

Junji Sugiyama

List of Publications by Year in descending order

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202
papers

13,351
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19608

61
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24179

110
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206
docs citations

206
times ranked

10308
citing authors

#	ARTICLE	IF	CITATIONS
1	Crystal Structure and Hydrogen Bonding System in Cellulose I _β from Synchrotron X-ray and Neutron Fiber Diffraction. <i>Journal of the American Chemical Society</i> , 2003, 125, 14300-14306.	6.6	1,274
2	Optically Transparent Composites Reinforced with Networks of Bacterial Nanofibers. <i>Advanced Materials</i> , 2005, 17, 153-155.	11.1	908
3	Electron diffraction study on the two crystalline phases occurring in native cellulose from an algal cell wall. <i>Macromolecules</i> , 1991, 24, 4168-4175.	2.2	738
4	Combined infrared and electron diffraction study of the polymorphism of native celluloses. <i>Macromolecules</i> , 1991, 24, 2461-2466.	2.2	500
5	Computer simulation studies of microcrystalline cellulose I _β ² . <i>Carbohydrate Research</i> , 2006, 341, 138-152.	1.1	357
6	The binding specificity and affinity determinants of family 1 and family 3 cellulose binding modules. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2003, 100, 484-489.	3.3	323
7	Parallel-up structure evidences the molecular directionality during biosynthesis of bacterial cellulose. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 1997, 94, 9091-9095.	3.3	273
8	Polymorphism of Cellulose I Family: A Reinvestigation of Cellulose IV. <i>Biomacromolecules</i> , 2004, 5, 1385-1391.	2.6	261
9	Orientation of cellulose microcrystals by strong magnetic fields. <i>Macromolecules</i> , 1992, 25, 4232-4234.	2.2	245
10	Characterization of the supermolecular structure of cellulose in wood pulp fibres. <i>Cellulose</i> , 2003, 10, 103-110.	2.4	182
11	Structural Details of Crystalline Cellulose from Higher Plants. <i>Biomacromolecules</i> , 2004, 5, 1333-1339.	2.6	179
12	Synchrotron-radiated X-ray and neutron diffraction study of native cellulose. <i>Cellulose</i> , 1997, 4, 221-232.	2.4	178
13	Fine structure and tensile properties of ramie fibres in the crystalline form of cellulose I, II, III and IV. <i>Polymer</i> , 1997, 38, 463-468.	1.8	177
14	TEMPO-mediated oxidation of native cellulose: Microscopic analysis of fibrous fractions in the oxidized products. <i>Carbohydrate Polymers</i> , 2006, 65, 435-440.	5.1	175
15	New Insight into Cellulose Structure by Atomic Force Microscopy Shows the I _β Crystal Phase at Near-Atomic Resolution. <i>Biophysical Journal</i> , 2000, 79, 1139-1145.	0.2	172
16	Expression and Characterization of the Chitin-Binding Domain of Chitinase A1 from <i>Bacillus circulans</i> WL-12. <i>Journal of Bacteriology</i> , 2000, 182, 3045-3054.	1.0	157
17	Native celluloses on the basis of two crystalline phase (I _β /I _β ²) system. <i>Journal of Applied Polymer Science</i> , 1993, 49, 1491-1496.	1.3	154
18	Roles of the Exposed Aromatic Residues in Crystalline Chitin Hydrolysis by Chitinase A from <i>Serratia marcescens</i> 2170. <i>Journal of Biological Chemistry</i> , 2001, 276, 41343-41349.	1.6	154

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19	Allomorphs of native crystalline cellulose I evaluated by two equatorial d-spacings. <i>Journal of Wood Science</i> , 2001, 47, 124-128.	0.9	151
20	Transformation of Valonia cellulose crystals by an alkaline hydrothermal treatment. <i>Macromolecules</i> , 1990, 23, 3196-3198.	2.2	146
21	The β - β' transformation of highly crystalline cellulose by annealing in various mediums. <i>Macromolecules</i> , 1991, 24, 6816-6822.	2.2	145
22	Lattice images from ultrathin sections of cellulose microfibrils in the cell wall of <i>Valonia macrophysa</i> Kütz. <i>Planta</i> , 1985, 166, 161-168.	1.6	143
23	Nanodomains of β and β' Cellulose in Algal Microfibrils. <i>Macromolecules</i> , 1998, 31, 6275-6279.	2.2	136
24	Structural modification of bacterial cellulose. <i>Cellulose</i> , 2000, 7, 213-225.	2.4	122
25	High-Resolution Atomic Force Microscopy of Native <i>Valonia</i> Cellulose I Microcrystals. <i>Journal of Structural Biology</i> , 1997, 119, 129-138.	1.3	121
26	Characterization of starch based nanocomposites. <i>Journal of Materials Science</i> , 2007, 42, 8163-8171.	1.7	119
27	The chitin system in the tubes of deep sea hydrothermal vent worms. <i>Journal of Structural Biology</i> , 1992, 109, 116-128.	1.3	118
28	Aromatic residues within the substrate-binding cleft of <i>Bacillus circulans</i> chitinase A1 are essential for hydrolysis of crystalline chitin. <i>Biochemical Journal</i> , 2003, 376, 237-244.	1.7	107
29	Microstructure and mechanical properties of bacterial cellulose/chitosan porous scaffold. <i>Cellulose</i> , 2010, 17, 349-363.	2.4	104
30	Crystalline cellulose β and β' studied by molecular dynamics simulation. <i>Carbohydrate Research</i> , 1995, 273, 207-223.	1.1	103
31	Molecular Imaging of <i>Halocynthia papillosa</i> Cellulose. <i>Journal of Structural Biology</i> , 1998, 124, 42-50.	1.3	102
32	Prediction of Lignin Contents from Infrared Spectroscopy: Chemical Digestion and Lignin/Biomass Ratios of <i>Cryptomeria japonica</i> . <i>Applied Biochemistry and Biotechnology</i> , 2019, 188, 1066-1076.	1.4	100
33	Unidirectional processive action of cellobiohydrolase Cel7A on <i>Valonia</i> cellulose microcrystals. <i>FEBS Letters</i> , 1998, 432, 113-116.	1.3	98
34	Cellulose synthesized by <i>Acetobacter xylinum</i> in the presence of plant cell wall polysaccharides. <i>Cellulose</i> , 2002, 9, 65-74.	2.4	95
35	Cellulosic nanocomposites. I. Thermally deformable cellulose hexanoates from heterogeneous reaction. <i>Journal of Applied Polymer Science</i> , 2000, 78, 2242-2253.	1.3	94
36	Enhancement of growth by expression of poplar cellulase in <i>Arabidopsis thaliana</i> . <i>Plant Journal</i> , 2003, 33, 1099-1106.	2.8	92

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37	Versatile derivatives of carbohydrate-binding modules for imaging of complex carbohydrates approaching the molecular level of resolution. <i>BioTechniques</i> , 2006, 41, 435-443.	0.8	89
38	Negative Diamagnetic Anisotropy and Birefringence of Cellulose Nanocrystals. <i>Macromolecules</i> , 2015, 48, 8844-8857.	2.2	89
39	A combined FT-IR microscopy and principal component analysis on softwood cell walls. <i>Carbohydrate Polymers</i> , 2003, 52, 449-453.	5.1	87
40	Formation and Structure of Artificial Cellulose Spherulites via Enzymatic Polymerization. <i>Biomacromolecules</i> , 2000, 1, 168-173.	2.6	80
41	Improved Structural Data of Cellulose III Prepared in Supercritical Ammonia. <i>Macromolecules</i> , 2001, 34, 1237-1243.	2.2	80
42	Molecular directionality in crystalline β -chitin: hydrolysis by chitinases A and B from <i>Serratia marcescens</i> 2170. <i>Biochemical Journal</i> , 2005, 388, 851-856.	1.7	80
43	Visualization of cellulase interactions with cellulose microfibril by transmission electron microscopy. <i>Cellulose</i> , 2017, 24, 1-9.	2.4	80
44	Aging of wood: Analysis of color changes during natural aging and heat treatment. <i>Holzforschung</i> , 2011, 65, .	0.9	79
45	Selective degradation of the cellulose I β component in <i>Cladophora</i> cellulose with <i>Trichoderma viride</i> cellulase. <i>Carbohydrate Research</i> , 1997, 305, 109-116.	1.1	76
46	Molecular Directionality in Cellulose Polymorphs. <i>Biomacromolecules</i> , 2006, 7, 274-280.	2.6	76
47	Characterization of native crystalline cellulose in the cell walls of Oomycota. <i>Journal of Biotechnology</i> , 1997, 57, 29-37.	1.9	74
48	Direct investigation of the structural properties of tension wood cellulose microfibrils using microbeam X-ray fibre diffraction. <i>Holzforschung</i> , 2006, 60, 474-479.	0.9	74
49	Mechanical Behavior of Cellulose Microfibrils in Tension Wood, in Relation with Maturation Stress Generation. <i>Biophysical Journal</i> , 2006, 91, 1128-1135.	0.2	74
50	Maturation Stress Generation in Poplar Tension Wood Studied by Synchrotron Radiation Microdiffraction \AA . <i>Plant Physiology</i> , 2011, 155, 562-570.	2.3	72
51	Formation of Highly Twisted Ribbons in a Carboxymethylcellulase Gene-Disrupted Strain of a Cellulose-Producing Bacterium. <i>Journal of Bacteriology</i> , 2013, 195, 958-964.	1.0	70
52	Nanotube and Three-Way Nanotube Formation with Nonionic Amphiphilic Block Peptides. <i>Macromolecular Bioscience</i> , 2008, 8, 1026-1033.	2.1	69
53	Artificial Chitin Spherulites Composed of Single Crystalline Ribbons of β -Chitin via Enzymatic Polymerization. <i>Macromolecules</i> , 2000, 33, 4155-4160.	2.2	68
54	Systematic survey on crystalline features of algal celluloses. <i>Cellulose</i> , 1997, 4, 147-160.	2.4	66

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55	Title is missing!. Cellulose, 2002, 9, 351-360.	2.4	66
56	Proton-Dependent Coniferin Transport, a Common Major Transport Event in Differentiating Xylem Tissue of Woody Plants Å. Plant Physiology, 2013, 162, 918-926.	2.3	66
57	Transformation of peptide nanotubes into a vesicle via fusion driven by stereo-complex formation. Chemical Communications, 2011, 47, 3204.	2.2	65
58	Molecular directionality of Î²-chitin biosynthesis. Journal of Molecular Biology, 1999, 286, 247-255.	2.0	64
59	Honeycomb-like architecture produced by living bacteria, Gluconacetobacter xylinus. Carbohydrate Polymers, 2007, 69, 1-6.	5.1	64
60	Vesicular Self-Assembly of a Helical Peptide in Water. Langmuir, 1999, 15, 4461-4463.	1.6	63
61	Surface functional group dependent apatite formation on bacterial cellulose microfibrils network in a simulated body fluid. Journal of Biomedical Materials Research - Part A, 2007, 81A, 124-134.	2.1	63
62	The GLABRA2 homeodomain protein directly regulates <i>CESA5</i> and <i>XTH17</i> gene expression in Arabidopsis roots. Plant Journal, 2009, 60, 564-574.	2.8	62
63	Docking of congo red to the surface of crystalline cellulose using molecular mechanics. Biopolymers, 1995, 36, 201-210.	1.2	61
64	Dual Response of Photonic Films with Chiral Nematic Cellulose Nanocrystals: Humidity and Formaldehyde. ACS Applied Materials & Interfaces, 2020, 12, 17833-17844.	4.0	61
65	The enzymatic susceptibility of cellulose microfibrils of the algal-bacterial type and the cotton-ramie type. Carbohydrate Research, 1997, 305, 261-269.	1.1	60
66	The directionality of chitin biosynthesis: a revisit. Biochemical Journal, 2003, 374, 755-760.	1.7	58
67	Mechanical characteristics of aged Hinoki wood from Japanese historical buildings. Comptes Rendus Physique, 2009, 10, 601-611.	0.3	58
68	Visualization of the adsorption of a bacterial endo-Î²-1,4-glucanase and its isolated cellulose-binding domain to crystalline cellulose. International Journal of Biological Macromolecules, 1993, 15, 347-351.	3.6	57
69	On the detachment of the gelatinous layer in tension wood fiber. Journal of Wood Science, 2005, 51, 218-221.	0.9	55
70	Enzymatic hydrolysis of bacterial cellulose. Carbohydrate Research, 1997, 305, 281-288.	1.1	54
71	Geometric phase analysis of lattice images from algal cellulose microfibrils. Polymer, 2003, 44, 1871-1879.	1.8	53
72	Structural Study of Î± Chitin from the Grasping Spines of the Arrow Worm (Sagitta spp.). Journal of Structural Biology, 1995, 114, 218-228.	1.3	52

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73	Characterization of tension and normally lignified wood cellulose in <i>Populus maximowiczii</i> . <i>Cellulose</i> , 1995, 2, 223-233.	2.4	51
74	Almost Pure β -Cellulose in the Cell Wall of <i>Glaucozystis</i> . <i>Journal of Structural Biology</i> , 1999, 127, 248-257.	1.3	51
75	Precautions for the Structural Analysis of the Gelatinous Layer in Tension Wood. <i>IAWA Journal</i> , 2005, 26, 189-195.	2.7	49
76	Localization of Crystalline Allomorphs in Cellulose Microfibril. <i>Biomacromolecules</i> , 2009, 10, 2235-2239.	2.6	49
77	Morphology Control between Twisted Ribbon, Helical Ribbon, and Nanotube Self-Assemblies with His-Containing Helical Peptides in Response to pH Change. <i>Langmuir</i> , 2014, 30, 1022-1028.	1.6	47
78	Trp122 and Trp134 on the surface of the catalytic domain are essential for crystalline chitin hydrolysis by <i>Bacillus circulans</i> chitinase A1. <i>FEBS Letters</i> , 2001, 494, 74-78.	1.3	46
79	Importance of Exposed Aromatic Residues in Chitinase B from <i>Serratia marcescens</i> 2170 for Crystalline Chitin Hydrolysis. <i>Journal of Biochemistry</i> , 2004, 136, 163-168.	0.9	46
80	Accessibility and size of <i>Valonia</i> cellulose microfibril studied by combined deuteration/rehydrogenation and FTIR technique. <i>Cellulose</i> , 2008, 15, 419-424.	2.4	46
81	Rational design of peptide nanotubes for varying diameters and lengths. <i>Journal of Peptide Science</i> , 2011, 17, 94-99.	0.8	46
82	On the polarity of cellulose in the cell wall of <i>Valonia</i> . <i>Planta</i> , 1994, 193, 260.	1.6	44
83	Parallel assembly of dipolar columns composed of a stacked cyclic tri- β -peptide. <i>Organic and Biomolecular Chemistry</i> , 2006, 4, 1896-1901.	1.5	43
84	Direct imaging of polysaccharide aggregates in frozen aqueous dilute systems. <i>Carbohydrate Polymers</i> , 1994, 23, 261-264.	5.1	42
85	High-resolution electron microscopy on cellulose II and β -chitin single crystals. , 1998, 5, 113-122.		42
86	Wood identification of a wooden mask using synchrotron X-ray microtomography. <i>Journal of Archaeological Science</i> , 2010, 37, 2842-2845.	1.2	42
87	Exhaustive crystal structure search and crystal modeling of β -chitin. <i>International Journal of Biological Macromolecules</i> , 2007, 40, 336-344.	3.6	40
88	Tubulation on peptide vesicles by phase-separation of a binary mixture of amphiphilic right-handed and left-handed helical peptides. <i>Soft Matter</i> , 2011, 7, 4143.	1.2	40
89	Contractive Force and Transformation of Microfibril with Aqueous Sodium Hydroxide Solution for Wood. <i>Holzforschung</i> , 2000, 54, 315-320.	0.9	39
90	Tensile strength of windmill palm (<i>Trachycarpus fortunei</i>) fiber bundles and its structural implications. <i>Journal of Materials Science</i> , 2012, 47, 949-959.	1.7	37

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91	Computer vision-based wood identification and its expansion and contribution potentials in wood science: A review. <i>Plant Methods</i> , 2021, 17, 47.	1.9	37
92	Identification of <i>Pinus</i> species related to historic architecture in Korea using NIR chemometric approaches. <i>Journal of Wood Science</i> , 2016, 62, 156-167.	0.9	36
93	Columnar Assembly of Cyclic β -Amino Acid Functionalized with Pyranose Rings. <i>Biomacromolecules</i> , 2006, 7, 2394-2400.	2.6	34
94	Cellulose Nanolayers Designed by Self-Assembly of its Thiosemicarbazone on a Gold Substrate. <i>Advanced Materials</i> , 2007, 19, 3368-3370.	11.1	34
95	X-ray Microbeam and Electron Diffraction Experiments on Developing Xylem Cell Walls. <i>Biomacromolecules</i> , 2002, 3, 182-186.	2.6	33
96	Maturation Stress Generation in Poplar Tension Wood Studied by Synchrotron Radiation Microdiffraction. <i>Plant Physiology</i> , 2010, 152, 1650-1658.	2.3	32
97	Near-infrared spectroscopy as a potential method for identification of anatomically similar Japanese diploxylons. <i>Journal of Wood Science</i> , 2015, 61, 251-261.	0.9	31
98	Crystalline morphology of <i>Valonia macrophysa</i> cellulose IIII revealed by direct lattice imaging. <i>International Journal of Biological Macromolecules</i> , 1987, 9, 122-130.	3.6	30
99	Title is missing!. <i>Journal of Materials Science</i> , 2002, 37, 4279-4284.	1.7	30
100	Preferential Uniplanar Orientation of Cellulose Microfibrils Reinvestigated by the FTIR Technique. <i>Cellulose</i> , 2006, 13, 309-316.	2.4	30
101	Directional degradation of β -chitin by chitinase A1 revealed by a novel reducing end labelling technique. <i>FEBS Letters</i> , 2002, 510, 201-205.	1.3	29
102	Labeling the planar face of crystalline cellulose using quantum dots directed by type-I carbohydrate-binding modules. <i>Cellulose</i> , 2009, 16, 19-26.	2.4	29
103	The structural changes in crystalline cellulose and effects on enzymatic digestibility. <i>Polymer Degradation and Stability</i> , 2013, 98, 2351-2356.	2.7	29
104	Versatile peptide rafts for conjugate morphologies by self-assembling amphiphilic helical peptides. <i>Polymer Journal</i> , 2013, 45, 509-515.	1.3	29
105	Studies of the structural change during deformation in <i>Cryptomeria japonica</i> by time-resolved synchrotron small-angle X-ray scattering. <i>Journal of Structural Biology</i> , 2005, 151, 1-11.	1.3	28
106	Compression stress in opposite wood of angiosperms: observations in chestnut, mani and poplar. <i>Annals of Forest Science</i> , 2006, 63, 507-510.	0.8	28
107	Functional Reconstitution of Cellulose Synthase in <i>Escherichia coli</i> . <i>Biomacromolecules</i> , 2014, 15, 4206-4213.	2.6	28
108	Automated recognition of wood used in traditional Japanese sculptures by texture analysis of their low-resolution computed tomography data. <i>Journal of Wood Science</i> , 2015, 61, 630-640.	0.9	28

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109	Aggregation of ribbons in bacterial cellulose induced by high pressure incubation. <i>Carbohydrate Polymers</i> , 2003, 53, 9-14.	5.1	27
110	Viability and cellulose synthesizing ability of <i>Gluconacetobacter xylinus</i> cells under high-hydrostatic pressure. <i>Extremophiles</i> , 2007, 11, 693-698.	0.9	27
111	Non-destructive method for wood identification using conventional X-ray computed tomography data. <i>Journal of Cultural Heritage</i> , 2019, 38, 88-93.	1.5	27
112	Enzymatic hydrolysis of biomimetic bacterial cellulose-hemicellulose composites. <i>Carbohydrate Polymers</i> , 2018, 190, 95-102.	5.1	25
113	Automated identification of Lauraceae by scale-invariant feature transform. <i>Journal of Wood Science</i> , 2018, 64, 69-77.	0.9	25
114	A spectroscopic assessment of cellulose and the molecular mechanisms of cellulose biosynthesis in the ascidian <i>Ciona intestinalis</i> . <i>Marine Genomics</i> , 2008, 1, 9-14.	0.4	24
115	Enzymatic Polymerization Behavior Using Cellulose-Binding Domain Deficient Endoglucanase II. <i>Macromolecular Bioscience</i> , 2005, 5, 623-628.	2.1	23
116	Double Assembly Composed of Lectin Association with Columnar Molecular Assembly of Cyclic Tri-Î²-peptide Having Sugar Units. <i>Biomacromolecules</i> , 2007, 8, 611-616.	2.6	23
117	Effect of thermochemical pretreatment on lignin alteration and cell wall microstructural degradation in <i>Eucalyptus globulus</i> : comparison of acid, alkali, and water pretreatments. <i>Journal of Wood Science</i> , 2016, 62, 276-284.	0.9	23
118	Molecular assembly formation of cyclic hexa-Î²-peptide composed of acetylated glycosamino acids. <i>Biopolymers</i> , 2007, 88, 150-156.	1.2	21
119	Temperature-Triggered Fusion of Vesicles Composed of Right-Handed and Left-Handed Amphiphilic Helical Peptides. <i>Langmuir</i> , 2011, 27, 4300-4304.	1.6	21
120	Near-Infrared Chemometric Approach to Exhaustive Analysis of Rice Straw Pretreated for Bioethanol Conversion. <i>Applied Biochemistry and Biotechnology</i> , 2011, 164, 194-203.	1.4	21
121	Multimethod approach to understand the assembly of cellulose fibrils in the biosynthesis of bacterial cellulose. <i>Cellulose</i> , 2018, 25, 2771-2783.	2.4	21
122	Influence of drying of chara cellulose on length/length distribution of microfibrils after acid hydrolysis. <i>International Journal of Biological Macromolecules</i> , 2018, 109, 569-575.	3.6	21
123	Spontaneous Vesicle Formation by Helical Glycopeptides in Water. <i>Journal of Colloid and Interface Science</i> , 2000, 222, 265-267.	5.0	20
124	Newly developed nanocomposites from cellulose acetate/layered silicate/poly(Îµ-caprolactone): Synthesis and morphological characterization. <i>Journal of Wood Science</i> , 2006, 52, 121-127.	0.9	20
125	Anatomical features of Fagaceae wood statistically extracted by computer vision approaches: Some relationships with evolution. <i>PLoS ONE</i> , 2019, 14, e0220762.	1.1	20
126	High-resolution electron microscopy on ultrathin sections of cellulose microfibrils generated by glomerulocytes in <i>Polyzoa vesiculiphora</i> . <i>Protoplasma</i> , 1998, 203, 84-90.	1.0	19

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127	The thermal expansion of mannan I obtained from ivory nuts. <i>Carbohydrate Polymers</i> , 2007, 70, 298-303.	5.1	19
128	The crystalline phase of cellulose changes under developmental control in a marine chordate. <i>Cellular and Molecular Life Sciences</i> , 2011, 68, 1623-1631.	2.4	19
129	Characterization of crystalline linear (1 → 3)- β -D-glucan synthesized in vitro. <i>Carbohydrate Polymers</i> , 2017, 177, 341-346.	5.1	19
130	Varietal difference in cellulose microfibril dimensions observed by infrared spectroscopy. <i>Cellulose</i> , 2009, 16, 1-8.	2.4	18
131	Cell wall characterization of windmill palm (<i>Trachycarpus Fortunei</i>) fibers and its functional implications. <i>IAWA Journal</i> , 2013, 34, 20-33.	0.5	18
132	Changes in micropores in dry wood with elapsed time in the environment. <i>Journal of Wood Science</i> , 2008, 54, 515-519.	0.9	17
133	Electronic properties of tetrathiafulvalene- π -modified cyclic-peptide nanotube. <i>Biopolymers</i> , 2016, 106, 275-282.	1.2	17
134	Texture analysis of stereograms of diffuse-porous hardwood: identification of wood species used in <i>Tripitaka Koreana</i> . <i>Journal of Wood Science</i> , 2017, 63, 322-330.	0.9	17
135	Cellulose β investigated by IR-spectroscopy at low temperatures. <i>Cellulose</i> , 2014, 21, 3171-3179.	2.4	16
136	Facile and Precise Formation of Unsymmetric Vesicles Using the Helix Dipole, Stereocomplex, and Steric Effects of Peptides. <i>Langmuir</i> , 2014, 30, 4273-4279.	1.6	16
137	Self-Assemblies of Triskelion A ₂ B-Type Amphiphilic Polypeptide Showing pH-Responsive Morphology Transformation. <i>Langmuir</i> , 2012, 28, 6006-6012.	1.6	15
138	Chemometric Analysis with Near-Infrared Spectroscopy for Chemically Pretreated <i>Erianthus</i> toward Efficient Bioethanol Production. <i>Applied Biochemistry and Biotechnology</i> , 2012, 166, 711-721.	1.4	15
139	ANATOMICAL AND MECHANICAL CHARACTERISTICS OF LEAF-SHEATH FIBROVASCULAR BUNDLES IN PALMS. <i>IAWA Journal</i> , 2013, 34, 285-300.	2.7	15
140	Evaluation of cell wall reinforcement in feather keratin-treated waterlogged wood as imaged by synchrotron X-ray microtomography (μ CT) and TEM. <i>Holzforschung</i> , 2013, 67, 795-803.	0.9	15
141	Quantitative evaluation of properties of residual DNA in <i>Cryptomeria japonica</i> wood. <i>Journal of Wood Science</i> , 2015, 61, 1-9.	0.9	15
142	Formation of gold nanoparticles in microreactor composed of helical peptide assembly in water. <i>Journal of Colloid and Interface Science</i> , 2004, 280, 506-510.	5.0	14
143	Extraction of cellulose-synthesizing activity of <i>Gluconacetobacter xylinus</i> by alkylmaltoside. <i>Carbohydrate Research</i> , 2011, 346, 2760-2768.	1.1	14
144	Fibrillar assembly of bacterial cellulose in the presence of wood-based hemicelluloses. <i>International Journal of Biological Macromolecules</i> , 2017, 102, 111-118.	3.6	14

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145	Outstanding Toughness of Cherry Bark Achieved by Helical Spring Structure of Rigid Cellulose Fiber Combined with Flexible Layers of Lipid Polymers. <i>Advanced Materials</i> , 2018, 30, 1705315.	11.1	14
146	Enzymatic activities of novel mutant endoglucanases carrying sequential active sites. <i>International Journal of Biological Macromolecules</i> , 2008, 43, 226-231.	3.6	13
147	Variation of microfibril angles and chemical composition: Implication for functional properties. <i>Journal of Materials Science Letters</i> , 2003, 22, 963-966.	0.5	11
148	Enzymatic Polymerization Catalyzed by Immobilized Endoglucanase on Gold. <i>Biomacromolecules</i> , 2011, 12, 785-790.	2.6	11
149	Degradation and Synthesis of β -Glucans by a <i>Magnaporthe oryzae</i> Endotransglucosylase, a Member of the Glycoside Hydrolase 7 Family. <i>Journal of Biological Chemistry</i> , 2013, 288, 13821-13830.	1.6	11
150	CesA protein is included in the terminal complex of <i>Acetobacter</i> . <i>Cellulose</i> , 2017, 24, 2017-2027.	2.4	11
151	Wood properties and chemical composition of the eccentric growth branch of <i>Viburnum odoratissimum</i> var. <i>awabuki</i> . <i>Trees - Structure and Function</i> , 2010, 24, 541-549.	0.9	10
152	Effects of reaction conditions on cellulose structures synthesized in vitro by bacterial cellulose synthases. <i>Carbohydrate Polymers</i> , 2016, 136, 656-666.	5.1	10
153	Alpha-cellulose extraction procedure for the tropical tree sungkai (<i>Peronema canescens</i> Jack) by using an improved vessel for reliable paleoclimate reconstruction. <i>Geochemical Journal</i> , 2014, 48, 299-307.	0.5	10
154	Wood Identification of Historical Architecture in Korea by Synchrotron X-ray Microtomography-Based Three-Dimensional Microstructural Imaging. <i>Journal of the Korean Wood Science and Technology</i> , 2020, 48, 283-290.	0.8	10
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