Matti Leisola

List of Publications by Year
in descending order

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53	2,205	186209	223716
papers	citations	28 h-index	46 g-index

53	53	53	1973
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Three-dimensional structures of thermophilic beta-1,4-xylanases from Chaetomium thermophilum and Nonomuraea flexuosa. Comparison of twelve xylanases in relation to their thermal stability. FEBS Journal, 2003, 270, 1399-1412.	0.2	188
2	A rare sugar xylitol. Part II: biotechnological production and future applications of xylitol. Applied Microbiology and Biotechnology, 2007, 74, 273-276.	1.7	177
3	Engineering of multiple arginines into the Ser/Thr surface of Trichoderma reesei endo-1,4-Î²-xylanase II increases the thermotolerance and shifts the pH optimum towards alkaline pH. Protein Engineering, Design and Selection, 2002, 15, 141-145.	1.0	131
4	Metabolic Engineering of Lactobacillus helveticus CNRZ32 for Production of Pure l -(+)-Lactic Acid. Applied and Environmental Microbiology, 2000, 66, 3835-3841.	1.4	112
5	A combination of weakly stabilizing mutations with a disulfide bridge in the Î±-helix region of Trichoderma reesei endo-1,4-Î²-xylanase II increases the thermal stability through synergism. Journal of Biotechnology, 2001, 88, 37-46.	1.9	109
6	Production of d-mannitol by heterofermentative lactic acid bacteria. Process Biochemistry, 2002, 37, 1207-1213.	1.8	96
7	A de novo designed N-terminal disulphide bridge stabilizes the Trichoderma reesei endo-1,4-Î²-xylanase II. Journal of Biotechnology, 2004, 108, 137-143.	1.9	84
8	Production of xylitol from d-xylose by recombinant Lactococcus lactis. Journal of Biotechnology, 2005, 118, 55-66.	1.9	65
9	Influence of pH on the production of xylanases by Trichoderma reesei Rut C-30. Process Biochemistry, 2004, 39, 731-736.	1.8	61
10	Engineering the thermostability of Trichoderma reesei endo-1,4-?-xylanase II by combination of disulphide bridges. Extremophiles, 2004, 8, 393-400.	0.9	57
11	Exopolysaccharide-Producing Bacteria from Sugar Beets. Applied and Environmental Microbiology, 1999, 65, 862-864.	1.4	56
12	Protein engineering: opportunities and challenges. Applied Microbiology and Biotechnology, 2007, 75, 1225-1232.	1.7	56
13	Metabolic engineering of Lactobacillus fermentum for production of mannitol and pure L-lactic acid or pyruvate. Biotechnology and Bioengineering, 2003, 82, 653-663.	1.7	55
14	Characterization of Glycine Sarcosine N -Methyltransferase and Sarcosine Dimethylglycine N -Methyltransferase. Applied and Environmental Microbiology, 2001, 67, 2044-2050.	1.4	50
15	Actinopolyspora halophila has two separate pathways for betaine synthesis. Archives of Microbiology, 2001, 176, 294-300.	1.0	49
16	Xylanase production by Trichoderma reesei Rut C-30 grown on L-arabinose-rich plant hydrolysates. Bioresource Technology, 2005, 96, 753-759.	4.8	47
17	Production and identification of extracellular oxidases of Phanerochaete chrysosporium. Journal of Biotechnology, 1985, 2, 379-382.	1.9	46
18	Isomerization of pentose and hexose sugars by an enzyme reactor packed with cross-linked xylose isomerase crystals. Enzyme and Microbial Technology, 2002, 31, 67-76.	1.6	46

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19	Improved mannitol production by a random mutant of Leuconostoc pseudomesenteroides. Journal of Biotechnology, 2005, 116, 283-294.	1.9	46
20	Effect of Glycosylation and Additional Domains on the Thermostability of a Family 10 Xylanase Produced by Thermopolyspora flexuosa. Applied and Environmental Microbiology, 2010, 76, 356-360.	1.4	41
21	Structure of the exopolysaccharide produced by Enterobacter amnigenus. Carbohydrate Research, 2005, 340, 439-447.	1.1	40
22	Continuous production of lignin peroxidase by Phanerochaete chrysosporium. Journal of Biotechnology, 1986, 4, 283-291.	1.9	38
23	Characterization of the xylanase produced by submerged cultivation of Thermomyces lanuginosus DSM 10635. Enzyme and Microbial Technology, 2004, 35, 93-99.	1.6	38
24	Engineering the substrate specificity of xylose isomerase. Protein Engineering, Design and Selection, 2005, 17, 861-869.	1.0	35
25	Metabolic Flux Analysis of Candida tropicalis Growing on Xylose in an Oxygen-Limited Chemostat. Metabolic Engineering, 2002, 4, 248-256.	3.6	31
26	d-Tagatose production in the presence of borate by resting Lactococcus lactis cells harboring Bifidobacterium longum l-arabinose isomerase. Bioprocess and Biosystems Engineering, 2013, 36, 489-497.	1.7	31
27	Novel reactions of xylose isomerase from Streptomyces rubiginosus. Enzyme and Microbial Technology, 1999, 25, 695-700.	1.6	29
28	Cross-linked glucose isomerase crystals as a liquid chromatographic separation material. Enzyme and Microbial Technology, 2000, 26, 550-558.	1.6	29
29	Thermostability of endo-1,4-Î²-xylanase II from Trichoderma reesei studied by electrospray ionization Fourier-transform ion cyclotron resonance MS, hydrogen/deuterium-exchange reactions and dynamic light scattering. Biochemical Journal, 2001, 356, 453-460.	1.7	29
30	l-Xylose and l-lyxose production from xylitol using Alcaligenes 701B strain and immobilized l-rhamnose isomerase enzyme. Enzyme and Microbial Technology, 2005, 36, 976-981.	1.6	27
31	Growth characteristics and metabolic flux analysis ofCandida milleri. Biotechnology and Bioengineering, 2000, 70, 197-207.	1.7	24
32	Phytase production by high cell density culture of recombinant Bacillus subtilis. Biotechnology Letters, 2001, 23, 761-766.	1.1	24
33	Characterization of Mutant Xylanases Using Fourier Transform Ion Cyclotron Resonance Mass Spectrometry:â€‰ Stabilizing Contributions of Disulfide Bridges and N-Terminal Extensions. Biochemistry, 2004, 43, 9556-9566.	1.2	24
34	Simultaneous catalysis and product separation by cross-linked enzyme crystals. Biotechnology and Bioengineering, 2001, 72, 501-505.	1.7	23
35	Stability of native and cross-linked crystalline glucose isomerase. , 1999, 64, 377-380.		21
36	Thermostability of endo-1,4-Î²-xylanase II from Trichoderma reesei studied by electrospray ionization Fourier-transform ion cyclotron resonance MS, hydrogen/deuterium-exchange reactions and dynamic light scattering. Biochemical Journal, 2001, 356, 453.	1.7	20

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37	Xylitol purification by cross-linked glucose isomerase crystals. Biotechnology Letters, 1998, 12, 557-560.	0.5	19
38	C-2 Epimer Formation of Tetrose, Pentose and Hexose Sugars by Xylose Isomerase. Biocatalysis and Biotransformation, 2002, 20, 235-240.	1.1	17
39	Xylose Isomerase Catalysed Novel Hexose Epimerization. Biocatalysis and Biotransformation, 1999, 17, 393-400.	1.1	16
40	Stochastic boundary molecular dynamics simulation of l-ribose in the active site of Actinoplanes missouriensis xylose isomerase and its Val135Asn mutant with improved reaction rate. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2005, 1749, 65-73.	1.1	15
41	Characterization of genes involved in fructose utilization by Lactobacillus fermentum. Archives of Microbiology, 2006, 186, 51-59.	1.0	14
42	Factors affecting the production of l-xylulose by resting cells of recombinant Escherichia coli. Journal of Industrial Microbiology and Biotechnology, 2009, 36, 1323-1330.	1.4	14
43	Production of l-xylose from l-xylulose using Escherichia coli l-fucose isomerase. Enzyme and Microbial Technology, 2012, 50, 71-76.	1.6	14
44	Engineering the Thermotolerance and pH Optimum of Family 11 Xylanases by Site-Directed Mutagenesis. Methods in Enzymology, 2004, 388, 156-167.	0.4	12
45	A new and efficient phosphate starvation inducible expression system for Lactococcus lactis. Applied Microbiology and Biotechnology, 2008, 79, 803-810.	1.7	12
46	Development of Cross-Linked Antibody Fab Fragment Crystals for Enantioselective Separation of a Drug Enantiomer. Crystal Growth and Design, 2003, 3, 777-782.	1.4	11
47	Candida guilliermondii grows on rare pentoses â€“ implications for production of pure xylitol. Biotechnology Letters, 2002, 24, 507-510.	1.1	9
48	Total Hydrolysis of Xylotetraose and Xylobiose by Soluble and Cross-linked Crystalline Xylanase II from Trichoderma reesei. Biocatalysis and Biotransformation, 2002, 20, 281-290.	1.1	6
49	Enantioselective Affinity Chromatography of a Chiral Drug by Crystalline and Carrier-Bound Antibody Fab Fragment. Biotechnology Progress, 2004, 20, 771-776.	1.3	6
50	Effect of active site mutation on pH activity and transglycosylation of Sulfolobus acidocaldarius Î²-glycosidase. Journal of Molecular Catalysis B: Enzymatic, 2015, 118, 62-69.	1.8	3
51	Chromatographic separation of nucleosides using a cross-linked xylose isomerase crystal stationary phase. Journal of Separation Science, 2004, 27, 1491-1497.	1.3	2
52	Bioscience, Bioinnovations, and Bioethics. , 2007, 107, 41-56.		0
53	Protein Engineering of Industrial Enzymes. , 2006, , 579-601.		0