Michael Hans-Peter Studer

List of Publications by Year
in descending order

32 papers	2,159 citations	471509 17 h-index	414414 32 g-index
33 all docs	33 docs citations	33 times ranked	2893 citing authors

#	Article	IF	Citations
1	Lignin content in natural <i>Populus</i> variants affects sugar release. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 6300-6305.	7.1	515
2	Steam explosion pretreatment of softwood: the effect of the explosive decompression on enzymatic digestibility. Biotechnology for Biofuels, 2016, 9, 152.	6.2	183
3	Biochemical Conversion Processes of Lignocellulosic Biomass to Fuels and Chemicals â€“ A Review. Chimia, 2015, 69, 572.	0.6	160
4	Consolidated bioprocessing of lignocellulose by a microbial consortium. Energy and Environmental Science, 2014, 7, 1446.	30.8	144
5	Lignin repolymerisation in spruce autohydrolysis pretreatment increases cellulase deactivation. Green Chemistry, 2015, 17, 3521-3532.	9.0	139
6	Chemical transformations of Populus trichocarpa during dilute acid pretreatment. RSC Advances, 2012, 2, 10925.	3.6	138
7	A heterogeneous microbial consortium producing short-chain fatty acids from lignocellulose. Science, 2020, 369, .	12.6	120
8	Consolidated bioprocessing of lignocellulosic biomass to lactic acid by a synthetic fungalâ€bacterial consortium. Biotechnology and Bioengineering, 2018, 115, 1207-1215.	3.3	92
9	HSQC (heteronuclear single quantum coherence) 13Câ€“1H correlation spectra of whole biomass in perdeuterated pyridinium chlorideâ€“DMSO system: An effective tool for evaluating pretreatment. Fuel, 2011, 90, 2836-2842.	6.4	91
10	The effect of liquid hot water pretreatment on the chemicalâ€“structural alteration and the reduced recalcitrance in poplar. Biotechnology for Biofuels, 2017, 10, 237.	6.2	88
11	Engineering of a highâ€throughput screening system to identify cellulosic biomass, pretreatments, and enzyme formulations that enhance sugar release. Biotechnology and Bioengineering, 2010, 105, 231-238.	3.3	84
12	The effect of bovine serum albumin on batch and continuous enzymatic cellulose hydrolysis mixed by stirring or shaking. Bioresource Technology, 2011, 102, 6295-6298.	9.6	56
13	Smallâ€scale and automatable highâ€throughput compositional analysis of biomass. Biotechnology and Bioengineering, 2011, 108, 306-312.	3.3	51
14	Impacts of biofilms on the conversion of cellulose. Applied Microbiology and Biotechnology, 2020, 104, 5201-5212.	3.6	44
15	Engineering of ecological niches to create stable artificial consortia for complex biotransformations. Current Opinion in Biotechnology, 2020, 62, 129-136.	6.6	27
16	Application potential of a carbocation scavenger in autohydrolysis and dilute acid pretreatment to overcome high softwood recalcitrance. Biomass and Bioenergy, 2017, 105, 164-173.	5.7	22
17	Co-hydrolysis of hydrothermal and dilute acid pretreated populus slurries to support development of a high-throughput pretreatment system. Biotechnology for Biofuels, 2011, 4, 19.	6.2	20
18	Populus resequencing: towards genome-wide association studies. BMC Proceedings, 2011, 5, .	1.6	19

#	Article	IF	Citations
19	Steam Explosion Pretreatment of Beechwood. Part 1: Comparison of the Enzymatic Hydrolysis of Washed Solids and Whole Pretreatment Slurry at Different Solid Loadings. Energies, 2020, 13, 3653.	3.1	17
20	Pilot-scale steam explosion pretreatment with 2-naphthol to overcome high softwood recalcitrance. Biotechnology for Biofuels, 2017, 10, 130.	6.2	16
21	A Multispecies Fungal Biofilm Approach to Enhance the Celluloytic Efficiency of Membrane Reactors for Consolidated Bioprocessing of Plant Biomass. Frontiers in Microbiology, 2017, 8, 1930.	3.5	15
22	Two-stage steam explosion pretreatment of softwood with 2-naphthol as carbocation scavenger. Biotechnology for Biofuels, 2019, 12, 37.	6.2	15
23	A cellulolytic fungal biofilm enhances the consolidated bioconversion of cellulose to short chain fatty acids by the rumen microbiome. Applied Microbiology and Biotechnology, 2019, 103, 3355-3365.	3.6	14
24	Steam Explosion Pretreatment of Beechwood. Part 2: Quantification of Cellulase Inhibitors and Their Effect on Avicel Hydrolysis. Energies, 2020, 13, 3638.	3.1	13
25	Enhanced simultaneous saccharification and fermentation of pretreated beech wood by in situ treatment with the white rot fungus Irpex lacteus in a membrane aerated biofilm reactor. Bioresource Technology, 2017, 237, 135-138.	9.6	12
26	The influence of the explosive decompression in steam-explosion pretreatment on the enzymatic digestibility of different biomasses. Faraday Discussions, 2017, 202, 269-280.	3.2	12
27	Catalytic valorization of the acetate fraction of biomass to aromatics and its integration into the carboxylate platform. Green Chemistry, 2019, 21, 2801-2809.	9.0	12
28	Techno-economic assessment of bioethanol production from lignocellulose by consortium-based consolidated bioprocessing at industrial scale. New Biotechnology, 2021, 65, 53-60.	4.4	12
29	Novel membrane bioreactor: Able to cope with fluctuating loads, poorly water soluble VOCs, and biomass accumulation. Biotechnology and Bioengineering, 2008, 99, 38-48.	3.3	10
30	Comparison of the Effectiveness of a Fluidized Sand Bath and a Steam Chamber for Reactor Heating. Industrial & Engineering Chemistry Research, 2013, 52, 4932-4938.	3.7	6
31	Application of a slurry feeder to 1 and 3 stage continuous simultaneous saccharification and fermentation of dilute acid pretreated corn stover. Bioresource Technology, 2014, 170, 470-476.	9.6	6
32	Selectivity Control during the Single-Step Conversion of Aliphatic Carboxylic Acids to Linear Olefins. ACS Catalysis, 2018, 8, 10769-10773.	11.2	6