Liisa Viikari

List of Publications by Year in descending order

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70 papers	5,641 citations	53660 45 h-index	98622 67 g-index
75 all docs	75 docs citations	75 times ranked	4445 citing authors

#	Article	IF	Citations
1	Xylanases in bleaching: From an idea to the industry. FEMS Microbiology Reviews, 1994, 13, 335-350.	3.9	587
2	Inhibition of enzymatic hydrolysis by residual lignins from softwoodâ€”study of enzyme binding and inactivation on ligninâ€rich surface. Biotechnology and Bioengineering, 2011, 108, 2823-2834.	1.7	222
3	Thermostable Enzymes in Lignocellulose Hydrolysis. , 2007, 108, 121-145.		203
4	Purification and characterization of two Î²-mannanases from Trichoderma reesei. Journal of Biotechnology, 1993, 29, 229-242.	1.9	202
5	Xylans inhibit enzymatic hydrolysis of lignocellulosic materials by cellulases. Bioresource Technology, 2012, 121, 8-12.	4.8	162
6	Biotechnical utilization of wood carbohydrates after steaming pretreatment. Applied Microbiology and Biotechnology, 1985, 22, 416.	1.7	159
7	Restriction of the enzymatic hydrolysis of steam-pretreated spruce by lignin and hemicellulose. Enzyme and Microbial Technology, 2010, 46, 185-193.	1.6	157
8	Evaluation of different microbial xylanolytic systems. Journal of Biotechnology, 1987, 6, 49-60.	1.9	156
9	Evaluation of Wet Oxidation Pretreatment for Enzymatic Hydrolysis of Softwood. Applied Biochemistry and Biotechnology, 2004, 117, 01-18.	1.4	142
10	Formation of levan and sorbitol from sucrose by Zymomonas mobilis. Applied Microbiology and Biotechnology, 1984, 19, 252-255.	1.7	139
11	The role of acetyl xylan esterase in the solubilization of xylan and enzymatic hydrolysis of wheat straw and giant reed. Biotechnology for Biofuels, 2011, 4, 60.	6.2	137
12	Synergistic action of xylanase and mannanase improves the total hydrolysis of softwood. Bioresource Technology, 2011, 102, 9096-9104.	4.8	136
13	High temperature enzymatic prehydrolysis prior to simultaneous saccharification and fermentation of steam pretreated corn stover for ethanol production. Enzyme and Microbial Technology, 2007, 40, 607-613.	1.6	134
14	Carbohydrate-Binding Modules of Fungal Cellulases. Advances in Applied Microbiology, 2014, 88, 103-165.	1.3	127
15	Carbohydrate Metabolism in Zymomonas. Critical Reviews in Biotechnology, 1988, 7, 237-261.	5.1	125
16	Carbohydrate-binding modules (CBMs) revisited: reduced amount of water counterbalances the need for CBMs. Biotechnology for Biofuels, 2013, 6, 30.	6.2	123
17	Role of oxidative enzymatic treatments on enzymatic hydrolysis of softwood. Biotechnology and Bioengineering, 2004, 86, 550-557.	1.7	121
18	Cloning, expression, and characterization of novel thermostable family 7 cellobiohydrolases. Biotechnology and Bioengineering, 2008, 101, 515-528.	1.7	115

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19	Action of Trichoderma reesei mannanase on galactoglucomannan in pine kraft pulp. Journal of Biotechnology, 1997, 57, 191-204.	1.9	104
20	Purification, characterization and sequence analysis of a laccase from the ascomycete Mauginiella sp.. Enzyme and Microbial Technology, 2003, 33, 854-862.	1.6	90
21	Characterisation of Specific Activities and Hydrolytic Properties of Cell-Wall-Degrading Enzymes Produced by Trichoderma reesei Rut C30 on Different Carbon Sources. Applied Biochemistry and Biotechnology, 2010, 161, 347-364.	1.4	86
22	Effect of pH on production of xylanase by Trichoderma reesei on xylan- and cellulose-based media. Applied Microbiology and Biotechnology, 1993, 40, 224.	1.7	83
23	Thermostable recombinant xylanases from Nonomuraea flexuosa and Thermoascus aurantiacus show distinct properties in the hydrolysis of xylans and pretreated wheat straw. Biotechnology for Biofuels, 2011, 4, 12.	6.2	82
24	Xylan as limiting factor in enzymatic hydrolysis of nanocellulose. Bioresource Technology, 2013, 129, 135-141.	4.8	82
25	Modification of hardwood dissolving pulp with purifiedTrichoderma reesei cellulases. Cellulose, 1996, 3, 153-163.	2.4	81
26	Adsorption of monocomponent enzymes in enzyme mixture analyzed quantitatively during hydrolysis of lignocellulose substrates. Bioresource Technology, 2011, 102, 1220-1227.	4.8	80
27	Production of lignin peroxidase and laccase by Phlebia radiata. Applied Microbiology and Biotechnology, 1989, 31, 234.	1.7	79
28	The laccase-catalyzed modification of lignin for enzymatic hydrolysis. Enzyme and Microbial Technology, 2011, 49, 492-498.	1.6	74
29	Comparison of the synergistic action of two thermostable xylanases from GH families 10 and 11 with thermostable cellulases in lignocellulose hydrolysis. Bioresource Technology, 2011, 102, 9090-9095.	4.8	71
30	Evaluation of the role of xyloglucanase in the enzymatic hydrolysis of lignocellulosic substrates. Enzyme and Microbial Technology, 2008, 43, 109-114.	1.6	64
31	Characterization of Unbleached Kraft Pulps by Enzymatic Treatment, Potentiometric Titration and Polyelectrolyte Adsorption. Holzforschung, 1996, 50, 208-214.	0.9	63
32	Thermostable endoglucanases in the liquefaction of hydrothermally pretreated wheat straw. Biotechnology for Biofuels, 2011, 4, 2.	6.2	61
33	Formation of sorbitol by Zymomonas mobilis. Applied Microbiology and Biotechnology, 1984, 20, 118.	1.7	60
34	Xylo-oligosaccharides are competitive inhibitors of cellobiohydrolase I from Thermoascus aurantiacus. Bioresource Technology, 2012, 117, 286-291.	4.8	59
35	The role of carbohydrate binding module (CBM) at high substrate consistency: Comparison of Trichoderma reesei and Thermoascus aurantiacus Cel7A (CBHI) and Cel5A (EGII). Bioresource Technology, 2013, 143, 196-203.	4.8	59
36	Binding of hemicellulases on isolated polysaccharide substrates. Enzyme and Microbial Technology, 1995, 17, 499-505.	1.6	55

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37	Oxidative d-xylose metabolism of Gluconobacter oxydans. Applied Microbiology and Biotechnology, 1988, 29, 375-379.	1.7	54
38	Effects of bacterial treatments on wood extractives. Journal of Biotechnology, 2003, 103, 67-76.	1.9	53
39	Liquefaction of hydrothermally pretreated wheat straw at high-solids content by purified Trichoderma enzymes. Bioresource Technology, 2011, 102, 1968-1974.	4.8	52
40	By-products in the fermentation of sucrose by different Zymomonas-strains. Applied Microbiology and Biotechnology, 1986, 23, 240.	1.7	51
41	The role of two Trichoderma reesei xylanases in the bleaching of pine kraft pulp. Applied Microbiology and Biotechnology, 1992, 37, 825.	1.7	51
42	Changes in Submicrometer Structure of Enzymatically Hydrolyzed Microcrystalline Cellulose. Biomacromolecules, 2010, 11, 1111-1117.	2.6	51
43	Cellulases without carbohydrate-binding modules in high consistency ethanol production process. Biotechnology for Biofuels, 2014, 7, 27.	6.2	51
44	A novel combination of prosthetic groups in a fungal laccase; PQQ and two copper atoms. FEBS Letters, 1990, 267, 6-8.	1.3	50
45	Enzymatic accessibility of xylans in lignocellulosic materials. Applied Microbiology and Biotechnology, 1994, 41, 124-129.	1.7	49
46	Effect of temperature on lignin-derived inhibition studied with three structurally different cellobiohydrolases. Bioresource Technology, 2013, 146, 118-125.	4.8	46
47	Mechanisms of laccase-mediator treatments improving the enzymatic hydrolysis of pre-treated spruce. Biotechnology for Biofuels, 2014, 7, 177.	6.2	46
48	An acetylglucomannan esterase of Aspergillus oryzae; purification, characterization and role in the hydrolysis of O-acetyl-galactoglucomannan. Journal of Biotechnology, 1995, 42, 197-206.	1.9	45
49	Enzymatic deacetylation of galactoglucomannans. Applied Microbiology and Biotechnology, 1993, 39, 159.	1.7	44
50	The role of xylonolactone in xylonic acid production by Pseudomonas fragi. Applied Microbiology and Biotechnology, 1988, 27, 333.	1.7	43
51	Regioselective deacetylation of cellulose acetates by acetyl xylan esterases of different CE-families. Journal of Biotechnology, 2003, 105, 95-104.	1.9	43
52	Substrate specificities of Penicillium simplicissimum Î±-galactosidases. Enzyme and Microbial Technology, 1998, 22, 192-198.	1.6	42
53	Application of thermostable xylanase of Dictyoglomus sp. in enzymatic treatment of kraft pulps. Applied Microbiology and Biotechnology, 1994, 41, 130-133.	1.7	38
54	Fructose metabolism in Zymomonas mobilis. Applied Microbiology and Biotechnology, 1986, 24, 471.	1.7	35

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55	Effects of Fungal and Enzymatic Treatments on Isolated Lignins and on Pulp Bleachability. Holzforschung, 1993, 47, 29-35.	0.9	34
56	The carbohydrate-binding module of xylanase from Nonomuraea flexuosa decreases its non-productive adsorption on lignin. Biotechnology for Biofuels, 2013, 6, 18.	6.2	31
57	Adsorption and Activity of Trichoderma reesei Cellobiohydrolase I, Endoglucanase II, and the Corresponding Core Proteins on Steam Pretreated Willow. Applied Biochemistry and Biotechnology, 1999, 81, 81-90.	1.4	30
58	Purification and characterization of a thermophilic xylanase from the brown-rot fungus Gloeophyllum trabeum. Journal of Biotechnology, 1994, 32, 67-74.	1.9	27
59	Small-angle scattering study of structural changes in the microfibril network of nanocellulose during enzymatic hydrolysis. Cellulose, 2013, 20, 1031-1040.	2.4	24
60	Laccase fromMelanocarpus albomycesbinds effectively to cellulose. FEBS Letters, 2004, 576, 251-255.	1.3	23
61	Reed canary grass as a feedstock for 2nd generation bioethanol production. Bioresource Technology, 2012, 123, 669-672.	4.8	21
62	Pilot scale production of a Trichoderma reesei endo-Î²-glucanase by brewer's yeast. Journal of Biotechnology, 1991, 17, 133-146.	1.9	19
63	Large-scale applicable purification and characterization of a membrane-bound PQQ-dependent aldose dehydrogenase. Journal of Biotechnology, 1993, 29, 287-297.	1.9	17
64	Enzymatic solubilization of fibre-bound and isolated birch xylans. Journal of Biotechnology, 1993, 28, 219-228.	1.9	17
65	Possibility of Increasing Mechanical Pulp Yield by Enzymatic Treatment. Holzforschung, 1994, 48, 436-440.	0.9	15
66	Impact of the Donnan effect on the action of xylanases on fibre substrates. Journal of Biotechnology, 1997, 57, 217-222.	1.9	13
67	Competitive inhibition of cellobiohydrolase I by manno-oligosaccharides. Enzyme and Microbial Technology, 2015, 68, 62-68.	1.6	11
68	Enzymatic Depolymerization of Plant Cell Wall Hemicelluloses. , 0, , 352-373.		4
69	Lignocellulose Modifying Enzymes for Sustaniable Technologies. ACS Symposium Series, 2003, , 30-44.	0.5	1
70	CELLULASES IN PULP AND PAPER PROCESSING. , 2000, , 69-80.		0