, 2587-2598		45
1058	Improvement of polyvinyl alcohol properties by adding nanocrystalline cellulose isolated from banana pseudostems. *Carbohydrate Polymers*, **2014**, 112, 165-72	10.3	112
1057	Preparation of Chitin-Based Nano-Fibrous and Composite Materials Using Ionic Liquids. **2014**, 383-400		1
1056	Enhancing the Wood Glue Bond Using Cellulose Modified Epoxy. **2015**, 1122, 145-148		
1055	Preparation of Functional Polymer-Grafted Cellulose through Azide Alkyne Cycloaddition or Cá Cross-Coupling. **2015**, 62-85		
1054	Preparation of nanocrystalline cellulose from corncob used as reinforcement in separator for lithium ion battery. **2015**,		1
1053	Cellulose Nanofibers: Synthesis, Properties and Applications. **2015**, 1-37		1
1052	Nanocellulose: Biomedical Nanomaterial Applications. **2015**, 5077-5100		1
1051	Cellulose Nanomaterials. **2015**, 1-22		
1050	Natural Cellulose Fibers: Sources, Isolation, Properties and Applications. **2015**, 25-59		
1049	Pulping of flax raw materials using plasma-chemical treatment. **2015**, 49, 459-464		5
1048	Gender differences in murine pulmonary responses elicited by cellulose nanocrystals. **2016**, 13, 28		59

1047	Optimization of the silane treatment of cellulosic fibers from eucalyptus wood using response surface methodology. **2015**, 132, n/a-n/a		14
1046	Natural polyphenol tannic acid reinforced poly(3-hydroxybutyrate-co-3-hydroxyvalerate) composite films with enhanced tensile strength and fracture toughness. **2015**, 36, 2303-2308		10
1045	Mechanical properties of oil palm biocomposites enhanced with micro to nanobiofillers. **2015**, 401-435		2
1044	Influence of Surface Modification on the Microstructure and Thermo-Mechanical Properties of Bamboo Fibers. **2015**, 8, 6597-6608		73
1043	Preparation of photocrosslinked fish elastin polypeptide/microfibrillated cellulose composite gels with elastic properties for biomaterial applications. **2015**, 13, 338-53		16
1042	Isolation and properties of cellulose nanofibrils from coconut palm petioles by different mechanical process. **2015**, 10, e0122123		34
1041	A Facile Approach to Evaluate Thermal Insulation Performance of Paper Cups. **2015**, 2015, 1-8		2
1040	Effects of Soybean Oil Modified Cellulose Fibril and Organosilane Modified Cellulose Fibril on Crystallization of Polypropylene. **2015**, 2015, 1-9		4
1039	Rheological Properties and Processing of Polymer Blends with Micro- and Nanofibrillated Cellulose. **2015**, 259-291		1
1038	Polymer Nanofibers Reinforced with Cellulose Nanocrystals. **2015**, 323-341		
1037	Cationic nanofibrillar cellulose with high antibacterial properties. *Carbohydrate Polymers*, **2015**, 131, 224-32	10.3	68
1036	Extraction and Production of Cellulose Nanofibers. **2015**, 81-118		4
1035	An overview of feasibilities and challenge of conductive cellulose for rechargeable lithium based battery. **2015**, 50, 204-213		36
1034	Combined bleaching and hydrolysis for isolation of cellulose nanofibrils from waste sackcloth. *Carbohydrate Polymers*, **2015**, 131, 152-8	10.3	33
1033	Preparation And Properties Of Bionanocomposite Films Reinforced With Nanocellulose Isolated From Moroccan Alfa Fibres. **2015**, 15, 164-172		25
1032	Does cellulose II exist in native alga cell walls? Cellulose structure of Derbesia cell walls studied with SFG, IR and XRD. **2015**, 22, 3531-3540		8
1031	Crystallinity and Morphological of Cellulose Extraction from Elaeis guineensis Jacquin Frond. **2015**, 819, 251-255		
1030	Polymers and Ionic Liquids: A Successful Wedding. **2015**, 216, 359-368		49

1029	Micellization Behavior of a Cationic Gemini Surfactant, Pentanediyl-1,5-Bis(Dimethylcetylammonium Bromide): Effect of Asparagine and Temperature. **2015**, 36, 1134-1139		15
1028	Extraction of Cellulose Nanofibers from Cotton Linter and Their Composites. **2015**, 145-164		2
1027	Antimicrobial bacterial cellulose nanocomposites prepared by in situ polymerization of 2-aminoethyl methacrylate. *Carbohydrate Polymers*, **2015**, 123, 443-53	10.3	49
1026	Cellulosic Nanocomposites from Natural Fibers for Medical Applications: A Review. **2015**, 475-511		11
1025	High quality fluorescent cellulose nanofibers from endemic rice husk: isolation and characterization. *Carbohydrate Polymers*, **2015**, 122, 308-13	10.3	56
1024	Fabrication of cellulose-based aerogels from waste newspaper without any pretreatment and their use for absorbents. *Carbohydrate Polymers*, **2015**, 123, 150-6	10.3	107
1023	Design, characterization and preliminary in vitro evaluation of a mucoadhesive polymer based on modified pectin and acrylic monomers with potential use as a pharmaceutical excipient. *Carbohydrate Polymers*, **2015**, 121, 372-81	10.3	39
1022	Extraction of cellulose nanocrystals from plant sources for application as reinforcing agent in polymers. **2015**, 75, 176-200		280
1021	Mechanically reinforced chitosan/cellulose nanocrystals composites with good transparency and biocompatibility. **2015**, 33, 61-69		34
1020	Wet Explosion: a Universal and Efficient Pretreatment Process for Lignocellulosic Biorefineries. **2015**, 8, 1101-1116		68
1019	Extraction of cellulose nano-crystals from old corrugated container fiber using phosphoric acid and enzymatic hydrolysis followed by sonication. *Carbohydrate Polymers*, **2015**, 125, 360-6	10.3	126
1018	Preparation of cellulose nanofiber from softwood pulp by ball milling. **2015**, 22, 1729-1741		107
1017	Soy protein isolate/cellulose nanofiber complex gels as fat substitutes: rheological and textural properties and extent of cream imitation. **2015**, 22, 2619-2627		40
1016	Encyclopedia of Polymeric Nanomaterials. **2015**, 155-160		
1015	Wood microstructure â□A cellular composite. **2015**, 3-26		8
1014	Processing of wood for wood composites. **2015**, 27-45		5
1013	Anomalous scaling law of strength and toughness of cellulose nanopaper. **2015**, 112, 8971-6		203
1012	Green in-situ synthesized silver nanoparticles embedded in bacterial cellulose nanopaper as a bionanocomposite plasmonic sensor. **2015**, 74, 353-9		95

1011	Fabrication of nanostructured and microstructured chitin materials through gelation with suitable dispersion media. **2015**, 5, 12736-12746		46
1010	Encyclopedia of Polymeric Nanomaterials. **2015**, 1-12		
1009	Preparation of reactive fibre interfaces using multifunctional cellulose derivatives. *Carbohydrate Polymers*, **2015**, 132, 261-73	10.3	10
1008	Effects of processing on the properties of chitosan/cellulose nanocrystal films. *Carbohydrate Polymers*, **2015**, 133, 284-93	10.3	112
1007	Regenerated cellulose/multiwalled carbon nanotube composite films with efficient electric heating performance. *Carbohydrate Polymers*, **2015**, 133, 456-63	10.3	32
1006	Properties and Processing Relationship of Polyhydroxybutyrate and Cellulose Biocomposites. **2015**, 8, 807-813		24
1005	Cellulose Nanofiber for Eco-friendly Polymer Nanocomposites. **2015**, 323-365		5
1004	Multicomponent Polymer Composite/Nanocomposite Systems Using Polymer Matrices from Sustainable Renewable Sources. **2015**, 469-494		2
1003	PCL/PVA nanoencapsulated reinforcing fillers of steam exploded/autoclaved cellulose nanofibrils for tissue engineering applications. **2015**, 5, 23999-24008		27
1002	Green bionanocomposite based on kefiran and cellulose nanocrystals produced from beer industrial residues. **2015**, 77, 85-91		51
1001	Cellulose nanocrystals isolated from oil palm trunk. *Carbohydrate Polymers*, **2015**, 127, 202-8	10.3	120
1000	Rheological behavior of cellulose nanowhisker suspension under magnetic field. *Carbohydrate Polymers*, **2015**, 126, 240-7	10.3	21
999	Melt polycondensation to improve the dispersion of bacterial cellulose into polylactide via melt compounding: enhanced barrier and mechanical properties. **2015**, 22, 1201-1226		65
998	Vegetal fibers in polymeric composites: a review. **2015**, 25, 9-22		111
997	Biocellulose-based flexible magnetic paper. **2015**, 117, 17B734		21
996	Supramolecular Nanofibrillar Polymer Hydrogels. **2015**, 167-208		14
995	Novel nanocomposites based on fatty acid modified cellulose nanofibers/poly(lactic acid): Morphological and physical properties. **2015**, 5, 21-31		75
994	Electrospun Cellulose Composite Nanofibers. **2015**, 191-227		4

993	Mechanical, thermal and morphological characterization of cellulose fiber-reinforced phenolic foams. **2015**, 75, 367-372	46
992	Electrical and Optical Properties of Nanocellulose Films and Its Nanocomposites. **2015**, 395-432	1
991	Extraction and Characterization of Cellulose Nanofibers from Banana Plant. **2015**, 65-80	2
990	Sustainable Resource based Hyperbranched Epoxy Nanocomposite as an Infection Resistant, Biodegradable, Implantable Muscle Scaffold. **2015**, 3, 1136-1144	19
989	The effect of biomass bulk arrangements on the decomposition pathways in the torrefaction process. **2015**, 81, 679-684	15
988	Click chemistry route to covalently link cellulose and clay. **2015**, 22, 1615-1624	14
987	Poly(vinyl alcohol)/cellulose nanofibril hybrid aerogels with an aligned microtubular porous structure and their composites with polydimethylsiloxane. **2015**, 7, 7436-44	80
986	Consolidation and dewatering of a microfibrillated cellulose fiber composite paper in wet pressing. **2015**, 68, 585-591	12
985	Preparation and characterization of nanocellulose from beer industrial residues using acid hydrolysis/ultrasound. **2015**, 16, 529-536	54
984	A feasibility study on semi industrial nozzleless electrospinning of cellulose nanofiber. **2015**, 6, 193-211	11
983	Life cycle assessment of nanocellulose-reinforced advanced fibre composites. **2015**, 118, 154-162	57
982	The clouding phenomena of mixed surfactant (non-ionic Triton X-114 + cationic gemini 16-5-16) solutions: Influence of inorganic and organic additives on the cloud point. **2015**, 212, 237-244	49
981	Enhanced homogeneity and interfacial compatibility in melt-extruded cellulose nano-fibers reinforced polyethylene via surface adsorption of poly(ethylene glycol)- block -poly(ethylene) amphiphiles. **2015**, 72, 270-281	43
980	Encyclopedia of Polymeric Nanomaterials. **2015**, 118-124	0
979	Extraction and Characterization of Cellulosic Nanowhisker Obtained from Discarded Cotton Fibers. **2015**, 2, 1-7	28
978	Encyclopedia of Polymeric Nanomaterials. **2015**, 98-105	
977	Nanocelluloses from jute fibers and their nanocomposites with natural rubber: Preparation and characterization. **2015**, 81, 768-77	151
976	Heterogeneous modification of softwoods cellulose nanofibers with oleic acid: Effect of reaction time and oleic acid concentration. **2015**, 16, 1715-1722	19

975	Star Telechelic Poly(l-lactide) Ionomers. **2015**, 48, 6580-6588		25
974	Mechanical and thermal properties of sisal fiber reinforced acrylated epoxidized castor oil toughened diglycidyl ether of bisphenol A epoxy nanocomposites. **2015**, 34, 1476-1490		13
973	Hydrogels Nanocomposites Based on Crystals, Whiskers and Fibrils Derived from Biopolymers. **2015**, 43-71		11
972	Nanocellulose-based Translucent Diffuser for Optoelectronic Device Applications with Dramatic Improvement of Light Coupling. **2015**, 7, 26860-4		58
971	Preparation and characterization of epoxidized soybean oil-based paper composite as potential water-resistant materials. **2015**, 132, n/a-n/a		12
970	The role of soil properties and itâ interaction towards quality plant fiber: A review. **2015**, 43, 1006-1015		43
969	Rheological study of reinforcement of agarose hydrogels by cellulose nanowhiskers. *Carbohydrate Polymers*, **2015**, 116, 117-23	10.3	67
968	Basic effects of pulp refining on fiber properties--a review. *Carbohydrate Polymers*, **2015**, 115, 785-803	10.3	160
967	New developments in fiber hemp (Cannabis sativa L.) breeding. **2015**, 68, 32-41		156
966	Influence of the Additives on Clouding of Non-Ionic Surfactant Triton X-114 Solutions: Evaluation of Thermodynamics at the CP. **2015**, 36, 1569-1576		18
965	Isolation of micro- and nano-crystalline cellulose particles and fabrication of crystalline particles-loaded whey protein cold-set gel. **2015**, 174, 97-103		35
964	Production of cellulose nanofibrils from bleached eucalyptus fibers by hyperthermostable endoglucanase treatment and subsequent microfluidization. **2015**, 22, 351-361		85
963	Effect of Dextrose and Temperature on the Micellization of Cationic Gemini Surfactant (16-6-16). **2015**, 36, 1029-1035		23
962	A critical review on cellulose: From fundamental to an approach on sensor technology. **2015**, 41, 402-412		173
961	. **2016**,		1
960	Polymers Extracted from Biomass. **2016**,		0
959	Irradiation Pretreatment of Tropical Biomass and Biofiber for Biofuel Production. **2016**,		5
958	Preparation and characterization of nanofibrillated Cellulose/Poly (Vinyl Alcohol) composite films. **2016**, 0-0		5

957	Thermoplastic Starch (TPS)-Cellulosic Fibers Composites: Mechanical Properties and Water Vapor Barrier: A Review. **2016**,	12
956	Comparative Study of Microcelluloses Isolated From Two Different Biomasses with Commercial Cellulose. **2016**, 11,	3
955	Reinforcement of Poly (Lactic Acid) with Spray-dried Lignocellulosic Material. **2016**, 12,	1
954	Glycerine Treated Nanofibrillated Cellulose Composites. **2016**, 2016, 1-9	7
953	Using Commercial Enzymes to Produce Cellulose Nanofibers from Soybean Straw. **2016**, 2016, 1-10	56
952	Eggshell and Bacterial Cellulose Composite Membrane as Absorbent Material in Active Packaging. **2016**, 2016, 1-8	5
951	Functionalization of Cellulose Nanocrystals in Choline Lactate Ionic Liquid. **2016**, 9,	14
950	Nanocellulose-Based Polymeric Blends for Food Packaging Applications. **2016**, 205-252	13
949	Nanocellulose in Thin Films, Coatings, and Plies for Packaging Applications: A Review. **2016**, 12,	160
948	Enrichment of Cellulosic Waste Hemp (Cannabis sativa) Hurd into Non-Toxic Microfibres. **2016**, 9,	14
947	Investigation on Polylactide (PLA)/Poly(butylene adipate-co-terephthalate) (PBAT)/Bark Flour of Plane Tree (PF) Eco-Composites. **2016**, 9,	13
946	Green Composites Made of Bamboo Fabric and Poly (Lactic) Acid for Packaging Applications-A Review. **2016**, 9,	82
945	Modification and Potential Application of Short-Chain-Length Polyhydroxyalkanoate (SCL-PHA). **2016**, 8,	59
944	Characterization of Epoxy Composites Reinforced with Wax Encapsulated Microcrystalline Cellulose. **2016**, 8,	9
943	Water Susceptibility and Mechanical Properties of Thermoplastic StarchâPectin Blends Reactively Extruded with Edible Citric Acid. **2016**, 19, 138-142	11
942	Nanocellulose Produced from Rice Hulls and its Effect on the Properties of Biodegradable Starch Films. **2016**, 19, 167-174	52
941	Estudo da estabilidade tÍrmica e propriedades mecÂnicas de nanocompÓsitos de poliamida 6,6 com nanofibras de celulose. **2016**, 21, 898-905	1
940	Lignin-coated cellulose nanocrystals as promising nucleating agent for poly(lactic acid). **2016**, 126, 1243-1251	27

939	Synthesis of superhydrophobic ultralight aerogels from nanofibrillated cellulose isolated from natural reed for high-performance adsorbents. **2016**, 122, 1		29
938	Nanocellulose induces cellulase production in Trichoderma reesei. **2016**, 51, 1452-1457		8
937	Opportunities for Cellulose Nanomaterials in Packaging Films: A Review and Future Trends. **2016**, 4, 313-326		37
936	Biodegradation Properties of Bioplastic-Based Planting Pots. **2016**, 199-210		
935	Isolation of bacterial cellulose nanocrystalline from pineapple peel waste: Optimization of acid concentration in the hydrolysis method. **2016**,		3
934	COST-FP1105: Properties of PLA films reinforced with unmodified and acetylated freeze dried nanofibrillated cellulose. **2016**, 70, 1125-1134		8
933	A review on chitosan-cellulose blends and nanocellulose reinforced chitosan biocomposites: Properties and their applications. *Carbohydrate Polymers*, **2016**, 150, 216-26	10.3	305
932	Solvent resistance of 2,2,6,6-tetramethylpiperidine-1-oxyl (TEMPO) treated cellulose nanofiber film for flexible electronics. **2016**, 23, 1979-1987		17
931	Strategies for development and implementation of bio-based materials as effective renewable resources of energy: A comprehensive review on adsorbent technology. **2016**, 62, 654-664		40
930	Characterization of cellulose nanowhiskers extracted from alfa fiber and the effect of their dispersion methods on nanocomposite properties. **2016**, 30, 1899-1912		11
929	Transparent cellulose/polyhedral oligomeric silsesquioxane nanocomposites with enhanced UV-shielding properties. *Carbohydrate Polymers*, **2016**, 147, 171-177	10.3	25
928	The fast and effective isolation of nanocellulose from selected cellulosic feedstocks. *Carbohydrate Polymers*, **2016**, 148, 251-8	10.3	48
927	Nutrient capture and recycling by periphyton attached to modified agrowaste carriers. **2016**, 23, 8035-43		10
926	Engineered emulsions for obesity treatment. **2016**, 52, 90-97		22
925	A comprehensive review on modified clay based composite for energy based materials. **2016**, 61, 466-472		22
924	Characterization of nanocellulose recovery from Elaeis guineensis frond for sustainable development. **2016**, 18, 2503-2512		40
923	Evaluation of mixing efficiency in elaborating of chitosan/cellulose nanocomposite via statistical analyses. **2016**, 93, 703-711		7
922	Chlorine-Free Biomass Processing: Enzymatic Alternatives for Bleaching and Hydrolysis of Lignocellulosic Materials. **2016**, 241-268		

921	Cellulosic Graphene Biocomposites for Versatile High-Performance Flexible Electronic Applications. **2016**, 2, 1600245		35
920	Sonosynthesis of cellulose nanoparticles (CNP) from kenaf fiber: Effects of processing parameters. **2016**, 17, 1352-1358		16
919	Polysaccharide based bionanocomposites, properties and applications: A review. **2016**, 92, 1012-1024		115
918	Introduction for Nanomaterials and Nanocomposites: State of Art, New Challenges, and Opportunities. **2016**, 1-20		5
917	Nanocomposites Based on Cellulose, Hemicelluloses, and Lignin. **2016**, 391-424		3
916	Nanofibrillated cellulose as an additive in papermaking process: A review. *Carbohydrate Polymers*, **2016**, 154, 151-66	10.3	169
915	Overview of Cellulose Nanomaterials, Their Capabilities and Applications. **2016**, 68, 2383-2394		125
914	Nanocellulose prepared by acid hydrolysis of isolated cellulose from sugarcane bagasse. **2016**, 107, 012045		104
913	Evaluation of novel applications of cellulose hydrogel films reconstituted from acetate and chloride of 1-butyl-3-methylimidazolium by comparing their optical, mechanical, and adsorption properties. **2016**, 8, 108-117		10
912	Functionalized polyacrylonitrile-nanofiber based immunosensor for Vibrio cholerae detection. **2016** , 133,		15
911	Rheological behavior of highly loaded cellulose nanocrystal/poly(vinyl alcohol) composite suspensions. **2016**, 23, 3001-3012		19
910	Bamboo fiber at macro-, micro- and nanoscale for application as reinforcement. **2016**, 4, 41-52		9
909	Qualitative evaluation of microfibrillated cellulose using the crill method and some aspects of microscopy. **2016**, 23, 3611-3624		4
908	Microcrystalline cellulose: Isolation, characterization and bio-composites application-A review. **2016** , 93, 789-804		328
907	Nanotechnology in Agriculture. **2016**, 233-242		28
906	Novel pretreatment pathways for dissolution of lignocellulosic biomass based on ionic liquid and low temperature alkaline treatment. **2016**, 93, 194-200		43
905	Spray-Coated Halloysite-Epoxy Composites: A Means To Create Mechanically Robust, Vertically Aligned Nanotube Composites. **2016**, 8, 20396-406		20
904	Cellulose Microfibrils from Natural Fiber Reinforced Biocomposites and its Applications. **2016**, 55-95		

903	Viscoelastic characteristics of all cellulose suspension and nanocomposite. *Carbohydrate Polymers*, **2016**, 151, 119-129	10.3	16
902	High water-content thermoresponsive hydrogels via electrostatic macrocrosslinking of cellulose nanofibrils. **2016**, 54, 3415-3424		9
901	Effect of Additives on Self-Association and Clouding Phenomena of Various Surface-Active Drugs. **2016**, 1056-1070		1
900	Effect of Individualized Cellulose Fibrils on Properties of Poly(Methyl Methacrylate) Composites. **2016**, 55, 867-883		2
899	FILLERS â□ORIGIN, CHEMICAL COMPOSITION, PROPERTIES, AND MORPHOLOGY. **2016**, 13-266		15
898	Preparation of superhydrophobic coating with excellent abrasion resistance and durability using nanofibrillated cellulose. **2016**, 6, 106194-106200		18
897	Facile preparation and separation performances of cellulose nanofibrous membranes. **2016**, 133, n/a-n/a		17
896	Microfibrillated cellulose-reinforced nonedible starch-based thermoset biocomposites. **2016**, 133,		22
895	Characterizations of biodegradable epoxy-coated cellulose nanofibrils (CNF) thin film for flexible microwave applications. **2016**, 23, 1989-1995		11
894	Treatments of plant biomass for cementitious building materials â□A review. **2016**, 121, 161-176		67
893	Carbon nanotube/cellulose papers with high performance in electric heating and electromagnetic interference shielding. **2016**, 131, 77-87		90
892	Easy production of cellulose nanofibrils from corn stalk by a conventional high speed blender. **2016**, 93, 39-47		68
891	Cellulose and Other Capsular Polysaccharides of Acetic Acid Bacteria. **2016**, 299-320		2
890	Industrial and crop wastes: A new source for nanocellulose biorefinery. **2016**, 93, 26-38		194
889	Nanofibrillated cellulose/nanographite composite films. **2016**, 23, 2487-2500		8
888	Effect of homogenization (microfluidization) process parameters in mechanical production of micro- and nanofibrillated cellulose on its rheological and morphological properties. **2016**, 23, 1221-1238		64
887	Surface functionalization of nanofibrillated cellulose extracted from wheat straw: Effect of process parameters. *Carbohydrate Polymers*, **2016**, 150, 48-56	10.3	48
886	Isolation and characterization of cellulose nanofibers from bamboo using microwave liquefaction combined with chemical treatment and ultrasonication. *Carbohydrate Polymers*, **2016**, 151, 725-734	10.3	102

885	Comparison of the properties of periphyton attached to modified agro-waste carriers. **2016**, 23, 3718-26		5
884	A comparison of partially acetylated nanocellulose, nanocrystalline cellulose, and nanoclay as fillers for high-performance polylactide nanocomposites. **2016**, 133, n/a-n/a		63
883	Extraction and comparison of carboxylated cellulose nanocrystals from bleached sugarcane bagasse pulp using two different oxidation methods. *Carbohydrate Polymers*, **2016**, 138, 237-43	10.3	133
882	Characterization of nanocelluloses isolated from Ushar (Calotropis procera) seed fiber: Effect of isolation method. **2016**, 168, 146-150		74
881	Self-Association, Mixed Micellization, and Thermodynamic Studies of Sodium Dodecyl Sulfate (SDS) and Hexanediyl-1,6-Bis(Dimethylcetylammonium Bromide) (16-6-16). **2016**, 37, 1760-1766		6
880	Materials Research for Manufacturing. **2016**,		4
879	American Process: Production of Low Cost Nanocellulose for Renewable, Advanced Materials Applications. **2016**, 267-302		41
878	Antimicrobial Activity of Silver Ions Released from Zeolites Immobilized on Cellulose Nanofiber Mats. **2016**, 8, 3032-40		85
877	Microcrystalline-cellulose and polypropylene based composite: A simple, selective and effective material for microwavable packaging. *Carbohydrate Polymers*, **2016**, 142, 133-40	10.3	45
876	Influence of surface modified cellulose microfibrils on the improved mechanical properties of poly (lactic acid). **2016**, 84, 329-39		37
875	State of the art on tribological behavior of polymer matrix composites reinforced with natural fibers in the green materials world. **2016**, 19, 717-736		129
874	The Self-Association and Mixed Micellization of an Anionic Surfactant, Sodium Dodecyl Sulfate, and a Cationic Surfactant, Cetyltrimethylammonium Bromide: Conductometric, Dye Solubilization, and Surface Tension Studies. **2016**, 37, 1645-1654		29
873	Polyhydroxyalkanoates and Their Nanobiocomposites With Cellulose Nanocrystals. **2016**, 261-285		8
872	The thermal stability of nanocellulose and its acetates with different degree of polymerization. **2016**, 23, 451-464		40
871	Enhanced thermal and mechanical properties of epoxy composites by addition of hyperbranched polyglycerol grown on cellulose fibers. **2016**, 23, 1		9
870	Carbohydrate-Based Advanced Biomaterials for Food Sustainability: A Review. **2016**, 842, 182-195		7
869	StarchâPVA Nanocomposite Film Incorporated with Cellulose Nanocrystals and MMT: A Comparative Study. **2016**, 12, 37-48		56
868	Nanoindentation Measurements of Jute/Poly Lactic Acid Composites. **2016**, 139-154		2

867	In-situ modification of cellulose nanofibrils by organosilanes during spray drying. **2016**, 93, 129-135		18
866	Biomimetic composite scaffolds based on mineralization of hydroxyapatite on electrospun poly(e-caprolactone)/nanocellulose fibers. *Carbohydrate Polymers*, **2016**, 143, 270-8	10.3	68
865	Transport of microorganisms into cellulose nanofiber mats. **2016**, 6, 24438-24445		26
864	The Micellization and Clouding Phenomena of a Nonionic Surfactant, Poly(ethylene glycol) t-octylphenyl ether (Triton X-100): Effect of (Chloride Salt) Electrolytes. **2016**, 37, 1287-1293		18
863	Double emulsions for the compatibilization of hydrophilic nanocellulose with non-polar polymers and validation in the synthesis of composite fibers. **2016**, 12, 2721-8		21
862	Bifunctional graphene oxideâ□ellulose nanofibril aerogel loaded with Fe(III) for the removal of cationic dye via simultaneous adsorption and Fenton oxidation. **2016**, 6, 19819-19825		58
861	Fabrication of silk fibroin/cellulose whiskersâ□hitosan composite porous scaffolds by layer-by-layer assembly for application in bone tissue engineering. **2016**, 51, 4399-4410		36
860	Effects of Drying Strategies and Microfibrillated Cellulose Fiber Content on the Properties of Foam-Formed Paper. **2016**, 36, 235-249		13
859	Characterization of cellulose nanofiber sheets from different refining processes. **2016**, 23, 403-414		33
858	Application of cellulose acetate fibrous membranes in the removal of micro- and submicron solid particulates in drinking water media. **2016**, 57, 15676-15686		3
857	Xyloglucan-Functional Latex Particles via RAFT-Mediated Emulsion Polymerization for the Biomimetic Modification of Cellulose. **2016**, 17, 1414-24		35
856	Thermodynamic and micellization studies of a cationic gemini surfactant 16-6-16: Influence of ascorbic acid and temperature. **2016**, 78, 9-14		8
855	Cellulose Nanocrystals from Forest Residues as Reinforcing Agents for Composites: A Study from Macro- to Nano-Dimensions. *Carbohydrate Polymers*, **2016**, 139, 139-49	10.3	104
854	Review: nanocelluloses as versatile supports for metal nanoparticles and their applications in catalysis. **2016**, 18, 622-637		394
853	Surface modification of cellulose nanofibers with alkenyl succinic anhydride for high-density polyethylene reinforcement. **2016**, 83, 72-79		82
852	Hierarchically structured MFI zeolite monolith prepared using agricultural waste as solid template. **2016**, 221, 23-31		12
851	Processing of wood-based microfibrillated cellulose and nanofibrillated cellulose, and applications relating to papermaking: a review. **2016**, 23, 93-123		231
850	Property tuning of poly(lactic acid)/cellulose bio-composites through blending with modified ethylene-vinyl acetate copolymer. *Carbohydrate Polymers*, **2016**, 137, 515-524	10.3	32

849	Surface modification of cellulose nanofibrils by maleated styrene block copolymer and their composite reinforcement application. **2016**, 23, 519-528		19
848	The Micellization and Clouding of Nonionic Surfactant, Poly(Ethylene Glycol) t-Octylphenyl Ether (Triton X-100): Effect of Halide Ions of (Sodium Salt) Electrolytes. **2016**, 37, 1385-1394		15
847	Mechanical characterization of scalable cellulose nano-fiber based composites made using liquid composite molding process. **2016**, 84, 277-284		53
846	Role of Cloud Point of the Capping Agent (Nonionic Surfactant, Triton X-100) on the Synthesis of Silver Nanoparticles. **2016**, 37, 853-859		10
845	An environmentally friendly method for the isolation of cellulose nano fibrils from banana rachis fibers. **2017**, 87, 81-90		9
844	Effect of (chloride salt) electrolytes on the mixed micellization of (equimolar) a cationic gemini (dimeric) surfactant and a cationic conventional (monomeric) surfactant. **2017**, 38, 303-308		13
843	Micellization and mixed micellization of cationic gemini (dimeric) surfactants and cationic conventional (monomeric) surfactants: Conductometric, dye solubilization, and surface tension studies. **2017**, 38, 280-287		18
842	Physical Study of the Primary and Secondary Photothermal Events in Gold/Cellulose Nanocrystals (AuNP/CNC) Nanocomposites Embedded in PVA Matrices. **2017**, 5, 1601-1609		25
841	Bacterial Nano-Cellulose Triboelectric Nanogenerator. **2017**, 33, 130-137		142
840	Recent progress in cellulose nanocrystals: sources and production. **2017**, 9, 1763-1786		545
839	Rheological and Thermo-Mechanical Properties of Poly(lactic acid)/Lignin-Coated Cellulose Nanocrystal Composites. **2017**, 5, 1711-1720		113
838	Characterization of Nanocellulose Using Small-Angle Neutron, X-ray, and Dynamic Light Scattering Techniques. **2017**, 121, 1340-1351		86
837	Wheat straw hemicelluloses added with cellulose nanocrystals and citric acid. Effect on film physical properties. *Carbohydrate Polymers*, **2017**, 164, 317-324	10.3	68
836	Production of poly-hydroxyalkanoate as secondary metabolite with main focus on sustainable energy. **2017**, 72, 95-104		32
835	Additive Manufacturing of Cellulosic Materials with Robust Mechanics and Antimicrobial Functionality. **2017**, 2, 1600084		71
834	POSS fernlike structure as a support for TiO2 nanoparticles in fabrication of superhydrophobic polymer-based nanocomposite surfaces. **2017**, 520, 514-521		14
833	Composite fibers prepared from multi-walled carbon nanotubes/cellulose dispersed/dissolved in ammonium/dimethyl sulfoxide mixed solvent. **2017**, 7, 2186-2192		17
832	Coupling Agent Usage in the Preparation of Cellulose Nanofibril (CNF)- and Cellulose Nanocrystal (CNC)-Based Nanocomposites. **2017**, 335-364		

831	Dynamic Mechanical Characterization of Cellulose Nanofibril CNF- and Cellulose Nanocrystal CNC-Based Nanocomposites. **2017**, 445-479		
830	Surface Modification of Nanocellulose. **2017**, 101-122		13
829	Thermoplastic Cellulose Nanocomposites. **2017**, 175-216		
828	Thermoset Cellulose Nanocomposites: Flammability Characteristics. **2017**, 235-272		2
827	Cellulosic Biocomposites: Potential Materials for Future. **2017**, 69-100		12
826	Methods for Extraction of Nanocellulose from Various Sources. **2017**, 1-49		61
825	Self-healing green composites based on soy protein and microfibrillated cellulose. **2017**, 143, 22-30		29
824	Steady-shear and viscoelastic properties of cellulose nanofibrilâ□anoclay dispersions. **2017**, 24, 1815-1824		14
823	Cellulose nanofibril nanopapers and bioinspired nanocomposites: a review to understand the mechanical property space. **2017**, 5, 16003-16024		153
822	Characterization of Individual Hydrogen Bonds in Crystalline Regenerated Cellulose Using Resolved Polarized FTIR Spectra. **2017**, 2, 1469-1476		61
821	Mechanical reinforcement of gelatin hydrogel with nanofiber cellulose as a function of percolation concentration. **2017**, 103, 226-233		49
820	Preparation and evaluation of polyurethane/cellulose nanowhisker bimodal foam nanocomposites for osteogenic differentiation of hMSCs. *Carbohydrate Polymers*, **2017**, 171, 281-291	10.3	38
819	The effect of pre-treatment on the production of lignocellulosic nanofibers and their application as a reinforcing agent in paper. **2017**, 24, 2605-2618		25
818	Ultrastrong and Bioactive Nanostructured Bio-Based Composites. **2017**, 11, 5148-5159		109
817	Polysaccharide nanocrystals as fillers for PLA based nanocomposites. **2017**, 24, 447-478		96
816	Reinforcement of natural rubber latex using lignocellulosic nanofibers isolated from spinifex grass. **2017**, 9, 9510-9519		42
815	Contribution of Residual Proteins to the Thermomechanical Performance of Cellulosic Nanofibrils Isolated from Green Macroalgae. **2017**, 5, 6978-6985		18
814	Exploration of permeability and antifouling performance on modified cellulose acetate ultrafiltration membrane with cellulose nanocrystals. *Carbohydrate Polymers*, **2017**, 174, 190-199	10.3	53

813	Bacterial Nanocellulose Applications for Tissue Engineering. **2017**, 47-66		2
812	An overview on cellulose-based material in tailoring bio-hybrid nanostructured photocatalysts for water treatment and renewable energy applications. **2017**, 103, 1232-1256		95
811	Nanocellulose in Sensing and Biosensing. **2017**, 29, 5426-5446		240
810	Extraction, isolation and characterization of nanocrystalline cellulose from industrial kelp (Laminaria japonica) waste. *Carbohydrate Polymers*, **2017**, 173, 353-359	10.3	58
809	Nanocomposites based on banana starch reinforced with cellulose nanofibers isolated from banana peels. **2017**, 505, 154-167		99
808	Nanocellulose as a green and sustainable emerging material in energy applications: a review. **2017**, 28, 1583-1594		32
807	Polyethylene cellulose nanofibrils nanocomposites. *Carbohydrate Polymers*, **2017**, 173, 50-56	10.3	34
806	Topochemistry of cellulose nanofibers resulting from molecular and polymer grafting. **2017**, 24, 2139-2152		11
805	Improving the mechanical properties of CNF films by NMMO partial dissolution with hot calender activation. **2017**, 24, 1691-1704		12
804	Reusable Cellulose-Based Hydrogel Sticker Film Applied as Gate Dielectric in Paper Electrolyte-Gated Transistors. **2017**, 27, 1606755		66
803	Coconut shell powder reinforced thermoplastic polyurethane/natural rubber blend-composites: effect of silane coupling agents on the mechanical and thermal properties of the composites. **2017**, 52, 6712-6725		38
802	Evaluation of Microwave Activity on Starch-Based Nanocomposites Reinforced at Different Loading Fraction Organic-to-Inorganic Nanofillers. **2017**, 56, 1043-1058		
801	Review of Nanocellulose Polymer Composite Characteristics and Challenges. **2017**, 56, 687-731		56
800	Stability enhancement of nanofibrillated cellulose in electrolytes through grafting of 2-acrylamido-2-methylpropane sulfonic acid. **2017**, 24, 731-738		25
799	Chemical and plasma surface modification of lignocellulose coconut waste for the preparation of advanced biobased composite materials. *Carbohydrate Polymers*, **2017**, 159, 48-57	10.3	54
798	Physicochemical characterization of high-quality bacterial cellulose produced by Komagataeibacter sp. strain W1 and identification of the associated genes in bacterial cellulose production. **2017**, 7, 45145-45155		28
797	Quantitative investigations of xylose and arabinose substituents in hydroxypropylated and hydroxyvinylethylated arabinoxylans. *Carbohydrate Polymers*, **2017**, 175, 671-678	10.3	1
796	Preparation and characterization of poly(ethylene 2,5-furandicarboxylate/nanocrystalline cellulose composites via solvent casting. **2017**, 37, 869-878		19

795	Marine Applications of Natural Fibre-Reinforced Composites: A Manufacturing Case Study. **2017**, 21-47		13
794	Nanocelluloses: Science and Technology. **2017**, 1-24		
793	Organic electrolyte solutions as versatile media for the dissolution and regeneration of cellulose. **2017**, 19, 4754-4768		32
792	Reinforcement effect of poly (methyl methacrylate)-g-cellulose nanofibers on LDPE/thermoplastic starch composites: preparation and characterization. **2017**, 26, 733-742		12
791	doGlycans-Tools for Preparing Carbohydrate Structures for Atomistic Simulations of Glycoproteins, Glycolipids, and Carbohydrate Polymers for GROMACS. **2017**, 57, 2401-2406		44
790	Application of Chitin/Chitosan and Its Derivatives as Adsorbents, Coagulants, and Flocculants. **2017**, 453-487		11
789	Cellulose-Nanofiber-Enabled 3D Printing of a Carbon-Nanotube Microfiber Network. **2017**, 1, 1700222		89
788	Review of recent research on flexible multifunctional nanopapers. **2017**, 9, 15181-15205		99
787	Extraction and modification of cellulose nanofibers derived from biomass for environmental application. **2017**, 7, 42750-42773		95
786	Nanocellulose as a sustainable biomass material: structure, properties, present status and future prospects in biomedical applications. **2017**, 9, 14758-14781		150
785	Heteropoly acid supported on silicaliteâ possesing intracrystalline nanovoids prepared using biomass â an efficient and recyclable catalyst for esterification of levulinic acid. **2017**, 547, 237-247		26
784	One-Step Production of Amphiphilic Nanofibrillated Cellulose Using a Cellulose-Producing Bacterium. **2017**, 18, 3432-3438		17
783	Biomimetic adsorption of zwitterionicâxyloglucan block copolymers to CNF: towards tailored super-absorbing cellulose materials. **2017**, 7, 14947-14958		12
782	Preparation of Chitin-Based Nanocomposite Materials Through Gelation with Ionic Liquid. **2017**, 97-120		2
781	Enhancement in physicochemical properties of citric acid/nano SiO2 treated sustainable wood-starch nanocomposites. **2017**, 24, 4263-4274		5
780	A comparative study of green composites based on tapioca starch and celluloses. **2017**,		0
779	Environmental and technical feasibility of cellulose nanocrystal manufacturing from sugarcane bagasse. *Carbohydrate Polymers*, **2017**, 175, 518-529	10.3	37
778	Hydrophobic and porous cellulose nanofibrous screen for efficient particulate matter (PM2.5) blocking. **2017**, 50, 405304		4

777	Effect of preparation process of microfibrillated cellulose-reinforced polypropylene upon dispersion and mechanical properties. **2017**, 24, 3789-3801		15
776	Development of Optimized Edible Packaging Based on White-cheek Shark (Carcharhinus dussumieri) Skin Gelatin Biopolymer: Mechanical, Water Vapor Permeability, and Structural Properties. **2017**, 26, 1244-1258		1
775	Synthesis and characterization of cellulose from locally available rice straw. **2017**,		17
774	Effect of carboxylic acid groups on the supercapacitive performance of functional carbon frameworks derived from bacterial cellulose. **2017**, 28, 2212-2218		11
773	Woven hybrid Biocomposite: Mechanical properties of woven kenaf bast fibre/oil palm empty fruit bunches hybrid reinforced poly hydroxybutyrate biocomposite as non-structural building materials. **2017**, 154, 155-166		33
772	Lignocellulosic Fibers Composites: An Overview. **2017**, 293-308		1
771	Fibers from Natural Resources. **2017**, 287-309		2
770	Surface Functionalization Through Vapor-Phase-Assisted Surface Polymerization (VASP) on Natural Materials from Agricultural By-Products. **2017**, 355-377		
769	High-performance N-doped MWCNT/GO/cellulose hybrid composites for supercapacitor electrodes. **2017**, 7, 49799-49809		8
768	WtF-Nano: One-Pot Dewatering and Water-Free Topochemical Modification of Nanocellulose in Ionic Liquids or δ-Valerolactone. **2017**, 10, 4879-4890		10
767	The plant cell-wall enzyme AtXTH3 catalyses covalent cross-linking between cellulose and cello-oligosaccharide. **2017**, 7, 46099		44
766	Preparation and crystallization behavior of poly(ethylene 2,5-furandicarboxylate)/cellulose composites by twin screw extrusion. *Carbohydrate Polymers*, **2017**, 174, 1026-1033	10.3	18
765	A Simple Approach to Prepare Carboxycellulose Nanofibers from Untreated Biomass. **2017**, 18, 2333-2342		92
764	Periphyton. **2017**, 225-249		1
763	Synthesis of bacterial cellulose and bacterial cellulose nanocrystals for their applications in the stabilization of olive oil pickering emulsion. **2017**, 72, 127-135		117
762	Green Biocomposites. **2017**,		11
761	Nanocrystalline cellulose extracted from pine wood and corncob. *Carbohydrate Polymers*, **2017**, 157, 1577-1585	10.3	81
760	Effects of Cellulose Nanofibers Filling and Palmitic Acid Emulsions Coating on the Physical Properties of Fish Gelatin Films. **2017**, 12, 23-32		26

759	Nanocellulose in packaging: Advances in barrier layer technologies. **2017**, 95, 574-582		195
758	Rheology of cellulose nanofibrils/silver nanowires suspension for the production of transparent and conductive electrodes by screen printing. **2017**, 394, 160-168		46
757	Isolation and characterization of cellulose nanofibers from cassava root bagasse and peelings. *Carbohydrate Polymers*, **2017**, 157, 962-970	10.3	86
756	Carbonized cellulose paper as an effective interlayer in lithium-sulfur batteries. **2017**, 396, 637-643		65
755	Engineering nanocomposite membranes: Addressing current challenges and future opportunities. **2017**, 401, 1-15		66
754	Miscanthus Giganteus: A commercially viable sustainable source of cellulose nanocrystals. *Carbohydrate Polymers*, **2017**, 155, 230-241	10.3	60
753	Magnetic cellulose/Ag as a novel eco-friendly nanobiocomposite to catalyze synthesis of chromene-linked nicotinonitriles. *Carbohydrate Polymers*, **2017**, 156, 259-267	10.3	123
752	Thermal properties and crystallinity of PCL/PBSA/cellulose nanocrystals grafted with PCL chains. **2017**, 134,		17
751	Development and material properties of poly(lactic acid)/poly(3-hydroxybutyrate-coâ-hydroxyvalerate)-based nanocrystalline cellulose nanocomposites. **2017**, 134,		4
750	Mechanical and drug release properties of alginate beads reinforced with cellulose. **2017**, 134,		24
749	Preparation, Characterization and Antimicrobial Activity of Sodium Alginate Nanobiocomposite Films Incorporated with ε-Polylysine and Cellulose Nanocrystals. **2017**, 41, e13120		14
748	Aerogel preparation from short cellulose nanofiber of the Eucalyptus species. **2017**, 53, 503-512		9
747	Enhancements in crystallinity, thermal stability, tensile modulus and strength of sisal fibres and their PP composites induced by the synergistic effects of alkali and high intensity ultrasound (HIU) treatments. **2017**, 34, 729-742		60
746	Aminated Cellulose Nanofibers for Selective Removal of Endotoxins from Protein Solutions. **2017**, 46, 194-196		4
745	Producing aerogels from silanized cellulose nanofiber suspension. **2017**, 24, 769-779		52
744	Nanocellulose-based membranes for CO2 capture. **2017**, 522, 216-225		65
743	Bionanomaterial from agricultural waste and its application. **2017**, 45-88		4
742	Biomass nanofibrillar cellulose in nanocomposites. **2017**, 305-326		0

741	Nanocellulose. **2017**, 261-276	27
740	Effects of Fructose and Temperature on the Micellization of a Cationic Gemini Surfactant, Pentanediyl-1,5-bis(dimethylcetylammonium) Bromide in Aqueous Solutions. **2017**, 91, 2518-2524	1
739	The Synthesis of a Chemical Stimuli Nanowhiskers of Cellulose (CNWs) Composite Hydrogel. **2017**, 269, 012043	
738	Design of green laminated composites from agricultural biomass. **2017**, 291-311	1
737	Biodegradable polymernanocomposites for packaging applications. **2017**, 329-363	6
736	Chemical Treatment of Waste Abaca for Natural Fiber-Reinforced Geopolymer Composite. **2017**, 10,	47
735	Preparation and Characterization of Cellulose Nanocrystals from the Bio-ethanol Residuals. **2017**, 7,	38
734	Spectroscopy and microscopy of microfibrillar and nanofibrillar composites. **2017**, 279-299	2
733	Aplicaciones biomdicas de biomateriales polimfricos. **2017**, 84, 241	4
732	Nanofibrillated cellulose reinforcement in thermoset polymer composites. **2017**, 1-24	6
731	Recent advances in nanocellulose-based polymer nanocomposites. **2017**, 89-112	9
730	Cellulose-Based Smart Fluids under Applied Electric Fields. **2017**, 10,	23
729	Production of Nanocellulose. **2017**, 41-67	1
728	Applications. **2017**, 105-212	
727	Extraction and Characterization of Microfibers Obtained from Banana Waste. **2017**,	2
726	Nanofibrillated cellulose as an additive in papermaking process. **2017**, 153-173	3
725	Regiocontroll synthesis cellulose-graft-polycaprolactone copolymer (2,3-di-O-PCL-cellulose) by a new route. **2017**, 11, 991-1002	3
724	Nanocellulose: a promising material for engineering - an overview. **2017**, 8, 71	6

723	PHBV/cellulose nanofibrils composites obtained by solution casting and electrospinning process. **2017**, 22,		8
722	Nanocellulose as a template for the production of advanced nanostructured material. **2017**, 427-454		3
721	Synthesis and Characterization of Nanocrystalline Cellulose Derived from Pineapple Peel Residues. **2017**, 5, 271-279		16
720	Study of the structure/property relationship of nanomaterials for development of novel food packaging. **2017**, 265-294		1
719	Natural fibers for hydrogels production and their applications in agriculture. **2017**, 66, 495-505		10
718	Rice Straw Extracted Cellulose Biocompatible Nanofiber. **2017**, 6, 1-20		
717	Naturally-derived biopolymer nanocomposites: Interfacial design, properties and emerging applications. **2018**, 125, 1-41		130
716	Development of high throughput, high precision synthesis platforms and characterization methodologies for toxicological studies of nanocellulose. **2018**, 25, 2303-2319		32
715	Cellulose nanofiber board. *Carbohydrate Polymers*, **2018**, 187, 133-139	10.3	21
714	Fabrication of (PPC/NCC)/PVA composites with inner-outer double constrained structure and improved glass transition temperature. *Carbohydrate Polymers*, **2018**, 191, 35-43	10.3	11
713	Rheology of the cellulose nanocrystals filled poly(ε-caprolactone) biocomposites. **2018**, 140, 167-178		30
712	Advances in cellulose nanomaterials. **2018**, 25, 2151-2189		221
711	The Influence of Electrolytes on the Mixed Micellization of Equimolar (Monomeric and Dimeric) Surfactants. **2018**, 92, 185-190		2
710	Electrospun nanofiber reinforced composites: a review. **2018**, 9, 2685-2720		336
709	Incorporation of microfibrillated cellulose into collagen-hydroxyapatite scaffold for bone tissue engineering. **2018**, 115, 385-392		36
708	Fiber reinforcement of hydrophilic materials for a low-torque shaft seal in water environment. **2018** , 4, 17-00590-17-00590		2
707	PEG-template for surface modification of zeolite: A convenient material to the design of polypropylene based composite for packaging films. **2018**, 9, 71-77		13
706	Low-Cost, Sustainable, and Environmentally Sound Cellulose Absorbent with High Efficiency for Collecting Methane Bubbles from Seawater. **2018**, 6, 6370-6377		19

705	Mechanical properties of polyamide 11 reinforced with cellulose nanofibres from Triodia pungens. **2018**, 25, 2367-2380		8
704	Evaluation of hybrid-short-coir-fibre-reinforced composites via full factorial design. **2018**, 202, 313-323		25
703	Direct mechanical production of wood nanofibers from raw wood microparticles with no chemical treatment. **2018**, 115, 26-31		29
702	Mechanical and thermal properties of modified red mud-reinforced phenolic foams. **2018**, 67, 528-534		12
701	Combining ex-ante LCA and EHS screening to assist green design: A case study of cellulose nanocrystal foam. **2018**, 178, 494-506		18
700	Bionanocomposites for Packaging Applications. **2018**,		8
699	Poly(lactic acid)/Cellulose Composites Obtained from Modified Cotton Fibers by Successive Acid Hydrolysis. **2018**, 26, 3149-3158		11
698	Lignocellulosic Composite Materials. **2018**,		5
697	Mechanical and Thermal Properties of Less Common Natural Fibres and Their Composites. **2018**, 177-213		1
696	Design and Fabrication of Kenaf Fibre Reinforced Polymer Composites for Portable Laptop Table. **2018**, 323-356		3
695	Preparation of acetylated nanofibrillated cellulose from corn stalk microcrystalline cellulose and its reinforcing effect on starch films. **2018**, 111, 959-966		13
694	Fabrication and characterization of cellulose nanofibrils/epoxy nanocomposite foam. **2018**, 53, 4949-4960		15
693	Lignocellulosic Materials of Brazilâ□□their Characterization and Applications in Polymer Composites and Art Works. **2018**, 1-96		3
692	Preparation of transparent cellulose film with controlled haze using halloysite nanotubes. **2018**, 25, 1239-1248		12
691	Reuse of Selected Lignocellulosic and Processed Biomasses as Sustainable Sources for the Fabrication of Nanocellulose via Ni(II)-Catalyzed Hydrolysis Approach: A Comparative Study. **2018**, 26, 2825-2844		13
690	Nanocrystalline cellulose as an eco-friendly reinforcing additive to polyurethane coating for augmented anticorrosive behavior. *Carbohydrate Polymers*, **2018**, 183, 311-318	10.3	29
689	Graphitic carbon nitride embedded in hot-melt adhesive polyester and hydrophilic cellulose blend fibers for the efficient elimination of antibiotics under solar irradiation. **2018**, 453, 110-119		16
688	Production of cellulose nanofibers from Aspen and Bode chopsticks using a high temperature and high pressure steam treatment combined with milling. *Carbohydrate Polymers*, **2018**, 194, 303-310	10.3	17

687	On the use of acrylated epoxidized soybean oil as a reactive compatibilizer in injection-molded compostable pieces consisting of polylactide filled with orange peel flour. **2018**, 67, 1341-1351		22
686	Polyvinyl alcohol reinforced with crystalline nanocellulose for 3D printing application. **2018**, 15, 236-244		34
685	Hybrid composites based on sisal fibers and silica nanoparticles. **2018**, 39, 146-156		16
684	Hydrogels of poly(2-hydroxyethyl methacrylate) reinforced with nanocrystalline cellulose as candidates for biomaterials. **2018**, 39, E278-E285		7
683	Alkaline Delignification of Cactus Fibres for Pulp and Papermaking Applications. **2018**, 26, 798-806		10
682	Extraction and Characterization of Nanocrystalline Cellulose from Cassava Bagasse. **2018**, 26, 789-797		17
681	Effects of fiber-surface modification on the properties of bamboo flour/polypropylene composites and their interfacial compatibility. **2018**, 38, 157-166		5
680	Development of nanocellulose-reinforced PLA nanocomposite by using maleated PLA (PLA-g-MA). **2018**, 31, 1090-1101		33
679	Combined approaches to obtain cellulose nanocrystals, nanofibrils and fermentable sugars from elephant grass. *Carbohydrate Polymers*, **2018**, 180, 38-45	10.3	30
678	Functionalized cellulose nanocrystals as reinforcement in biodegradable polymer nanocomposites. **2018**, 39, E9-E29		73
677	Green Synthesis of Copper-Reinforced Cellulose Nanocomposites for Packaging Applications. **2018**, 179-189		4
676	In vitro cytocompatibility of chitosan/PVA/methylcellulose â□Nanocellulose nanocomposites scaffolds using L929 fibroblast cells. **2018**, 449, 574-583		37
675	Progress in the research and applications of natural fiber-reinforced polymer matrix composites. **2018**, 25, 835-846		24
674	Isolation of nanocrystalline cellulose from rice straw and preparation of its biocomposites with chitosan: Physicochemical characterization and evaluation of interfacial compatibility. **2018**, 154, 8-17		67
673	Mechanisms contributing to mechanical property changes in composites of polypropylene reinforced with spray-dried cellulose nanofibrils. **2018**, 25, 439-448		22
672	The potential of tailoring the conditions of steam explosion to produce xylo-oligosaccharides from sugarcane bagasse. **2018**, 250, 221-229		36
671	. **2018**,		7
670	Construction of cost effective homebuilt spin coater for coating amylose-amylopectin thin films. **2018**, 9, 279		1

669	Multiple Factor Analysis on Preparation of Cellulose Nanofiber by Ball Milling from Softwood Pulp. **2018**, 13,	5
668	Green Resins from Plant Sources and Strengthening Mechanisms. **2018**, 11-55	1
667	Surface modification of cellulose nanocrystals with different acid anhydrides for improved dispersion in poly(butylene succinate).. **2018**, 8, 38305-38314	12
666	Surface functionalisation of microfibrillated cellulose (MFC) of cocoa pod husk with Methacryloxypropyltrimethoxysilane (MPS). **2018**, 5, 22000-22009	3
665	Production of nanocellulose from lime residues using chemical-free technology. **2018**, 5, 11095-11100	11
664	A Brief Review of Jute Fibre and Its Composites. **2018**, 5, 28427-28437	49
663	Biomaterial from Oil Palm Waste: Properties, Characterization and Applications. **2018**,	23
662	. **2018**,	5
661	Nanocellulose-Based Composites in Biomedical Applications. **2018**, 369-401	1
660	Cellulose Nanofibers: Electrospinning and Nanocellulose Self-Assemblies. **2018**, 67-95	11
659	Nanocellulose, a Versatile Green Platform: From Biosources to Materials and Their Applications. **2018**, 118, 11575-11625	578
658	Specialty Application of Functional Biopolymers. **2018**, 1-48	
657	Dynamic Mechanical Properties of Hemp Nanofibre Reinforced Epoxy Composite. **2018**, 455, 012013	1
656	Fiber-Reinforced Composites. **2018**, 1-30	
655	Applications of cellulose nanomaterials in pharmaceutical science and pharmacology. **2018**, 12, 768-780	16
654	Mechanical, thermal, and water vapor barrier properties of regenerated cellulose/nano-SiO2 composite films. **2018**, 25, 7153-7165	20
653	Co-Production of Cellulose Nanocrystals and Fermentable Sugars Assisted by Endoglucanase Treatment of Wood Pulp. **2018**, 11,	18
652	New organic-inorganic hybrid composites based on cellulose nanofibers and modified Laponite. **2018**, 7, 327-334	3

651	A review of extractions of seaweed hydrocolloids: Properties and applications. **2018**, 12, 296-317	69
650	Review of Cellulose Smart Material: Biomass Conversion Process and Progress on Cellulose-Based Electroactive Paper. **2018**, 6, 1-25	17
649	A Novel Approach for the Preparation of Poly(Butylene Succinate) Microparticles. **2018**, 381, 1800118	5
648	Examining the efficiency of mechanic/enzymatic pretreatments in micro/nanofibrillated cellulose production. **2018**, 0-0	4
647	Synergistic Effect of Hybridized Cellulose Nanocrystals and Organically Modified Montmorillonite on Carrageenan Bionanocomposites. **2018**, 8,	15
646	Investigations on short coir fibreâreinforced composites via full factorial design. **2018**, 26, 391-399	15
645	Cellulose defibrillation and functionalization by plasma in liquid treatment. **2018**, 8, 15473	27
644	Novel protein-repellent and antimicrobial polysaccharide multilayer thin films. **2018**, 73, 93-103	6
643	Thorium adsorption by oxidized biochar fibres derived from Luffa cylindrica sponges. **2018**, 317, 1065-1070	9
642	Preparation of poly (propylene carbonate)/graphite nanoplates-spherical nanocrystal cellulose composite with improved glass transition temperature and electrical conductivity. **2018**, 168, 63-73	18
641	Influences of saccharides types and initial glucose concentration on microbial cellulose production by G. xylinus. **2018**, 9, 174	1
640	Extraction and characterization of nanocellulose from sugarcane bagasse by ball-milling-assisted acid hydrolysis. **2018**,	15
639	Influence of the Lignin Content on the Properties of Poly(Lactic Acid)/lignin-Containing Cellulose Nanofibrils Composite Films. **2018**, 10,	25
638	Mesoporous titania films templated by cellulose nanocrystals: morphological and spectrophotometric properties. **2018**, 25, 6591-6602	4
637	Effects of hydrogen bonding on starch granule dissolution, spinnability of starch solution, and properties of electrospun starch fibers. **2018**, 153, 643-652	22
636	Improved Cellulose Nanofibril Dispersion in Melt-Processed Polycaprolactone Nanocomposites by a Latex-Mediated Interphase and Wet Feeding as LDPE Alternative. **2018**, 1, 2669-2677	21
635	A systematic literature review on less common natural fibres and their biocomposites. **2018**, 195, 240-267	65
634	Fabrication and cytotoxicity assessment of cellulose nanofibrils using Bassia eriophora biomass. **2018**, 117, 911-918	15

633	Preparation and characterization of cellulose/N,N'-methylene bisacrylamide/graphene oxide hybrid hydrogels and aerogels. *Carbohydrate Polymers*, **2018**, 196, 289-298	10.3	33
632	Sugarcane bagasse fiber and its cellulose nanocrystals for polymer reinforcement and heavy metal adsorbent: a review. **2018**, 25, 4303-4330		56
631	Characteristics of cellulose extracted from Josapine pineapple leaf fibre after alkali treatment followed by extensive bleaching. **2018**, 25, 4407-4421		37
630	Nanocellulose: Extraction and application. **2018**, 1, 32-43		350
629	All-cellulose composites based on the self-reinforced effect. **2018**, 9, 42-53		35
628	Assessment the performance and morphological structures of asymmetric PES/surfactant membranes for nanofiltration of dyes wastewater. **2018**, 9, 137		2
627	Characterization of pulp derived nanocellulose hydrogels using AVAP® technology. *Carbohydrate Polymers*, **2018**, 198, 270-280	10.3	24
626	Cellulose-Based Hydrogel for Industrial Applications. **2018**, 1-41		1
625	Natural fiber reinforced vinyl polymer composites. **2018**, 27-70		13
624	Recent Strategies in Preparation of Cellulose Nanocrystals and Cellulose Nanofibrils Derived from Raw Cellulose Materials. **2018**, 2018, 1-25		92
623	Green Nanotechnology for Biomedical, Food, and Agricultural Applications. **2018**, 1-18		1
622	Cellulose crystals plastify by localized shear. **2018**, 115, 7260-7265		25
621	Ester Crosslinking Enhanced Hydrophilic Cellulose Nanofibrils Aerogel. **2018**, 6, 11979-11988		30
620	Incorporation of Filler/Additives in Polymer Gel for Advanced Application. **2018**, 445-492		1
619	Electrochemical immunosensor based on magnetite nanoparticles incorporated electrospun polyacrylonitrile nanofibers for Vitamin-D detection. **2018**, 93, 145-156		44
618	Bio-polyethylene reinforced with thermomechanical pulp fibers: Mechanical and micromechanical characterization and its application in 3D-printing by fused deposition modelling. **2018**, 153, 70-77		59
617	Annealing and saponification of electrospun cellulose-acetate nanofibers used as reinforcement materials for composites. **2018**, 113, 158-165		22
616	Advances in biopolymer-based membrane preparation and applications. **2018**, 564, 562-586		148

615	Photoluminescent spray-coated paper sheet: Write-in-the-dark. *Carbohydrate Polymers*, **2018**, 200, 154-161	10.3	37
614	Cellulose Nanocrystals for Health Care Applications. **2018**, 415-459		12
613	Facile Fabrication of 100% Bio-based and Degradable Ternary Cellulose/PHBV/PLA Composites. **2018**, 11,		13
612	Recent Advances in Modified Cellulose for Tissue Culture Applications. **2018**, 23,		72
611	Nanofiller Reinforced Biodegradable PLA/PHA Composites: Current Status and Future Trends. **2018**, 10,		86
610	Cellulose Aerogels: Synthesis, Applications, and Prospects. **2018**, 10,		170
609	Novel Nanofibrillated Cellulose/Chitin Whisker Hybrid Nanocomposites and their Use for Mechanical Performance Enhancements. **2018**, 13,		5
608	DFT Optimization of Isolated Molecular Chain Sheet Models Constituting Native Cellulose Crystal Structures. **2018**, 3, 8050-8058		12
607	Comparative properties of nanofibers produced using unbleached and bleached wheat straw pulps. **2018**, 33, 439-447		1
606	Nanocellulose in Food Packaging. **2018**, 297-329		3
605	Effect of Hydrolysis Conditions of Organosolv Pulp from Kenaf Fibers on the Physicochemical Properties of the Obtained Nanocellulose. **2018**, 54, 193-198		14
604	Comparison of structural, thermal and proton conductivity properties of micro- and nanocelluloses. *Carbohydrate Polymers*, **2018**, 200, 536-542	10.3	25
603	Synthesis of Nanofibrillated Cellulose by Combined Ammonium Persulphate Treatment with Ultrasound and Mechanical Processing. **2018**, 8,		25
602	Effect of Microfibrillated Cellulose on Microstructure and Properties of Poly(vinyl alcohol) Foams. **2018**, 10,		10
601	Manufacturing process centered on dry-pulp direct kneading method opens a door for commercialization of cellulose nanofiber reinforced composites. **2018**, 354, 563-568		35
600	Preparation of conductive cellulose paper through electrochemical exfoliation of graphite: The role of anionic surfactant ionic liquids as exfoliating and stabilizing agents. *Carbohydrate Polymers*, **2018**, 201, 48-59	10.3	8
599	Fabrication and characterization of the bionanocomposite film based on whey protein biopolymer loaded with TiO2 nanoparticles, cellulose nanofibers and rosemary essential oil. **2018**, 124, 300-315		104
598	Ultralight super-hydrophobic carbon aerogels based on cellulose nanofibers/poly(vinyl alcohol)/graphene oxide (CNFs/PVA/GO) for highly effective oil-water separation. **2018**, 9, 508-519		38

597	Rheological and mechanical properties of polylactide nanocomposites reinforced with the cellulose nanofibers with various surface treatments. **2018**, 25, 3955-3971		34
596	Green and facile surface modification of cellulose nanocrystal as the route to produce poly(lactic acid) nanocomposites with improved properties. *Carbohydrate Polymers*, **2018**, 197, 204-214	10.3	39
595	Effect of ultrasonication on physicochemical properties of apple based nanocellulose-calcium carbonate composites. **2018**, 25, 4603-4621		24
594	Thermal Behavior of Bacterial Cellulose Based Hydrogels with Other Composites and Related Instrumental Analysis. **2018**, 1-25		1
593	Lignocellulosic Materials and Their Use in Bio-based Packaging. **2018**,		8
592	Lignocellulosic Materials: Sources and Processing Technologies. **2018**, 13-33		3
591	Functional Properties of Lignocellulosic Materials. **2018**, 35-47		1
590	A Review on Peanut Shell Powder Reinforced Polymer Composites. **2019**, 58, 349-365		19
589	Mechanical Characterization of Cellulose Nanofibril Materials Made by Additive Manufacturing. **2019**, 43-45		3
588	Cinnamate-Functionalized Natural Carbohydrates as Photopatternable Gate Dielectrics for Organic Transistors. **2019**, 31, 7608-7617		14
587	Recyclable nanocomposite foams of Poly(vinyl alcohol), clay and cellulose nanofibrils â Mechanical properties and flame retardancy. **2019**, 182, 107762		13
586	Direct esterification of reinforced papers by immersion method and evaluation of their properties. **2019**, 53, 1035-1050		2
585	Regenerated cellulose-dispersed polystyrene composites enabled via Pickering emulsion polymerization. *Carbohydrate Polymers*, **2019**, 223, 115079	10.3	16
584	Oil palm microfiber-reinforced handsheet-molded thermoplastic green composites for sustainable packaging applications. **2019**, 35, 173-187		2
583	Thermally-induced cellulose nanofibril films with near-complete ultraviolet-blocking and improved water resistance. *Carbohydrate Polymers*, **2019**, 223, 115050	10.3	16
582	Biocomposite Reinforced with Nanocellulose for Packaging Applications. **2019**, 83-123		2
581	Reactive Melt Mixing of Poly(3-Hydroxybutyrate)/Rice Husk Flour Composites with Purified Biosustainably Produced Poly(3-Hydroxybutyrate--3-Hydroxyvalerate). **2019**, 12,		22
580	Facile extraction of cellulose nanocrystals. *Carbohydrate Polymers*, **2019**, 223, 115114	10.3	39

579	Aerogel Perfusion-Prepared h-BN/CNF Composite Film with Multiple Thermally Conductive Pathways and High Thermal Conductivity. **2019**, 9,	17
578	Poly(ε-caprolactone)-based biocomposites reinforced with nanocrystalline cellulose grafted with poly(L-lactic acid). **2019**, 500, 012021	5
577	Application of Biodegradable and Biocompatible Nanocomposites in Electronics: Current Status and Future Directions. **2019**, 9,	52
576	Electron Beam Irradiation Isolates Cellulose Nanofiber from Korea "Tall Goldenrod" Invasive Alien Plant Pulp. **2019**, 9,	9
575	Graphene two-dimensional crystal prepared from cellulose two-dimensional crystal hydrolysed from sustainable biomass sugarcane bagasse. **2019**, 241, 118209	15
574	Cellulose nanofibers from lignocellulosic biomass of lemongrass using enzymatic hydrolysis: characterization and cytotoxicity assessment. **2019**, 27, 683-693	16
573	Automatic Modulation Recognition of Radar Signals Based on Manhattan Distance-Based Features. **2019**, 7, 41193-41204	9
572	Extraction of Cellulose Nanofibers via Eco-friendly Supercritical Carbon Dioxide Treatment Followed by Mild Acid Hydrolysis and the Fabrication of Cellulose Nanopapers. **2019**, 11,	25
571	. **2019**,	17
570	Preparation and Characterization of Soy Protein Isolate-Based Nanocomposite Films with Cellulose Nanofibers and Nano-Silica via Silane Grafting. **2019**, 11,	15
569	Advanced Functional Materials from Nanopolysaccharides. **2019**,	7
568	Advances in Sustainable Polymers. **2019**,	5
567	PGlu-Modified Nanocrystalline Cellulose Improves Mechanical Properties, Biocompatibility, and Mineralization of Polyester-Based Composites. **2019**, 12,	4
566	Influence of Different Pretreatments on the Antibacterial Properties of Chitosan Functionalized Viscose Fabric: TEMPO Oxidation and Coating with TEMPO Oxidized Cellulose Nanofibrils. **2019**, 12,	11
565	Nanocellulose isolation characterization and applications: a journey from non-remedial to biomedical claims. **2019**, 2, 187-212	21
564	Monodisperse Highly Ordered and Polydisperse Biobased Solid Foams. **2019**,	2
563	Graphene/Carbon Paper Combined with Redox Active Electrolyte for Supercapacitors with High Performance. **2019**, 11,	5
562	Production of Nanocellulose and Its Applications in Drug Delivery: A Critical Review. **2019**, 7, 15800-15827	85

561	Protein nanofibrils: Preparation, properties, and possible applications in industrial nanomaterials. **2019**, 29-63		11
560	Green Composite Materials from Biopolymers Reinforced with Agroforestry Waste. **2019**, 27, 2651-2673		24
559	Sulfo-functional 3D porous cellulose/graphene oxide composites for highly efficient removal of methylene blue and tetracycline from water. **2019**, 140, 119-128		23
558	Preparation and Characterization of Nanocelluloses from Oil Palm Empty Fruit Bunch Cellulose. **2019**, 98, 194-201		2
557	The influence of bio-fibers from different pulping processes on the pulp-polylactic acid composites (PPCs) properties from sugarcane bagasse. **2019**, 34, 239-249		2
556	Jute Based Bio and Hybrid Composites and Their Applications. **2019**, 7, 77		26
555	Epoxy Composites with Reduced Graphene Oxide-Cellulose Nanofiber Hybrid Filler and Their Application in Concrete Strain and Crack Monitoring. **2019**, 19,		6
554	Impact of thermal processing or solvent casting upon crystallization of PLA nanocellulose and/or nanoclay composites. **2019**, 136, 47486		13
553	Extraction of Cellulose Nanofibers and Their Eco/Friendly Polymer Composites. **2019**, 37-64		8
552	Beyond ethanol, sugar, and electricity: a critical review of product diversification in Brazilian sugarcane mills. **2019**, 13, 809-821		18
551	Processing and Industrial Applications of Sustainable Nanocomposites Containing Nanofillers. **2019**, 451-478		1
550	Nanoparticles and textile technology. **2019**, 181-217		4
549	Cellulose nanocrystals reinforced κ-carrageenan based UV resistant transparent bionanocomposite films for sustainable packaging applications. *Carbohydrate Polymers*, **2019**, 211, 181-194	10.3	91
548	Functionalizing Cellulose Nanocrystals with Click Modifiable Carbohydrate-Binding Modules. **2019**, 20, 3087-3093		10
547	Cellulose Nanocrystals as a Sustainable Raw Material: Cytotoxicity and Applications on Healthcare Technology. **2019**, 304, 1900092		22
546	Natural Rubber Composites Filled with Crop Residues as an Alternative to Vulcanizates with Common Fillers. **2019**, 11,		32
545	A comprehensive characterization of ice nucleation by three different types of cellulose particles immersed in water. **2019**, 19, 4823-4849		33
544	Highly Filled Papers, on their Manufacturing, Processing, and Applications. **2019**, 21, 1900180		10

543	Mechanical Properties of Cellulose Nanocrystal (CNC) Bundles: Coarse-Grained Molecular Dynamic Simulation. **2019**, 3, 57		20
542	Biotemplated synthesis of cellulose nanocrystal@PVP-assisted polydopamine@Ag nanoparticle as conductive composites. **2019**, 30, 12077-12086		3
541	Fiber-Reinforced Composites. **2019**, 417-446		4
540	Modifications of microcrystalline cellulose (MCC), nanofibrillated cellulose (NFC), and nanocrystalline cellulose (NCC) for antimicrobial and wound healing applications. **2019**, 19, 103-119		53
539	Cellulose Nanocrystals: Particles and Polymer Nanocomposites. **2019**, 395-434		2
538	A combined homogenization-high intensity ultrasonication process for individualizaion of cellulose micro-nano fibers from rice straw. **2019**, 26, 5831-5849		41
537	Contribution of hemicellulose to cellulose nanofiber-based nanocomposite films with enhanced strength, flexibility and UV-blocking properties. **2019**, 26, 6023-6034		29
536	Enhanced Interfacial Adhesion of Polylactide/Poly(Ɛ-caprolactone)/Walnut Shell Flour Composites by Reactive Extrusion with Maleinized Linseed Oil. **2019**, 11,		17
535	Sugar palm (Arenga pinnata (Wurmb.) Merr) cellulosic fibre hierarchy: a comprehensive approach from macro to nano scale. **2019**, 8, 2753-2766		152
534	Microfibrillated cellulose modified with urea and its reinforcement for starch-based bionanocomposites. **2019**, 26, 5981-5993		10
533	Structural and functional modification of cellulose nanofibrils using graft copolymerization with glycidyl methacrylate by Fe2+âthiourea dioxideâH2O2 redox system. **2019**, 26, 4853-4864		17
532	Surface Structure Patterning for Fabricating Non-fluorinated Superhydrophobic Cellulosic Membranes. **2019**, 1, 1220-1229		13
531	Strong ultralight foams based on nanocrystalline cellulose for high-performance insulation. *Carbohydrate Polymers*, **2019**, 218, 103-111	10.3	16
530	The Effect of Nanofillers on the Functional Properties of Biopolymer-based Films: A Review. **2019**, 11,		114
529	Fabrication of stable copper nanoparticles embedded in nanocellulose film as a bionanocomposite plasmonic sensor and thereof for optical sensing of cyanide ion in water samples. **2019**, 26, 4945-4956		9
528	Micro Crystalline Bamboo Cellulose Based Seaweed Biodegradable Composite Films for Sustainable Packaging Material. **2019**, 27, 1602-1612		30
527	Lignocellulose-Based Nanoparticles and Nanocomposites: Preparation, Properties, and Applications. **2019**, 41-69		9
526	Production of bioplastic through food waste valorization. **2019**, 127, 625-644		200

525	Chitin nano-whiskers (CNWs) as a bio-based bio-degradable reinforcement for epoxy: evaluation of the impact of CNWs on the morphological, fracture, mechanical, dynamic mechanical, and thermal characteristics of DGEBA epoxy resin.. **2019**, 9, 11063-11076		9
524	Lignocellulose Structure and the Effect on Nanocellulose Production. **2019**, 17-30		2
523	Rheology of the sesame oil-in-water emulsions stabilized by cellulose nanofibers. **2019**, 94, 114-127		47
522	Morphological, Mechanical and Thermal Properties of Poly(lactic acid) (PLA)/Cellulose Nanofibrils (CNF) Composites Nanofiber for Tissue Engineering. **2019**, 34, 207-215		31
521	Eco-friendly sodium bicarbonate treatment and its effect on epoxy and polyester coir fibre composites. **2019**, 211, 427-436		36
520	Coconut oil-cellulose beaded microfibers by coaxial electrospinning: An eco-model system to study thermoregulation of confined phase change materials. **2019**, 26, 1855-1868		13
519	A facile ionic liquid approach to prepare cellulose-rich aerogels directly from corn stalks. **2019**, 21, 2699-2708		21
518	Highly Toughened and Transparent Biobased Epoxy Composites Reinforced with Cellulose Nanofibrils. **2019**, 11,		25
517	Role of Cellulose Nanofibrils in Polymer Nanocomposites. **2019**, 251-276		3
516	Compression Behavior of Biodegradable Thermoplastic Plasticizer-Containing Composites. **2019**, 51, 18-25		3
515	Methodologies for Assessing Risks of Accidents in Chemical Process Industries. **2019**, 19, 623-648		10
514	Fabrication of thermo- and pH-sensitive cellulose nanofibrils-reinforced hydrogel with biomass nanoparticles. *Carbohydrate Polymers*, **2019**, 215, 289-295	10.3	46
513	Carbon Fibers Encapsulated with Nano-Copper: A Core-Shell Structured Composite for Antibacterial and Electromagnetic Interference Shielding Applications. **2019**, 9,		18
512	Structure and Properties of Cellulose Nanofibrils. **2019**, 53-80		2
511	Reinforcement of layer-by-layer self-assembly coating modified cellulose nanofibers to reduce the flammability of polyvinyl alcohol. **2019**, 26, 3183-3192		5
510	Ammonia-sensing ability of differently structured hydroxyapatite blended cellulose nanofibril composite films. **2019**, 26, 3325-3337		17
509	Preparation of cellulose nanofibers from Miscanthus x. Giganteus by ammonium persulfate oxidation. *Carbohydrate Polymers*, **2019**, 212, 30-39	10.3	15
508	Hydrophobic cellulose ester as a sustainable material for simple and efficient water purification processes from fatty oils contamination. **2019**, 53, 249-261		9

507	Extraction of cellulose nanofibers from cocos nucifera var aurantiaca peduncle by ball milling combined with chemical treatment. *Carbohydrate Polymers*, **2019**, 212, 312-322	10.3	31
506	Microbial Cellulose from a Komagataeibacter intermedius Strain Isolated from Commercial Wine Vinegar. **2019**, 27, 956-967		9
505	A facile synthesis of CuAg nanoparticles on highly porous ZnO/carbon black-cellulose acetate sheets for nitroarene and azo dyes reduction/degradation. **2019**, 130, 288-299		48
504	Extraction of Nano Cellulose Fibres and Their Eco-friendly Polymer Composite. **2019**, 245-257		1
503	The Influences of Different Bamboo Filler Loading on Tensile Properties and Impact Strength of RHDPE/BF Composites. **2019**, 557, 012069		0
502	Insights of Bacterial Cellulose: Bio and Nano-Polymer Composites Toward Industrial Application. **2019**, 339-356		
501	A Three-Dimensional Strain Rosette Sensor Based on Graphene Composite with Piezoresistive Effect. **2019**, 2019, 1-12		1
500	. **2019**,		2
499	Preparation and Properties of Nanocellulose from Miscanthus x giganteus. **2019**, 2019, 1-8		11
498	A Review of the Compositions, Processing, Materials and Properties of Brake Pad Production. **2019**, 1378, 032103		0
497	Effect of chemical modification of fiber surface on natural fiber composites: A review. **2019**, 18, 3428-3434		26
496	Properties of Cellulose Nanofibers Prepared from Recycled Pulp Fiber Using the Aqueous Counter Collision Method. **2019**, 75, 140-144		1
495	Cellulose an ageless renewable green nanomaterial for medical applications: An overview of ionic liquids in extraction, separation and dissolution of cellulose. **2019**, 129, 750-777		61
494	Fabrication and characterization of emulsified and freeze-dried epoxy/cellulose nanofibril nanocomposite foam. **2019**, 26, 1769-1780		3
493	Evaluation of cellular attachment and proliferation on different surface charged functional cellulose electrospun nanofibers. *Carbohydrate Polymers*, **2019**, 207, 796-805	10.3	31
492	Cellulose nanofibrils as reinforcing agents for PLA-based nanocomposites: An in situ approach. **2019**, 171, 94-102		44
491	Super Gas Barrier and Fire Resistance of Nanoplatelet/Nanofibril Multilayer Thin Films. **2019**, 6, 1801424		33
490	Enhancement of basic properties of polysaccharide-based composites with organic and inorganic fillers: A review. **2019**, 136, 47251		37

489	Cellulose nanocrystals from rice and oat husks and their application in aerogels for food packaging. **2019**, 124, 175-184		60
488	Rheological and mechanical properties of polypropylene composites containing microfibrillated cellulose (MFC) with improved compatibility through surface silylation. **2019**, 26, 1085-1097		11
487	Production and modification of nanofibrillated cellulose composites and potential applications. **2019**, 115-141		5
486	Poly(lactic acid)/Cellulose Films Produced from Composite Spheres Prepared by Emulsion-Solvent Evaporation Method. **2019**, 11,		18
485	Thermal Behavior of Bacterial Cellulose-Based Hydrogels with Other Composites and Related Instrumental Analysis. **2019**, 763-787		
484	Cellulose-Based Hydrogel for Industrial Applications. **2019**, 909-949		1
483	A comparative study on the starch-based biocomposite films reinforced by nanocellulose prepared from different non-wood fibers. **2019**, 26, 2425-2435		30
482	Mechanical reinforcement and thermal properties of PVA tricomponent nanocomposites with chitin nanofibers and cellulose nanocrystals. **2019**, 116, 147-157		41
481	Emerging Cellulose-Based Nanomaterials and Nanocomposites. **2019**, 307-351		12
480	Review of the main factors controlling the fracture toughness and impact strength properties of natural composites. **2019**, 6, 022001		18
479	Eco-friendly post-consumer cotton waste recycling for regenerated cellulose fibers. *Carbohydrate Polymers*, **2019**, 206, 141-148	10.3	54
478	Mechanical properties of carbon fibre reinforced aluminium laminates using two different layering pattern for aero engine application. **2019**, 5, 123-131		2
477	Effect of chemical treatment on the thermal properties of hybrid natural fiber-reinforced composites. **2019**, 136, 47154		72
476	Preparation and characterization of cellulose nanocrystals from bacterial cellulose produced in sugar beet molasses and cheese whey media. **2019**, 122, 280-288		69
475	Modified cellulose membrane with good durability for effective oil-in-water emulsion treatment. **2019**, 211, 1463-1470		30
474	Innovative cellulose fibres reinforced ethylene-norbornene copolymer composites of an increased degradation potential. **2019**, 159, 174-183		9
473	Reconstructing micro/nano hierarchical structures particle with nanocellulose for superhydrophobic coatings. **2019**, 560, 171-179		24
472	Epoxy-Based Multifunctional Nanocomposites. **2019**, 111-135		1

471	Cellulose filaments reinforced low-density polyethylene. **2019**, 40, 16-23		5
470	Natural fiber reinforced polylactic acid composites: A review. **2019**, 40, 446-463		170
469	Natural cellulose fiber-reinforced polyamide 6 thermoplastic composites prepared via in situ anionic ring-opening polymerization. **2019**, 40, 1104-1116		9
468	Exploiting poly(e-caprolactone) and cellulose nanofibrils modified with latex nanoparticles for the development of biodegradable nanocomposites. **2019**, 40, 1342-1353		14
467	Comparison of mechanical reinforcement effects of cellulose nanocrystal, cellulose nanofiber, and microfibrillated cellulose in starch composites. **2019**, 40, E365		24
466	Prediction of surface roughness quality of green abrasive water jet machining: a soft computing approach. **2019**, 30, 2965-2979		33
465	Green Composites From Sustainable Cellulose Nanofibrils. **2020**, 81-94		3
464	Mechanical and aging resistance properties of polypropylene (PP) reinforced with nanocellulose/attapulgite composites (NCC/AT). **2020**, 27, 73-85		9
463	Nanocellulose Based Aerogels for Varying Engineering Applications. **2020**, 155-165		7
462	Opportunities With Renewable Jute Fiber Composites to Reduce Eco-Impact of Nonrenewable Polymers. **2020**, 810-821		4
461	A review of natural fiber composites: properties, modification and processing techniques, characterization, applications. **2020**, 55, 829-892		203
460	Overview of Nanocellulose in Food Packaging. **2020**, 11, 154-167		10
459	High-performance modified cellulose paper-based biosensors for medical diagnostics and early cancer screening: A concise review. *Carbohydrate Polymers*, **2020**, 229, 115463	10.3	83
458	Cellulose nanofibril-polymer hybrids for protecting drilling fluid at high salinity and high temperature. *Carbohydrate Polymers*, **2020**, 229, 115465	10.3	13
457	Use of cellulose nanofibers as a denture immersing solution. **2020**, 39, 80-88		2
456	The application of natural polymerâBased hydrogels in tissue engineering. **2020**, 273-307		3
455	Waste paper: An underutilized but promising source for nanocellulose mining. **2020**, 102, 281-303		56
454	Feasibility of ramie fibers as raw material for the isolation of nanofibrillated cellulose. *Carbohydrate Polymers*, **2020**, 230, 115579	10.3	10

453	Pretreatment of Microfibrillated Cellulose on Polylactide Composites. **2020**, 28, 110-117		1
452	Thermal properties of nanocellulose-reinforced composites: A review. **2020**, 137, 48544		76
451	Hydrodynamics and local mass transfer characterization under gasâ□quidâ□quid slug flow in a rectangular microchannel. **2020**, 66, e16805		10
450	Cellulose nanofibers reinforced biodegradable polyester blends: Ternary biocomposites with balanced mechanical properties. *Carbohydrate Polymers*, **2020**, 233, 115845	10.3	18
449	Stable nanocellulose gels prepared by crosslinking of surface charged cellulose nanofibrils with di- and triiodoalkanes. **2020**, 27, 2053-2068		4
448	Isolation of microcrystalline cellulose from corn stover with emphasis on its constituents: Corn cover and corn cob. **2020**, 27, 589-594		9
447	Lightweight, flexible, and multifunctional anisotropic nanocellulose-based aerogels for CO2 adsorption. **2020**, 27, 2695-2707		15
446	Manipulating nickel oxides in naturally derived cellulose nanofiber networks as robust cathodes for high-performance Niâ□n batteries. **2020**, 8, 565-572		26
445	Rheological and mechanical properties of cellulose/LDPE composites using sustainable and fully renewable compatibilisers. **2020**, 137, 48744		5
444	Poly(propylene carbonate)/poly(3-hydroxybutyrate)-based bionanocomposites reinforced with cellulose nanocrystal for potential application as a packaging material. **2020**, 31, 853-863		9
443	Red dye extracted sappan wood waste derived activated carbons characterization and dye adsorption properties. **2020**, 102, 107646		13
442	Electrospun natural polymer and its composite nanofibrous scaffolds for nerve tissue engineering. **2020**, 31, 519-548		14
441	Facile sonochemical synthesis of AgO-guar gum nanocomposite as a visible light photocatalyst for the organic transformation reactions. **2020**, 385, 121621		12
440	Detailed Structural Analyses of Nanofibrillated Bacterial Cellulose and Its Application as Binder Material for a Display Device. **2020**, 21, 581-588		7
439	Systematic Investigation from Material Characterization to Modeling of Jute-Substrate-Based Conformal Circularly Polarized Wearable Antenna. **2020**, 49, 7292-7307		4
438	Stable Suspensions of Lignocellulose Nanofibrils (LCNFs) Dispersed in Organic Solvents. **2020**, 8, 15989-15997		8
437	The financial impact of replacing plastic packaging by biodegradable biopolymers - A smart solution for the food industry. **2020**, 277, 124013		14
436	Phosphorylase-catalyzed bottom-up synthesis of short-chain soluble cello-oligosaccharides and property-tunable cellulosic materials. **2021**, 51, 107633		13

435	The optimisation of fabrication process for various chemically treated kenaf fibres in epoxy matrix composites. **2020**, 839, 012012		
434	Additive Manufacturing of Prostheses Using Forest-Based Composites. **2020**, 7,		4
433	Study on the Macro and Micromechanics Tensile Strength Properties of Orange Tree Pruning Fiber as Sustainable Reinforcement on Bio-Polyethylene Compared to Oil-Derived Polymers and Its Composites. **2020**, 12,		6
432	Nanocellulose-based products for sustainable applications-recent trends and possibilities. **2020**, 19, 779-806		32
431	Recent Developments in Cellulose Nanomaterial Composites. **2021**, 33, e2000718		26
430	Processing methods of bionanocomposites. **2020**, 87-104		2
429	Curcumin-based bionanocomposites. **2020**, 233-257		
428	Rheological behavior of cellulose nanofibers from cassava peel obtained by combination of chemical and physical processes. *Carbohydrate Polymers*, **2020**, 248, 116744	10.3	18
427	From Cellulose to Cellulose Nanofibrils-A Comprehensive Review of the Preparation and Modification of Cellulose Nanofibrils. **2020**, 13,		32
426	Eco-Friendly Bioinspired Interface Design for High-Performance Cellulose Nanofibril/Carbon Nanotube Nanocomposites. **2020**, 12, 55527-55535		9
425	Analyzing TEMPO-Oxidized Cellulose Fiber Morphology: New Insights into Optimization of the Oxidation Process and Nanocellulose Dispersion Quality. **2020**, 8, 17752-17762		14
424	Chemical Composition and Mechanical Properties of Natural Fibers. **2020**, 1-12		29
423	Surface modification and qualitative natural coloring of raw jute to reduce electrical resistance and induce anti-microbial properties. **2020**, 1, 100018		4
422	Inkjet printing of homogeneous and green cellulose nanofibril dielectrics for high performance IGZO TFTs. **2020**, 8, 12578-12586		4
421	Recent advancements of plant-based natural fiberâreinforced composites and their applications. **2020**, 200, 108254		114
420	The reinforcement effect of cellulose nanofiber on Youngâs modulus of polyvinyl alcohol gel produced through the freeze/thaw method. **2020**, 27, 1		7
419	Enzymatic path to bioconversion of lignocellulosic biomass. **2020**, 5-32		
418	Mitigation of Polysulfide Shuttling by Interlayer/Permselective Separators in Lithiumâsulfur Batteries. **2020**, 3, 8095-8129		26

417	A Review on Plant Cellulose Nanofibre-Based Aerogels for Biomedical Applications. **2020**, 12,	72
416	Rapid hemostatic chitosan/cellulose composite sponge by alkali/urea method for massive haemorrhage. **2020**, 164, 2769-2778	16
415	Tensile and flexural properties of epoxy laminates with natural papaya bast fibre cellular layers. **2020**, 2, 100017	
414	Controlling the degradation of cellulose scaffolds with Malaprade oxidation for tissue engineering. **2020**, 8, 7904-7913	5
413	Effect of -TsOH pretreatment on separation of bagasse components and preparation of nanocellulose filaments. **2020**, 7, 200967	2
412	Nucleation and crystallization of poly(propylene 2,5-furan dicarboxylate) by direct blending of microcrystalline cellulose: improved tensile and barrier properties. **2020**, 27, 9423-9436	5
411	The effect of nanocrystalline cellulose and TEMPO-oxidized nanocellulose on the compatibility of polypropylene/cyclic natural rubber blends. **2020**, 089270572095912	3
410	Valorization of food waste to multiple bio-energies based on enzymatic pretreatment: A critical review and blueprint for the future. **2020**, 277, 124091	11
409	. **2020**,	1
408	Extraction and Characterization of Munja Fibers and Its Potential in the Biocomposites. **2020**, 1-19	6
407	Functional Biobased Composite Polymers for Food Packaging Applications. **2020**, 95-136	3
406	A Study of Some Mechanical Properties of Composite Materials with a Dammar-Based Hybrid Matrix and Reinforced by Waste Paper. **2020**, 12,	2
405	Developed Chitosan/Oregano Essential Oil Biocomposite Packaging Film Enhanced by Cellulose Nanofibril. **2020**, 12,	12
404	A Review on Micro- to Nanocellulose Biopolymer Scaffold Forming for Tissue Engineering Applications. **2020**, 12,	29
403	In situ formed active and intelligent bacterial cellulose/cotton fiber composite containing curcumin. **2020**, 27, 9371-9382	10
402	Extraction and Characterization of Cellulose Nanofibres and Cellulose Nanocrystals from Sammaz-14 Maize Cobs. **2020**, 1-16	3
401	Thermal properties of polyethylene compositions with micro-and nanocellulose. **2020**, 921, 012019	
400	On the toxicity of cellulose nanocrystals and nanofibrils in animal and cellular models. **2020**, 27, 5509-5544	33

399	Preparation of Microfibrillated Cellulose from Wood Pulp through Carbamate Modification and Colloid Milling. **2020**, 10, 1977	3
398	Phase separation of co-solvent promotes multiple bio-nanomaterials conversion from natural lignocellulose. **2020**, 152, 112469	6
397	Tribological property of cellulose nanofiber water dispersion using various material pairs. **2020**, 14, JAMDSM0039-JAMD	3
396	Review of nanocellulose and nanohydrogel matrices for the development of sustainable future materials. **2020**, 155-176	0
395	Sound Absorption of Hemp Fibers (Cannabis Sativa L.) Based Nonwoven Fabrics and Composites: A Review. **2020**, 1-13	22
394	Photocatalytic TiO2@CS-embedded cellulose nanofiber mixed matrix membrane. **2020**, 276, 119111	18
393	Soluble soybean polysaccharide/nano zinc oxide antimicrobial nanocomposite films reinforced with microfibrillated cellulose. **2020**, 159, 793-803	12
392	Current State of Applications of Nanocellulose in Flexible Energy and Electronic Devices. **2020**, 8, 420	42
391	The fabrication of flexible and oxygen barrier cellulose nanofiber/polylactic acid nanocomposites using cosolvent system. **2020**, 137, 49536	9
390	Cellulose acetate composite films fabricated with zero-valent iron nanoparticles and its use in the degradation of persistent organic pollutants. **2020**, 34, e5892	10
389	Development of powdering method for cellulose nanofibers assisted by zinc oxide for compounding reinforced natural rubber composite. **2020**, 3, 100005	10
388	A Review on Surface-Functionalized Cellulosic Nanostructures as Biocompatible Antibacterial Materials. **2020**, 12, 73	73
387	Synthesis and cationic dye biosorption properties of a novel low-cost adsorbent: coconut waste modified with acrylic and polyacrylic acids. **2020**, 22, 551-566	11
386	Isolation and characterization of nanocrystalline cellulose from flaxseed Hull: A future onco-drug delivery agent. **2020**, 24, 374-379	7
385	Bio-based composite hydrogels for biomedical applications. **2020**, 3, 022001	16
384	Preparation and application of nanocellulose from Miscanthus giganteus to improve the quality of paper for bags. **2020**, 2, 1	7
383	Transformation of Glucose to 5-Hydroxymethylfurfural Over Regenerated Cellulose Supported Nb2O5nH2O in Aqueous Solution. **2020**, 150, 2599-2606	6
382	Self-Fibrillating Cellulose Fibers: Rapid In Situ Nanofibrillation to Prepare Strong, Transparent, and Gas Barrier Nanopapers. **2020**, 21, 1480-1488	13

381	Zwitterionic Sulfobetaine Hydrogel Electrolyte Building Separated Positive/Negative Ion Migration Channels for Aqueous Zn-MnO2 Batteries with Superior Rate Capabilities. **2020**, 10, 2000035		123
380	Bio-based polybenzoxazine composites for oil-water separation, sound absorption and corrosion resistance applications. **2020**, 86, 106443		27
379	Bio-inspired antibacterial cellulose paper-poly(amidoxime) composite hydrogel for highly efficient uranium(vi) capture from seawater. **2020**, 56, 3935-3938		43
378	Sustainable Water Responsive Mechanically Adaptive and Self-Healable Polymer Composites Derived from Biomass. **2020**, 8, 726		2
377	Development of new nanocomposites for 3D printing applications. **2020**, 17-59		1
376	Multifunctionalized Cellulose Nanofiber for Water-Repellent and Wash-Sustainable Coatings on Fabrics. **2020**, 36, 8144-8151		6
375	Sustainable, High-Barrier Polyaleuritate/Nanocellulose Biocomposites. **2020**, 8, 10682-10690		5
374	Eco-Friendly Preparation of Nanofibrillated Cellulose from Water Hyacinth Using NaOH/Urea Pretreatment. **2020**, 990, 225-230		1
373	A Study About Water/Alkali Treatments of Hemp Fiber on Ultraviolet Ageing of the Reinforced Polypropylene Composites. **2020**, 28, 2572-2583		8
372	Effects of enzymes on the refining of different pulps. **2020**, 320, 1-10		4
371	Co-evolution of β-glucosidase activity and product tolerance for increasing cellulosic ethanol yield. **2020**, 42, 2239-2250		6
370	Pharmaceutical and synthetic hormone removal using biopolymer membranes. **2020**, 397-421		1
369	Characteristics of biopolymers from natural resources. **2020**, 49-95		5
368	Effect of magnetic field alignment of cellulose nanocrystals in starch nanocomposites: Physicochemical and mechanical properties. *Carbohydrate Polymers*, **2020**, 247, 116688	10.3	15
367	Aerogel from Sustainably Grown Bacterial Cellulose Pellicles as a Thermally Insulative Film for Building Envelopes. **2020**, 12, 34115-34121		7
366	Biocompatibility analysis of Borassus flabellifer biomass-derived nanofibrillated cellulose. *Carbohydrate Polymers*, **2020**, 235, 115961	10.3	21
365	Development, processing and applications of bio-sourced cellulose nanocrystal composites. **2020**, 103, 101221		84
364	Dissipation and distribution of difenoconazole in bananas and a risk assessment of dietary intake. **2020**, 27, 15365-15374		9

363	Nanocellulose-Enabled Membranes for Water Purification: Perspectives. **2020**, 4, 1900114		70
362	Hybrid Polyester Composites Reinforced with Curau Fibres and Nanoclays. **2020**, 21, 399-406		20
361	Combining cobalt ferrite and graphite with cellulose nanocrystals for magnetically active and electrically conducting mesoporous nanohybrids. *Carbohydrate Polymers*, **2020**, 236, 116001	10.3	4
360	Fabrication of cellulose nanofiber/polypyrrole/polyvinylpyrrolidone aerogels with box-Behnken design for optimal electrical conductivity. *Carbohydrate Polymers*, **2020**, 235, 116028	10.3	12
359	Surface modified cellulose nanomaterials: a source of non-spherical nanoparticles for drug delivery. **2020**, 7, 1727-1758		42
358	Design and Synthesis of Fluorescent Nanocelluloses for Sensing and Bioimaging Applications. **2020**, 85, 487-502		16
357	Influence of silane-modified coconut shell powder on thermal and mechanical properties of thermoplastic elastomers. **2020**, 69, 571-576		3
356	Cellulose modified by citric acid reinforced Poly(lactic acid) resin as fillers. **2020**, 175, 109118		12
355	Efficient waste polyvinyl(butyral) and cellulose composite enabled carbon nanofibers for oxygen reduction reaction and water remediation. **2020**, 510, 145505		7
354	Green Nanocomposite-Based Metamaterial Electromagnetic Absorbers: Potential, Current Developments and Future Perspectives. **2020**, 8, 33289-33304		1
353	Pineapple Leaf Fibers. **2020**,		8
352	Screening of Nanocellulose from Different Biomass Resources and Its Integration for Hydrophobic Transparent Nanopaper. **2020**, 25,		23
351	Statistical analysis of the crystallinity index of nanocellulose produced from Kraft pulp via controlled enzymatic hydrolysis. **2020**, 67, 366-374		3
350	Nano- and microcellulose-based adsorption materials in water treatment. **2020**, 1-83		0
349	Cellulose-based monoliths with enhanced surface area and porosity. **2020**, 137, 48975		4
348	Bacterial cellulose matrices to develop enzymatically active paper. **2020**, 27, 3413-3426		10
347	Purification, characterisation and antioxidant activities of chondroitin sulphate extracted from Raja porosa cartilage. *Carbohydrate Polymers*, **2020**, 241, 116306	10.3	13
346	On the Synthesis and Characterization of Polylactic Acid, Polyhydroxyalkanoate, Cellulose Acetate, and Their Engineered Blends by Solvent Casting. **2020**, 29, 5542-5556		7

345	Development of Ethyl Cellulose-based Formulations: A Perspective on the Novel Technical Methods. **2020**, 1-48		16
344	Research on the Strengthening Advantages on Using Cellulose Nanofibers as Polyvinyl Alcohol Reinforcement. **2020**, 12,		11
343	Cellulose-derived materials for drug delivery applications. **2020**, 367-390		6
342	Facile chemo-refining approach for production of micro-nanofibrillated cellulose from bleached mixed hardwood pulp to improve paper quality. *Carbohydrate Polymers*, **2020**, 238, 116186	10.3	10
341	Stabilization of Various Zero-Valent Metal Nanoparticles on a Superabsorbent Polymer for the Removal of Dyes, Nitrophenol, and Pathogenic Bacteria. **2020**, 5, 7379-7391		26
340	High performances of plant fiber reinforced compositesâ A new insight from hierarchical microstructures. **2020**, 194, 108151		52
339	Influence of coupling agent on altering the reinforcing efficiency of natural fibre-incorporated polymers â A review. **2020**, 39, 520-544		26
338	Novel Extruded Starch-Beet Pulp Composites for Packaging Foams. **2020**, 13,		3
337	Electrocatalytic Behavior and Determination of Amitriptyline Drug with MWCNT@Celllulose Composite Modified Glassy Carbon Electrode. **2020**, 13,		3
336	Chemical Modification of Reducing End-Groups in Cellulose Nanocrystals. **2021**, 60, 66-87		39
335	Chemische Modifizierung der reduzierenden Enden von Cellulosenanokristallen. **2021**, 133, 66-88		2
334	Evaluation of mercerization treatment conditions on extracted cellulose from shea nut shell using FTIR and thermogravimetric analysis. **2021**, 38, 958-963		6
333	Cholesterol removal via cyclodextrin-decoration on cellulose nanocrystal (CNC)-grafted poly(HEMA-GMA) nanocomposite adsorbent. **2021**, 28, 471-487		5
332	Thermal post-processing of bagasse fiber reinforced polypropylene composites. **2021**, 23, 100546		2
331	Morphology-controllable cellulose/chitosan sponge for deep wound hemostasis with surfactant and pore-foaming agent. **2021**, 118, 111408		11
330	Antifouling PES/Cu@Fe3O4 mixed matrix membranes: Quantitative structureâ ctivity relationship (QSAR) modeling and wastewater treatment potentiality. **2021**, 407, 126501		17
329	Facile fabrication of hydrophobic cellulose-based organic/inorganic nanomaterial modified with POSS by plasma treatment. *Carbohydrate Polymers*, **2021**, 253, 117193	10.3	10
328	Extraction of cellulose nanocrystals from microcrystalline cellulose for the stabilization of cetyltrimethylammonium bromide-enhanced Pickering emulsions. **2021**, 608, 125442		15

327	The Potentials of Corn Waste Lignocellulosic Fibre as an Improved Reinforced Bioplastic Composites. **2021**, 29, 363-381		15
326	Tensile and morphological properties of nanocrystalline cellulose and nanofibrillated cellulose reinforced PLA bionanocomposites: A review. **2021**, 61, 22-38		7
325	Recent advances on composite hydrogels designed for the remediation of dye-contaminated water and wastewater: A review. **2021**, 284, 124703		52
324	Use of gamma irradiation technology for modification of bacterial cellulose nanocrystals/chitosan nanocomposite film. *Carbohydrate Polymers*, **2021**, 253, 117144	10.3	11
323	Electrochemical applications of nanocellulose. **2021**, 313-335		1
322	Upcycling of paper waste for high-performance lithium-sulfur batteries. **2021**, 19, 100591		8
321	Synergistic Reinforcement of Composite Hydrogels with Nanofiber Mixtures of Cellulose Nanocrystals and Chitin Nanofibers. **2021**, 22, 340-352		4
320	Cellulose-based material in lithium-sulfur batteries: A review. *Carbohydrate Polymers*, **2021**, 255, 117469	10.3	16
319	Recent studies on modified cellulose/nanocellulose epoxy composites: A systematic review. *Carbohydrate Polymers*, **2021**, 255, 117366	10.3	20
318	Preparation and characterization of curdlan/nanocellulose blended film and its application to chilled meat preservation. **2021**, 266, 128948		8
317	Nanocomposites based on the cellulose extracted from the Amazon Peperomia pellucida and polyaniline derivatives: structural and thermal properties. **2021**, 75, 1809-1821		1
316	Osteogenic differentiation of mesenchymal stem cells on the bimodal polymer polyurethane/polyacrylonitrile containing cellulose phosphate nanowhisker. **2021**, 34, 310-324		3
315	Di-carboxylic acid cellulose nanofibril (DCA-CNF) as an additive in water-based drilling fluids (WBMs) applied to shale formations. **2021**, 28, 417-436		2
314	Amylose/cellulose nanofiber composites for all-natural, fully biodegradable and flexible bioplastics. *Carbohydrate Polymers*, **2021**, 253, 117277	10.3	14
313	Micro-nanofibrillated cellulose preparation from bleached softwood pulp using chemo-refining approach and its evaluation as strength enhancer for paper properties. **2021**, 11, 101-115		2
312	Effect of Alkaline Surface Modification and Carbonization on Biochemical Properties of Rice and Coffee Husks for Use in Briquettes and Fiber-Reinforced Plastics. **2021**, 18, 620-629		10
311	Physical, mechanical, optical and biodegradability properties of polyvinyl alcohol/cellulose nanofibrils/kaolinite clay-based hybrid composite films. **2021**, 63, 62-74		6
310	Production of cellulose nanofibrils and films from elephant grass using deep eutectic solvents and a solid acid catalyst.. **2021**, 11, 14071-14078		2

309	Agricultural biomass as value chain developers in different sectors. **2021**, 467-509	
308	Fabrication and characterization of modified microcrystalline cellulose membrane as proton exchange membrane for direct methanol fuel cell. **2021**, 46, 1855-1859	3
307	Nano-structured Polymer-Based Composites. **2021**, 335-367	
306	Micro- and Nanocellulose in Polymer Composite Materials: A Review. **2021**, 13,	94
305	Electrospun biopolymer-based hybrid composites. **2021**, 225-252	1
304	Economic and environmental concerns of bio-based polymers processing. **2021**, 239-254	
303	Development of biobased wood polymer nanocomposites: industrial applications, market, and future trends. **2021**, 587-615	1
302	Green Fiber Thermoplastic Composites. **2021**, 35-62	
301	Nanocellulose biopolymer-based biofilms: Applications and challenges. **2021**, 43-62	0
300	Manufacturing and Processing of Short Bamboo Fiber-Based Polymer Composite. **2021**, 17-37	
299	Cellulose-based biocomposites. **2021**, 135-195	1
298	A Review on Natural Fiber Bio-Composites, Surface Modifications and Applications. **2021**, 26,	36
297	Synthesis and Application of Cellulose-Polyethyleneimine Composites and Nanocomposites: A Concise Review. **2021**, 14,	11
296	Overview of Cellulose Types and Applications. **2021**, 220-236	
295	Natural Polymer-Based MOF Composites. **2021**, 321-348	0
294	Increasing the Possibilities of TEMPO-Mediated Oxidation in the Production of Cellulose Nanofibers by Reducing the Reaction Time and Reusing the Reaction Medium. **2021**, 5, 2000277	4
293	Adsorbents based on nanofibers. **2021**, 33, 389-443	2
292	Nanocellulose-Based Materials for Heavy Metal Removal from Wastewater. **2021**, 1-34	

291	Fatigue behavior of wooden fiber reinforced epoxy composites. **2021**,	
290	Multiscale Structure of Plant Fibers. **2021**, 117-134	
289	The effect of alkaline concentration in the alkaline delignification-assisted sonication on sengon wood. **2021**,	
288	A Review of the Physical and Thermal Properties of Roselle Fiber-Reinforced Polymer Hybrid Composites. **2021**, 271-283	
287	Comparative analysis of physical and functional properties of cellulose nanofibers isolated from alkaline pre-treated wheat straw in optimized hydrochloric acid and enzymatic processes. **2021**, 171, 331-342	3
286	Synthesis of cellulose aerogels as promising carriers for drug delivery: a review. **2021**, 28, 2697-2714	13
285	Recent Advances in Functional Materials through Cellulose Nanofiber Templating. **2021**, 33, e2005538	21
284	Bioplastic production from renewable lignocellulosic feedstocks: a review. **2021**, 20, 167-187	12
283	Cellulose Nanofibrils Endow Phase-Change Polyethylene Glycol with Form Control and Solid-to-gel Transition for Thermal Energy Storage. **2021**, 13, 6188-6200	16
282	The use of cellulose in bio-derived formulations for 3D/4D printing: A review. **2021**, 4, 100113	16
281	Bio-sourced vinyl ester resin reinforced with microfibrillar cellulose: Mechanical and thermal properties. 096739112110020	0
280	Starch-based biocomposite membrane reinforced by orange bagasse cellulose nanofibers extracted from ionic liquid treatment. **2021**, 28, 4137-4149	6
279	Recent Advances in the Synthesis of Nanocellulose FunctionalizedâHybrid Membranes and Application in Water Quality Improvement. **2021**, 9, 611	14
278	Horizons for Future Sustainability. **2021**, 91-130	1
277	Effect of oxidation on cellulose and water structure: a molecular dynamics simulation study. **2021**, 28, 3917-3933	2
276	From toilet to table: value-tailored messages influence emotional responses to wastewater products. **2021**, 14, 79	2
275	A novel design for nanocellulose reinforced ureaâformaldehyde resin: a breakthrough in amino resin synthesis and biocomposite manufacturing. **2021**, 28, 3435-3450	4
274	Studies on morphological, physico-chemical and mechanical properties of wheat straw reinforced polyester resin composite. 1	5

273	Production of Nanocellulose by Enzymatic Treatment for Application in Polymer Composites. **2021**, 14,		11
272	Tuning piezoelectric properties in elastomeric polyurethane nanocomposites utilizing cellulose nanocrystals. **2021**, 138, 50865		1
271	The preparation and properties of polyurethane foams reinforced with bamboo fiber sources in China. **2021**, 8, 045501		3
270	Hydrophobization of cellulose oxalate using oleic acid in a catalyst-free esterification suitable for preparing reinforcement in polymeric composites. *Carbohydrate Polymers*, **2021**, 257, 117615	10.3	1
269	Nanobiocomposite Films: a â€Greener Alternateâ€for Food Packaging. **2021**, 14, 1013-1027		5
268	Application of Nanocellulose as particle stabilizer in food Pickering emulsion: Scope, Merits and challenges. **2021**, 110, 573-583		26
267	The effect of ZnO nanoparticles as Ag-carrier in PBAT for antimicrobial films. 1		5
266	Perspective Applications and Associated Challenges of Using Nanocellulose in Treating Bone-Related Diseases. **2021**, 9, 616555		11
265	Green composites based on thermoplastic starches and various natural plant fibers: Impacting parameters of the mechanical properties using machine-learning. **2021**, 42, 3458-3467		2
264	Functionalization of cellulose nanocrystal powder by non-thermal atmospheric-pressure plasmas. **2021**, 28, 6239-6252		4
263	Mussel-inspired reinforcement of a biodegradable aliphatic polyester with bamboo fibers. **2021**, 296, 126587		8
262	Valorization of Date Palm Waste for Plastic Reinforcement: Macro and Micromechanics of Flexural Strength. **2021**, 13,		5
261	Highly Developed Surface Area Thiosemicarbazide Biochar Derived from Aloe Vera for Efficient Adsorption of Uranium. **2021**, 63, 353-363		4
260	A COMPARATIVE STUDY OF CELLULOSE NANOWHISKERS (CNWs) AND CELLULOSE NANOFIBERS (CNFs). **2021**, 55, 501-510		1
259	ISOLATION AND CHARACTERIZATION OF NANOCELLULOSE FROM SUGARCANE BAGGASE AND ITS SWELLING STUDY. **2021**, 73-74		
258	Influence of alignment and microstructure features on the mechanical properties and failure mechanisms of cellulose nanocrystals (CNC) films. **2021**, 118, 104399		4
257	Cellulose-based biogenic supports, remarkably friendly biomaterials for proteins and biomolecules. **2021**, 182, 113170		8
256	Mechanical and Physicochemical Properties of 3D-Printed Agave Fibers/Poly(lactic) Acid Biocomposites. **2021**, 14,		4

255	A review of nanocellulose as a new material towards environmental sustainability. **2021**, 775, 145871	61
254	3D printing to innovate biopolymer materials for demanding applications: A review. **2021**, 20, 100459	23
253	Mechanical Properties of Bio-Composites Based on Epoxy Resin and Nanocellulose Fibres. **2021**, 14,	6
252	Characterization of sweet bamboo (Dendrocalamus asper Backer) kraft pulp filled in poly(lactic acid)/polybutylene succinate blend composite. **2021**, 42, 5090	5
251	. **2021**,	0
250	Applications of nanocellulosic products in food: Manufacturing processes, structural features and multifaceted functionalities. **2021**, 113, 277-300	6
249	Polymeric Biocomposites from Renewable and Sustainable Natural Resources. **2022**, 65-108	
248	Individualization of Nanofibrillated Cellulose from Sri Lankan Rice Straw: Structural Characteristics and Thermal Properties. **2021**,	0
247	Characterization of physical and mechanical properties of recycled jute fabric reinforced polypropylene composites. **2021**, 42, 5435	2
246	Nanocellulose, a versatile platform: From the delivery of active molecules to tissue engineering applications. **2022**, 9, 566-589	17
245	Extraction and characterization of cellulose nanocrystals from cotton fiber by enzymatic hydrolysis-assisted high-pressure homogenization.	3
244	Are nonwoven fabrics used in foods made of cellulose or plastic? Cellulose/plastic separation by using Schweizer's reagent and analysis based on a sample of tea bags. **2021**, 151, 188-194	2
243	Carbohydrate Nanomaterials Addition to Starch-Based Packaging: A Review about Fundamentals and Application. 2100057	0
242	Improving rubber concrete strength and toughness by plasma-induced end-of-life tire rubber surface modification. **2021**, 18, 2100081	3
241	Mechanical performance of 3D woven jute/green epoxy composites with novel weaving patterns. 152808372094802	
240	Nano-Cellulosic Fibers from Agricultural Wastes.	
239	Electrospun cellulose fibers from ionic liquid: Practical implications toward robust morphology. **2022**, 139, 51525	3
238	Preparation of Breathable Cellulose Based Polymeric Membranes with Enhanced Water Resistance for the Building Industry. **2021**, 14,	0

237	Cellulosic nanofibers filled poly(Ehydroxybutyrate): Relations between viscoelasticity of composites and aspect ratios of nanofibers. *Carbohydrate Polymers*, **2021**, 265, 118093	10.3	8
236	Economic assessment of the conversion of bleached eucalyptus Kraft pulp into cellulose nanocrystals in a stand-alone facility via acid and enzymatic hydrolysis.		2
235	Surface modifications of nanocellulose: From synthesis to high-performance nanocomposites. **2021** , 119, 101418		21
234	Nanocellulose-Based Functional Materials: From Chiral Photonics to Soft Actuator and Energy Storage. 2104991		26
233	The Use of Nanocellulose in Edible Coatings for the Preservation of Perishable Fruits and Vegetables. **2021**, 11, 990		4
232	An overview of Zn/ZnO modified cellulosic nanocomposites and their potential applications. **2021**, 28, 1		3
231	CelluMOFs: Green, Facile, and Flexible Metal-Organic Frameworks for Versatile Applications. 2105395		12
230	Recent studies on cellulose-based fluorescent smart materials and their applications: A comprehensive review. *Carbohydrate Polymers*, **2021**, 267, 118135	10.3	23
229	Hydrophobic composite foams based on nanocellulose-sepiolite for oil sorption applications. **2021**, 417, 126068		9
228	Valorization of Rice Straw into Cellulose Microfibers for the Reinforcement of Thermoplastic Corn Starch Films. **2021**, 11, 8433		3
227	Recent advances in nanocellulose-based different biomaterials: types, properties, and emerging applications. **2021**, 14, 2601-2623		24
226	Nanocellulose aerogel for highly efficient adsorption of uranium (VI) from aqueous solution. *Carbohydrate Polymers*, **2021**, 267, 118233	10.3	18
225	Towards producing high-quality lignin-based carbon fibers: A review of crucial factors affecting lignin properties and conversion techniques. **2021**, 189, 768-784		12
224	Turbidity-based measurement of bleeding in fresh cement paste as affected by cellulose nanofibres. **2021**, 123, 104197		0
223	A UV-shielding and hydrophobic graphitic carbon nitride nanosheets/cellulose nanofibril (gCNNS/CNF) transparent coating on wood surface for weathering resistance. **2021**, 159, 106440		2
222	Reinforcement of surface-modified cellulose nanofibrils extracted from Napier grass stem in natural rubber composites. **2021**, 171, 113881		6
221	Rheological and tribological properties of low-temperature greases based on cellulose acetate butyrate gel. *Carbohydrate Polymers*, **2021**, 272, 118509	10.3	9
220	Increasing efficiency of the homogenization process for production of chitin nanofibers for barrier film applications. *Carbohydrate Polymers*, **2021**, 274, 118658	10.3	3

219	Strong, ductile and biodegradable polylactic acid/lignin-containing cellulose nanofibril composites with improved thermal and barrier properties. **2021**, 171, 113898	8
218	Plasma-assisted fibrillation and surface-modification of microfibrillar cellulose. **2021**, 304, 130615	2
217	Enhancement of the interlaminar fracture toughness and damping properties of carbon fiber reinforced composites using cellulose nanofiber interleaves. **2021**, 28, 100940	2
216	Occurrence, distribution, and structure of natural polysaccharides. **2022**, 1-27	0
215	Fillers â□Origin, Chemical Composition, Properties, and Morphology. **2021**, 13-302	1
214	Greener Composites from Plant Fibers: Preparation, Structure, and Properties. **2021**, 307-325	
213	Eco-friendly composites and nanocomposites. **2021**, 105-120	
212	Effect of TiC Nanoparticles Reinforcement in Coir Fiber Based Bio/Synthetic Epoxy Hybrid Composites: Mechanical and Thermal Characteristics. **2021**, 29, 2609	13
211	Synthesis of Recyclable Magnetic Cellulose Nanofibers from Ionic Liquids for Practical Applications in Separation Science. **2021**, 70, 737-743	
210	Bio-composites: Eco-friendly Substitute of Glass Fiber Composites. **2021**, 151-175	
209	Green Composites: Introductory Overview. **2021**, 1-20	1
208	Seaweed-Based Biodegradable Biopolymers, Composite, and Blends with Applications. **2021**, 121-149	1
207	Design of Foods Using Naturally Structured Materials. 44-58	1
206	Bio-composites: Eco-friendly Substitute of Glass Fiber Composites. **2020**, 1-25	11
205	Extraction of Multiple Value-Added Compounds from Agricultural Biomass Waste: A Review. **2020**, 163-192	3
204	Cellulose from Lignocellulosic Waste. **2015**, 475-511	15
203	Green Nanotechnology for Biomedical, Food, and Agricultural Applications. **2019**, 2681-2698	9
202	Nanopolysaccharides in Barrier Composites. **2019**, 321-366	3

201	Cellulose Nanostructures Extracted from Pineapple Fibres. **2020**, 185-234	3
200	Physicochemical Properties of Nanocellulose Extracted from Pineapple Leaf Fibres and Its Composites. **2020**, 167-183	3
199	Waste Cellulose Fibers Reinforced Polylactide Toughened by Direct Blending of Epoxidized Soybean Oil. **2020**, 21, 2949-2961	2
198	General introduction on sustainable nanocellulose and nanohydrogel matrices. **2020**, 1-31	3
197	Biodegradable nanomaterials for drink packaging. **2020**, 609-632	4
196	Fabrication and characterization of a starch-based superabsorbent hydrogel composite reinforced with cellulose nanocrystals from potato peel waste. **2020**, 601, 124962	30
195	Macromolecules in the Condensed State. **2014**, 217-236	1
194	EVALUATION OF POLY(VINYL ALCOHOL) ADDITION EFFECT ON NANOFIBRILLATED CELLULOSE FILMS CHARACTERISTICS. **2020**, 26, 1-8	3
193	Physical and Mechanical Properties of Hempcrete. **2020**, 13, 26-34	8
192	Oxidation of Cellulose from Oil Palm Empty Fruit Bunch Using Hydrogen Peroxide in Alkaline Condition. **2018**, 8, 51	4
191	Electrospinning of Cellulose Nanocrystal-Reinforced Polyurethane Fibrous Mats. **2020**, 12,	3
190	Wood cellulose fibers reinforced polylactic acid composite: mechanical, thermomechanical characteristics and orientation of fiber. **2020**, 7, 9-23	3
189	Synthesis and Characterization of New Biodegradable Chitosan/Polyvinyl Alcohol/Cellulose Nanocomposite. **2016**, 05, 18-26	15
188	Energy Efficient Manufacturing of Nanocellulose by Chemo- and Bio-Mechanical Processes: A Review. **2015**, 05, 204-212	45
187	Cellulose Nanocrystals as Advanced "Green" Materials for Biological and Biomedical Engineering. **2015**, 40, 373-393	25
186	Nanokompozit Kaynağı ve Uygulama Alanı Olarak Bitkiler.	2
185	Studies on the Characteristics of CNF from Paper Mulberry Bast Fiber. **2019**, 51, 88-99	2
184	Large Scale Applications of Nanocellulosic Materials - A Comprehensive Review -. **2015**, 47, 5-21	9

183	Optimal Tensile Properties of Biocomposites Made of Treated Amazonian Curau Fibres Using Taguchi Method. **2021**, 24,	1
182	Comparative Analysis of Thermal and Physico-Mechanical Properties of Polyethylene Compositions Containing Microcrystalline and Nanofibrillary Cellulose. **2021**, 15, 716-723	1
181	Thermal properties of kenaf fiber-based nanocellulose reinforced polyurethane composites. **2021**, 846, 012010	
180	Development of biocomposite films from natural protein sources for food packaging applications: Structural characterization and physicochemical properties. 51665	
179	Dynamic X-ray micotomography of microfibrous cellulose liquid foams using deep learning. **2022**, 248, 117173	1
178	Liquid and Solid Functional Bio-Based Coatings. **2021**, 13,	7
177	Novel Micro- and Nanocellulose-Based Delivery Systems for Liposoluble Compounds. **2021**, 11,	2
176	Effects of cellulose nanofibrils and starch compared with polyacrylamide on fundamental properties of pulp and paper. **2021**, 192, 618-626	1
175	Isolation of nanocellulose from lignocellulosic biomass: Synthesis, characterization, modification, and potential applications. **2021**, 9, 106606	1
174	Effect of The Addition of Various Cellulose Nanofibers on The Properties of Sheet of Paper Mulberry Bast Fiber. **2015**, 43, 730-739	
173	Sustainable Polymers: A Perspective to the Future. **2016**, 1-18	
172	Characterization Sugarcane Bagasse Particulate Reinforced Polylactic Acid Composites Prepared by Compounding and Manual Compression Molding Technique. **2017**, 397-409	
171	Next-Generation Products and Greenhouse Gas Implications. **2017**, 243-258	
170	Case Studiesâ Sustainable and Lightweight Automotive Parts via Injection Molding. **2017**, 453-470	
169	Starch -Based Biomaterials and Nanocomposites. 623-636	
168	Cellulose Whisker-Based Green Polymer Composites. 461-494	1
167	Produ de suspens s nanofibrilares de celulose vegetal por meio de processo combinado â Avalia do gasto energ tico. **2018**, 23,	0
166	Encyclopedia of Sustainability Science and Technology. **2018**, 1-34	1

165	Biopolymer Dispersed Poly Lactic Acid Composites and Blends for Food Packaging Applications. **2019**, 209-235	0
164	Chemical Modification of Cellulose in Solvents for Functional Materials. **2019**, 427-460	
163	Specialty Application of Functional Biopolymers. **2019**, 509-556	
162	Theoretical Background. **2019**, 9-48	
161	From biorefineries to bioproducts: conversion of pretreated pulp from biorefining streams to lignocellulose nanofibers. **2019**, 18, 233-241	
160	Effect of Surface-Modified Cellulose Nanofibril with Cationic Polyelectrolyte on Drainage and Strength of Paper. **2019**, 51, 29-35	0
159	Plant fiber reinforced biocomposites: properties and applications.	
158	Advances in Agronanotechnology and Future Prospects. **2020**, 85-104	
157	Composite Materials in Epoxy Resin Matrix Using Curaua Fibers. **2021**, 333-340	
156	Enhancement of the properties of acrylic wood coatings with the use of biopolymers. **2022**, 162, 106522	1
155	Cellulose tailored semiconductors for advanced photocatalysis. **2022**, 154, 111820	7
154	Bionanomaterials from Agricultural Wastes. **2020**, 243-260	0
153	Mechanical and Morphological Properties of Hybrid Composites Based on Recycled LDPE/EVA Blend Reinforced with Clay and Babassu Fiber Residues. **2020**, 661-669	
152	Development of Biomass-Derived Cellulose Nanocrystals and its Composites. **2020**, 237-269	
151	A facile method to prepare superhydrophobic nanocellulose-based aerogel with high thermal insulation performance via a two-step impregnation process. **2022**, 29, 245	2
150	Natural Fibers for the Production of Green Composites. 1-23	1
149	Greener Composites from Plant Fibers: Preparation, Structure, and Properties. **2021**, 1-19	
148	High dielectric flexible thin films based on cellulose nanofibers and zinc sulfide nanoparticles. **2022**, 276, 115538	0

147	Electroassisted Filtration of Microfibrillated Cellulose: Insights Gained from Experimental and Simulation Studies.		0
146	Nanocellulose: Resources, Physio-Chemical Properties, Current Uses and Future Applications. **2021**, 3,		5
145	Nanocomposite and bio-nanocomposite polymeric materials/membranes development in energy and medical sector: A review. **2021**,		11
144	Cellulose nanofibers aerogels functionalized with AgO: Preparation, characterization and antibacterial activity. **2021**, 194, 58-65		5
143	Durable mechanical properties of unidirectional flax fiber/phenolic composites under hydrothermal aging. **2022**, 220, 109264		2
142	Bio-nano-composites containing at least two components, chitosan and zein, for food packaging applications: A review of the nano-composites in comparison with the conventional counterparts.. *Carbohydrate Polymers*, **2022**, 280, 119027	10.3	3
141	Combined Enzymatic Pretreatment of Pulp for Production of CNF. **2021**, 53, 5-15		0
140	Nanocellulose in plastic industry. **2022**, 123-132		
139	Extraction and properties of cellulose for polymer composites. **2022**, 59-86		
138	Nanocellulose in packaging industry. **2022**, 43-66		0
137	Cellulose reinforcement in thermoset composites. **2022**, 127-142		0
136	Industrial Applications of Cellulose Extracted from Agricultural and Food Industry Wastes. **2022**, 417-443		0
135	A Study Using the Combined Method of Scientometric and Manual Analysis on the Present Research of Plant Fibres Reinforced Concrete.		
134	Stress-transfer analyses in cellulose nanofiber/montmorillonite nanocomposites with X-ray diffraction and chemical interaction between cellulose nanofiber and montmorillonite. **2022**, 29, 2949		0
133	Kenaf Fibre Reinforced Cementitious Composites. **2022**, 10, 3		6
132	The effect of surface treatments and graphene-based modifications on mechanical properties of natural jute fiber composites: A review.. **2022**, 25, 103597		6
131	Bio-composites for fused filament fabrication: effects of maleic anhydride grafting on poly(lactic acid) and microcellulose. 1		0
130	In Situ Biosynthesis of Biodegradable Functional Bacterial Cellulose for High-Efficiency Particulate Air Filtration. **2022**, 10, 1644-1652		1

129	Preparation and Characterization of Bio-based Nanocomposites Packaging Films Reinforced with Cellulose Nanofibers from Unripe Banana Peels. 2100283	3
128	Diversified antibacterial modification and latest applications of polysaccharide-based hydrogels for wound healthcare. **2022**, 26, 101396	4
127	Recent Progress on Bio-Based Polyesters Derived from 2,5-Furandicarbonxylic Acid (FDCA).. **2022**, 14,	4
126	Spectra and crystallographic analysis of combined ultrasonic and mild acid hydrolysis structural effects on lignin-containing cellulose nanofibrils (LCNFs) and cellulose nanofibrils (CNFs). 1-11	0
125	Cellulose and Its Nano-Derivatives as a Water-Repellent and Fire-Resistant Surface: A Review.. **2021**, 15,	0
124	Nanocellulose: Chemistry, preparation, and applications in the food industry. **2022**, 155-177	
123	A Comparative Study of Cellulose Nanocomposite Derived from Algae and Bacteria and Its Applications. **2022**, 151-187	
122	Nanocellulose composites in the pulp and paper industry. **2022**, 375-395	
121	Fabrication and Characterization of Hydrophobic Cellulose Nanofibrils/Silica Nanocomposites with Hexadecyltrimethoxysilane.. **2022**, 14,	2
120	Green composites prepared from soy protein, polylactic acid (PLA), starch, cellulose, chitin: a review. 1	1
119	Pre-fibrillation of pulps to manufacture cellulose nanofiber-reinforced high-density polyethylene using the dry pulp direct kneading method. **2022**, 29, 2985-2998	
118	Biocomposites based on natural fibers and polymers: A review on properties and potential applications. 073168442110706	4
117	Exploiting chitosan to improve the interface of nanocellulose reinforced polymer composites. 1	2
116	Predicting the effect of coconut natural fibers for improving the performance of biocomposite materials based on the poly (methyl methacrylate)-PMMA polymer for engineering applications. 1	0
115	Nanocellulose for Sustainable Water Purification.. **2022**,	6
114	An Overview of the Alternative Use of Seaweeds to Produce Safe and Sustainable Bio-Packaging. **2022**, 12, 3123	1
113	Waste-Derived Cellulosic Fibers and Their Applications. **2022**, 2022, 1-13	0
112	Photocured Nanocellulose Composites: Recent Advances. **2022**, 10, 3131-3149	2

111	Sustainable Natural Bio-Origin Materials for Future Flexible Devices.. **2022**, e2200560		9
110	Comparative Evaluation of the Thermal, Structural, Chemical and Morphological Properties of Bagasse from the Leaf and Fruit of Bromelia hemisphaerica Lam. Delignified by Organosolv. **2022**, 12, 3761		1
109	Synthesis and characterization of fabricated fiber metal laminates for aerospace applications. **2022**,		1
108	Bamboo-based composites: A review on fundamentals and processes of bamboo bonding. **2022**, 235, 109776		13
107	Modification of Cellulose Micro- and Nanomaterials to Improve Properties of Aliphatic Polyesters/Cellulose Composites: A Review.. **2022**, 14,		4
106	Mussel-inspired chemistry to design biodegradable food packaging films with antimicrobial properties. **2022**, 162, 17-29		1
105	Hydrophobic, breathable cellulose nonwoven fabrics for disposable hygiene applications.. *Carbohydrate Polymers*, **2022**, 288, 119367	10.3	0
104	Mechanical characteristics of bacterial cellulose-reinforced mycelium composite materials. **2021**, 8, 18		8
103	Recent Advancements in the Natural Fiber-Reinforced Polymer Composites. **2022**, 301-327		
102	Thermal Properties of Cellulose Nanofibers and Their Composites. **2022**, 201-217		
101	Recent Trends in Assessment of Cellulose Derivatives in Designing Novel and Nanoparticulate-Based Drug Delivery Systems for Improvement of Oral Health.. **2021**, 14,		1
100	Effect of Coupling Agent on Softwood Kraft Nanocellulose Fibril-Reinforced Polylactic Acid Biocomposite. **2021**, 2021, 1-13		10
99	Impact Performance of Three-dimensional Woven Composites with Novel Binding Yarn Patterns. 1-16		1
98	Reactive Cellu-mers-A Novel Approach to Improved Cellulose/Polymer Composites.. **2022**, 14,		1
97	Nanoscale cellulose and nanocellulose-based aerogels. **2022**, 229-260		0
96	Processing of bionanocomposites. **2022**, 31-41		
95	Carbohydrate-Binding Modules of Potential Resources: Occurrence in Nature, Function, and Application in Fiber Recognition and Treatment.. **2022**, 14,		0
94	Biodegradable, Super-Strong, and Conductive Cellulose Macrofibers for Fabric-Based Triboelectric Nanogenerator.. **2022**, 14, 115		6

93	Analysis of the In Vitro Toxicity of Nanocelluloses in Human Lung Cells as Compared to Multi-Walled Carbon Nanotubes.. **2022**, 12,		1
92	Genotoxicity of Three Micro/Nanocelluloses with Different Physicochemical Characteristics in MG-63 and V79 Cells. **2022**, 12, 91-108		1
91	Green Chemistry and Molecularly Imprinted Membranes. **2022**, 12, 472		0
90	Hydrophobicity improvement of cellulose nanofibrils films by stearic acid and modified precipitated calcium carbonate coating. 1		0
89	Nanocellulose-based superhydrophobic coating with acid resistance and fluorescence. **2022**, 168, 106911		2
88	A study using a combined method of scientometric and manual analysis to review the present research of plant fibres reinforced concrete. **2022**, 341, 127551		1
87	Characterization of antibacterial aerogel based on e-poly-l-lysine/nanocellulose by using citric acid as crosslinker. *Carbohydrate Polymers*, **2022**, 291, 119568	10.3	1
86	A review of nanocellulose adsorptive membrane as multifunctional wastewater treatment. *Carbohydrate Polymers*, **2022**, 291, 119563	10.3	8
85	Sustainable Green Methods for the Extraction of Biopolymers. **2022**, 73-110		1
84	Remarkable Enhancement in Thermal Performance of Polypropylene Carbonate by Using Exfoliated Boron Nitride Nanosheets.		
83	Nanocellulose in tissue engineering and bioremediation: mechanism of action. **2022**, 13, 12823-12833		
82	An Opto- and Thermal-Rewrite PCM/CNF-IR 780 Energy Storage Nanopaper with Mechanical Regulated Performance. 2200688		0
81	Natural Polymers and Their Nanocomposites Used for Environmental Applications. **2022**, 12, 1707		0
80	Nanocomposites of Epoxy and Cellulosic Nanomaterials. 235-265		
79	Polyvalent metal ion adsorption by chemically modified biochar fibers. **2022**, 267-286		
78	Degradation by Electron Beam Irradiation of Some Composites Based on Natural Rubber Reinforced with Mineral and Organic Fillers. **2022**, 23, 6925		1
77	Anisotropic, elastic cellulose nanofibril cryogel cross-linked by waterborne polyurethane with excellent thermal insulation performance.		
76	Fluorescent cellulosic composites based on carbon dots: Recent advances, developments, and applications. *Carbohydrate Polymers*, **2022**, 119768	10.3	1

75	Cellulose-Based Materials for Water Purification. **2022**, 7,		0
74	Oxidized cellulose nanofibrils-based surimi gel enhancing additives: Interactions, performance and mechanisms. **2022**, 133, 107893		0
73	Green composites, the next-generation sustainable composite materials: Specific features and applications. **2022**, 55-70		
72	Polymer-based green composites and their applications. **2022**, 123-145		
71	Circularity Potential of Rice Husk as a Bioplastic Resource: Techno-Environmental Assessment.		
70	Nanocellulose-Based Composite Materials Used in Drug Delivery Systems. **2022**, 14, 2648		4
69	Recent advances of micro-nanofiber materials for rechargeable zinc-air batteries. **2022**, 51, 181-211		2
68	Redispersion of dried plant nanocellulose: A review. *Carbohydrate Polymers*, **2022**, 294, 119830	10.3	1
67	Remarkable enhancement in thermal performance of polypropylene carbonate by using exfoliated boron nitride nanosheets. **2022**, 138247		1
66	Surface Doping of Anionic Clusters Facilitated Direct Fabrication of Commercial Cellulose Nanofibrils for Long-Range Ordered Layer Structures.		1
65	Nanocellulose as a promising substrate for advanced sensors and their applications. **2022**, 218, 473-487		1
64	A simple model to fit and interpret creep curves-behaviour of modified micro-cellulose particulate composites.		0
63	Colocasia esculenta stems for the isolation of cellulose nanofibers: a chlorine-free method for the biomass conversion.		0
62	Cellulose derivatives and cellulose-metal-organic frameworks for CO2 adsorption and separation. **2022**, 64, 102163		0
61	All-natural, sustainable laminated composites from bacterial cellulose and wheat flour paste. **2022**, 118, 103242		
60	Cellulose from Annual Plants and Its Use for the Production of the Films Hydrophobized with Tetrafluoroethylene Telomers. **2022**, 27, 6002		0
59	Nanofibras de celulose (NFC) como reforço de matrizes cimentícias: revisão sistemática da literatura. **2022**, 12, 311-327		0
58	Biopolymers based aerogels: A review on revolutionary solutions for smart therapeutics delivery. **2023**, 131, 101014		3

57	Flexible Lumped Microwave Passive Components and Filters on Cellulose Nanofibril Substrates. **2022**, 1-6	0
56	Overview of preparation, modification, and application of tunicate-derived nanocellulose. **2023**, 452, 139439	1
55	Novel Technologies for Seaweed Polysaccharides Extraction and Their Use in Food with Therapeutically ApplicationsâĂ Review. **2022**, 11, 2654	2
54	Source of Nanocellulose and Its Application in Nanocomposite Packaging Material: A Review. **2022**, 12, 3158	6
53	Biobased Polymer Composites: A Review. **2022**, 6, 255	4
52	Covalent Crosslinking of Colloidal Cellulose Nanocrystals for Multifunctional Nanostructured Hydrogels with Tunable Physicochemical Properties.	1
51	Functionalized Cellulose Sheets with Fertilizers Applied as Multimodal Agricultural Supports for Seedling Cultivation.	0
50	Aqueous-Based Polyimine Functionalization of Cellulose Nanofibrils for Effective Drying and Polymer Composite Reinforcement.	1
49	Phenol formaldehyde resin modified by cellulose and lignin nanomaterials: Review and recent progress. **2022**,	1
48	Study of Progress on Nanocrystalline Cellulose and Natural Fiber Reinforcement Biocomposites. **2022**, 2022, 1-16	1
47	Sustainable starch biocomposite films fully-based on white rice (Oryza sativa) agroindustrial by-products. **2022**, 136, 47-58	1
46	Fully Bio-based Polybenzoxazines Derived from Thymol: Thermal Stability, Hydrophobicity and Corrosion Resistant Properties.	2
45	Sources, Chemical Functionalization, and Commercial Applications of Nanocellulose and Nanocellulose-Based Composites: A Review. **2022**, 14, 4468	0
44	Short Fiber Reinforced Composites. **2022**, 185-367	0
43	The Encapsulation of Bioactive Plant Extracts into the Cellulose Microfiber Isolated from G. optiva Species for Biomedical Applications. **2022**, 12, 1089	1
42	From nature, requite to nature: Bio-based cellulose and its derivatives for construction of green zinc batteries. **2023**, 454, 140311	1
41	Preparation of Side-By-Side Bicomponent Fibers Using Bio Polyol Based Thermoplastic Polyurethane (TPU) and TPU/Polylactic Acid Blends. **2022**, 10, 95	0
40	The synthesis, mechanisms, and additives for bio-compatible polyvinyl alcohol hydrogels: A review on current advances, trends, and future outlook.	0

39	Rare Earth Elements Uptake by Synthetic Polymeric and Cellulose-Based Materials: A Review. **2022**, 14, 4786	0
38	Nanocellulose and Cellulose Making with Bio-Enzymes from Different Particle Sizes of Neosinocalamus Affinis. **2022**, 12, 1734	2
37	Physico-chemical parameters for the assembly of moxifloxacin hydrochloride and cetyltrimethylammonium chloride mixtures in aqueous and alcoholic media. **2022**,	0
36	Applications of Biobased Composites in Optical Devices. **2023**, 471-490	0
35	Epoxy-functionalized polyethyleneimine modified epichlorohydrin-cross-linked cellulose aerogel as adsorbents for carbon dioxide capture. **2023**, 302, 120389	1
34	APPROACHING SUSTAINABILITY: NANOCELLULOSE REINFORCED ELASTOMERSâ A REVIEW. **2022**, 95, 515-549	0
33	Mechanical properties of cellulose-based multiscale composites: A review.	1
32	Testing of Natural Fiber Composites. **2023**, 131-148	0
31	Cellulose and protein nanofibrils: Singular biobased nanostructures for the design of sustainable advanced materials. 10,	0
30	Effect of moisture content on the microscopic properties of amorphous cellulose: a molecular dynamics simulations. **2022**, 9, 125308	0
29	Eco-friendly and facile preparation of chitosan-based biofilms of novel acetoacetylated lignin for antioxidant and UV-shielding properties. **2023**, 225, 1384-1393	0
28	Agronanobiotechnology: Present and Prospect. **2023**, 43-80	0
27	Effect of phosphorylation on the production of cellulose nanofibrils from Eucalyptus sp. **2023**, 193, 116173	0
26	Synthesis and characterization of carboxymethyl cellulose from pineapple leaf and kenaf core biomass: a comparative study of new raw materials.	0
25	Extraction of Corn Bract Cellulose by the Ammonia-Coordinated Bio-Enzymatic Method. **2023**, 15, 206	1
24	Extraction of cellulose from agro-industrial wastes. **2023**, 319-348	0
23	Lignin-Derived Carbon Nanofibers Loaded with TiO 2 Enables Efficient Photocatalysis. 2200459	0
22	Cellulose nanocrystals from Siam weed: Synthesis and physicochemical characterization. **2023**, 9, e13104	0

21	Cellulose-Based Drug Delivery Systems in Lung Disorders. **2023**, 83-102	0
20	Enhancement of photocatalytic performance in degradation of aqueous trichloroethylene and methylene blue by using TiO2 thin film fabricated by cellulose nanocrystals templating and Nb doping.	0
19	Nanocellulose-Based (Bio)composites for Optoelectronic Applications. **2023**, 1-26	0
18	Advanced applications of biomass nanocellulose-reinforced polymer composites. **2023**, 349-385	0
17	Advances in haemostatic sponges: Characteristics and the underlying mechanisms for rapid haemostasis. **2023**, 27, 231-256	0
16	Investigating the use of natural hollow fibers from common milkweed to improve the mechanical and thermal properties of epoxy resin.	0
15	Cationic cellulose nanocrystals as sustainable green material for multi biological applications via potential. 1-25	1
14	Improved photocatalytic property of lignin-derived carbon nanofibers through catalyst synergy. **2023**, 233, 123588	1
13	Porphyrin Photosensitizers Grafted in Cellulose Supports: A Review. **2023**, 24, 3475	0
12	Recent advances in MOF-bio-interface: a review. **2023**, 34, 202002	0
11	Recent developments in GO/Cellulose based composites: Properties, synthesis, and its applications. **2023**, 270, 125786	0
10	Evaluating the Properties of Native and Modified Milkweed Floss for Applications as a Reinforcing Fiber. **2023**, 20,	0
9	Organized mineralized cellulose nanostructures for biomedical applications.	0
8	A Review of Biomass-Derived UV-Shielding Materials for Bio-Composites. **2023**, 16, 2231	0
7	Tannin improves the processability and delays the biodegradability of poly (lactic acid)-starch-based thermoset materials produced by injection molding made with renewable compounds. **2023**, 140,	0
6	Development of nanocellulose fiber reinforced starch biopolymer composites: a review. **2023**,	0
5	Horse chestnut thermoplastic starch nanocomposite films reinforced with nanocellulose. **2023**,	0
4	Molecular Dynamics Simulation on Tensile Behavior of Cellulose at Different Strain Rates. **2023**, 2023, 1-10	0

3	Machinability analysis of Typha angustifolia natural fiber reinforced composites through experimental modeling â Influence of fiber orientation.	0
2	Recent advances in the development of MXenes/cellulose based composites: A review. **2023**, 240, 124477	0
1	Functional Sensory and Biomedical Applications of Cellulose Nanocrystals as a Sustainable Source of Material. **2023**, 61-75	0