

Gunnar Henriksson

List of Publications by Year in descending order

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94
papers

5,309
citations

87888

38
h-index

85541

71
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96
all docs

96
docs citations

96
times ranked

6083
citing authors

#	ARTICLE	IF	CITATIONS
1	Wood-Derived Materials for Green Electronics, Biological Devices, and Energy Applications. <i>Chemical Reviews</i> , 2016, 116, 9305-9374.	47.7	1,110
2	A critical review of cellobiose dehydrogenases. <i>Journal of Biotechnology</i> , 2000, 78, 93-113.	3.8	387
3	Structural Differences between the Lignin~Carbohydrate Complexes Present in Wood and in Chemical Pulps. <i>Biomacromolecules</i> , 2005, 6, 3467-3473.	5.4	264
4	Cellulose Nanofibers from Softwood, Hardwood, and Tunicate: Preparation~Structure~Film Performance Interrelation. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 13508-13519.	8.0	149
5	Cellobiose oxidase from <i>Phanerochaete chrysosporium</i> can be cleaved by papain into two domains. <i>FEBS Journal</i> , 1991, 196, 101-106.	0.2	141
6	A new scaffold for binding haem in the cytochrome domain of the extracellular flavocytochrome cellobiose dehydrogenase. <i>Structure</i> , 2000, 8, 79-88.	3.3	136
7	Crystal structure of the flavoprotein domain of the extracellular flavocytochrome cellobiose dehydrogenase. <i>Journal of Molecular Biology</i> , 2002, 315, 421-434.	4.2	134
8	Improved Accessibility and Reactivity of Dissolving Pulp for the Viscose Process:~Pretreatment with Monocomponent Endoglucanase. <i>Biomacromolecules</i> , 2006, 7, 2027-2031.	5.4	118
9	Wood hemicelluloses exert distinct biomechanical contributions to cellulose fibrillar networks. <i>Nature Communications</i> , 2020, 11, 4692.	12.8	117
10	Polymerization of Monolignols by Redox Shuttle~Mediated Enzymatic Oxidation. <i>Plant Cell</i> , 2002, 14, 1953-1962.	6.6	109
11	Investigation of the Molecular Weight Increase of Commercial Lignosulfonates by Laccase Catalysis. <i>Biomacromolecules</i> , 2010, 11, 904-910.	5.4	105
12	Production of highly efficient enzymes for flax retting by. <i>Journal of Biotechnology</i> , 1999, 68, 115-123.	3.8	95
13	The Physical Action of Cellulases Revealed by a Quartz Crystal Microbalance Study Using Ultrathin Cellulose Films and Pure Cellulases. <i>Biomacromolecules</i> , 2008, 9, 249-254.	5.4	94
14	Polygalacturonase is the key component in enzymatic retting of flax. <i>Journal of Biotechnology</i> , 2000, 81, 85-89.	3.8	92
15	Carbohydrate Reactions During High-Temperature Steam Treatment of Aspen Wood. <i>Applied Biochemistry and Biotechnology</i> , 2005, 125, 175-188.	2.9	85
16	Do the extracellular enzymes cellobiose dehydrogenase and manganese peroxidase form a pathway in lignin biodegradation?. <i>FEBS Letters</i> , 2000, 477, 79-83.	2.8	80
17	Monocomponent endoglucanase treatment increases the reactivity of softwood sulphite dissolving pulp. <i>Journal of Industrial Microbiology and Biotechnology</i> , 2005, 32, 211-214.	3.0	80
18	Regular Motifs in Xylan Modulate Molecular Flexibility and Interactions with Cellulose Surfaces. <i>Plant Physiology</i> , 2017, 175, 1579-1592.	4.8	79

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19	Endoglucanase 28 (Cel12A), a new <i>Phanerochaete chrysosporium</i> cellulase. <i>FEBS Journal</i> , 1999, 259, 88-95.	0.2	75
20	Spray Enzymatic Retting: A New Method for Processing Flax Fibers. <i>Textile Research Journal</i> , 2000, 70, 486-494.	2.2	75
21	Structural features of mildly fractionated lignin carbohydrate complexes (LCC) from spruce. <i>RSC Advances</i> , 2016, 6, 42120-42131.	3.6	74
22	Influence of Chelating Agents and Mechanical Pretreatment on Enzymatic Retting of Flax. <i>Textile Research Journal</i> , 1997, 67, 829-836.	2.2	70
23	Cloning and characterization of a cDNA encoding a cellobiose dehydrogenase from the white rot fungus <i>Phanerochaete chrysosporium</i> . <i>FEBS Letters</i> , 1995, 369, 233-238.	2.8	61
24	Effect of Retting Enzymes on the Structure and Composition of Flax Cell Walls. <i>Textile Research Journal</i> , 1997, 67, 279-287.	2.2	61
25	Mechanism of the Reductive Half-reaction in Cellobiose Dehydrogenase. <i>Journal of Biological Chemistry</i> , 2003, 278, 7160-7166.	3.4	60
26	Continuous nano- and ultra-filtration of kraft pulping black liquor with ceramic filters. <i>Industrial Crops and Products</i> , 2004, 20, 143-150.	5.2	58
27	A molecular dynamics study of the effect of glycosidic linkage type in the hemicellulose backbone on the molecular chain flexibility. <i>Plant Journal</i> , 2016, 88, 56-70.	5.7	58
28	Effects of moisture content during densification of biomass pellets, focusing on polysaccharide substances. <i>Biomass and Bioenergy</i> , 2019, 122, 322-330.	5.7	57
29	Electron transfer between cellobiose dehydrogenase and graphite electrodes. <i>Analytica Chimica Acta</i> , 1996, 331, 207-215.	5.4	53
30	Progress in Enzyme-Retting of Flax. <i>Journal of Natural Fibers</i> , 2004, 1, 21-47.	3.1	52
31	Bioinspired Ultrastable Lignin Cathode via Graphene Reconfiguration for Energy Storage. <i>ACS Sustainable Chemistry and Engineering</i> , 2017, 5, 3553-3561.	6.7	51
32	Oxidative polymerisation of models for phenolic lignin end-groups by laccase. <i>Holzforschung</i> , 2010, 64, .	1.9	49
33	The formation of β -1,2 structures in lignin biosynthesis—are there two different pathways?. <i>Organic and Biomolecular Chemistry</i> , 2003, 1, 3621-3624.	2.8	46
34	On the formation of lignin polysaccharide networks in Norway spruce. <i>Phytochemistry</i> , 2015, 111, 177-184.	2.9	44
35	Chemical/Physical Retting of Flax Using Detergent and Oxalic Acid at High pH. <i>Textile Research Journal</i> , 1998, 68, 942-947.	2.2	41
36	The active component in the flax-retting system of the zygomycete <i>Rhizopus oryzae</i> sb is a family 28 polygalacturonase. <i>Journal of Industrial Microbiology and Biotechnology</i> , 2005, 32, 431-438.	3.0	41

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37	The structure of galactoglucomannan impacts the degradation under alkaline conditions. <i>Cellulose</i> , 2019, 26, 2155-2175.	4.9	41
38	Structural modification of commercial lignosulphonates through laccase catalysis and ozonolysis. <i>Industrial Crops and Products</i> , 2010, 32, 458-466.	5.2	40
39	Lignin isolated from primary walls of hybrid aspen cell cultures indicates significant differences in lignin structure between primary and secondary cell wall. <i>Plant Physiology and Biochemistry</i> , 2005, 43, 777-785.	5.8	38
40	Non-enzymatic reduction of quinone methides during oxidative coupling of monolignols: implications for the origin of benzyl structures in lignins. <i>Organic and Biomolecular Chemistry</i> , 2006, 4, 3456.	2.8	35
41	Enzyme catalyzed cross-linking of spruce galactoglucomannan improves its applicability in barrier films. <i>Carbohydrate Polymers</i> , 2013, 95, 690-696.	10.2	35
42	Textile qualities of regenerated cellulose fibers from cotton waste pulp. <i>Textile Reseach Journal</i> , 2018, 88, 2485-2492.	2.2	35
43	Low Mw-lignin fractions together with vegetable oils as available oligomers for novel paper-coating applications as hydrophobic barrier. <i>Industrial Crops and Products</i> , 2008, 27, 98-103.	5.2	34
44	The effects of xyloglucan on the properties of paper made from bleached kraft pulp. <i>Nordic Pulp and Paper Research Journal</i> , 2003, 18, 182-187.	0.7	30
45	Bioinspired composites from cross-linked galactoglucomannan and microfibrillated cellulose: Thermal, mechanical and oxygen barrier properties. <i>Carbohydrate Polymers</i> , 2016, 136, 146-153.	10.2	29
46	Calculation of the isoelectric points of native proteins with spreading of pKa values. <i>Electrophoresis</i> , 1995, 16, 1377-1380.	2.4	28
47	Phenolic constituents in flax bast tissue and inhibition of cellulase and pectinase. <i>Biotechnology Letters</i> , 2000, 22, 741-746.	2.2	28
48	A possible explanation for the structural inhomogeneity of lignin in LCC networks. <i>Wood Science and Technology</i> , 2017, 51, 1365-1376.	3.2	26
49	Effects of Incorporated Iron or Cobalt on the Ethanol Oxidation Activity of Nickel (Oxy)Hydroxides in Alkaline Media. <i>Electrocatalysis</i> , 2019, 10, 489-498.	3.0	26
50	Extraction of hemicelluloses from fiberized spruce wood. <i>Carbohydrate Polymers</i> , 2015, 117, 19-24.	10.2	25
51	Acetylation and Sugar Composition Influence the (In)Solubility of Plant Î²-Mannans and Their Interaction with Cellulose Surfaces. <i>ACS Sustainable Chemistry and Engineering</i> , 2020, 8, 10027-10040.	6.7	25
52	On the role of the monolignol Î³-carbon functionality in lignin biopolymerization. <i>Phytochemistry</i> , 2009, 70, 147-155.	2.9	23
53	Stabilization of Polysaccharides During Alkaline Pre-Treatment of Wood Combined with Enzyme-Supported Extractions in a Biorefinery. <i>Journal of Wood Chemistry and Technology</i> , 2015, 35, 91-101.	1.7	21
54	The reactivity of lignin carbohydrate complex (LCC) during manufacture of dissolving sulfite pulp from softwood. <i>Industrial Crops and Products</i> , 2018, 115, 315-322.	5.2	21

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55	The degree of acetylation affects the microbial degradability of mannans. <i>Polymer Degradation and Stability</i> , 2016, 133, 36-46.	5.8	20
56	Improved dispersibility of once-dried cellulose nanofibers in the presence of glycerol. <i>Nordic Pulp and Paper Research Journal</i> , 2018, 33, 647-650.	0.7	19
57	Insights on the ethanol oxidation reaction at electrodeposited PdNi catalysts under conditions of increased mass transport. <i>International Journal of Hydrogen Energy</i> , 2021, 46, 1615-1626.	7.1	18
58	Comparison between 10,000-year old and contemporary spruce lignin. <i>Wood Science and Technology</i> , 2009, 43, 23-41.	3.2	17
59	<i>Phoma herbarum</i> , a soil fungus able to grow on natural lignin and synthetic lignin (DHP) as sole carbon source and cause lignin degradation. <i>Journal of Industrial Microbiology and Biotechnology</i> , 2016, 43, 1175-1182.	3.0	17
60	BIOREFINERY: Mild steam explosion: A way to activate wood for enzymatic treatment, chemical pulping and biorefinery processes. <i>Nordic Pulp and Paper Research Journal</i> , 2012, 27, 828-835.	0.7	16
61	Influence on off-gassing during storage of Scots pine wood pellets produced from sawdust with different extractive contents. <i>Biomass and Bioenergy</i> , 2022, 156, 106325.	5.7	16
62	Transparent Composites Made from Tunicate Cellulose Membranes and Environmentally Friendly Polyester. <i>ChemSusChem</i> , 2018, 11, 1728-1735.	6.8	15
63	Controlled Seasoning of Scots Pine Chips Using an Albino Strain of <i>Ophiostoma</i> . <i>Industrial & Engineering Chemistry Research</i> , 2006, 45, 2374-2380.	3.7	14
64	A Novel Nano Cellulose Preparation Method and Size Fraction by Cross Flow Ultra- Filtration. <i>Current Organic Chemistry</i> , 2012, 16, 1871-1875.	1.6	13
65	Compression of Biomass Substances – A Study on Springback Effects and Color Formation in Pellet Manufacture. <i>Applied Sciences (Switzerland)</i> , 2019, 9, 4302.	2.5	13
66	Plastic composites made from glycerol, citric acid, and forest components. <i>BioResources</i> , 2018, 13, 6600-6612.	1.0	13
67	ORIGINAL RESEARCH: Sulfonation of phenolic end groups in lignin directs laccase-initiated reactions towards cross-linking. <i>Industrial Biotechnology</i> , 2010, 6, 50-59.	0.8	11
68	Chemical Pulping: Fenton's reaction: a simple and versatile method to structurally modify commercial lignosulphonates. <i>Nordic Pulp and Paper Research Journal</i> , 2011, 26, 90-98.	0.7	11
69	Electrodeposited PdNi on a Ni rotating disk electrode highly active for glycerol electrooxidation in alkaline conditions. <i>Electrochimica Acta</i> , 2022, 403, 139714.	5.2	11
70	On the effect of a xylanase post-treatment as a means of reducing the yellowing of bleached hardwood kraft pulp. <i>Nordic Pulp and Paper Research Journal</i> , 2007, 22, 172-176.	0.7	10
71	Technical soda lignin dissolved in urea as an environmental friendly binder in wood fiberboard. <i>Journal of Adhesion Science and Technology</i> , 2014, 28, 490-498.	2.6	9
72	Effects of Acidic Media Pre-incubation on Flax Enzyme Retting Efficiency. <i>Textile Research Journal</i> , 2003, 73, 263-267.	2.2	8

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73	Effects of a Biologically Relevant Antioxidant on the Dehydrogenative Polymerization of Coniferyl Alcohol. <i>Biomacromolecules</i> , 2008, 9, 3378-3382.	5.4	7
74	On the effect of hemicellulose removal on cellulose-lignin interactions. <i>Nordic Pulp and Paper Research Journal</i> , 2017, 32, 542-549.	0.7	7
75	Structure-Activity Effects of Biomass-Based Hydroxyacids for Sustainable Electrochemical Hydrogen Production. <i>ChemSusChem</i> , 2021, 14, 1902-1912.	6.8	7
76	What are the biological functions of lignin and its complexation with carbohydrates? - OPEN ACCESS. <i>Nordic Pulp and Paper Research Journal</i> , 2017, 32, 527-541.	0.7	7
77	Structural basis for lignin recalcitrance during sulfite pulping for production of dissolving pulp from pine heartwood. <i>Industrial Crops and Products</i> , 2022, 177, 114391.	5.2	7
78	Xylan adsorption on cellulose: Preferred alignment and local surface immobilizing effect. <i>Carbohydrate Polymers</i> , 2022, 285, 119221.	10.2	7
79	Nontraditionally Retted Flax for Dry Cotton Blend Spinning. <i>Textile Research Journal</i> , 2001, 71, 375-380.	2.2	6
80	Oxidation of methyl linoleate in the presence of lignin. <i>Progress in Organic Coatings</i> , 2011, 72, 325-333.	3.9	5
81	Investigation on Enzymatic Oxidative Polymerization of Technical Soda Lignin. <i>Current Organic Chemistry</i> , 2012, 16, 1850-1854.	1.6	5
82	Effect of wood carbohydrates on the oxidation of unsaturated fatty acids. <i>Progress in Organic Coatings</i> , 2013, 76, 1068-1074.	3.9	5
83	Xyloglucan for estimating the surface area of cellulose fibers. <i>Nordic Pulp and Paper Research Journal</i> , 2018, 33, 194-199.	0.7	5
84	Understanding Off-Gassing of Biofuel Wood Pellets Using Pellets Produced from Pure Microcrystalline Cellulose with Different Additive Oils. <i>Energies</i> , 2022, 15, 2281.	3.1	5
85	Effect of Model Lignin Structures on the Oxidation of Unsaturated Fatty Acids. <i>Polymers From Renewable Resources</i> , 2010, 1, 69-90.	1.3	4
86	Xyloglucan adsorption for measuring the specific surface area on various never-dried cellulose nanofibers. <i>Nordic Pulp and Paper Research Journal</i> , 2018, 33, 186-193.	0.7	4
87	Lignin carbohydrate complex studies during kraft pulping for producing paper grade pulp from birch. <i>Tappi Journal</i> , 2020, 19, 447-460.	0.5	4
88	On the effect of hemicellulose removal on cellulose-lignin interactions. - OPEN ACCESS. <i>Nordic Pulp and Paper Research Journal</i> , 2017, 32, 542-549.	0.7	3
89	Densification of Wood-Influence on Mechanical and Chemical Properties when 11 Naturally Occurring Substances in Wood Are Mixed with Beech and Pine. <i>Energies</i> , 2021, 14, 5895.	3.1	2
90	Critical parameters for tall oil separation I: The importance of the ratio of fatty acids to rosin acids. <i>Tappi Journal</i> , 2019, 18, 547-555.	0.5	2

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91	High calcium content of <i>Eucalyptus dunnii</i> wood affects delignification and polysaccharide degradation in kraft pulping. Nordic Pulp and Paper Research Journal, 2022, 37, 338-348.	0.7	2
92	Stabilising mannose using sodium dithionite at alkaline conditions. Holzforschung, 2020, 74, 131-140.	1.9	1
93	The influence of lignin and xylan on some kraftliner pulp properties. Nordic Pulp and Paper Research Journal, 2009, 24, 403-408.	0.7	0
94	Editorial: From understanding the biological function of lignin in plants to production of colloidal lignin particles - OPEN ACCESS. Nordic Pulp and Paper Research Journal, 2017, 32, 483-484.	0.7	0