Tsuguyuki Saito

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/7695119/publications.pdf

Version: 2024-02-01

196 papers	22,835 citations	13099 68 h-index	8167 148 g-index
204 all docs	204 docs citations	204 times ranked	11515 citing authors

#	Article	IF	Citations
1	Comparative characterization of phosphorylated wood holocelluloses and celluloses for nanocellulose production. Cellulose, 2022, 29, 2805-2816.	4.9	13
2	Uniaxial orientation of Î²-chitin nanofibres used as an organic framework in the scales of a hot vent snail. Journal of the Royal Society Interface, 2022, 19, .	3.4	3
3	Rateâ€Limited Reaction in TEMPO/Laccase/O 2 Oxidation of Cellulose. Macromolecular Rapid Communications, 2021, 42, 2000501.	3.9	6
4	Mechanically Strong, Scalable, Mesoporous Xerogels of Nanocellulose Featuring Light Permeability, Thermal Insulation, and Flame Self-Extinction. ACS Nano, 2021, 15, 1436-1444.	14.6	59
5	Local Crystallinity in Twisted Cellulose Nanofibers. ACS Nano, 2021, 15, 2730-2737.	14.6	53
6	Particle size distributions for cellulose nanocrystals measured by atomic force microscopy: an interlaboratory comparison. Cellulose, 2021, 28, 1387-1403.	4.9	27
7	Thermal conduction through individual cellulose nanofibers. Applied Physics Letters, 2021, 118, .	3.3	14
8	Anisotropic thermal conductivity measurement of organic thin film with bidirectional 3Ï‰ method. Review of Scientific Instruments, 2021, 92, 034902.	1.3	6
9	Nanocellulose-containing cellulose ether composite films prepared from aqueous mixtures by casting and drying method. Cellulose, 2021, 28, 6373.	4.9	15
10	Recovery of the Irreversible Crystallinity of Nanocellulose by Crystallite Fusion: A Strategy for Achieving Efficient Energy Transfers in Sustainable Biopolymer Skeletons. Angewandte Chemie, 2021, 133, 24835.	2.0	1
11	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.	13.8	22
12	Nanocellulose Xerogel as Template for Transparent, Thick, Flame-Retardant Polymer Nanocomposites. Nanomaterials, 2021, 11, 3032.	4.1	8
13	Distribution and Quantification of Diverse Functional Groups on Phosphorylated Nanocellulose Surfaces. Biomacromolecules, 2021, 22, 5214-5222.	5.4	11
14	Colorless Transparent Melamineâ€"Formaldehyde Aerogels for Thermal Insulation. ACS Applied Nano Materials, 2020, 3, 49-54.	5.0	26
15	Crystallinity-Independent yet Modification-Dependent True Density of Nanocellulose. Biomacromolecules, 2020, 21, 939-945.	5.4	43
16	Controlling Miscibility of the Interphase in Polymer-Grafted Nanocellulose/Cellulose Triacetate Nanocomposites. ACS Omega, 2020, 5, 23755-23761.	3.5	10
17	Magnetically Collectable Nanocellulose-Coated Polymer Microparticles by Emulsion Templating. Langmuir, 2020, 36, 9235-9240.	3.5	8
18	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.	6.7	23

#	Article	IF	Citations
19	Influence of Chemical and Enzymatic TEMPO-Mediated Oxidation on Chemical Structure and Nanofibrillation of Lignocellulose. ACS Sustainable Chemistry and Engineering, 2020, 8, 14198-14206.	6.7	25
20	Best Practice for Reporting Wet Mechanical Properties of Nanocellulose-Based Materials. Biomacromolecules, 2020, 21, 2536-2540.	5.4	30
21	Nanocellulose Film Properties Tunable by Controlling Degree of Fibrillation of TEMPO-Oxidized Cellulose. Frontiers in Chemistry, 2020, 8, 37.	3.6	49
22	Anisotropic Thermal Expansion of Transparent Cellulose Nanopapers. Frontiers in Chemistry, 2020, 8, 68.	3.6	9
23	Synthesis of Chitin Nanofiber-Coated Polymer Microparticles via Pickering Emulsion. Biomacromolecules, 2020, 21, 1886-1891.	5.4	23
24	Cross-polarization dynamics and conformational study of variously sized cellulose crystallites using solid-state 13C NMR. Journal of Wood Science, 2020, 66, .	1.9	15
25	Carboxylated nanocellulose/poly(ethylene oxide) composite films as solidâ€“solid phase-change materials for thermal energy storage. Carbohydrate Polymers, 2019, 225, 115215.	10.2	32
26	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.	5.6	25
27	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.	3.5	78
28	Thermal and electrical properties of nanocellulose films with different interfibrillar structures of alkyl ammonium carboxylates. Cellulose, 2019, 26, 1657-1665.	4.9	6
29	Nanocellulose Xerogels With High Porosities and Large Specific Surface Areas. Frontiers in Chemistry, 2019, 7, 316.	3.6	45
30	Characterization of cellulose microfibrils, cellulose molecules, and hemicelluloses in buckwheat and rice husks. Cellulose, 2019, 26, 6529-6541.	4.9	43
31	Preparation and characterization of carboxylated cellulose nanofibrils with dual metal counterions. Cellulose, 2019, 26, 4313-4323.	4.9	9
32	Nanostructure and Properties of Nacre-Inspired Clay/Cellulose Nanocompositesâ€"Synchrotron X-ray Scattering Analysis. Macromolecules, 2019, 52, 3131-3140.	4.8	38
33	Parametric Model to Analyze the Components of the Thermal Conductivity of a Cellulose-Nanofibril Aerogel. Physical Review Applied, 2019, 11, .	3.8	29
34	Preparation of oxidized celluloses in a TEMPO/NaBr system using different chlorine reagents in water. Cellulose, 2019, 26, 3021-3030.	4.9	16
35	Dual Counterion Systems of Carboxylated Nanocellulose Films with Tunable Mechanical, Hydrophilic, and Gas-Barrier Properties. Biomacromolecules, 2019, 20, 1691-1698.	5.4	18
36	Characterization of TEMPOâ€•Oxidized and Refi ned Pulps ï¼ˆPart 2ï¼‰. Kami Pa Gikyoshi/Japan Tappi Journal, 2019, 73, 1234-1239.	0.1	0

#	Article	IF	Citations
37	Characterization of Concentration-Dependent Gelation Behavior of Aqueous 2,2,6,6-Tetramethylpiperidine-1-oxylâ˘Cellulose Nanocrystal Dispersions Using Dynamic Light Scattering. Biomacromolecules, 2019, 20, 750-757.	5.4	25
38	Surface-hydrophobized TEMPO-nanocellulose/rubber composite films prepared in heterogeneous and homogeneous systems. Cellulose, 2019, 26, 463-473.	4.9	29
39	Preparation of oxidized celluloses in a NaBr/NaClO system using 2-azaadamantane N-oxyl (AZADO) derivatives in water at pH 10. Cellulose, 2019, 26, 1479-1487.	4.9	6
40	Investigation of stability of branched structures in softwood cellulose using SEC/MALLS/RI/UV and sugar composition analyses. Cellulose, 2018, 25, 2667-2679.	4.9	17
41	Chitin nanocrystals prepared by oxidation of Î±-chitin using the O2/laccase/TEMPO system. Carbohydrate Polymers, 2018, 189, 178-183.	10.2	57
42	Determination of length distribution of TEMPO-oxidized cellulose nanofibrils by field-flow fractionation/multi-angle laser-light scattering analysis. Cellulose, 2018, 25, 1599-1606.	4.9	8
43	Acid-Free Preparation of Cellulose Nanocrystals by TEMPO Oxidation and Subsequent Cavitation. Biomacromolecules, 2018, 19, 633-639.	5.4	165
44	Nematic structuring of transparent and multifunctional nanocellulose papers. Nanoscale Horizons, 2018, 3, 28-34.	8.0	89
45	Influence of drying of chara cellulose on length/length distribution of microfibrils after acid hydrolysis. International Journal of Biological Macromolecules, 2018, 109, 569-575.	7.5	21
46	Solution-state structures of the cellulose model pullulan in lithium chloride/N,N-dimethylacetamide. International Journal of Biological Macromolecules, 2018, 107, 2598-2603.	7.5	17
47	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.	7.5	21
48	All-cellulose Materials Adhered with Cellulose Nanofibrils. Kami Pa Gikyoshi/Japan Tappi Journal, 2018, 72, 1050-1058.	0.1	3
49	The Crystallinity of Nanocellulose: Dispersion-Induced Disordering of the Grain Boundary in Biologically Structured Cellulose. ACS Applied Nano Materials, 2018, 1, 5774-5785.	5.0	127
50	Tailoring Nanocelluloseâ€"Cellulose Triacetate Interfaces by Varying the Surface Grafting Density of Poly(ethylene glycol). ACS Omega, 2018, 3, 11883-11889.	3.5	12
51	Preparation and Hydrogel Properties of pH-Sensitive Amphoteric Chitin Nanocrystals. Journal of Agricultural and Food Chemistry, 2018, 66, 11372-11379.	5.2	31
52	Luminescent and Transparent Nanocellulose Films Containing Europium Carboxylate Groups as Flexible Dielectric Materials. ACS Applied Nano Materials, 2018, 1, 4972-4979.	5.0	33
53	Review: Catalytic oxidation of cellulose with nitroxyl radicals under aqueous conditions. Progress in Polymer Science, 2018, 86, 122-148.	24.7	221
54	Counterion design of TEMPO-nanocellulose used as filler to improve properties of hydrogenated acrylonitrile-butadiene matrix. Composites Science and Technology, 2018, 167, 339-345.	7.8	27

#	Article	IF	Citations
55	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.	4.1	16
56	Mechanical Properties and Preparing Processes of the TEMPO-Oxidized Cellulose Nanofibers Hydrogels. Journal of Fiber Science and Technology, 2018, 74, 24-29.	0.4	3
57	Characterization of TEMPO-Oxidized and Refined Pulps. Kami Pa Gikyoshi/Japan Tappi Journal, 2018, 72, 545-552.	0.1	0
58	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.	2.3	13
59	Interfacial layer thickness design for exploiting the reinforcement potential of nanocellulose in cellulose triacetate matrix. Composites Science and Technology, 2017, 147, 100-106.	7.8	19
60	Ensemble evaluation of polydisperse nanocellulose dimensions: rheology, electron microscopy, X-ray scattering and turbidimetry. Cellulose, 2017, 24, 3231-3242.	4.9	24
61	Dynamic Viscoelastic Functions of Liquid-Crystalline Chitin Nanofibril Dispersions. Biomacromolecules, 2017, 18, 2564-2570.	5.4	17
62	Cellulose Nanofibers Prepared Using the TEMPO/Laccase/O₂ System. Biomacromolecules, 2017, 18, 288-294.	5.4	71
63	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
64	Different Conformations of Surface Cellulose Molecules in Native Cellulose Microfibrils Revealed by Layer-by-Layer Peeling. Biomacromolecules, 2017, 18, 3687-3694.	5.4	38
65	Preparation and characterization of zinc oxide/TEMPO-oxidized cellulose nanofibril composite films. Cellulose, 2017, 24, 4861-4870.	4.9	22
66	Effect of coexisting salt on TEMPO-mediated oxidation of wood cellulose for preparation of nanocellulose. Cellulose, 2017, 24, 4097-4101.	4.9	29
67	Molar Masses and Molar Mass Distributions of Chitin and Acid-Hydrolyzed Chitin. Biomacromolecules, 2017, 18, 4357-4363.	5.4	13
68	Estimating the Strength of Single Chitin Nanofibrils via Sonication-Induced Fragmentation. Biomacromolecules, 2017, 18, 4405-4410.	5.4	56
69	Characterization of cellulose nanofibrils prepared by direct TEMPO-mediated oxidation of hemp bast. Cellulose, 2017, 24, 3767-3775.	4.9	34
70	Fundamental properties of handsheets containing TEMPO-oxidized pulp in various weight ratios. Nordic Pulp and Paper Research Journal, 2016, 31, 248-254.	0.7	7
71	Improvement of Air Filters by Nanocelluloses. Kami Pa Gikyoshi/Japan Tappi Journal, 2016, 70, 1072-1078.	0.1	5
72	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.	3.9	48

#	Article	IF	Citations
73	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.	4.8	36
74	Viscoelastic Properties of Coreâ€"Shell-Structured, Hemicellulose-Rich Nanofibrillated Cellulose in Dispersion and Wet-Film States. Biomacromolecules, 2016, 17, 2104-2111.	5.4	43
75	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.	4.9	33
76	Fast and Robust Nanocellulose Width Estimation Using Turbidimetry. Macromolecular Rapid Communications, 2016, 37, 1581-1586.	3.9	40
77	Partitioned airs at microscale and nanoscale: thermal diffusivity in ultrahigh porosity solids of nanocellulose. Scientific Reports, 2016, 6, 20434.	3.3	94
78	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.	8.2	173
79	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.	5.4	43
80	Pathologic Features of Colorectal Inflammatory Polyps in Miniature Dachshunds. Veterinary Pathology, 2016, 53, 833-839.	1.7	22
81	Influence of Flexibility and Dimensions of Nanocelluloses on the Flow Properties of Their Aqueous Dispersions. Biomacromolecules, 2015, 16, 2127-2131.	5.4	83
82	Molecular Mass and Molecular-Mass Distribution of TEMPO-Oxidized Celluloses and TEMPO-Oxidized Cellulose Nanofibrils. Biomacromolecules, 2015, 16, 675-681.	5.4	72
83	SECâ€"MALLS analysis of wood holocelluloses dissolved in 8Â% LiCl/1,3-dimethyl-2-imidazolidinone: challenges and suitable analytical conditions. Cellulose, 2015, 22, 3347-3357.	4.9	8
84	Phenotypic screening of a library of compounds against metastatic and non-metastatic clones of a canine mammary gland tumour cell line. Veterinary Journal, 2015, 205, 288-296.	1.7	6
85	Anti-tumour effect of metformin in canine mammary gland tumour cells. Veterinary Journal, 2015, 205, 297-304.	1.7	12
86	Low-Birefringent and Highly Tough Nanocellulose-Reinforced Cellulose Triacetate. ACS Applied Materials & Interfaces, 2015, 7, 11041-11046.	8.0	44
87	Creation of a new material stream from Japanese cedar resources to cellulose nanofibrils. Reactive and Functional Polymers, 2015, 95, 19-24.	4.1	17
88	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.	8.0	81
89	Cellulose nanofibrils improve the properties of all-cellulose composites by the nano-reinforcement mechanism and nanofibril-induced crystallization. Nanoscale, 2015, 7, 17957-17963.	5.6	76
90	Simple Freeze-Drying Procedure for Producing Nanocellulose Aerogel-Containing, High-Performance Air Filters. ACS Applied Materials & Interfaces, 2015, 7, 19809-19815.	8.0	231

#	Article	IF	Citations
91	Improvement of nanodispersibility of oven-dried TEMPO-oxidized celluloses in water. Cellulose, 2014, 21, 4093-4103.	4.9	77
92	Comparison of mechanical reinforcement effects of surface-modified cellulose nanofibrils and carbon nanotubes in PLLA composites. Composites Science and Technology, 2014, 90, 96-101.	7.8	60
93	SEC-MALLS analysis of TEMPO-oxidized celluloses using methylation of carboxyl groups. Cellulose, 2014, 21, 167-176.	4.9	18
94	Determination of nanocellulose fibril length by shear viscosity measurement. Cellulose, 2014, 21, 1581-1589.	4.9	107
95	Dispersion stability and aggregation behavior of TEMPO-oxidized cellulose nanofibrils in water as a function of salt addition. Cellulose, 2014, 21, 1553-1559.	4.9	119
96	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.	5.4	61
97	Highly tough and transparent layered composites of nanocellulose and synthetic silicate. Nanoscale, 2014, 6, 392-399.	5.6	72
98	Hydrophobic, Ductile, and Transparent Nanocellulose Films with Quaternary Alkylammonium Carboxylates on Nanofibril Surfaces. Biomacromolecules, 2014, 15, 4320-4325.	5.4	114
99	Nanofibrillar Chitin Aerogels as Renewable Base Catalysts. Biomacromolecules, 2014, 15, 4314-4319.	5.4	83
100	TEMPO-oxidized cellulose nanofibrils prepared from various plant holocelluloses. Reactive and Functional Polymers, 2014, 85, 126-133.	4.1	95
101	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.	8.0	44
102	Aerogels with 3D Ordered Nanofiber Skeletons of Liquidâ€Crystalline Nanocellulose Derivatives as Tough and Transparent Insulators. Angewandte Chemie - International Edition, 2014, 53, 10394-10397.	13.8	426
103	Bioinspired stiff and flexible composites of nanocellulose-reinforced amorphous CaCO3. Materials Horizons, 2014, 1, 321.	12.2	70
104	Formation of Nanosized Islands of Dialkyl Î²-Ketoester Bonds for Efficient Hydrophobization of a Cellulose Film Surface. Langmuir, 2014, 30, 8109-8118.	3.5	21
105	Preparation of completely C6-carboxylated curdlan by catalytic oxidation with 4-acetamido-TEMPO. Carbohydrate Polymers, 2014, 100, 74-79.	10.2	22
106	Cellulose nanofibrils as templates for the design of poly(l-lactide)-nucleating surfaces. Polymer, 2014, 55, 2937-2942.	3.8	30
107	Celluloseâ€"clay layered nanocomposite films fabricated from aqueous cellulose/LiOH/urea solution. Carbohydrate Polymers, 2014, 100, 179-184.	10.2	45
108	Fundamental Properties of Nanocellulose. Kami Pa Gikyoshi/Japan Tappi Journal, 2014, 68, 837-840.	0.1	2

#	Article	IF	Citations
109	<i>Cellulose Nanofibers : Fundamental Properties and Structures Formation</i>. Journal of Fiber Science and Technology, 2014, 70, P-216-P-218.	0.0	0
110	TEMPO-Mediated Oxidation of Hemp Bast Holocellulose to Prepare Cellulose Nanofibrils Dispersed in Water. Journal of Polymers and the Environment, 2013, 21, 555-563.	5.0	32
111	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.	5.0	49
112	TEMPO-oxidized cellulose hydrogel as a high-capacity and reusable heavy metal ion adsorbent. Journal of Hazardous Materials, 2013, 260, 195-201.	12.4	132
113	IÎ±Ââ†’ÂIÎ² transition of cellulose under ultrasonic radiation. Cellulose, 2013, 20, 597-603.	4.9	30
114	An Ultrastrong Nanofibrillar Biomaterial: The Strength of Single Cellulose Nanofibrils Revealed via Sonication-Induced Fragmentation. Biomacromolecules, 2013, 14, 248-253.	5.4	507
115	Effects of carboxyl-group counter-ions on biodegradation behaviors of TEMPO-oxidized cellulose fibers and nanofibril films. Cellulose, 2013, 20, 2505-2515.	4.9	35
116	Stability of (1â†’3)-Î²-polyglucuronic acid under various pH and temperature conditions. Carbohydrate Polymers, 2013, 97, 413-420.	10.2	4
117	Influence of TEMPO-oxidized cellulose nanofibril length on film properties. Carbohydrate Polymers, 2013, 93, 172-177.	10.2	187
118	Preparation and characterization of TEMPO-oxidized cellulose nanofibrils with ammonium carboxylate groups. International Journal of Biological Macromolecules, 2013, 59, 99-104.	7.5	46
119	Surface Engineering of Ultrafine Cellulose Nanofibrils toward Polymer Nanocomposite Materials. Biomacromolecules, 2013, 14, 1541-1546.	5.4	173
120	Selective Permeation of Hydrogen Gas Using Cellulose Nanofibril Film. Biomacromolecules, 2013, 14, 1705-1709.	5.4	64
121	Transparent, flexible, and highâ€strength regenerated cellulose/saponite nanocomposite films with high gas barrier properties. Journal of Applied Polymer Science, 2013, 130, 3168-3174.	2.6	13
122	Transparent, Conductive, and Printable Composites Consisting of TEMPO-Oxidized Nanocellulose and Carbon Nanotube. Biomacromolecules, 2013, 14, 1160-1165.	5.4	257
123	TEMPO-oxidized cellulose nanofibril/poly(vinyl alcohol) composite drawn fibers. Polymer, 2013, 54, 935-941.	3.8	71
124	Improvement of nanofibrillation efficiency of Î±-chitin in water by selecting acid used for surface cationisation. RSC Advances, 2013, 3, 2613.	3.6	19
125	Degradation of TEMPO-oxidized cellulose fibers and nanofibrils by crude cellulase. Cellulose, 2013, 20, 795-805.	4.9	23
126	Comparative characterization of TEMPO-oxidized cellulose nanofibril films prepared from non-wood resources. International Journal of Biological Macromolecules, 2013, 59, 208-213.	7.5	66

#	Article	IF	Citations
127	Facile fabrication of transparent cellulose films with high water repellency and gas barrier properties. Cellulose, 2012, 19, 1913-1921.	4.9	46
128	Comparative characterization of aqueous dispersions and cast films of different chitin nanowhiskers/nanofibers. International Journal of Biological Macromolecules, 2012, 50, 69-76.	7.5	165
129	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.	7.5	110
130	Superior Reinforcement Effect of TEMPO-Oxidized Cellulose Nanofibrils in Polystyrene Matrix: Optical, Thermal, and Mechanical Studies. Biomacromolecules, 2012, 13, 2188-2194.	5.4	148
131	Nanoporous Networks Prepared by Simple Air Drying of Aqueous TEMPO-Oxidized Cellulose Nanofibril Dispersions. Biomacromolecules, 2012, 13, 943-946.	5.4	36
132	Relationship between Length and Degree of Polymerization of TEMPO-Oxidized Cellulose Nanofibrils. Biomacromolecules, 2012, 13, 842-849.	5.4	419
133	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
134	Ultrastrong and High Gas-Barrier Nanocellulose/Clay-Layered Composites. Biomacromolecules, 2012, 13, 1927-1932.	5.4	283
135	Multifunctional Coating Films by Layer-by-Layer Deposition of Cellulose and Chitin Nanofibrils. Biomacromolecules, 2012, 13, 553-558.	5.4	96
136	Mechanical and oxygen barrier properties of films prepared from fibrillated dispersions of TEMPO-oxidized Norway spruce and Eucalyptus pulps. Cellulose, 2012, 19, 705-711.	4.9	72
137	Improvement of mechanical and oxygen barrier properties of cellulose films by controlling drying conditions of regenerated cellulose hydrogels. Cellulose, 2012, 19, 695-703.	4.9	38
138	Cellulose II nanoelements prepared from fully mercerized, partially mercerized and regenerated celluloses by 4-acetamido-TEMPO/NaClO/NaClO2 oxidation. Cellulose, 2012, 19, 435-442.	4.9	31
139	Nano-dispersion of TEMPO-oxidized cellulose/aliphatic amine salts in isopropyl alcohol. Cellulose, 2012, 19, 459-466.	4.9	37
140	Self-aligned integration of native cellulose nanofibrils towards producing diverse bulk materials. Soft Matter, 2011, 7, 8804.	2.7	320
141	TEMPO-Oxidized Cellulose Nanofibrils Dispersed in Organic Solvents. Biomacromolecules, 2011, 12, 518-522.	5.4	108
142	Pore Size Determination of TEMPO-Oxidized Cellulose Nanofibril Films by Positron Annihilation Lifetime Spectroscopy. Biomacromolecules, 2011, 12, 4057-4062.	5.4	105
143	Viscoelastic Evaluation of Average Length of Cellulose Nanofibers Prepared by TEMPO-Mediated Oxidation. Biomacromolecules, 2011, 12, 548-550.	5.4	89
144	Transparent Cellulose Films with High Gas Barrier Properties Fabricated from Aqueous Alkali/Urea Solutions. Biomacromolecules, 2011, 12, 2766-2771.	5.4	223

#	Article	IF	Citations
145	TEMPO-oxidized cellulose nanofibers. Nanoscale, 2011, 3, 71-85.	5.6	2,446
146	Fabrication of Novel Film Containing Hydroxyapatite Nanoparticles/Cellulose Derivative and its Evaluation. IOP Conference Series: Materials Science and Engineering, 2011, 18, 192020.	0.6	0
147	Wood cellulose nanofibrils prepared by TEMPO electro-mediated oxidation. Cellulose, 2011, 18, 421-431.	4.9	105
148	Formation of N-acylureas on the surface of TEMPO-oxidized cellulose nanofibril with carbodiimide in DMF. Cellulose, 2011, 18, 1191-1199.	4.9	34
149	Enlargement of individual cellulose microfibrils in transgenic poplars overexpressing xyloglucanase. Journal of Wood Science, 2011, 57, 71-75.	1.9	10
150	Preparation and characterization of TEMPO-oxidized cellulose nanofibril films with free carboxyl groups. Carbohydrate Polymers, 2011, 84, 579-583.	10.2	368
151	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.	1.9	75
152	Water dispersion of cellulose II nanocrystals prepared by TEMPO-mediated oxidation of mercerized cellulose at pH 4.8. Cellulose, 2010, 17, 279-288.	4.9	77
153	Glucose/Glucuronic Acid Alternating Coâ€polysaccharides Prepared from TEMPOâ€Oxidized Native Celluloses by Surface Peeling. Angewandte Chemie - International Edition, 2010, 49, 7670-7672.	13.8	92
154	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.	5.8	82
155	Thermal stabilization of TEMPO-oxidized cellulose. Polymer Degradation and Stability, 2010, 95, 1502-1508.	5.8	337
156	Individual chitin nano-whiskers prepared from partially deacetylated Î±-chitin by fibril surface cationization. Carbohydrate Polymers, 2010, 79, 1046-1051.	10.2	272
157	Oxidation of curdlan and other polysaccharides by 4-acetamide-TEMPO/NaClO/NaClO2 under acid conditions. Carbohydrate Polymers, 2010, 81, 592-598.	10.2	45
158	CaCO3/chitin-whisker hybrids: formation of CaCO3 crystals in chitin-based liquid-crystalline suspension. Polymer Journal, 2010, 42, 583-586.	2.7	57
159	Structural Analysis of TEMPO-Oxidized Cellulose Nanofibers. Journal of Fiber Science and Technology, 2010, 66, P.240-P.242.	0.0	3
160	Papermaking of Disintegrated Fibers of TEMPO-mediated Oxidized Pulps. Kami Pa Gikyoshi/Japan Tappi Journal, 2010, 64, 437-447.	0.1	2
161	Side reactions of 4-acetamido-TEMPO as the catalyst in cellulose oxidation systems. Holzforschung, 2010, 64, .	1.9	5
162	Entire Surface Oxidation of Various Cellulose Microfibrils by TEMPO-Mediated Oxidation. Biomacromolecules, 2010, 11, 1696-1700.	5.4	407

#	Article	IF	Citations
163	TEMPO Electromediated Oxidation of Some Polysaccharides Including Regenerated Cellulose Fiber. Biomacromolecules, 2010, 11, 1593-1599.	5.4	86
164	Topochemical synthesis and catalysis of metal nanoparticles exposed on crystalline cellulose nanofibers. Chemical Communications, 2010, 46, 8567.	4.1	211
165	Effects of TEMPO-mediated Oxidation of Pulp Fibers on Filtration and Ion-exchange Properties of Handsheets. Kami Pa Gikyoshi/Japan Tappi Journal, 2010, 64, 955-968.	0.1	0
166	TEMPO-mediated oxidation of softwood thermomechanical pulp. Holzforschung, 2009, 63, 529-535.	1.9	86
167	Surface carboxylation of porous regenerated cellulose beads by 4-acetamide-TEMPO/NaClO/NaClO2 system. Cellulose, 2009, 16, 841-851.	4.9	52
168	TEMPO-mediated oxidation of Î²-chitin to prepare individual nanofibrils. Carbohydrate Polymers, 2009, 77, 832-838.	10.2	133
169	Oxidation of regenerated cellulose with NaClO2 catalyzed by TEMPO and NaClO under acid-neutral conditions. Carbohydrate Polymers, 2009, 78, 330-335.	10.2	120
170	Individualization of Nano-Sized Plant Cellulose Fibrils by Direct Surface Carboxylation Using TEMPO Catalyst under Neutral Conditions. Biomacromolecules, 2009, 10, 1992-1996.	5.4	665
171	Transparent and High Gas Barrier Films of Cellulose Nanofibers Prepared by TEMPO-Mediated Oxidation. Biomacromolecules, 2009, 10, 162-165.	5.4	1,118
172	Element profiles of onion producing districts in Japan, as determined using INAA and PGA. Journal of Radioanalytical and Nuclear Chemistry, 2008, 278, 375-379.	1.5	9
173	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.	1.5	10
174	Preparation of Chitin Nanofibers from Squid Pen Î²-Chitin by Simple Mechanical Treatment under Acid Conditions. Biomacromolecules, 2008, 9, 1919-1923.	5.4	315
175	Chitin Nanocrystals Prepared by TEMPO-Mediated Oxidation of Î±-Chitin. Biomacromolecules, 2008, 9, 192-198.	5.4	337
176	Wet Strength Improvement of TEMPO-Oxidized Cellulose Sheets Prepared with Cationic Polymers. Industrial & Engineering Chemistry Research, 2007, 46, 773-780.	3.7	78
177	Cellulose Nanofibers Prepared by TEMPO-Mediated Oxidation of Native Cellulose. Biomacromolecules, 2007, 8, 2485-2491.	5.4	2,015
178	Homogeneous Suspensions of Individualized Microfibrils from TEMPO-Catalyzed Oxidation of Native Cellulose. Biomacromolecules, 2006, 7, 1687-1691.	5.4	1,524
179	TEMPO-mediated oxidation of native cellulose: Microscopic analysis of fibrous fractions in the oxidized products. Carbohydrate Polymers, 2006, 65, 435-440.	10.2	175
180	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.	4.7	208

#	Article	IF	Citations
181	SEC-MALS analysis of cellouronic acid prepared from regenerated cellulose by TEMPO-mediated oxidation. Cellulose, 2006, 13, 73-80.	4.9	38
182	Ion-exchange behavior of carboxylate groups in fibrous cellulose oxidized by the TEMPO-mediated system. Carbohydrate Polymers, 2005, 61, 183-190.	10.2	223
183	Distribution of carboxylate groups introduced into cotton linters by the TEMPO-mediated oxidation. Carbohydrate Polymers, 2005, 61, 414-419.	10.2	132
184	TEMPO-mediated Oxidation of Native Cellulose: SECâ€"MALLS Analysis of Water-soluble and -Insoluble Fractions in the Oxidized Products. Cellulose, 2005, 12, 305-315.	4.9	66
185	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.	5.4	1,056
186	Multifunctional Alloys Obtained via a Dislocation-Free Plastic Deformation Mechanism. Science, 2003, 300, 464-467.	12.6	779
187	Reactive sputtering of Ta under gradient oxygen pressure. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1993, 11, 2790-2795.	2.1	5
188	Simulation study of a run-time bandwidth assignment technique for delay sensitive traffic in high-speed network. , 0, , .		0
189	A proposal for a DSM architecture suitable for a widely distributed environment and its evaluation. , 0, , .		6
190	A proposal of reserved channel dynamic channel assignment algorithm for multimedia mobile communication systems. , 0, , .		0
191	A study on rate and credit flow control using real-time integrated traffic management scheme for ABR services. , 0, , .		0
192	Effective real-time video transmission system using fast bandwidth reservation protocol for ATM networks. , 0, , .		2
193	QoS guarantees for high-speed variable-length packet LANs. , 0, , .		0
194	Efficient time slot assignment algorithms in variable bit rate TDM switch. , 0, , .		0
195	VTDM: a variable bit rate TDM switch architecture for video stream. , 0, , .		2
196	Performance evaluation of variable length packet switch based on deflection routing and input port distribution. , 0, , .		1