

Davinia Salvachua Rodriguez

List of Publications by Year in descending order

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papers

3,730
citations

172457

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265206

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43
docs citations

43
times ranked

3677
citing authors

#	ARTICLE	IF	CITATIONS
1	Opportunities and challenges in biological lignin valorization. <i>Current Opinion in Biotechnology</i> , 2016, 42, 40-53.	6.6	517
2	Towards lignin consolidated bioprocessing: simultaneous lignin depolymerization and product generation by bacteria. <i>Green Chemistry</i> , 2015, 17, 4951-4967.	9.0	298
3	Fungal pretreatment: An alternative in second-generation ethanol from wheat straw. <i>Bioresource Technology</i> , 2011, 102, 7500-7506.	9.6	282
4	Enhancing muconic acid production from glucose and lignin-derived aromatic compounds via increased protocatechuate decarboxylase activity. <i>Metabolic Engineering Communications</i> , 2016, 3, 111-119.	3.6	194
5	cis,cis-Muconic acid: separation and catalysis to bio-adipic acid for nylon-6,6 polymerization. <i>Green Chemistry</i> , 2016, 18, 3397-3413.	9.0	147
6	Innovative Chemicals and Materials from Bacterial Aromatic Catabolic Pathways. <i>Joule</i> , 2019, 3, 1523-1537.	24.0	142
7	Bioprocess development for muconic acid production from aromatic compounds and lignin. <i>Green Chemistry</i> , 2018, 20, 5007-5019.	9.0	127
8	Characterization of a Novel Dye-Decolorizing Peroxidase (DyP)-Type Enzyme from <i>Irpex lacteus</i> and Its Application in Enzymatic Hydrolysis of Wheat Straw. <i>Applied and Environmental Microbiology</i> , 2013, 79, 4316-4324.	3.1	125
9	The Techno-Economic Basis for Coproduct Manufacturing To Enable Hydrocarbon Fuel Production from Lignocellulosic Biomass. <i>ACS Sustainable Chemistry and Engineering</i> , 2016, 4, 3196-3211.	6.7	121
10	Succinic acid production on xylose-enriched biorefinery streams by <i>Actinobacillus succinogenes</i> in batch fermentation. <i>Biotechnology for Biofuels</i> , 2016, 9, 28.	6.2	120
11	Metabolic engineering of <i>Pseudomonas putida</i> for increased polyhydroxyalkanoate production from lignin. <i>Microbial Biotechnology</i> , 2020, 13, 290-298.	4.2	120
12	Base-Catalyzed Depolymerization of Solid Lignin-Rich Streams Enables Microbial Conversion. <i>ACS Sustainable Chemistry and Engineering</i> , 2017, 5, 8171-8180.	6.7	115
13	Continuous succinic acid production by <i>Actinobacillus succinogenes</i> on xylose-enriched hydrolysate. <i>Biotechnology for Biofuels</i> , 2015, 8, 181.	6.2	89
14	Differential proteomic analysis of the secretome of <i>Irpex lacteus</i> and other white-rot fungi during wheat straw pretreatment. <i>Biotechnology for Biofuels</i> , 2013, 6, 115.	6.2	84
15	Lignin depolymerization by fungal secretomes and a microbial sink. <i>Green Chemistry</i> , 2016, 18, 6046-6062.	9.0	84
16	Burkholderia: An Untapped but Promising Bacterial Genus for the Conversion of Aromatic Compounds. <i>Trends in Biotechnology</i> , 2020, 38, 963-975.	9.3	83
17	Outer membrane vesicles catabolize lignin-derived aromatic compounds in <i>Pseudomonas putida</i> KT2440. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 9302-9310.	7.1	82
18	Intracellular pathways for lignin catabolism in white-rot fungi. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	7.1	82

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19	Engineering glucose metabolism for enhanced muconic acid production in <i>Pseudomonas putida</i> KT2440. <i>Metabolic Engineering</i> , 2020, 59, 64-75.	7.0	76
20	Tandem chemical deconstruction and biological upcycling of poly(ethylene terephthalate) to β -keto adipic acid by <i>Pseudomonas putida</i> KT2440. <i>Metabolic Engineering</i> , 2021, 67, 250-261.	7.0	74
21	Adaptive laboratory evolution of <i>Pseudomonas putida</i> KT2440 improves p-coumaric and ferulic acid catabolism and tolerance. <i>Metabolic Engineering Communications</i> , 2020, 11, e00143.	3.6	73
22	Production of itaconic acid from alkali pretreated lignin by dynamic two stage bioconversion. <i>Nature Communications</i> , 2021, 12, 2261.	12.8	72
23	Succinic acid production from lignocellulosic hydrolysate by <i>Basfia succiniciproducens</i> . <i>Bioresource Technology</i> , 2016, 214, 558-566.	9.6	63
24	Engineered <i>Pseudomonas putida</i> simultaneously catabolizes five major components of corn stover lignocellulose: Glucose, xylose, arabinose, p-coumaric acid, and acetic acid. <i>Metabolic Engineering</i> , 2020, 62, 62-71.	7.0	63
25	Mixed Carboxylic Acid Production by <i>Megasphaera elsdenii</i> from Glucose and Lignocellulosic Hydrolysate. <i>Fermentation</i> , 2017, 3, 10.	3.0	53
26	Sugar recoveries from wheat straw following treatments with the fungus <i>Irpex lacteus</i> . <i>Bioresource Technology</i> , 2013, 131, 218-225.	9.6	51
27	Metabolic Engineering of <i>Actinobacillus succinogenes</i> Provides Insights into Succinic Acid Biosynthesis. <i>Applied and Environmental Microbiology</i> , 2017, 83, .	3.1	47
28	Particle Size Reduction of Poly(ethylene terephthalate) Increases the Rate of Enzymatic Depolymerization But Does Not Increase the Overall Conversion Extent. <i>ACS Sustainable Chemistry and Engineering</i> , 2022, 10, 9131-9140.	6.7	39
29	Quantification of acidic compounds in complex biomass-derived streams. <i>Green Chemistry</i> , 2016, 18, 4750-4760.	9.0	38
30	Systems biology-guided understanding of white-rot fungi for biotechnological applications: A review. <i>IScience</i> , 2022, 25, 104640.	4.1	31
31	Versatile peroxidase as a valuable tool for generating new biomolecules by homogeneous and heterogeneous cross-linking. <i>Enzyme and Microbial Technology</i> , 2013, 52, 303-311.	3.2	30
32	Development of Lignocellulosic Biorefinery Technologies: Recent Advances and Current Challenges. <i>Australian Journal of Chemistry</i> , 2016, 69, 1201.	0.9	29
33	Post-Fermentation Recovery of Biobased Carboxylic Acids. <i>ACS Sustainable Chemistry and Engineering</i> , 2018, 6, 15273-15283.	6.7	29
34	Propionic acid production from corn stover hydrolysate by <i>Propionibacterium acidipropionici</i> . <i>Biotechnology for Biofuels</i> , 2017, 10, 200.	6.2	25
35	Tailoring diesel bioblendstock from integrated catalytic upgrading of carboxylic acids: a H_2 -fuel property first approach. <i>Green Chemistry</i> , 2019, 21, 5813-5827.	9.0	25
36	Debottlenecking 4-hydroxybenzoate hydroxylation in <i>Pseudomonas putida</i> KT2440 improves muconate productivity from p-coumarate. <i>Metabolic Engineering</i> , 2022, 70, 31-42.	7.0	25

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37	Promoting microbial utilization of phenolic substrates from bio-oil. <i>Journal of Industrial Microbiology and Biotechnology</i> , 2019, 46, 1531-1545.	3.0	18
38	Production of Î²-ketoadipic acid from glucose in <i>Pseudomonas putida</i> KT2440 for use in performance-advantaged nylons. <i>Cell Reports Physical Science</i> , 2022, 3, 100840.	5.6	18
39	Process intensification for the biological production of the fuel precursor butyric acid from biomass. <i>Cell Reports Physical Science</i> , 2021, 2, 100587.	5.6	12
40	A Multiomic Approach to Understand How <i>Pleurotus eryngii</i> Transforms Non-Woody Lignocellulosic Material. <i>Journal of Fungi (Basel, Switzerland)</i> , 2021, 7, 426.	3.5	9
41	Bioconversion of wastewater-derived cresols to methyl muconic acids for use in performance-advantaged bioproducts. <i>Green Chemistry</i> , 2022, 24, 3677-3688.	9.0	4
42	Corrigendum to “Engineering glucose metabolism for enhanced muconic acid production in <i>Pseudomonas putida</i> KT2440” [Metab. Eng. 59 (2020) 64–75]. <i>Metabolic Engineering</i> , 2022, 72, 66-67.	7.0	0