Leonardo D Gomez

List of Publications by Year
in descending order

83 papers	4,248 citations	117571 34 h-index	118793 62 g-index
85 all docs	85 docs citations	85 times ranked	5882 citing authors

#	ARTICLE	IF	CITATIONS
1	Valuable chemicals identified from Flourensia species using vacuum and analytical pyrolysis. Journal of Analytical and Applied Pyrolysis, 2022, 161, 105382.	2.6	2
2	Variability for cell-wall and yield components in commercial sugarcane (<i>Saccharum spp</i>.) progeny: contrasts with parental lines and energy cane. Journal of Crop Improvement, 2022, 36, 769-788.	0.9	4
3	Integration of Aspergillus niger transcriptomic profile with metabolic model identifies potential targets to optimise citric acid production from lignocellulosic hydrolysate. , 2022, 15, 4.		3
4	Flexible and digestible wood caused by viral-induced alteration of cell wall composition. Current Biology, 2022, , .	1.8	0
5	Cell Wall Composition Impacts Structural Characteristics of the Stems and Thereby Biomass Yield. Journal of Agricultural and Food Chemistry, 2022, 70, 8511-8511.	2.4	0
6	Biomass composition of the golden tide pelagic seaweeds Sargassum fluitans and S. natans (morphotypes I and VIII) to inform valorisation pathways. Science of the Total Environment, 2021, 762, 143134.	3.9	72
7	Design of experiments driven optimization of alkaline pretreatment and saccharification for sugarcane bagasse. Bioresource Technology, 2021, 321, 124499.	4.8	16
8	Thermochemical pretreatments of maize stem for sugar recovery: Comparative evaluation of microwave and conventional heating. Industrial Crops and Products, 2021, 160, 113106.	2.5	13
9	Overcoming the tradeâ€off between grain weight and number in wheat by the ectopic expression of expansin in developing seeds leads to increased yield potential. New Phytologist, 2021, 230, 629-640.	3.5	79
10	Senna reticulata: a Viable Option for Bioenergy Production in the Amazonian Region. Bioenergy Research, 2021, 14, 91-105.	2.2	3
11	Fast pyrolysis of rice husk under vacuum conditions to produce levoglucosan. Journal of Analytical and Applied Pyrolysis, 2021, 156, 105105.	2.6	16
12	FTIR Screening to Elucidate Compositional Differences in Maize Recombinant Inbred Lines with Contrasting Saccharification Efficiency Yields. Agronomy, 2021, 11, 1130.	1.3	10
13	Elucidating the multifunctional role of the cell wall components in the maize exploitation. BMC Plant Biology, 2021, 21, 251.	1.6	2
14	Biorefining Potential of Wild-Grown Arundo donax, Cortaderia selloana and Phragmites australis and the Feasibility of White-Rot Fungi-Mediated Pretreatments. Frontiers in Plant Science, 2021, 12, 679966.	1.7	11
15	Accessory enzymes of hypercellulolytic Penicillium funiculosum facilitate complete saccharification of sugarcane bagasse. Biotechnology for Biofuels, 2021, 14, 171.	6.2	14
16	Improved hydrolysis yields and silica recovery by design of experiments applied to acid-alkali pretreatment in rice husks. Industrial Crops and Products, 2021, 170, 113676.	2.5	12
17	Anaerobic digestion of Crassulacean Acid Metabolism plants: Exploring alternative feedstocks for semi-arid lands. Bioresource Technology, 2020, 297, 122262.	4.8	15
18	Joint Seleniumâ€œIodine Supply and Arbuscular Mycorrhizal Fungi Inoculation Affect Yield and Quality of Chickpea Seeds and Residual Biomass. Plants, 2020, 9, 804.	1.6	17

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19	Association mapping identifies quantitative trait loci (QTL) for digestibility in rice straw. Biotechnology for Biofuels, 2020, 13, 165.	6.2	7
20	Transcriptomics predicts compound synergy in drug and natural product treated glioblastoma cells. PLoS ONE, 2020, 15, e0239551.	1.1	15
21	Valorisation of Natural Resources and the Need for Economic and Sustainability Assessment: The Case of Cocoa Pod Husk in Indonesia. Sustainability, 2020, 12, 8962.	1.6	5
22	Comparative evaluation of microwave-assisted acid, alkaline, and inorganic salt pretreatments of sugarcane bagasse for sugar recovery. Biomass Conversion and Biorefinery, 2020, , 1.	2.9	19
23	Arabidopsis <i>XTH4</i> and <i>XTH9</i> Contribute to Wood Cell Expansion and Secondary Wall Formation. Plant Physiology, 2020, 182, 1946-1965.	2.3	45
24	Cell wall remodeling under salt stress: Insights into changes in polysaccharides, feruloylation, lignification, and phenolic metabolism in maize. Plant, Cell and Environment, 2020, 43, 2172-2191.	2.8	79
25	Nutrient and drought stress: implications for phenology and biomass quality in miscanthus. Annals of Botany, 2019, 124, 553-566.	1.4	19
26	Alcoholic fermentation of thermochemical and biological hydrolysates derived from Miscanthus biomass by Clostridium acetobutylicum ATCC 824. Biomass and Bioenergy, 2019, 130, 105382.	2.9	7
27	Sustainable Galactarateâ€Based Polymers: Multiâ€Enzymatic Production of Pectinâ€Derived Polyesters. Macromolecular Rapid Communications, 2019, 40, e1900361.	2.0	14
28	Sudangrass, an alternative lignocellulosic feedstock for bioenergy in Argentina. PLoS ONE, 2019, 14, e0217435.	1.1	8
29	Cell wall hydrolases act in concert during aerenchyma development in sugarcane roots. Annals of Botany, 2019, 124, 1067-1089.	1.4	15
30	Designing xylan for improved sustainable biofuel production. Plant Biotechnology Journal, 2019, 17, 2225-2227.	4.1	15
31	Integrated processing of sugarcane bagasse: Arabinoxylan extraction integrated with ethanol production. Biochemical Engineering Journal, 2019, 146, 31-40.	1.8	17
32	An ancient family of lytic polysaccharide monooxygenases with roles in arthropod development and biomass digestion. Nature Communications, 2018, 9, 756.	5.8	192
33	Bringing down the wall one brick at a time. New Phytologist, 2018, 218, 5-7.	3.5	1
34	A glycosyl transferase family 43 protein involved in xylan biosynthesis is associated with straw digestibility in <i>Brachypodium distachyon</i>. New Phytologist, 2018, 218, 974-985.	3.5	21
35	Plantâ€“Rhizobium symbiosis, seed nutraceuticals, and waste quality for energy production of Vicia faba L. as affected by crop management. Chemical and Biological Technologies in Agriculture, 2018, 5, .	1.9	11
36	Biomass recalcitrance in barley, wheat and triticale straw: Correlation of biomass quality with classic agronomical traits. PLoS ONE, 2018, 13, e0205880.	1.1	9

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37	Hemocyanin facilitates lignocellulose digestion by wood-boring marine crustaceans. Nature Communications, 2018, 9, 5125.	5.8	29
38	Valorisation strategies for cocoa pod husk and its fractions. Current Opinion in Green and Sustainable Chemistry, 2018, 14, 80-88.	3.2	91
39	Optimization of biomass pretreatments using fractional factorial experimental design. Biotechnology for Biofuels, 2018, 11, 206.	6.2	37
40	Genetic engineering of grass cell wall polysaccharides for biorefining. Plant Biotechnology Journal, 2017, 15, 1071-1092.	4.1	52
41	Valorising faba bean residual biomass: Effect of farming system and planting time on the potential for biofuel production. Biomass and Bioenergy, 2017, 107, 227-232.	2.9	32
42	Genetic complexity of miscanthus cell wall composition and biomass quality for biofuels. BMC Genomics, 2017, 18, 406.	1.2	22
43	A new perspective in bio-refining: levoglucosenone and cleaner lignin from waste biorefinery hydrolysis lignin by selective conversion of residual saccharides. Energy and Environmental Science, 2016, 9, 2571-2574.	15.6	79
44	Characterization of the cellulolytic secretome of <i>Trichoderma harzianum</i> during growth on sugarcane bagasse and analysis of the activity boosting effects of swollenin. Biotechnology Progress, 2016, 32, 327-336.	1.3	39
45	Efficient sugar production from sugarcane bagasse by microwave assisted acid and alkali pretreatment. Biomass and Bioenergy, 2016, 93, 269-278.	2.9	115
46	Expression of fungal acetyl xylan esterase in <i>Arabidopsis thaliana</i> improves saccharification of stem lignocellulose. Plant Biotechnology Journal, 2016, 14, 387-397.	4.1	72
47	Unlocking the potential of lignocellulosic biomass through plant science. New Phytologist, 2016, 209, 1366-1381.	3.5	177
48	Linkage Mapping of Stem Saccharification Digestibility in Rice. PLoS ONE, 2016, 11, e0159117.	1.1	6
49	Residual biomass saccharification in processing tomato is affected by cultivar and nitrogen fertilization. Biomass and Bioenergy, 2015, 72, 242-250.	2.9	20
50	Active fungal GH115 Î±-glucuronidase produced in Arabidopsis thaliana affects only the UX1-reactive glucuronate decorations on native glucuronoxylans. BMC Biotechnology, 2015, 15, 56.	1.7	17
51	Microwave assisted chemical pretreatment of Miscanthus under different temperature regimes. Sustainable Chemical Processes, 2015, 3, .	2.3	43
52	Supercritical extraction as an effective first-step in a maize stover biorefinery. RSC Advances, 2015, 5, 43831-43838.	1.7	35
53	Microwave assisted acid and alkali pretreatment of <i>Miscanthus </i>biomas<i>s </i>for biorefineries. AIMS Bioengineering, 2015, 2, 449-468.	0.6	31
54	Side by Side Comparison of Chemical Compounds Generated by Aqueous Pretreatments of Maize Stover, Miscanthus and Sugarcane Bagasse. Bioenergy Research, 2014, 7, 1466-1480.	2.2	19

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55	Range of cell-wall alterations enhance saccharification in <i>Brachypodium distachyon</i> mutants. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 14601-14606.	3.3	53
56	Evaluating the composition and processing potential of novel sources of Brazilian biomass for sustainable biorenewables production. Biotechnology for Biofuels, 2014, 7, 10.	6.2	87
57	Effects of pretreatment on morphology, chemical composition and enzymatic digestibility of eucalyptus bark: a potentially valuable source of fermentable sugars for biofuel production â€“ part 1. Biotechnology for Biofuels, 2013, 6, 75.	6.2	108
58	Identification of crop cultivars with consistently high lignocellulosic sugar release requires the use of appropriate statistical design and modelling. Biotechnology for Biofuels, 2013, 6, 185.	6.2	15
59	Disrupting the <i>cinnamyl alcohol dehydrogenase 1</i> gene (<i>Bd<scp>CAD</scp>1</i>) leads to altered lignification and improved saccharification in <i>Brachypodium distachyon</i>. Plant Journal, 2013, 73, 496-508.	2.8	118
60	Microwave-enhanced formation of glucose from cellulosic waste. Chemical Engineering and Processing: Process Intensification, 2013, 71, 37-42.	1.8	39
61	Latitudinal variation in ambient UV-B radiation is an important determinant of Lolium perenne forage production, quality, and digestibility. Journal of Experimental Botany, 2013, 64, 2193-2204.	2.4	19
62	<i>Arabidopsis</i> GT34 family contains five xyloglucan Î±â€•1,6â€•xylosyltransferases. New Phytologist, 2012, 195, 585-595.	3.5	64
63	The Analysis of Saccharification in Biomass Using an Automated High-Throughput Method. Methods in Enzymology, 2012, 510, 37-50.	0.4	10
64	Role of Plant Laccases in Lignin Polymerization. Advances in Botanical Research, 2012, 61, 145-172.	0.5	61
65	High-throughput Saccharification Assay for Lignocellulosic Materials. Journal of Visualized Experiments, 2011, , .	0.2	8
66	Arabidopsis genes <i>IRREGULAR XYLEM</i> (<i>IRX15</i>) and <i>IRX15L</i> encode DUF579â€•containing proteins that are essential for normal xylan deposition in the secondary cell wall. Plant Journal, 2011, 66, 401-413.	2.8	134
67	Automated saccharification assay for determination of digestibility in plant materials. Biotechnology for Biofuels, 2010, 3, 23.	6.2	77
68	AtTPS1-mediated trehalose 6-phosphate synthesis is essential for embryogenic and vegetative growth and responsiveness to ABA in germinating seeds and stomatal guard cells. Plant Journal, 2010, 64, no-no.	2.8	173
69	Expansins expression is associated with grain size dynamics in wheat (Triticum aestivum L.). Journal of Experimental Botany, 2010, 61, 1147-1157.	2.4	119
70	Arabinan Metabolism during Seed Development and Germination in Arabidopsis. Molecular Plant, 2009, 2, 966-976.	3.9	50
71	Analysis of saccharification in Brachypodium distachyon stems under mild conditions of hydrolysis. Biotechnology for Biofuels, 2008, 1, 15.	6.2	44
72	Sustainable liquid biofuels from biomass: the writing's on the walls. New Phytologist, 2008, 178, 473-485.	3.5	349

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73	Delayed embryo development in theARABIDOPSIS TREHALOSE-6-PHOSPHATE SYNTHASE 1mutant is associated with altered cell wall structure, decreased cell division and starch accumulation. Plant Journal, 2006, 46, 69-84.	2.8	181
74	The role of trehalose-6-phosphate synthase in Arabidopsis embryo development. Biochemical Society Transactions, 2005, 33, 280-282.	1.6	33
75	Intercellular Distribution of Glutathione Synthesis in Maize Leaves and Its Response to Short-Term Chilling. Plant Physiology, 2004, 134, 1662-1671.	2.3	110
76	Regulation of calcium signalling and gene expression by glutathione. Journal of Experimental Botany, 2004, 55, 1851-1859.	2.4	144
77	Coordinate induction of glutathione biosynthesis and glutathione-metabolizing enzymes is correlated with salt tolerance in tomato. FEBS Letters, 2003, 554, 417-421.	1.3	132
78	Status of antioxidant metabolites and enzymes in a catalase-deficient mutant of barley (Hordeum) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	1.7	33
79	Regulation of photosynthesis and antioxidant metabolism in maize leaves at optimal and chilling temperatures: review. Plant Physiology and Biochemistry, 2002, 40, 659-668.	2.8	170
80	Antioxidant system response of different wheat cultivars under drought: field and in vitro studies. Functional Plant Biology, 2001, 28, 1095.	1.1	38
81	Wheat Chloroplastic Glutathione Reductase Activity is Regulated by the Combined Effect of pH, NADPH and GSSG. Plant and Cell Physiology, 1999, 40, 683-690.	1.5	15
82	Changes in gluthathione reductase activity and protein content in wheat leaves and chloroplasts exposed to photooxidative stress. Plant Physiology and Biochemistry, 1998, 36, 321-329.	2.8	33
83	Inactivation and Degradation of CuZn-SOD by Active Oxygen Species in Wheat Chloroplasts Exposed to Photooxidative Stress. Plant and Cell Physiology, 1997, 38, 433-440.	1.5	123