Tsuguyuki Saito

List of Publications by Year
in descending order

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Version: 2024-02-01

196 papers	22,835 citations	13068 68 h-index	8138 148 g-index
204 all docs	204 docs citations	204 times ranked	11515 citing authors

#	ARTICLE	IF	CITATIONS
1	TEMPO-oxidized cellulose nanofibers. Nanoscale, 2011, 3, 71-85.	2.8	2,446
2	Cellulose Nanofibers Prepared by TEMPO-Mediated Oxidation of Native Cellulose. Biomacromolecules, 2007, 8, 2485-2491.	2.6	2,015
3	Homogeneous Suspensions of Individualized Microfibrils from TEMPO-Catalyzed Oxidation of Native Cellulose. Biomacromolecules, 2006, 7, 1687-1691.	2.6	1,524
4	Transparent and High Gas Barrier Films of Cellulose Nanofibers Prepared by TEMPO-Mediated Oxidation. Biomacromolecules, 2009, 10, 162-165.	2.6	1,118
5	TEMPO-Mediated Oxidation of Native Cellulose. The Effect of Oxidation Conditions on Chemical and Crystal Structures of the Water-Insoluble Fractions. Biomacromolecules, 2004, 5, 1983-1989.	2.6	1,056
6	Multifunctional Alloys Obtained via a Dislocation-Free Plastic Deformation Mechanism. Science, 2003, 300, 464-467.	6.0	779
7	Individualization of Nano-Sized Plant Cellulose Fibrils by Direct Surface Carboxylation Using TEMPO Catalyst under Neutral Conditions. Biomacromolecules, 2009, 10, 1992-1996.	2.6	665
8	An Ultrastrong Nanofibrillar Biomaterial: The Strength of Single Cellulose Nanofibrils Revealed via Sonication-Induced Fragmentation. Biomacromolecules, 2013, 14, 248-253.	2.6	507
9	Aerogels with 3D Ordered Nanofiber Skeletons of Liquidâ€Crystalline Nanocellulose Derivatives as Tough and Transparent Insulators. Angewandte Chemie - International Edition, 2014, 53, 10394-10397.	7.2	426
10	Relationship between Length and Degree of Polymerization of TEMPO-Oxidized Cellulose Nanofibrils. Biomacromolecules, 2012, 13, 842-849.	2.6	419
11	Entire Surface Oxidation of Various Cellulose Microfibrils by TEMPO-Mediated Oxidation. Biomacromolecules, 2010, 11, 1696-1700.	2.6	407
12	Preparation and characterization of TEMPO-oxidized cellulose nanofibril films with free carboxyl groups. Carbohydrate Polymers, 2011, 84, 579-583.	5.1	368
13	Chitin Nanocrystals Prepared by TEMPO-Mediated Oxidation of Î±-Chitin. Biomacromolecules, 2008, 9, 192-198.	2.6	337
14	Thermal stabilization of TEMPO-oxidized cellulose. Polymer Degradation and Stability, 2010, 95, 1502-1508.	2.7	337
15	Self-aligned integration of native cellulose nanofibrils towards producing diverse bulk materials. Soft Matter, 2011, 7, 8804.	1.2	320
16	Preparation of Chitin Nanofibers from Squid Pen Î²-Chitin by Simple Mechanical Treatment under Acid Conditions. Biomacromolecules, 2008, 9, 1919-1923.	2.6	315
17	Ultrastrong and High Gas-Barrier Nanocellulose/Clay-Layered Composites. Biomacromolecules, 2012, 13, 1927-1932.	2.6	283
18	Individual chitin nano-whiskers prepared from partially deacetylated Î±-chitin by fibril surface cationization. Carbohydrate Polymers, 2010, 79, 1046-1051.	5.1	272

#	Article	IF	Citations
19	Transparent, Conductive, and Printable Composites Consisting of TEMPO-Oxidized Nanocellulose and Carbon Nanotube. Biomacromolecules, 2013, 14, 1160-1165.	2.6	257
20	Simple Freeze-Drying Procedure for Producing Nanocellulose Aerogel-Containing, High-Performance Air Filters. ACS Applied Materials & Interfaces, 2015, 7, 19809-19815.	4.0	231
21	Ion-exchange behavior of carboxylate groups in fibrous cellulose oxidized by the TEMPO-mediated system. Carbohydrate Polymers, 2005, 61, 183-190.	5.1	223
22	Transparent Cellulose Films with High Gas Barrier Properties Fabricated from Aqueous Alkali/Urea Solutions. Biomacromolecules, 2011, 12, 2766-2771.	2.6	223
23	Review: Catalytic oxidation of cellulose with nitroxyl radicals under aqueous conditions. Progress in Polymer Science, 2018, 86, 122-148.	11.8	221
24	Topochemical synthesis and catalysis of metal nanoparticles exposed on crystalline cellulose nanofibers. Chemical Communications, 2010, 46, 8567.	2.2	211
25	Introduction of aldehyde groups on surfaces of native cellulose fibers by TEMPO-mediated oxidation. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2006, 289, 219-225.	2.3	208
26	Influence of TEMPO-oxidized cellulose nanofibril length on film properties. Carbohydrate Polymers, 2013, 93, 172-177.	5.1	187
27	TEMPO-mediated oxidation of native cellulose: Microscopic analysis of fibrous fractions in the oxidized products. Carbohydrate Polymers, 2006, 65, 435-440.	5.1	175
28	Surface Engineering of Ultrafine Cellulose Nanofibrils toward Polymer Nanocomposite Materials. Biomacromolecules, 2013, 14, 1541-1546.	2.6	173
29	Water-resistant and high oxygen-barrier nanocellulose films with interfibrillar cross-linkages formed through multivalent metal ions. Journal of Membrane Science, 2016, 500, 1-7.	4.1	173
30	Comparative characterization of aqueous dispersions and cast films of different chitin nanowhiskers/nanofibers. International Journal of Biological Macromolecules, 2012, 50, 69-76.	3.6	165
31	Acid-Free Preparation of Cellulose Nanocrystals by TEMPO Oxidation and Subsequent Cavitation. Biomacromolecules, 2018, 19, 633-639.	2.6	165
32	Superior Reinforcement Effect of TEMPO-Oxidized Cellulose Nanofibrils in Polystyrene Matrix: Optical, Thermal, and Mechanical Studies. Biomacromolecules, 2012, 13, 2188-2194.	2.6	148
33	TEMPO-mediated oxidation of Î²-chitin to prepare individual nanofibrils. Carbohydrate Polymers, 2009, 77, 832-838.	5.1	133
34	Distribution of carboxylate groups introduced into cotton linters by the TEMPO-mediated oxidation. Carbohydrate Polymers, 2005, 61, 414-419.	5.1	132
35	TEMPO-oxidized cellulose hydrogel as a high-capacity and reusable heavy metal ion adsorbent. Journal of Hazardous Materials, 2013, 260, 195-201.	6.5	132
36	The Crystallinity of Nanocellulose: Dispersion-Induced Disordering of the Grain Boundary in Biologically Structured Cellulose. ACS Applied Nano Materials, 2018, 1, 5774-5785.	2.4	127

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37	Oxidation of regenerated cellulose with NaClO2 catalyzed by TEMPO and NaClO under acid-neutral conditions. Carbohydrate Polymers, 2009, 78, 330-335.	5.1	120
38	Dispersion stability and aggregation behavior of TEMPO-oxidized cellulose nanofibrils in water as a function of salt addition. Cellulose, 2014, 21, 1553-1559.	2.4	119
39	Hydrophobic, Ductile, and Transparent Nanocellulose Films with Quaternary Alkylammonium Carboxylates on Nanofibril Surfaces. Biomacromolecules, 2014, 15, 4320-4325.	2.6	114
40	Cellulose nanofibrils prepared from softwood cellulose by TEMPO/NaClO/NaClO2 systems in water at pH 4.8 or 6.8. International Journal of Biological Macromolecules, 2012, 51, 228-234.	3.6	110
41	TEMPO-Oxidized Cellulose Nanofibrils Dispersed in Organic Solvents. Biomacromolecules, 2011, 12, 518-522.	2.6	108
42	Determination of nanocellulose fibril length by shear viscosity measurement. Cellulose, 2014, 21, 1581-1589.	2.4	107
43	Pore Size Determination of TEMPO-Oxidized Cellulose Nanofibril Films by Positron Annihilation Lifetime Spectroscopy. Biomacromolecules, 2011, 12, 4057-4062.	2.6	105
44	Wood cellulose nanofibrils prepared by TEMPO electro-mediated oxidation. Cellulose, 2011, 18, 421-431.	2.4	105
45	Multifunctional Coating Films by Layer-by-Layer Deposition of Cellulose and Chitin Nanofibrils. Biomacromolecules, 2012, 13, 553-558.	2.6	96
46	TEMPO-oxidized cellulose nanofibrils prepared from various plant holocelluloses. Reactive and Functional Polymers, 2014, 85, 126-133.	2.0	95
47	Partitioned airs at microscale and nanoscale: thermal diffusivity in ultrahigh porosity solids of nanocellulose. Scientific Reports, 2016, 6, 20434.	1.6	94
48	Glucose/Glucuronic Acid Alternating Coâ€polysaccharides Prepared from TEMPOâ€Oxidized Native Celluloses by Surface Peeling. Angewandte Chemie - International Edition, 2010, 49, 7670-7672.	7.2	92
49	Viscoelastic Evaluation of Average Length of Cellulose Nanofibers Prepared by TEMPO-Mediated Oxidation. Biomacromolecules, 2011, 12, 548-550.	2.6	89
50	Nematic structuring of transparent and multifunctional nanocellulose papers. Nanoscale Horizons, 2018, 3, 28-34.	4.1	89
51	TEMPO-mediated oxidation of softwood thermomechanical pulp. Holzforschung, 2009, 63, 529-535.	0.9	86
52	TEMPO Electromediated Oxidation of Some Polysaccharides Including Regenerated Cellulose Fiber. Biomacromolecules, 2010, 11, 1593-1599.	2.6	86
53	Nanofibrillar Chitin Aerogels as Renewable Base Catalysts. Biomacromolecules, 2014, 15, 4314-4319.	2.6	83
54	Influence of Flexibility and Dimensions of Nanocelluloses on the Flow Properties of Their Aqueous Dispersions. Biomacromolecules, 2015, 16, 2127-2131.	2.6	83

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55	Comparison study of TEMPO-analogous compounds on oxidation efficiency of wood cellulose for preparation of cellulose nanofibrils. Polymer Degradation and Stability, 2010, 95, 1394-1398.	2.7	82
56	Chemical Modification of Cellulose Nanofibers for the Production of Highly Thermal Resistant and Optically Transparent Nanopaper for Paper Devices. ACS Applied Materials & Interfaces, 2015, 7, 22012-22017.	4.0	81
57	Wet Strength Improvement of TEMPO-Oxidized Cellulose Sheets Prepared with Cationic Polymers. Industrial & Engineering Chemistry Research, 2007, 46, 773-780.	1.8	78
58	Dual Functions of TEMPO-Oxidized Cellulose Nanofibers in Oil-in-Water Emulsions: A Pickering Emulsifier and a Unique Dispersion Stabilizer. Langmuir, 2019, 35, 10920-10926.	1.6	78
59	Water dispersion of cellulose II nanocrystals prepared by TEMPO-mediated oxidation of mercerized cellulose at pH 4.8. Cellulose, 2010, 17, 279-288.	2.4	77
60	Improvement of nanodispersibility of oven-dried TEMPO-oxidized celluloses in water. Cellulose, 2014, 21, 4093-4103.	2.4	77
61	Cellulose nanofibrils improve the properties of all-cellulose composites by the nano-reinforcement mechanism and nanofibril-induced crystallization. Nanoscale, 2015, 7, 17957-17963.	2.8	76
62	Oxidation of bleached wood pulp by TEMPO/NaClO/NaClO2 system: effect of the oxidation conditions on carboxylate content and degree of polymerization. Journal of Wood Science, 2010, 56, 227-232.	0.9	75
63	Mechanical and oxygen barrier properties of films prepared from fibrillated dispersions of TEMPO-oxidized Norway spruce and Eucalyptus pulps. Cellulose, 2012, 19, 705-711.	2.4	72
64	Highly tough and transparent layered composites of nanocellulose and synthetic silicate. Nanoscale, 2014, 6, 392-399.	2.8	72
65	Molecular Mass and Molecular-Mass Distribution of TEMPO-Oxidized Celluloses and TEMPO-Oxidized Cellulose Nanofibrils. Biomacromolecules, 2015, 16, 675-681.	2.6	72
66	TEMPO-oxidized cellulose nanofibril/poly(vinyl alcohol) composite drawn fibers. Polymer, 2013, 54, 935-941.	1.8	71
67	Cellulose Nanofibers Prepared Using the TEMPO/Laccase/O₂ System. Biomacromolecules, 2017, 18, 288-294.	2.6	71
68	Bioinspired stiff and flexible composites of nanocellulose-reinforced amorphous CaCO3. Materials Horizons, 2014, 1, 321.	6.4	70
69	TEMPO-mediated Oxidation of Native Cellulose: SECâ€“MALLS Analysis of Water-soluble and -Insoluble Fractions in the Oxidized Products. Cellulose, 2005, 12, 305-315.	2.4	66
70	Comparative characterization of TEMPO-oxidized cellulose nanofibril films prepared from non-wood resources. International Journal of Biological Macromolecules, 2013, 59, 208-213.	3.6	66
71	Selective Permeation of Hydrogen Gas Using Cellulose Nanofibril Film. Biomacromolecules, 2013, 14, 1705-1709.	2.6	64
72	Bulky Quaternary Alkylammonium Counterions Enhance the Nanodispersibility of 2,2,6,6-Tetramethylpiperidine-1-oxyl-Oxidized Cellulose in Diverse Solvents. Biomacromolecules, 2014, 15, 1904-1909.	2.6	61

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73	Comparison of mechanical reinforcement effects of surface-modified cellulose nanofibrils and carbon nanotubes in PLLA composites. Composites Science and Technology, 2014, 90, 96-101.	3.8	60
74	Topological loading of Cu(i) catalysts onto crystalline cellulose nanofibrils for the Huisgen click reaction. Journal of Materials Chemistry, 2012, 22, 5538.	6.7	59
75	Mechanically Strong, Scalable, Mesoporous Xerogels of Nanocellulose Featuring Light Permeability, Thermal Insulation, and Flame Self-Extinction. ACS Nano, 2021, 15, 1436-1444.	7.3	59
76	CaCO3/chitin-whisker hybrids: formation of CaCO3 crystals in chitin-based liquid-crystalline suspension. Polymer Journal, 2010, 42, 583-586.	1.3	57
77	Chitin nanocrystals prepared by oxidation of Î±-chitin using the O2/laccase/TEMPO system. Carbohydrate Polymers, 2018, 189, 178-183.	5.1	57
78	Estimating the Strength of Single Chitin Nanofibrils via Sonication-Induced Fragmentation. Biomacromolecules, 2017, 18, 4405-4410.	2.6	56
79	Local Crystallinity in Twisted Cellulose Nanofibers. ACS Nano, 2021, 15, 2730-2737.	7.3	53
80	Surface carboxylation of porous regenerated cellulose beads by 4-acetamide-TEMPO/NaClO/NaClO2 system. Cellulose, 2009, 16, 841-851.	2.4	52
81	TEMPO-Mediated Oxidation of Norway Spruce and Eucalyptus Pulps: Preparation and Characterization of Nanofibers and Nanofiber Dispersions. Journal of Polymers and the Environment, 2013, 21, 207-214.	2.4	49
82	Nanocellulose Film Properties Tunable by Controlling Degree of Fibrillation of TEMPO-Oxidized Cellulose. Frontiers in Chemistry, 2020, 8, 37.	1.8	49
83	Improvement of the Thermal Stability of TEMPOâ€Oxidized Cellulose Nanofibrils by Heatâ€Induced Conversion of Ionic Bonds to Amide Bonds. Macromolecular Rapid Communications, 2016, 37, 1033-1039.	2.0	48
84	Facile fabrication of transparent cellulose films with high water repellency and gas barrier properties. Cellulose, 2012, 19, 1913-1921.	2.4	46
85	Preparation and characterization of TEMPO-oxidized cellulose nanofibrils with ammonium carboxylate groups. International Journal of Biological Macromolecules, 2013, 59, 99-104.	3.6	46
86	Oxidation of curdlan and other polysaccharides by 4-acetamide-TEMPO/NaClO/NaClO2 under acid conditions. Carbohydrate Polymers, 2010, 81, 592-598.	5.1	45
87	Celluloseâ€“clay layered nanocomposite films fabricated from aqueous cellulose/LiOH/urea solution. Carbohydrate Polymers, 2014, 100, 179-184.	5.1	45
88	Nanocellulose Xerogels With High Porosities and Large Specific Surface Areas. Frontiers in Chemistry, 2019, 7, 316.	1.8	45
89	Increase in the Water Contact Angle of Composite Film Surfaces Caused by the Assembly of Hydrophilic Nanocellulose Fibrils and Nanoclay Platelets. ACS Applied Materials & Interfaces, 2014, 6, 12707-12712.	4.0	44
90	Low-Birefringent and Highly Tough Nanocellulose-Reinforced Cellulose Triacetate. ACS Applied Materials & Interfaces, 2015, 7, 11041-11046.	4.0	44

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91	Viscoelastic Properties of Coreâ€“Shell-Structured, Hemicellulose-Rich Nanofibrillated Cellulose in Dispersion and Wet-Film States. Biomacromolecules, 2016, 17, 2104-2111.	2.6	43
92	Reliable d<i>n</i>/dc Values of Cellulose, Chitin, and Cellulose Triacetate Dissolved in LiCl/<i>N,N</i>-Dimethylacetamide for Molecular Mass Analysis. Biomacromolecules, 2016, 17, 192-199.	2.6	43
93	Characterization of cellulose microfibrils, cellulose molecules, and hemicelluloses in buckwheat and rice husks. Cellulose, 2019, 26, 6529-6541.	2.4	43
94	Crystallinity-Independent yet Modification-Dependent True Density of Nanocellulose. Biomacromolecules, 2020, 21, 939-945.	2.6	43
95	Fast and Robust Nanocellulose Width Estimation Using Turbidimetry. Macromolecular Rapid Communications, 2016, 37, 1581-1586.	2.0	40
96	SEC-MALS analysis of cellouronic acid prepared from regenerated cellulose by TEMPO-mediated oxidation. Cellulose, 2006, 13, 73-80.	2.4	38
97	Improvement of mechanical and oxygen barrier properties of cellulose films by controlling drying conditions of regenerated cellulose hydrogels. Cellulose, 2012, 19, 695-703.	2.4	38
98	Different Conformations of Surface Cellulose Molecules in Native Cellulose Microfibrils Revealed by Layer-by-Layer Peeling. Biomacromolecules, 2017, 18, 3687-3694.	2.6	38
99	Nanostructure and Properties of Nacre-Inspired Clay/Cellulose Nanocompositesâ€"Synchrotron X-ray Scattering Analysis. Macromolecules, 2019, 52, 3131-3140.	2.2	38
100	Nano-dispersion of TEMPO-oxidized cellulose/aliphatic amine salts in isopropyl alcohol. Cellulose, 2012, 19, 459-466.	2.4	37
101	Nanoporous Networks Prepared by Simple Air Drying of Aqueous TEMPO-Oxidized Cellulose Nanofibril Dispersions. Biomacromolecules, 2012, 13, 943-946.	2.6	36
102	Preparation of Aqueous Dispersions of TEMPO-Oxidized Cellulose Nanofibrils with Various Metal Counterions and Their Super Deodorant Performances. ACS Macro Letters, 2016, 5, 1402-1405.	2.3	36
103	Effects of carboxyl-group counter-ions on biodegradation behaviors of TEMPO-oxidized cellulose fibers and nanofibril films. Cellulose, 2013, 20, 2505-2515.	2.4	35
104	Formation of N-acylureas on the surface of TEMPO-oxidized cellulose nanofibril with carbodiimide in DMF. Cellulose, 2011, 18, 1191-1199.	2.4	34
105	Characterization of cellulose nanofibrils prepared by direct TEMPO-mediated oxidation of hemp bast. Cellulose, 2017, 24, 3767-3775.	2.4	34
106	SECâ€“MALLS analysis of ethylenediamine-pretreated native celluloses in LiCl/N,N-dimethylacetamide: softwood kraft pulp and highly crystalline bacterial, tunicate, and algal celluloses. Cellulose, 2016, 23, 1639-1647.	2.4	33
107	Luminescent and Transparent Nanocellulose Films Containing Europium Carboxylate Groups as Flexible Dielectric Materials. ACS Applied Nano Materials, 2018, 1, 4972-4979.	2.4	33
108	TEMPO-Mediated Oxidation of Hemp Bast Holocellulose to Prepare Cellulose Nanofibrils Dispersed in Water. Journal of Polymers and the Environment, 2013, 21, 555-563.	2.4	32

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109	Carboxylated nanocellulose/poly(ethylene oxide) composite films as solidâ€"solid phase-change materials for thermal energy storage. Carbohydrate Polymers, 2019, 225, 115215.	5.1	32
110	Cellulose II nanoelements prepared from fully mercerized, partially mercerized and regenerated celluloses by 4-acetamido-TEMPO/NaClO/NaClO2 oxidation. Cellulose, 2012, 19, 435-442.	2.4	31
111	Preparation and Hydrogel Properties of pH-Sensitive Amphoteric Chitin Nanocrystals. Journal of Agricultural and Food Chemistry, 2018, 66, 11372-11379.	2.4	31
112	IÎ±Ââ†’ÂIÎ² transition of cellulose under ultrasonic radiation. Cellulose, 2013, 20, 597-603.	2.4	30
113	Cellulose nanofibrils as templates for the design of poly(l-lactide)-nucleating surfaces. Polymer, 2014, 55, 2937-2942.	1.8	30
114	Best Practice for Reporting Wet Mechanical Properties of Nanocellulose-Based Materials. Biomacromolecules, 2020, 21, 2536-2540.	2.6	30
115	Effect of coexisting salt on TEMPO-mediated oxidation of wood cellulose for preparation of nanocellulose. Cellulose, 2017, 24, 4097-4101.	2.4	29
116	Parametric Model to Analyze the Components of the Thermal Conductivity of a Cellulose-Nanofibril Aerogel. Physical Review Applied, 2019, 11, .	1.5	29
117	Surface-hydrophobized TEMPO-nanocellulose/rubber composite films prepared in heterogeneous and homogeneous systems. Cellulose, 2019, 26, 463-473.	2.4	29
118	Counterion design of TEMPO-nanocellulose used as filler to improve properties of hydrogenated acrylonitrile-butadiene matrix. Composites Science and Technology, 2018, 167, 339-345.	3.8	27
119	Particle size distributions for cellulose nanocrystals measured by atomic force microscopy: an interlaboratory comparison. Cellulose, 2021, 28, 1387-1403.	2.4	27
120	Colorless Transparent Melamineâ€"Formaldehyde Aerogels for Thermal Insulation. ACS Applied Nano Materials, 2020, 3, 49-54.	2.4	26
121	Fabrication of ultrathin nanocellulose shells on tough microparticles<i>via</i>an emulsion-templated colloidal assembly: towards versatile carrier materials. Nanoscale, 2019, 11, 15004-15009.	2.8	25
122	Characterization of Concentration-Dependent Gelation Behavior of Aqueous 2,2,6,6-Tetramethylpiperidine-1-oxylâˆ’Cellulose Nanocrystal Dispersions Using Dynamic Light Scattering. Biomacromolecules, 2019, 20, 750-757.	2.6	25
123	Influence of Chemical and Enzymatic TEMPO-Mediated Oxidation on Chemical Structure and Nanofibrillation of Lignocellulose. ACS Sustainable Chemistry and Engineering, 2020, 8, 14198-14206.	3.2	25
124	Ensemble evaluation of polydisperse nanocellulose dimensions: rheology, electron microscopy, X-ray scattering and turbidimetry. Cellulose, 2017, 24, 3231-3242.	2.4	24
125	Degradation of TEMPO-oxidized cellulose fibers and nanofibrils by crude cellulase. Cellulose, 2013, 20, 795-805.	2.4	23
126	Nanocellulose Production via One-Pot Formation of C2 and C3 Carboxylate Groups Using Highly Concentrated NaClO Aqueous Solution. ACS Sustainable Chemistry and Engineering, 2020, 8, 17800-17806.	3.2	23

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127	Synthesis of Chitin Nanofiber-Coated Polymer Microparticles via Pickering Emulsion. Biomacromolecules, 2020, 21, 1886-1891.	2.6	23
128	Preparation of completely C6-carboxylated curdlan by catalytic oxidation with 4-acetamido-TEMPO. Carbohydrate Polymers, 2014, 100, 74-79.	5.1	22
129	Pathologic Features of Colorectal Inflammatory Polyps in Miniature Dachshunds. Veterinary Pathology, 2016, 53, 833-839.	0.8	22
130	Preparation and characterization of zinc oxide/TEMPO-oxidized cellulose nanofibril composite films. Cellulose, 2017, 24, 4861-4870.	2.4	22
131	Recovery of the Irreversible Crystallinity of Nanocellulose by Crystallite Fusion: A Strategy for Achieving Efficient Energy Transfers in Sustainable Biopolymer Skeletons**. Angewandte Chemie - International Edition, 2021, 60, 24630-24636.	7.2	22
132	Formation of Nanosized Islands of Dialkyl Î²-Ketoester Bonds for Efficient Hydrophobization of a Cellulose Film Surface. Langmuir, 2014, 30, 8109-8118.	1.6	21
133	Influence of drying of chara cellulose on length/length distribution of microfibrils after acid hydrolysis. International Journal of Biological Macromolecules, 2018, 109, 569-575.	3.6	21
134	Changes in the degree of polymerization of wood celluloses during dilute acid hydrolysis and TEMPO-mediated oxidation: Formation mechanism of disordered regions along each cellulose microfibril. International Journal of Biological Macromolecules, 2018, 109, 914-920.	3.6	21
135	Improvement of nanofibrillation efficiency of Î±-chitin in water by selecting acid used for surface cationisation. RSC Advances, 2013, 3, 2613.	1.7	19
136	Interfacial layer thickness design for exploiting the reinforcement potential of nanocellulose in cellulose triacetate matrix. Composites Science and Technology, 2017, 147, 100-106.	3.8	19
137	SEC-MALLS analysis of TEMPO-oxidized celluloses using methylation of carboxyl groups. Cellulose, 2014, 21, 167-176.	2.4	18
138	Dual Counterion Systems of Carboxylated Nanocellulose Films with Tunable Mechanical, Hydrophilic, and Gas-Barrier Properties. Biomacromolecules, 2019, 20, 1691-1698.	2.6	18
139	Creation of a new material stream from Japanese cedar resources to cellulose nanofibrils. Reactive and Functional Polymers, 2015, 95, 19-24.	2.0	17
140	Dynamic Viscoelastic Functions of Liquid-Crystalline Chitin Nanofibril Dispersions. Biomacromolecules, 2017, 18, 2564-2570.	2.6	17
141	Investigation of stability of branched structures in softwood cellulose using SEC/MALLS/RI/UV and sugar composition analyses. Cellulose, 2018, 25, 2667-2679.	2.4	17
142	Solution-state structures of the cellulose model pullulan in lithium chloride/N,N-dimethylacetamide. International Journal of Biological Macromolecules, 2018, 107, 2598-2603.	3.6	17
143	Influence of the morphology of zinc oxide nanoparticles on the properties of zinc oxide/nanocellulose composite films. Reactive and Functional Polymers, 2018, 131, 293-298.	2.0	16
144	Preparation of oxidized celluloses in a TEMPO/NaBr system using different chlorine reagents in water. Cellulose, 2019, 26, 3021-3030.	2.4	16

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145	Nanocellulose-containing cellulose ether composite films prepared from aqueous mixtures by casting and drying method. Cellulose, 2021, 28, 6373.	2.4	15
146	Cross-polarization dynamics and conformational study of variously sized cellulose crystallites using solid-state 13C NMR. Journal of Wood Science, 2020, 66, .	0.9	15
147	Thermal conduction through individual cellulose nanofibers. Applied Physics Letters, 2021, 118, .	1.5	14
148	Transparent, flexible, and highâ€strength regenerated cellulose/saponite nanocomposite films with high gas barrier properties. Journal of Applied Polymer Science, 2013, 130, 3168-3174.	1.3	13
149	Optimization of preparation of thermally stable cellulose nanofibrils via heatâ€induced conversion of ionic bonds to amide bonds. Journal of Polymer Science Part A, 2017, 55, 1750-1756.	2.5	13
150	Molar Masses and Molar Mass Distributions of Chitin and Acid-Hydrolyzed Chitin. Biomacromolecules, 2017, 18, 4357-4363.	2.6	13
151	Comparative characterization of phosphorylated wood holocelluloses and celluloses for nanocellulose production. Cellulose, 2022, 29, 2805-2816.	2.4	13
152	Anti-tumour effect of metformin in canine mammary gland tumour cells. Veterinary Journal, 2015, 205, 297-304.	0.6	12
153	Tailoring Nanocelluloseâ€"Cellulose Triacetate Interfaces by Varying the Surface Grafting Density of Poly(ethylene glycol). ACS Omega, 2018, 3, 11883-11889.	1.6	12
154	Distribution and Quantification of Diverse Functional Groups on Phosphorylated Nanocellulose Surfaces. Biomacromolecules, 2021, 22, 5214-5222.	2.6	11
155	Application of prompt gamma-ray analysis and instrumental neutron activation analysis to identify the beef production distinct. Journal of Radioanalytical and Nuclear Chemistry, 2008, 278, 409-413.	0.7	10
156	Enlargement of individual cellulose microfibrils in transgenic poplars overexpressing xyloglucanase. Journal of Wood Science, 2011, 57, 71-75.	0.9	10
157	Branched Structures of Softwood Celluloses: Proof Based on Size-Exclusion Chromatography and Multi-Angle Laser-Light Scattering. ACS Symposium Series, 2017, , 151-169.	0.5	10
158	Controlling Miscibility of the Interphase in Polymer-Grafted Nanocellulose/Cellulose Triacetate Nanocomposites. ACS Omega, 2020, 5, 23755-23761.	1.6	10
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