Davinia Salvachua Rodriguez

List of Publications by Year
in descending order

42 papers	3,730 citations	172457 29 h-index	265206 42 g-index
43 all docs	43 docs citations	43 times ranked	3677 citing authors

#	Article	IF	Citations
1	Debottlenecking 4-hydroxybenzoate hydroxylation in Pseudomonas putida KT2440 improves muconate productivity from p-coumarate. Metabolic Engineering, 2022, 70, 31-42.	7.0	25
2	Bioconversion of wastewater-derived cresols to methyl muconic acids for use in performance-advantaged bioproducts. Green Chemistry, 2022, 24, 3677-3688.	9.0	4
3	Corrigendum to â€œEngineering glucose metabolism for enhanced muconic acid production in Pseudomonas putida KT2440â€•[Metab. Eng. 59 (2020) 64â€"75]. Metabolic Engineering, 2022, 72, 66-67.	7.0	0
4	Production of Î²-ketoadipic acid from glucose in Pseudomonas putida KT2440 for use in performance-advantaged nylons. Cell Reports Physical Science, 2022, 3, 100840.	5.6	18
5	Systems biology-guided understanding of white-rot fungi for biotechnological applications: A review. IScience, 2022, 25, 104640.	4.1	31
6	Particle Size Reduction of Poly(ethylene terephthalate) Increases the Rate of Enzymatic Depolymerization But Does Not Increase the Overall Conversion Extent. ACS Sustainable Chemistry and Engineering, 2022, 10, 9131-9140.	6.7	39
7	Intracellular pathways for lignin catabolism in white-rot fungi. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	82
8	Production of itaconic acid from alkali pretreated lignin by dynamic two stage bioconversion. Nature Communications, 2021, 12, 2261.	12.8	72
9	A Multiomic Approach to Understand How Pleurotus eryngii Transforms Non-Woody Lignocellulosic Material. Journal of Fungi (Basel, Switzerland), 2021, 7, 426.	3.5	9
10	Tandem chemical deconstruction and biological upcycling of poly(ethylene terephthalate) to Î²-ketoadipic acid by Pseudomonas putida KT2440. Metabolic Engineering, 2021, 67, 250-261.	7.0	74
11	Process intensification for the biological production of the fuel precursor butyric acid from biomass. Cell Reports Physical Science, 2021, 2, 100587.	5.6	12
12	Metabolic engineering of <i>Pseudomonas putida</i> for increased polyhydroxyalkanoate production from lignin. Microbial Biotechnology, 2020, 13, 290-298.	4.2	120
13	Engineering glucose metabolism for enhanced muconic acid production in Pseudomonas putida KT2440. Metabolic Engineering, 2020, 59, 64-75.	7.0	76
14	Engineered Pseudomonas putida simultaneously catabolizes five major components of corn stover lignocellulose: Glucose, xylose, arabinose, p-coumaric acid, and acetic acid. Metabolic Engineering, 2020, 62, 62-71.	7.0	63
15	Adaptive laboratory evolution of Pseudomonas putida KT2440 improves p-coumaric and ferulic acid catabolism and tolerance. Metabolic Engineering Communications, 2020, 11, e00143.	3.6	73
16	Burkholderia: An Untapped but Promising Bacterial Genus for the Conversion of Aromatic Compounds. Trends in Biotechnology, 2020, 38, 963-975.	9.3	83
17	Outer membrane vesicles catabolize lignin-derived aromatic compounds in <i>Pseudomonas putida</i> KT2440. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 9302-9310.	7.1	82
18	Promoting microbial utilization of phenolic substrates from bio-oil. Journal of Industrial Microbiology and Biotechnology, 2019, 46, 1531-1545.	3.0	18

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19	Tailoring diesel bioblendstock from integrated catalytic upgrading of carboxylic acids: a â€œfuel property firstâ€•approach. Green Chemistry, 2019, 21, 5813-5827.	9.0	25
20	Innovative Chemicals and Materials from Bacterial Aromatic Catabolic Pathways. Joule, 2019, 3, 1523-1537.	24.0	142
21	Bioprocess development for muconic acid production from aromatic compounds and lignin. Green Chemistry, 2018, 20, 5007-5019.	9.0	127
22	Post-Fermentation Recovery of Biobased Carboxylic Acids. ACS Sustainable Chemistry and Engineering, 2018, 6, 15273-15283.	6.7	29
23	Metabolic Engineering of Actinobacillus succinogenes Provides Insights into Succinic Acid Biosynthesis. Applied and Environmental Microbiology, 2017, 83, .	3.1	47
24	Base-Catalyzed Depolymerization of Solid Lignin-Rich Streams Enables Microbial Conversion. ACS Sustainable Chemistry and Engineering, 2017, 5, 8171-8180.	6.7	115
25	Mixed Carboxylic Acid Production by Megasphaera elsdenii from Glucose and Lignocellulosic Hydrolysate. Fermentation, 2017, 3, 10.	3.0	53
26	Propionic acid production from corn stover hydrolysate by Propionibacterium acidipropionici. Biotechnology for Biofuels, 2017, 10, 200.	6.2	25
27	Succinic acid production from lignocellulosic hydrolysate by Basfia succiniciproducens. Bioresource Technology, 2016, 214, 558-566.	9.6	63
28	The Techno-Economic Basis for Coproduct Manufacturing To Enable Hydrocarbon Fuel Production from Lignocellulosic Biomass. ACS Sustainable Chemistry and Engineering, 2016, 4, 3196-3211.	6.7	121
29	Quantification of acidic compounds in complex biomass-derived streams. Green Chemistry, 2016, 18, 4750-4760.	9.0	38
30	Lignin depolymerization by fungal secretomes and a microbial sink. Green Chemistry, 2016, 18, 6046-6062.	9.0	84
31	Enhancing muconic acid production from glucose and lignin-derived aromatic compounds via increased protocatechuate decarboxylase activity. Metabolic Engineering Communications, 2016, 3, 111-119.	3.6	194
32	Development of Lignocellulosic Biorefinery Technologies: Recent Advances and Current Challenges. Australian Journal of Chemistry, 2016, 69, 1201.	0.9	29
33	Succinic acid production on xylose-enriched biorefinery streams by Actinobacillus succinogenes in batch fermentation. Biotechnology for Biofuels, 2016, 9, 28.	6.2	120
34	cis,cis-Muconic acid: separation and catalysis to bio-adipic acid for nylon-6,6 polymerization. Green Chemistry, 2016, 18, 3397-3413.	9.0	147
35	Opportunities and challenges in biological lignin valorization. Current Opinion in Biotechnology, 2016, 42, 40-53.	6.6	517
36	Continuous succinic acid production by Actinobacillus succinogenes on xylose-enriched hydrolysate. Biotechnology for Biofuels, 2015, 8, 181.	6.2	89

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37	Towards lignin consolidated bioprocessing: simultaneous lignin depolymerization and product generation by bacteria. Green Chemistry, 2015, 17, 4951-4967.	9.0	298
38	Differential proteomic analysis of the secretome of Irpex lacteus and other white-rot fungi during wheat straw pretreatment. Biotechnology for Biofuels, 2013, 6, 115.	6.2	84
39	Sugar recoveries from wheat straw following treatments with the fungus Irpex lacteus. Bioresource Technology, 2013, 131, 218-225.	9.6	51
40	Versatile peroxidase as a valuable tool for generating new biomolecules by homogeneous and heterogeneous cross-linking. Enzyme and Microbial Technology, 2013, 52, 303-311.	3.2	30
41	Characterization of a Novel Dye-Decolorizing Peroxidase (DyP)-Type Enzyme from Irpex lacteus and Its Application in Enzymatic Hydrolysis of Wheat Straw. Applied and Environmental Microbiology, 2013, 79, 4316-4324.	3.1	125
42	Fungal pretreatment: An alternative in second-generation ethanol from wheat straw. Bioresource Technology, 2011, 102, 7500-7506.	9.6	282