David Ibarra Trejo

List of Publications by Year
in descending order

70 papers	3,985 citations	101384 36 h-index	118652 62 g-index
70 all docs	70 docs citations	70 times ranked	3864 citing authors

#	Article	IF	Citations
1	Lignin-enriched residues from bioethanol production: Chemical characterization, isocyanate functionalization and oil structuring properties. International Journal of Biological Macromolecules, 2022, 195, 412-423.	3.6	13
2	Populus alba L., an Autochthonous Species of Spain: A Source for Cellulose Nanofibers by Chemical Pretreatment. Polymers, 2022, 14, 68.	2.0	4
3	Tailoring the properties of nanocellulose-sepiolite hybrid nanopapers by varying the nanocellulose type and clay content. Cellulose, 2022, 29, 5265-5287.	2.4	8
4	Different Kraft lignin sources for electrospun nanostructures production: Influence of chemical structure and composition. International Journal of Biological Macromolecules, 2022, 214, 554-567.	3.6	17
5	Emulsion Stabilization by Cationic Lignin Surfactants Derived from Bioethanol Production and Kraft Pulping Processes. Polymers, 2022, 14, 2879.	2.0	1
6	Obtaining Fermentable Sugars from a Highly Productive Elm Clone Using Different Pretreatments. Energies, 2021, 14, 2415.	1.6	3
7	Chemical, Thermal and Antioxidant Properties of Lignins Solubilized during Soda/AQ Pulping of Orange and Olive Tree Pruning Residues. Molecules, 2021, 26, 3819.	1.7	12
8	Properties versus application requirements of solubilized lignins from an elm clone during different pre-treatments. International Journal of Biological Macromolecules, 2021, 181, 99-111.	3.6	13
9	Production of Microfibrillated Cellulose from Fast-Growing Poplar and Olive Tree Pruning by Physical Pretreatment. Applied Sciences (Switzerland), 2021, 11, 6445.	1.3	9
10	Influence of Cellulose Characteristics on Pyrolysis Suitability. Processes, 2021, 9, 1584.	1.3	5
11	A sustainable methanol-based solvent exchange method to produce nanocellulose-based ecofriendly lubricants. Journal of Cleaner Production, 2021, 319, 128673.	4.6	11
12	Laccases as versatile enzymes: from industrial uses to novel applications. Journal of Chemical Technology and Biotechnology, 2020, 95, 481-494.	1.6	71
13	Evaluation of lignin-enriched side-streams from different biomass conversion processes as thickeners in bio-lubricant formulations. International Journal of Biological Macromolecules, 2020, 162, 1398-1413.	3.6	30
14	Co-production of soluble sugars and lignin from short rotation white poplar and black locust crops. Wood Science and Technology, 2020, 54, 1617-1643.	1.4	16
15	Cellulose Nanofibers from a Dutch Elm Disease-Resistant Ulmus minor Clone. Polymers, 2020, 12, 2450.	2.0	17
16	Process Strategies for the Transition of 1G to Advanced Bioethanol Production. Processes, 2020, 8, 1310.	1.3	55
17	Chemical and thermal analysis of lignin streams from Robinia pseudoacacia L. generated during organosolv and acid hydrolysis pre-treatments and subsequent enzymatic hydrolysis. International Journal of Biological Macromolecules, 2019, 140, 311-322.	3.6	23
18	Alternative Raw Materials for Pulp and Paper Production in the Concept of a Lignocellulosic Biorefinery. , 2019, , .		13

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19	Biorefinery of Lignocellulosic Biomass from an Elm Clone: Production of Fermentable Sugars and Ligninâ€Derived Biochar for Energy and Environmental Applications. Energy Technology, 2019, 7, 277-287.	1.8	24
20	Characterization of lignins from Populus alba L. generated as by-products in different transformation processes: Kraft pulping, organosolv and acid hydrolysis. International Journal of Biological Macromolecules, 2019, 126, 18-29.	3.6	54
21	Assessing cellulose nanofiber production from olive tree pruning residue. Carbohydrate Polymers, 2018, 179, 252-261.	5.1	80
22	Production of Ethanol from Lignocellulosic Biomass. Biofuels and Biorefineries, 2017, , 375-410.	0.5	20
23	Comparison of the efficiency of bacterial and fungal laccases in delignification and detoxification of steam-pretreated lignocellulosic biomass for bioethanol production. Journal of Industrial Microbiology and Biotechnology, 2017, 44, 1561-1573.	1.4	50
24	Potential of different poplar clones for sugar production. Wood Science and Technology, 2017, 51, 669-684.	1.4	9
25	Evaluation of lignins from side-streams generated in an olive tree pruning-based biorefinery: Bioethanol production and alkaline pulping. International Journal of Biological Macromolecules, 2017, 105, 238-251.	3.6	46
26	Potential of the new endophytic fungusHormonemasp. CECT-13092 for improving processes in lignocellulosic biorefineries: biofuel production and cellulosic pulp manufacture. Journal of Chemical Technology and Biotechnology, 2017, 92, 997-1005.	1.6	6
27	Laccases as a Potential Tool for the Efficient Conversion of Lignocellulosic Biomass: A Review. Fermentation, 2017, 3, 17.	1.4	85
28	Endophytic Fungi as Pretreatment to Enhance Enzymatic Hydrolysis of Olive Tree Pruning. BioMed Research International, 2017, 2017, 1-10.	0.9	12
29	Potential of Lignin-Degrading Endophytic Fungi on Lignocellulosic Biorefineries. Sustainable Development and Biodiversity, 2017, , 261-281.	1.4	4
30	A Bacterial Laccase for Enhancing Saccharification and Ethanol Fermentation of Steam-Pretreated Biomass. Fermentation, 2016, 2, 11.	1.4	36
31	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.	1.6	32
32	Screening of eucalyptus wood endophytes for laccase activity. Process Biochemistry, 2016, 51, 589-598.	1.8	44
33	Chemical Modification by Impregnation of Poplar Wood with Functional Composite Modifier. BioResources, 2015, 10, .	0.5	6
34	Evaluating Lignin-Rich Residues from Biochemical Ethanol Production of Wheat Straw and Olive Tree Pruning by FTIR and 2D-NMR. International Journal of Polymer Science, 2015, 2015, 1-11.	1.2	58
35	Towards the improvement of Eucalyptus globulus chemical and mechanical pulping using endophytic fungi. International Biodeterioration and Biodegradation, 2015, 105, 120-126.	1.9	18
36	Use of new endophytic fungi as pretreatment to enhance enzymatic saccharification of Eucalyptus globulus. Bioresource Technology, 2015, 196, 383-390.	4.8	43

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37	Characterization of purified bacterial cellulose focused on its use on paper restoration. Carbohydrate Polymers, 2015, 116, 173-181.	5.1	86
38	A review of biological delignification and detoxification methods for lignocellulosic bioethanol production. Critical Reviews in Biotechnology, 2015, 35, 342-354.	5.1	151
39	Unraveling the effects of laccase treatment on enzymatic hydrolysis of steam-exploded wheat straw. Bioresource Technology, 2015, 175, 209-215.	4.8	47
40	Lignin-enriched Fermentation Residues from Bioethanol Production of Fast-growing Poplar and Forage Sorghum. BioResources, 2015, 10, .	0.5	18
41	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
42	Ethanol from laccase-detoxified lignocellulose by the thermotolerant yeast Kluyveromyces marxianusâ€”Effects of steam pretreatment conditions, process configurations and substrate loadings. Biochemical Engineering Journal, 2013, 79, 94-103.	1.8	34
43	Improving the fermentation performance of <i>saccharomyces cerevisiae</i> by laccase during ethanol production from steamâ€exploded wheat straw at highâ€substrate loadings. Biotechnology Progress, 2013, 29, 74-82.	1.3	61
44	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.	4.8	43
45	Comparing cell viability and ethanol fermentation of the thermotolerant yeast Kluyveromyces marxianus and Saccharomyces cerevisiae on steam-exploded biomass treated with laccase. Bioresource Technology, 2013, 135, 239-245.	4.8	61
46	Production of Dissolving Grade Pulps from Wood and Non-Wood Paper-Grade Pulps by Enzymatic and Chemical Pretreatments. ACS Symposium Series, 2012, , 167-189.	0.5	1
47	Different laccase detoxification strategies for ethanol production from lignocellulosic biomass by the thermotolerant yeast Kluyveromyces marxianus CECT 10875. Bioresource Technology, 2012, 106, 101-109.	4.8	89
48	Enzymatic deinking of secondary fibers: cellulases/hemicellulases versus laccase-mediator system. Journal of Industrial Microbiology and Biotechnology, 2012, 39, 1-9.	1.4	62
49	Combination of alkaline and enzymatic treatments as a process for upgrading sisal paper-grade pulp to dissolving-grade pulp. Bioresource Technology, 2010, 101, 7416-7423.	4.8	79
50	Behavior of different monocomponent endoglucanases on the accessibility and reactivity of dissolving-grade pulps for viscose process. Enzyme and Microbial Technology, 2010, 47, 355-362.	1.6	72
51	Optimization of Treatments for the Conversion of Eucalyptus Kraft Pulp to Dissolving Pulp. Polymers From Renewable Resources, 2010, 1, 17-34.	0.8	2
52	Optimization of treatment sequences for the production of dissolving pulp from birch kraft pulp. Nordic Pulp and Paper Research Journal, 2010, 25, 31-38.	0.3	32
53	Exploring enzymatic treatments for the production of dissolving grade pulp from different wood and non-wood paper grade pulps 10th EWLP, Stockholm, Sweden, August 25â€“28, 2008. Holzforschung, 2009, 63, 721-730.	0.9	33
54	Monolignol acylation and lignin structure in some nonwoody plants: A 2D NMR study. Phytochemistry, 2008, 69, 2831-2843.	1.4	197

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55	Highly Acylated (Acetylated and/or <i>p</i>-Coumaroylated) Native Lignins from Diverse Herbaceous Plants. Journal of Agricultural and Food Chemistry, 2008, 56, 9525-9534.	2.4	172
56	Structural characterization of milled wood lignins from different eucalypt species. Holzforschung, 2008, 62, 514-526.	0.9	147
57	Increasing accessibility and reactivity of paper grade pulp by enzymatic treatment for use as dissolving pulp. Nordic Pulp and Paper Research Journal, 2008, 23, 363-368.	0.3	56
58	Microscopy studies reveal delignification and sterol removal from eucalypt kraft pulps by laccaseâ€“HBT. Biocatalysis and Biotransformation, 2007, 25, 251-259.	1.1	8
59	Structural modification of eucalypt pulp lignin in a totally chlorine-free bleaching sequence including a laccase-mediator stage. Holzforschung, 2007, 61, 634-646.	0.9	62
60	Removal of Lipophilic Extractives from Paper Pulp by Laccase and Lignin-Derived Phenols as Natural Mediators. Environmental Science & Technology, 2007, 41, 4124-4129.	4.6	91
61	Lignin Modification duringEucalyptus globulusKraft Pulping Followed by Totally Chlorine-Free Bleaching:Â A Two-Dimensional Nuclear Magnetic Resonance, Fourier Transform Infrared, and Pyrolysisâ˘Gas Chromatography/Mass Spectrometry Study. Journal of Agricultural and Food Chemistry, 2007, 55, 3477-3490.	2.4	118
62	Paper pulp delignification using laccase and natural mediators. Enzyme and Microbial Technology, 2007, 40, 1264-1271.	1.6	228
63	Composition of non-woody plant lignins and cinnamic acids by Py-GC/MS, Py/TMAH and FT-IR. Journal of Analytical and Applied Pyrolysis, 2007, 79, 39-46.	2.6	167
64	Enzymatic Removal of Free and Conjugated Sterols Forming Pitch Deposits in Environmentally Sound Bleaching of Eucalypt Paper Pulp. Environmental Science & Technology, 2006, 40, 3416-3422.	4.6	47
65	Exploring the enzymatic parameters for optimal delignification of eucalypt pulp by laccase-mediator. Enzyme and Microbial Technology, 2006, 39, 1319-1327.	1.6	104
66	Main lipophilic extractives in different paper pulp types can be removed using the laccaseâ€“mediator system. Applied Microbiology and Biotechnology, 2006, 72, 845-851.	1.7	54
67	Integrating laccaseâ€“mediator treatment into an industrial-type sequence for totally chlorine-free bleaching of eucalypt kraft pulp. Journal of Chemical Technology and Biotechnology, 2006, 81, 1159-1165.	1.6	73
68	Chemical characterization of residual lignins from eucalypt paper pulps. Journal of Analytical and Applied Pyrolysis, 2005, 74, 116-122.	2.6	68
69	Lignin-Derived Compounds as Efficient Laccase Mediators for Decolorization of Different Types of Recalcitrant Dyes. Applied and Environmental Microbiology, 2005, 71, 1775-1784.	1.4	508
70	Isolation of high-purity residual lignins from eucalypt paper pulps by cellulase and proteinase treatments followed by solvent extraction. Enzyme and Microbial Technology, 2004, 35, 173-181.	1.6	38