

Stefan Bauer

List of Publications by Year in descending order

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42
papers

3,787
citations

159358

30
h-index

264894

42
g-index

46
all docs

46
docs citations

46
times ranked

5791
citing authors

#	ARTICLE	IF	CITATIONS
1	Toward a Systems Approach to Understanding Plant Cell Walls. <i>Science</i> , 2004, 306, 2206-2211.	6.0	1,090
2	Development and application of a suite of polysaccharide-degrading enzymes for analyzing plant cell walls. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2006, 103, 11417-11422.	3.3	300
3	The Arabidopsis irregular xylem8 Mutant Is Deficient in Glucuronoxylan and Homogalacturonan, Which Are Essential for Secondary Cell Wall Integrity. <i>Plant Cell</i> , 2007, 19, 237-255.	3.1	251
4	Characterization of <i>Miscanthus giganteus</i> Lignin Isolated by Ethanol Organosolv Process under Reflux Condition. <i>Journal of Agricultural and Food Chemistry</i> , 2012, 60, 8203-8212.	2.4	200
5	Roles of Small Laccases from <i>Streptomyces</i> in Lignin Degradation. <i>Biochemistry</i> , 2014, 53, 4047-4058.	1.2	159
6	CHITINASE-LIKE1/POM-POM1 and Its Homolog CTL2 Are Glucan-Interacting Proteins Important for Cellulose Biosynthesis in <i>Arabidopsis</i> . <i>Plant Cell</i> , 2012, 24, 589-607.	3.1	158
7	Studies on the Vanadium-Catalyzed Nonoxidative Depolymerization of <i>Miscanthus giganteus</i> -Derived Lignin. <i>ACS Catalysis</i> , 2013, 3, 1369-1377.	5.5	150
8	Dissecting a complex chemical stress: chemogenomic profiling of plant hydrolysates. <i>Molecular Systems Biology</i> , 2013, 9, 674.	3.2	103
9	Functional genomics of lipid metabolism in the oleaginous yeast <i>Rhodospiridium toruloides</i> . <i>ELife</i> , 2018, 7, .	2.8	98
10	A comparative systems analysis of polysaccharide-elicited responses in <i>Neurospora crassa</i> reveals carbon source-specific cellular adaptations. <i>Molecular Microbiology</i> , 2014, 91, 275-299.	1.2	95
11	Prospecting for Energy-Rich Renewable Raw Materials: Agave Leaf Case Study. <i>PLoS ONE</i> , 2015, 10, e0135382.	1.1	73
12	A new method for isolating large quantities of <i>Arabidopsis</i> trichomes for transcriptome, cell wall and other types of analyses. <i>Plant Journal</i> , 2008, 56, 483-492.	2.8	72
13	Physiological and Genetic Description of Dissimilatory Perchlorate Reduction by the Novel Marine Bacterium <i>Arcobacter</i> sp. Strain CAB. <i>MBio</i> , 2013, 4, e00217-13.	1.8	64
14	The genetic basis of energy conservation in the sulfate-reducing bacterium <i>Desulfovibrio alaskensis</i> G20. <i>Frontiers in Microbiology</i> , 2014, 5, 577.	1.5	61
15	Comprehensive Analysis of Monomeric Phenolics in Dilute Acid Plant Hydrolysates. <i>Bioenergy Research</i> , 2014, 7, 654-669.	2.2	61
16	Cloning, expression, and characterization of an oligoxyloglucan reducing end-specific xyloglucanobiohydrolase from <i>Aspergillus nidulans</i> . <i>Carbohydrate Research</i> , 2005, 340, 2590-2597.	1.1	60
17	Structural Transformation of <i>Miscanthus giganteus</i> Lignin Fractionated under Mild Formosolv, Basic Organosolv, and Cellulolytic Enzyme Conditions. <i>Journal of Agricultural and Food Chemistry</i> , 2012, 60, 144-152.	2.4	56
18	Identification and characterization of a galacturonic acid transporter from <i>Neurospora crassa</i> and its application for <i>Saccharomyces cerevisiae</i> fermentation processes. <i>Biotechnology for Biofuels</i> , 2014, 7, 20.	6.2	54

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19	Anisotropic Cell Expansion Is Affected through the Bidirectional Mobility of Cellulose Synthase Complexes and Phosphorylation at Two Critical Residues on CESA3. <i>Plant Physiology</i> , 2016, 171, 242-250.	2.3	54
20	Programming mRNA decay to modulate synthetic circuit resource allocation. <i>Nature Communications</i> , 2017, 8, 15128.	5.8	50
21	Downscaled method using glass microfiber filters for the determination of Klason lignin and structural carbohydrates. <i>Biomass and Bioenergy</i> , 2014, 68, 75-81.	2.9	46
22	Mass Spectrometry for Characterizing Plant Cell Wall Polysaccharides. <i>Frontiers in Plant Science</i> , 2012, 3, 45.	1.7	42
23	Fungi isolated from <i>Miscanthus</i> and sugarcane: biomass conversion, fungal enzymes, and hydrolysis of plant cell wall polymers. <i>Biotechnology for Biofuels</i> , 2015, 8, 38.	6.2	41
24	Biochemical Analyses of Multiple Endoxylanases from the Rumen Bacterium <i>Ruminococcus albus</i> 8 and Their Synergistic Activities with Accessory Hemicellulose-Degrading Enzymes. <i>Applied and Environmental Microbiology</i> , 2011, 77, 5157-5169.	1.4	37
25	Identification of MEDIATOR16 as the <i>Arabidopsis</i> COBRA suppressor MONGOOSE1. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 16048-16053.	3.3	37
26	The <i>Arabidopsis</i> COBRA Protein Facilitates Cellulose Crystallization at the Plasma Membrane. <i>Journal of Biological Chemistry</i> , 2014, 289, 34911-34920.	1.6	35
27	Compositional analysis of <i>Miscanthus giganteus</i> by near infrared spectroscopy. <i>Cellulose</i> , 2013, 20, 1629-1637.	2.4	33
28	Analytical method for the determination of organic acids in dilute acid pretreated biomass hydrolysate by liquid chromatography-time-of-flight mass spectrometry. <i>Biotechnology for Biofuels</i> , 2014, 7, 145.	6.2	33
29	Rapid determination of cellulose. <i>Biotechnology and Bioengineering</i> , 2014, 111, 2355-2357.	1.7	32
30	Environment Has Little Effect on Biomass Biochemical Composition of <i>Miscanthus giganteus</i> Across Soil Types, Nitrogen Fertilization, and Times of Harvest. <i>Bioenergy Research</i> , 2015, 8, 1636-1646.	2.2	31
31	Overcoming inefficient cellobiose fermentation by cellobiose phosphorylase in the presence of xylose. <i>Biotechnology for Biofuels</i> , 2014, 7, 85.	6.2	28
32	Quantitative Trait Loci (QTL)-Guided Metabolic Engineering of a Complex Trait. <i>ACS Synthetic Biology</i> , 2017, 6, 566-581.	1.9	26
33	Lignocellulose-derived thin stillage composition and efficient biological treatment with a high-rate hybrid anaerobic bioreactor system. <i>Biotechnology for Biofuels</i> , 2016, 9, 120.	6.2	25
34	Rapid Small-Scale Determination of Extractives in Biomass. <i>Bioenergy Research</i> , 2015, 8, 68-76.	2.2	23
35	Fermentation of hydrolysate detoxified by pervaporation through block copolymer membranes. <i>Green Chemistry</i> , 2014, 16, 4206-4213.	4.6	22
36	(Per)Chlorate-Reducing Bacteria Can Utilize Aerobic and Anaerobic Pathways of Aromatic Degradation with (Per)Chlorate as an Electron Acceptor. <i>MBio</i> , 2015, 6, .	1.8	22

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37	Functional characterization of genes mediating cell wall metabolism and responses to plant cell wall integrity impairment. <i>BMC Plant Biology</i> , 2019, 19, 320.	1.6	20
38	Bypassing the Pentose Phosphate Pathway: Towards Modular Utilization of Xylose. <i>PLoS ONE</i> , 2016, 11, e0158111.	1.1	18
39	Identification of methanogenesis and syntrophy as important microbial metabolic processes for optimal thermophilic anaerobic digestion of energy cane thin stillage. <i>Bioresource Technology Reports</i> , 2019, 7, 100254.	1.5	17
40	Cloning and Expression of Hemicellulases from <i>Aspergillus nidulans</i> in <i>Pichia pastoris</i> . <i>Methods in Molecular Biology</i> , 2012, 824, 393-416.	0.4	4
41	O-Glycan analysis of cellobiohydrolase I from <i>Neurospora crassa</i> . <i>Glycobiology</i> , 2016, 26, 670-677.	1.3	4
42	Does size matter? Separations on guard columns for fast sample analysis applied to bioenergy research. <i>BMC Biotechnology</i> , 2015, 15, 38.	1.7	0