Elia TomÃ¡s-PejÃ³

List of Publications by Year
in descending order

61 papers	5,826 citations	201674 27 h-index	144013 57 g-index
61 all docs	61 docs citations	61 times ranked	6418 citing authors

#	Article	IF	Citations
1	Pretreatment technologies for an efficient bioethanol production process based on enzymatic hydrolysis: A review. Bioresource Technology, 2010, 101, 4851-4861.	9.6	3,203
2	Lignocellulosic ethanol production at high-gravity: challenges and perspectives. Trends in Biotechnology, 2014, 32, 46-53.	9.3	305
3	Comparison of SHF and SSF processes from steamâ€exploded wheat straw for ethanol production by xyloseâ€fermenting and robust glucoseâ€fermenting <i>Saccharomyces cerevisiae</i> strains. Biotechnology and Bioengineering, 2008, 100, 1122-1131.	3.3	204
4	A review of biological delignification and detoxification methods for lignocellulosic bioethanol production. Critical Reviews in Biotechnology, 2015, 35, 342-354.	9.0	151
5	Enzymatic cell disruption of microalgae biomass in biorefinery processes. Biotechnology and Bioengineering, 2015, 112, 1955-1966.	3.3	142
6	Biotechnological advances in lactic acid production by lactic acid bacteria: lignocellulose as novel substrate. Biofuels, Bioproducts and Biorefining, 2018, 12, 290-303.	3.7	124
7	Bioethanol production from wheat straw by the thermotolerant yeast Kluyveromyces marxianus CECT 10875 in a simultaneous saccharification and fermentation fed-batch process. Fuel, 2009, 88, 2142-2147.	6.4	110
8	Laccases as a Potential Tool for the Efficient Conversion of Lignocellulosic Biomass: A Review. Fermentation, 2017, 3, 17.	3.0	85
9	Agroindustrial waste as a resource for volatile fatty acids production via anaerobic fermentation. Bioresource Technology, 2020, 297, 122486.	9.6	77
10	Laccases as versatile enzymes: from industrial uses to novel applications. Journal of Chemical Technology and Biotechnology, 2020, 95, 481-494.	3.2	71
11	Adaptation of the xylose fermenting yeast Saccharomyces cerevisiae F12 for improving ethanol production in different fed-batch SSF processes. Journal of Industrial Microbiology and Biotechnology, 2010, 37, 1211-1220.	3.0	70
12	Pretreatment Technologies for Lignocellulose-to-Bioethanol Conversion. , 2011, , 149-176.		61
13	Valorization of steam-exploded wheat straw through a biorefinery approach: Bioethanol and bio-oil co-production. Fuel, 2017, 199, 403-412.	6.4	58
14	Effect of different cellulase dosages on cell viability and ethanol production by Kluyveromyces marxianus in SSF processes. Bioresource Technology, 2009, 100, 890-895.	9.6	56
15	Evolutionary engineering of Lactobacillus pentosus improves lactic acid productivity from xylose-rich media at low pH. Bioresource Technology, 2019, 288, 121540.	9.6	56
16	Short-term adaptation during propagation improves the performance of xylose-fermenting Saccharomyces cerevisiae in simultaneous saccharification and co-fermentation. Biotechnology for Biofuels, 2015, 8, 219.	6.2	50
17	Screening of oleaginous yeasts for lipid production using volatile fatty acids as substrate. Biomass and Bioenergy, 2020, 138, 105553.	5.7	50
18	Volatile fatty acids as novel building blocks for oilâ€based chemistry via oleaginous yeastÂfermentation. Biotechnology and Bioengineering, 2020, 117, 238-250.	3.3	49

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19	Unraveling the effects of laccase treatment on enzymatic hydrolysis of steam-exploded wheat straw. Bioresource Technology, 2015, 175, 209-215.	9.6	47
20	In situ laccase treatment enhances the fermentability of steam-exploded wheat straw in SSCF processes at high dry matter consistencies. Bioresource Technology, 2013, 143, 337-343.	9.6	43
21	Microbial lipids from organic wastes: Outlook and challenges. Bioresource Technology, 2021, 323, 124612.	9.6	43
22	Influence of enzymatic hydrolysis on the biochemical methane potential of<i>Chlorella vulgaris</i>and<i>Scenedesmus</i>sp.. Journal of Chemical Technology and Biotechnology, 2016, 91, 1299-1305.	3.2	41
23	Phenols and lignin: Key players in reducing enzymatic hydrolysis yields of steam-pretreated biomass in presence of laccase. Journal of Biotechnology, 2016, 218, 94-101.	3.8	40
24	Short-chain fatty acids and hydrogen production in one single anaerobic fermentation stage using carbohydrate-rich food waste. Journal of Cleaner Production, 2021, 284, 124727.	9.3	39
25	Exploring laccase and mediators behavior during saccharification and fermentation of steamâ€exploded wheat straw for bioethanol production. Journal of Chemical Technology and Biotechnology, 2016, 91, 1816-1825.	3.2	32
26	Sequential bioethanol and methane production from municipal solid waste: An integrated biorefinery strategy towards cost-effectiveness. Chemical Engineering Research and Design, 2021, 146, 424-431.	5.6	30
27	Assessment of different Bacillus coagulans strains for l-lactic acid production from defined media and gardening hydrolysates: Effect of lignocellulosic inhibitors. Journal of Biotechnology, 2020, 323, 9-16.	3.8	29
28	Fed-batch SSCF using steam-exploded wheat straw at high dry matter consistencies and a xylose-fermenting Saccharomyces cerevisiae strain: effect of laccase supplementation. Biotechnology for Biofuels, 2013, 6, 160.	6.2	28
29	Influence of the propagation strategy for obtaining robust <scp><i>S</i></scp><i>accharomyces cerevisiae</i> cells that efficiently coâ€ferment xylose and glucose in lignocellulosic hydrolysates. Microbial Biotechnology, 2015, 8, 999-1005.	4.2	28
30	Inhibition of cellulose enzymatic hydrolysis by laccaseâ€derived compounds from phenols. Biotechnology Progress, 2015, 31, 700-706.	2.6	28
31	Towards sequential bioethanol and l-lactic acid co-generation: Improving xylose conversion to l-lactic acid in presence of lignocellulosic ethanol with an evolved Bacillus coagulans. Renewable Energy, 2020, 153, 759-765.	8.9	28
32	VOLATILE FATTY ACIDS FROM ORGANIC WASTES AS NOVEL LOW-COST CARBON SOURCE FOR Yarrowia lipolytica. New Biotechnology, 2020, 56, 123-129.	4.4	28
33	Comparison of Chlorella vulgaris and cyanobacterial biomass: cultivation in urban wastewater and methane production. Bioprocess and Biosystems Engineering, 2016, 39, 703-712.	3.4	26
34	Semicontinuous anaerobic digestion of protease pretreated <i>Chlorella</i> biomass for volatile fatty acids production. Journal of Chemical Technology and Biotechnology, 2019, 94, 1861-1869.	3.2	24
35	Tuning microbial community in non-conventional two-stage anaerobic bioprocess for microalgae biomass valorization into targeted bioproducts. Bioresource Technology, 2021, 337, 125387.	9.6	24
36	Industrial yeasts strains for biorefinery solutions: Constructing and selecting efficient barcoded xylose fermenting strains for ethanol. Biofuels, Bioproducts and Biorefining, 2014, 8, 626-634.	3.7	23

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37	<i>Lactobacillus pentosus</i> CECT 4023 T coâ€utilizes glucose and xylose to produce lactic acid from wheat straw hydrolysate: Anaerobiosis as a key factor. Biotechnology Progress, 2019, 35, e2739.	2.6	23
38	Efficient utilization of hydrolysates from steam-exploded gardening residues for lactic acid production by optimization of enzyme addition and pH control. Waste Management, 2020, 107, 235-243.	7.4	22
39	Strategies of xylanase supplementation for an efficient saccharification and cofermentation process from pretreated wheat straw. Biotechnology Progress, 2011, 27, 944-950.	2.6	21
40	Production of Ethanol from Lignocellulosic Biomass. Biofuels and Biorefineries, 2017, , 375-410.	0.5	20
41	Insoluble solids at high concentrations repress yeastâ€™s response against stress and increase intracellular ROS levels. Scientific Reports, 2019, 9, 12236.	3.3	20
42	Insights on the microbial communities developed during the anaerobic fermentation of raw and pretreated microalgae biomass. Chemosphere, 2021, 263, 127942.	8.2	20
43	Volatile fatty acids production from protease pretreated <i>Chlorella</i> biomass via anaerobic digestion. Biotechnology Progress, 2018, 34, 1363-1369.	2.6	19
44	Effect of nutrient addition on preinoculum growth of S. cerevisiae for application in SSF processes. Biomass and Bioenergy, 2012, 45, 168-174.	5.7	18
45	Microalgae-based anaerobic fermentation as a promising technology for producing biogas and microbial oils. Energy, 2020, 206, 118184.	8.8	18
46	Pretreatment Technologies for Lignocellulosic Biomass Deconstruction Within a Biorefinery Perspective. , 2019, , 379-399.		16
47	Life cycle assessment of volatile fatty acids production from protein- and carbohydrate-rich organic wastes. Bioresource Technology, 2021, 321, 124528.	9.6	16
48	Carboxylic acids production via anaerobic fermentation: Microbial communitiesâ€™ responses to stepwise and direct hydraulic retention time decrease. Bioresource Technology, 2022, 344, 126282.	9.6	16
49	Unraveling the potential of non-conventional yeasts in biotechnology. FEMS Yeast Research, 2022, 22, .	2.3	15
50	Statistical correlation between waste macromolecular composition and anaerobic fermentation temperature for specific short-chain fatty acid production. Environmental Research, 2022, 206, 112288.	7.5	14
51	Prevailing acid determines the efficiency of oleaginous fermentation from volatile fatty acids. Journal of Environmental Chemical Engineering, 2022, 10, 107354.	6.7	12
52	Volatile Fatty Acids Production from Microalgae Biomass: Anaerobic Digester Performance and Population Dynamics during Stable Conditions, Starvation, and Process Recovery. Molecules, 2019, 24, 4544.	3.8	9
53	Assessing the relevance of acidic pH on primary intermediate compounds when targeting at carboxylate accumulation. Biomass Conversion and Biorefinery, 2022, 12, 4519-4529.	4.6	9
54	Effect of microalgae storage conditions on methane yields. Environmental Science and Pollution Research, 2018, 25, 14263-14270.	5.3	6

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55	Biogas and Volatile Fatty Acids Production: Temperature as a Determining Factor in the Anaerobic Digestion of Spirulina platensis. Waste and Biomass Valorization, 2019, 10, 2507-2515.	3.4	6
56	Key role of fluorescence quantum yield in Nile Red staining method for determining intracellular lipids in yeast strains. , 2022, 15, 37.		6
57	Microalgae production for nitrogen recovery of high-strength dry anaerobic digestion effluent. Waste Management, 2022, 139, 321-329.	7.4	5
58	Optimization of the laccase detoxification step in hybrid hydrolysis and fermentation processes from wheat straw by K. marxianus CECT 10875. Bioethanol, 2016, 2, .	1.2	4
59	Candida intermedia CBS 141442: A Novel Glucose/Xylose Co-Fermenting Isolate for Lignocellulosic Bioethanol Production. Energies, 2020, 13, 5363.	3.1	4
60	Insights into cell robustness against lignocellulosic inhibitors and insoluble solids in bioethanol production processes. Scientific Reports, 2022, 12, 557.	3.3	4
61	Hydrothermal Processing of Microalgae. , 2017, , 483-500.		0