Wolfgang H Schwarz

List of Publications by Year
in descending order

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100	5,220	81900	91884
papers	citations	39 h-index	69 g-index

102	102	102	4537
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Unusual substrate specificity in GH family 12: structureâ€“function analysis of glucanases Bgh12A and Xgh12B from Aspergillus cervinus, and Egh12 from Thielavia terrestris. Applied Microbiology and Biotechnology, 2022, 106, 1493-1509.	3.6	4
2	Strategic aromatic residues in the catalytic cleft of the xyloglucanase MtXgh74 modifying thermostability, mode of enzyme action, and viscosity reduction ability. Applied Microbiology and Biotechnology, 2021, 105, 1461-1476.	3.6	2
3	A Novel Primer Mixture for GH48 Genes: Quantification and Identification of Truly Cellulolytic Bacteria in Biogas Fermenters. Microorganisms, 2020, 8, 1297.	3.6	3
4	Milling byproducts are an economically viable substrate for butanol production using clostridial ABE fermentation. Applied Microbiology and Biotechnology, 2020, 104, 8679-8689.	3.6	8
5	Draft Genome Sequence of Paenibacillus polymyxa DSM 292, a Gram-Positive, Spore-Forming Soil Bacterium with High Biotechnological Potential. Microbiology Resource Announcements, 2020, 9, .	0.6	1
6	Novel endo-(1,4)-Î²-glucanase Bgh12A and xyloglucanase Xgh12B from Aspergillus cervinus belong to GH12 subgroup I and II, respectively. Applied Microbiology and Biotechnology, 2019, 103, 7553-7566.	3.6	11
7	Biochemical characterisation of four rhamnosidases from thermophilic bacteria of the genera Thermotoga, Caldicellulosiruptor and Thermoclostridium. Scientific Reports, 2019, 9, 15924.	3.3	13
8	Handling gene and protein names in the age of bioinformatics: the special challenge of secreted multimodular bacterial enzymes such as the cbhA/cbh9A gene of Clostridium thermocellum. World Journal of Microbiology and Biotechnology, 2018, 34, 42.	3.6	2
9	Complete Genome Sequence of the Novel Cellulolytic, Anaerobic, Thermophilic Bacterium Herbivorax saccincola Type Strain GGR1, Isolated from a Lab Scale Biogas Reactor as Established by Illumina and Nanopore MinION Sequencing. Genome Announcements, 2018, 6, .	0.8	10
10	Đ¡arbohydrate binding module CBM28 of endoglucanase Cel5D from Caldicellulosiruptor bescii recognizes crystalline cellulose. International Journal of Biological Macromolecules, 2018, 107, 305-311.	7.5	4
11	Evaluation of promoter sequences for the secretory production of a Clostridium thermocellum cellulase in Paenibacillus polymyxa. Applied Microbiology and Biotechnology, 2018, 102, 10147-10159.	3.6	7
12	Addition of Î²-galactosidase boosts the xyloglucan degradation capability of endoglucanase Cel9D from Clostridium thermocellum. Biotechnology for Biofuels, 2018, 11, 238.	6.2	6
13	Transmating: conjugative transfer of a new broad host range expression vector to various Bacillus species using a single protocol. BMC Microbiology, 2018, 18, 56.	3.3	15
14	The hemicellulose-degrading enzyme system of the thermophilic bacterium Clostridium stercorarium: comparative characterisation and addition of new hemicellulolytic glycoside hydrolases. Biotechnology for Biofuels, 2018, 11, 229.	6.2	62
15	Optimizing the composition of a synthetic cellulosome complex for the hydrolysis of softwood pulp: identification of the enzymatic core functions and biochemical complex characterization. Biotechnology for Biofuels, 2018, 11, 220.	6.2	19
16	Thermostable multifunctional GH74 xyloglucanase from Myceliophthora thermophila: high-level expression in Pichia pastoris and characterization of the recombinant protein. Applied Microbiology and Biotechnology, 2017, 101, 5653-5666.	3.6	21
17	Characterization of the arabinoxylan-degrading machinery of the thermophilic bacterium Herbinix hemicellulosilyticaâ€”Six new xylanases, three arabinofuranosidases and one xylosidase. Journal of Biotechnology, 2017, 257, 122-130.	3.8	35
18	A new method to evaluate temperature vs. pH activity profiles for biotechnological relevant enzymes. Biotechnology for Biofuels, 2017, 10, 234.	6.2	39

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19	HPAEC-PAD for oligosaccharide analysisâ€"novel insights into analyte sensitivity and response stability. Analytical and Bioanalytical Chemistry, 2017, 409, 7169-7181.	3.7	26
20	Identification of endoxylanase XynE from Clostridium thermocellum as the first xylanase of glycoside hydrolase family GH141. Scientific Reports, 2017, 7, 11178.	3.3	27
21	Genomics and prevalence of bacterial and archaeal isolates from biogas-producing microbiomes. Biotechnology for Biofuels, 2017, 10, 264.	6.2	50
22	Comparative characterization of all cellulosomal cellulases from Clostridium thermocellum reveals high diversity in endoglucanase product formation essential for complex activity. Biotechnology for Biofuels, 2017, 10, 240.	6.2	45
23	DNA and RNA Extraction and Quantitative Real-Time PCR-Based Assays for Biogas Biocenoses in an Interlaboratory Comparison. Bioengineering, 2016, 3, 7.	3.5	23
24	Unraveling the microbiome of a thermophilic biogas plant by metagenome and metatranscriptome analysis complemented by characterization of bacterial and archaeal isolates. Biotechnology for Biofuels, 2016, 9, 171.	6.2	134
25	Draft Genome Sequence of Propionispora sp. Strain 2/2-37, a New Xylan-Degrading Bacterium Isolated from a Mesophilic Biogas Reactor. Genome Announcements, 2016, 4, .	0.8	1
26	Complete Genome Sequence of Herbinix luporum SD1D, a New Cellulose-Degrading Bacterium Isolated from a Thermophilic Biogas Reactor. Genome Announcements, 2016, 4, .	0.8	8
27	Herbivorax saccincola gen. nov., sp. nov., a cellulolytic, anaerobic, thermophilic bacterium isolated via in sacco enrichments from a lab-scale biogas reactor. International Journal of Systematic and Evolutionary Microbiology, 2016, 66, 4458-4463.	1.7	35
28	Herbinix hemicellulosilytica gen. nov., sp. nov., a thermophilic cellulose-degrading bacterium isolated from a thermophilic biogas reactor. International Journal of Systematic and Evolutionary Microbiology, 2015, 65, 2365-2371.	1.7	90
29	The Role of Cellulose-Hydrolyzing Bacteria in the Production of Biogas from Plant Biomass. Microbiology Monographs, 2015, , 335-361.	0.6	6
30	Draft genome sequence of Herbinix hemicellulosilytica T3/55T, a new thermophilic cellulose degrading bacterium isolated from a thermophilic biogas reactor. Journal of Biotechnology, 2015, 214, 59-60.	3.8	21
31	Differences in biomass degradation between newly isolated environmental strains of Clostridium thermocellum and heterogeneity in the size of the cellulosomal scaffoldin. Systematic and Applied Microbiology, 2015, 38, 424-432.	2.8	16
32	Synergism of Glycoside Hydrolase Secretomes from Two Thermophilic Bacteria Cocultivated on Lignocellulose. Applied and Environmental Microbiology, 2014, 80, 2592-2601.	3.1	23
33	Isolation of a solventogenic Clostridium sp. strain: Fermentation of glycerol to n-butanol, analysis of the bcs operon region and its potential regulatory elements. Systematic and Applied Microbiology, 2014, 37, 1-9.	2.8	12
34	First draft genome sequence of the amylolytic Bacillus thermoamylovorans wild-type strain 1A1 isolated from a thermophilic biogas plant. Journal of Biotechnology, 2014, 192, 154-155.	3.8	15
35	Genomics of cellulolytic bacteria. Current Opinion in Biotechnology, 2014, 29, 171-183.	6.6	140
36	Complete genome sequence of the cellulolytic thermophile Ruminoclostridium cellulosi wild-type strain DG5 isolated from a thermophilic biogas plant. Journal of Biotechnology, 2014, 188, 136-137.	3.8	30

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37	Comparative genotyping of Clostridium thermocellum strains isolated from biogas plants: Genetic markers and characterization of cellulolytic potential. Systematic and Applied Microbiology, 2014, 37, 311-319.	2.8	24
38	Draft genome sequence of the cellulolytic Clostridium thermocellum wild-type strain BC1 playing a role in cellulosic biomass degradation. Journal of Biotechnology, 2013, 168, 62-63.	3.8	21
39	Complete Genome Sequence of Clostridium stercorarium subsp. stercorarium Strain DSM 8532, a Thermophilic Degrader of Plant Cell Wall Fibers. Genome Announcements, 2013, 1, e0007313.	0.8	18
40	In Vitro Reconstitution of the Complete Clostridium thermocellum Cellulosome and Synergistic Activity on Crystalline Cellulose. Applied and Environmental Microbiology, 2012, 78, 4301-4307.	3.1	55
41	An untapped bacterial cellulolytic community enriched from coastal marine sediment under anaerobic and thermophilic conditions. FEMS Microbiology Letters, 2012, 335, 39-46.	1.8	17
42	Molecular characterization and enzymatic hydrolysis of naringin extracted from kinnow peel waste. International Journal of Biological Macromolecules, 2011, 48, 58-62.	7.5	35
43	Hydrolytic bacteria in mesophilic and thermophilic degradation of plant biomass. Engineering in Life Sciences, 2010, 10, 528-536.	3.6	53
44	Reconstructing the clostridial n-butanol metabolic pathway in Lactobacillus brevis. Applied Microbiology and Biotechnology, 2010, 87, 635-646.	3.6	156
45	Hydrolysis of citrus peel naringin by recombinant Î±â€Lâ€rhamnosidase from Clostridium stercorarium. Journal of Chemical Technology and Biotechnology, 2010, 85, 1419-1422.	3.2	38
46	One-step purification and immobilization of His-tagged rhamnosidase for naringin hydrolysis. Process Biochemistry, 2010, 45, 451-456.	3.7	23
47	Isolation of a new butanol-producing Clostridium strain: High level of hemicellulosic activity and structure of solventogenesis genes of a new Clostridium saccharobutylicum isolate. Systematic and Applied Microbiology, 2009, 32, 449-459.	2.8	43
48	Stimulation of bacterial DNA transformation by cattle saliva: implications for using genetically modified plants in animal feed. World Journal of Microbiology and Biotechnology, 2009, 25, 457-463.	3.6	2
49	Cloning and characterisation of a large metagenomic DNA fragment containing glycosyl-hydrolase genes. Molecular Genetics, Microbiology and Virology, 2009, 24, 12-16.	0.3	8
50	Carbohydrate-binding properties of a separately folding protein module from Î²-1,3-glucanase Lic16A of Clostridium thermocellum. Microbiology (United Kingdom), 2009, 155, 2442-2449.	1.8	32
51	Eine bionische Nanomaschine fÃ¼r die Hydrolyse kristalliner Cellulose. Chemie-Ingenieur-Technik, 2008, 80, 1373-1373.	0.8	0
52	Bacterial Cellulose Hydrolysis in Anaerobic Environmental Subsystemsâ€”<scp>Clostridium thermocellum</scp>and<scp>Clostridium stercorarium</scp>, Thermophilic Plantâ€fiber Degraders. Annals of the New York Academy of Sciences, 2008, 1125, 298-307.	3.8	62
53	Extracellular glycosyl hydrolase activity of the Clostridium strains producing acetone, butanol, and ethanol. Applied Biochemistry and Microbiology, 2008, 44, 42-47.	0.9	15
54	Mutations in the Scaffoldin Gene,cipA, ofClostridium thermocellumwith Impaired Cellulosome Formation and Cellulose Hydrolysis: Insertions of a New Transposable Element, IS1447, and Implications for Cellulase Synergism on Crystalline Cellulose. Journal of Bacteriology, 2008, 190, 4321-4327.	2.2	60

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55	Two noncellulosomal cellulases of Clostridium thermocellum, Cel9I and Cel48Y, hydrolyse crystalline cellulose synergistically. FEMS Microbiology Letters, 2007, 268, 194-201.	1.8	94
56	Biofuels from microbes. Applied Microbiology and Biotechnology, 2007, 77, 23-35.	3.6	463
57	Protease inhibitors in bacteria: an emerging concept for the regulation of bacterial protein complexes?. Molecular Microbiology, 2006, 60, 1323-1326.	2.5	21
58	Bacterial acetone and butanol production by industrial fermentation in the Soviet Union: use of hydrolyzed agricultural waste for biorefinery. Applied Microbiology and Biotechnology, 2006, 71, 587-597.	3.6	282
59	A major new component in the cellulosome ofClostridium thermocellumis a processive endo-ÃŽÂ²-1,4-glucanase producing cellotetraose. FEMS Microbiology Letters, 2005, 249, 353-358.	1.8	73
60	Functional subgenomics ofClostridium thermocellum cellulosomal genes: Identification of the major catalytic components in the extracellular complex and detection of three new enzymes. Proteomics, 2005, 5, 3646-3653.	2.2	128
61	Two new major subunits in the cellulosome of Clostridium thermocellum: xyloglucanase Xgh74A and endoxylanase Xyn10D. Microbiology (United Kingdom), 2005, 151, 3395-3401.	1.8	56
62	Enzyme system of Clostridium stercorarium for hydrolysis of arabinoxylan: reconstitution of the in vivo system from recombinant enzymes. Microbiology (United Kingdom), 2004, 150, 2257-2266.	1.8	79
63	Tracing residual recombinant feed molecules during digestion and rumen bacterial diversity in cattle fed transgene maize. European Food Research and Technology, 2004, 218, 269-273.	3.3	114
64	Extracellular Glycosyl Hydrolases from Clostridia. Advances in Applied Microbiology, 2004, 56, 215-261.	2.4	45
65	Enzymes for digestion of cellulose and other polysaccharides in the gut of longhorn beetle larvae, Rhagium inquisitor L. (Col., Cerambycidae). International Biodeterioration and Biodegradation, 2003, 51, 175-179.	3.9	19
66	Lic16A of Clostridium thermocellum, a non-cellulosomal, highly complex endo-Î²-1,3-glucanase bound to the outer cell surface. Microbiology (United Kingdom), 2003, 149, 1021-1031.	1.8	63
67	Two new cellulosome components encoded downstream of cell in the genome of Clostridium thermocellum: the non-processive endoglucanase CelN and the possibly structural protein CseP. Microbiology (United Kingdom), 2003, 149, 515-524.	1.8	58
68	Chi18A, the Endochitinase in the Cellulosome of the Thermophilic, Cellulolytic Bacterium Clostridium thermocellum. Applied and Environmental Microbiology, 2002, 68, 3176-3179.	3.1	50
69	A newly described cellulosomal cellobiohydrolase, CelO, from Clostridium thermocellum: investigation of the exo-mode of hydrolysis, and binding capacity to crystalline cellulose The GenBank accession number for the sequence determined in this work is AJ275975.. Microbiology (United) Tj ETQq1 1 0.784314 rgBT /Overlock	1.8	52
70	The cellulosome and cellulose degradation by anaerobic bacteria. Applied Microbiology and Biotechnology, 2001, 56, 634-649.	3.6	565
71	New solvent-producing Clostridium sp. strains, hydrolyzing a wide range of polysaccharides, are closely related to Clostridium butyricum. Journal of Industrial Microbiology and Biotechnology, 2001, 27, 329-335.	3.0	30
72	The binding pattern of two carbohydrate-binding modules of laminarinase Lam16A from Thermotoga neapolitana: differences in Î²-glucan binding within family CBM4. Microbiology (United Kingdom), 2001, 147, 621-629.	1.8	47

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73	The thermostable alpha-l-rhamnosidase RamA of Clostridium stercorarium: biochemical characterization and primary structure of a bacterial alpha-l-rhamnoside hydrolase, a new type of inverting glycoside hydrolase. Molecular Microbiology, 2000, 35, 173-179.	2.5	91
74	Isolation of mesophilic solvent-producing clostridia from Colombian sources: physiological characterization, solvent production and polysaccharide hydrolysis. Journal of Biotechnology, 2000, 79, 117-126.	3.8	44
75	Duplicated Clostridium thermocellum cellobiohydrolase gene encoding cellulosomal subunits S3 and S5. Applied Microbiology and Biotechnology, 1999, 51, 852-859.	3.6	28
76	Organization of the Chromosomal Region Containing the Genes lexA and topA in Thermotoga neapolitana. Primary Structure of LexA Reveals Phylogenetic Relevance. Systematic and Applied Microbiology, 1999, 22, 174-178.	2.8	5
77	Nucleotide sequence ofarfBofClostridium stercorarium, and prediction of catalytic residues of ÃŽÂ±-l-arabinofuranosidases based on local similarity with several families of glycosyl hydrolases. FEMS Microbiology Letters, 1998, 164, 337-343.	1.8	32
78	Multidomain Structure and Cellulosomal Localization of the Clostridium thermocellum Cellobiohydrolase CbhA. Journal of Bacteriology, 1998, 180, 3091-3099.	2.2	70
79	Thermotoga neapolitana bglB gene, upstream of lamA, encodes a highly thermostable Î²-glucosidase that is a laminaribiase. Microbiology (United Kingdom), 1997, 143, 3537-3542.	1.8	48
80	Highly thermostable endo-1,3-Î² -glucanase (laminarinase) Lam A from Thermotoga neapolitana: nucleotide sequence of the gene and characterization of the recombinant gene product. Microbiology (United Kingdom), 1997, 143, 1701-1708.	1.8	71
81	Structure of the Clostridium stercorarium gene celY encoding the exo-1,4-ï¿½-glucanase Avicelase II. Microbiology (United Kingdom), 1997, 143, 891-898.	1.8	32
82	Molecular Characterization of Four Strains of the Cellulolytic ThermophileClostridium Stercorarium. Bioscience, Biotechnology and Biochemistry, 1995, 59, 1661-1665.	1.3	18
83	Debranching of arabinoxylan: properties of the thermoactive recombinant Î±-L-arabinofuranosidase fromClostridium stercorarium (ArfB). Applied Microbiology and Biotechnology, 1995, 43, 856-860.	3.6	47
84	Isolation and properties of acetate kinase- and phosphotransacetylase-negative mutants of Thermoanaerobacter thermohydrosulfuricus. Microbiology (United Kingdom), 1995, 141, 2891-2896.	1.8	9
85	Purification and cellulosomal localization ofClostridium thermocellum mixed linkage ?-glucanase LicB (1,3?1,4-?-D-glucanase). Biotechnology Letters, 1994, 16, 29-34.	2.2	22
86	Structure of the Clostridium thermocellum gene licB and the encoded beta-1,3-1,4-glucanase. A catalytic region homologous to Bacillus lichenases joined to the reiterated domain of clostridial cellulases. FEBS Journal, 1992, 204, 13-19.	0.2	78
87	Nucleotide sequence of the Clostridium thermocellum laminarinase gene. Biochemical and Biophysical Research Communications, 1991, 181, 507-512.	2.1	21
88	Properties of a thermoactive Î²-1,3-1,4-glucanase (lichenase) from Clostridium thermocellum expressed in Escherichia coli. Biochemical and Biophysical Research Communications, 1991, 177, 447-452.	2.1	68
89	Cloning theClostridium thermocellum thermostable laminarinase gene inEscherichia coli: The properties of the enzyme thus produced. Biotechnology Letters, 1990, 12, 811-816.	2.2	17
90	Sequence analysis of the Clostridium stercorarium celZ gene encoding a thermoactive cellulase (Avicelase I): Identification of catalytic and cellulose-binding domains. Molecular Genetics and Genomics, 1990, 223, 258-267.	2.4	81

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91	Xylan degradation by the thermophile Clostridium stercorarium: Cloning and expression of xylanase, ÃŸ-D-xylosidase, and Î±-L-arabinofuranosidase genes in Escherichia coli. Biochemical and Biophysical Research Communications, 1990, 170, 368-374.	2.1	31
92	Cloning and expression ofClostridium stercorarium cellulase genes inEscherichia coli. Biotechnology Letters, 1989, 11, 461-466.	2.2	20
93	Isolation of aClostridium thermocellum gene encoding a thermostable ?-1, 3-glucanase (laminarinase). Biotechnology Letters, 1988, 10, 225-230.	2.2	28
94	Degradation of barley ?-glucan by endoglucanase C of Clostridium thermocellum. Applied Microbiology and Biotechnology, 1988, 29, 25-31.	3.6	27
95	Nucleotide sequence of the celC gene encoding endoglucanase C of Clostridium thermocellum. Gene, 1988, 63, 23-30.	2.2	90
96	Activity staining of cellulases in polyacrylamide gels containing mixed linkage Î²-glucans. Analytical Biochemistry, 1987, 164, 72-77.	2.4	171
97	High-level expression of Clostridium thermocellum cellulase genes in Escherichia coli. Applied Microbiology and Biotechnology, 1987, 27, 50.	3.6	31
98	Properties of a Clostridium thermocellum Endoglucanase Produced in Escherichia coli. Applied and Environmental Microbiology, 1986, 51, 1293-1299.	3.1	102
99	Molecular cloning ofClostridium thermocellum genes involved in ?-glucan degradation in bacteriophage lambda. Biotechnology Letters, 1985, 7, 859-864.	2.2	69
100	Biochemical and Structural Characterization of Thermostable GH159 Glycoside Hydrolases Exhibiting Î±-L-Arabinofuranosidase Activity. Frontiers in Molecular Biosciences, 0, 9, .	3.5	2