Ana Gutierrez

List of Publications by Year
in descending order

124 papers	8,603 citations	34076 52 h-index	48277 88 g-index
127 all docs	127 docs citations	127 times ranked	6963 citing authors

#	Article	IF	Citations
1	Flavonoids naringenin chalcone, naringenin, dihydrotricin, and tricin are lignin monomers in papyrus. Plant Physiology, 2022, 188, 208-219.	2.3	28
2	Pseudochrobactrum algeriensis sp. nov., isolated from lymph nodes of Algerian cattle. International Journal of Systematic and Evolutionary Microbiology, 2022, 72, .	0.8	6
3	Unconventional lignin monomersâ€"Extension of the lignin paradigm. Advances in Botanical Research, 2022, , 1-39.	0.5	13
4	Induced lignoâ€suberin vascular coating and tyramineâ€derived hydroxycinnamic acid amides restrict <i>Ralstonia solanacearum</i> colonization in resistant tomato. New Phytologist, 2022, 234, 1411-1429.	3.5	26
5	Papyrus production revisited: differences between ancient and modern production modes. Cellulose, 2022, 29, 4931-4950.	2.4	6
6	Differences in the content, composition and structure of the lignins from rind and pith of papyrus (Cyperus papyrus L.) culms. Industrial Crops and Products, 2021, 174, 114226.	2.5	12
7	Fatty acid epoxidation by<i>Collariella virescens</i>peroxygenase and heme-channel variants. Catalysis Science and Technology, 2020, 10, 717-725.	2.1	29
8	Fatty-Acid Oxygenation by Fungal Peroxygenases: From Computational Simulations to Preparative Regio- and Stereoselective Epoxidation. ACS Catalysis, 2020, 10, 13584-13595.	5.5	25
9	Deciphering the Unique Structure and Acylation Pattern of <i>Posidonia oceanica</i> Lignin. ACS Sustainable Chemistry and Engineering, 2020, 8, 12521-12533.	3.2	24
10	Lignin from Tree Barks: Chemical Structure and Valorization. ChemSusChem, 2020, 13, 4537-4547.	3.6	33
11	Lignin Monomers from beyond the Canonical Monolignol Biosynthetic Pathway: Another Brick in the Wall. ACS Sustainable Chemistry and Engineering, 2020, 8, 4997-5012.	3.2	184
12	Two New Unspecific Peroxygenases from Heterologous Expression of Fungal Genes in Escherichia coli. Applied and Environmental Microbiology, 2020, 86, .	1.4	43
13	Selective Oxygenation of Ionones and Damascones by Fungal Peroxygenases. Journal of Agricultural and Food Chemistry, 2020, 68, 5375-5383.	2.4	13
14	Comparative Recalcitrance and Extractability of Cell Wall Polysaccharides from Cereal (Wheat, Rye,) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5 7192-7204.	3.2	17
15	Modulating Fatty Acid Epoxidation vs Hydroxylation in a Fungal Peroxygenase. ACS Catalysis, 2019, 9, 6234-6242.	5.5	54
16	Hydroxystilbene Glucosides Are Incorporated into Norway Spruce Bark Lignin. Plant Physiology, 2019, 180, 1310-1321.	2.3	43
17	Selective synthesis of 4-hydroxyisophorone and 4-ketoisophorone by fungal peroxygenases. Catalysis Science and Technology, 2019, 9, 1398-1405.	2.1	26
18	Structural Characterization of Lignin from Maize (Zea mays L.) Fibers: Evidence for Diferuloylputrescine Incorporated into the Lignin Polymer in Maize Kernels. Journal of Agricultural and Food Chemistry, 2018, 66, 4402-4413.	2.4	38

#	Article	IF	Citations
19	Selective synthesis of the resveratrol analogue 4,4â€²-dihydroxy-<i>trans</i>-stilbene and stilbenoids modification by fungal peroxygenases. Catalysis Science and Technology, 2018, 8, 2394-2401.	2.1	28
20	Variability in Lignin Composition and Structure in Cell Walls of Different Parts of MacaÃºba (<i>Acrocomia aculeata</i>) Palm Fruit. Journal of Agricultural and Food Chemistry, 2018, 66, 138-153.	2.4	70
21	Structural characteristics of lignin in pruning residues of olive tree (<i>Olea europaea</i> L.). Holzforschung, 2018, 73, 25-34.	0.9	18
22	A commercial laccase-mediator system to delignify and improve saccharification of the fast-growing<i>Paulownia fortunei</i>(Seem.) Hemsl.. Holzforschung, 2018, 73, 45-54.	0.9	13
23	Selective Epoxidation of Fatty Acids and Fatty Acid Methyl Esters by Fungal Peroxygenases. ChemCatChem, 2018, 10, 3964-3968.	1.8	26
24	Hydroxystilbenes Are Monomers in Palm Fruit Endocarp Lignins. Plant Physiology, 2017, 174, 2072-2082.	2.3	90
25	Fatty Acid Chain Shortening by a Fungal Peroxygenase. Chemistry - A European Journal, 2017, 23, 16985-16989.	1.7	37
26	Delignification and Saccharification Enhancement of Sugarcane Byproducts by a Laccase-Based Pretreatment. ACS Sustainable Chemistry and Engineering, 2017, 5, 7145-7154.	3.2	53
27	Effects of Fe deficiency on the protein profiles and lignin composition of stem tissues from Medicago truncatula in absence or presence of calcium carbonate. Journal of Proteomics, 2016, 140, 1-12.	1.2	12
28	Ligninâ€“carbohydrate complexes from sisal (Agave sisalana) and abaca (Musa textilis): chemical composition and structural modifications during the isolation process. Planta, 2016, 243, 1143-1158.	1.6	37
29	From Alkanes to Carboxylic Acids: Terminal Oxygenation by a Fungal Peroxygenase. Angewandte Chemie - International Edition, 2016, 55, 12248-12251.	7.2	43
30	From Alkanes to Carboxylic Acids: Terminal Oxygenation by a Fungal Peroxygenase. Angewandte Chemie, 2016, 128, 12436-12439.	1.6	14
31	Ferulates and lignin structural composition in cork. Holzforschung, 2016, 70, 275-289.	0.9	53
32	Molecular determinants for selective C₂₅-hydroxylation of vitamins D₂and D₃by fungal peroxygenases. Catalysis Science and Technology, 2016, 6, 288-295.	2.1	29
33	Chemical composition and thermal behavior of the pulp and kernel oils from macauba palm () Tj ETQq1 1 0.784314 rgBT /Overlock 10 T	2.5	63
34	Lipophilic phytochemicals from sugarcane bagasse and straw. Industrial Crops and Products, 2015, 77, 992-1000.	2.5	44
35	Cell wall modifications triggered by the down-regulation of Coumarate 3-hydroxylase-1 in maize. Plant Science, 2015, 236, 272-282.	1.7	44
36	Steroid Hydroxylation by Basidiomycete Peroxygenases: a Combined Experimental and Computational Study. Applied and Environmental Microbiology, 2015, 81, 4130-4142.	1.4	36

#	Article	IF	Citations
37	Isolation and Structural Characterization of the Milled Wood Lignin, Dioxane Lignin, and Cellulolytic Lignin Preparations from Brewerâ€™s Spent Grain. Journal of Agricultural and Food Chemistry, 2015, 63, 603-613.	2.4	110
38	Regioselective Hydroxylation in the Production of 25â€Hydroxyvitaminâ€…D by <i>Coprinopsis cinerea</i> Peroxygenase. ChemCatChem, 2015, 7, 283-290.	1.8	23
39	5â€hydroxymethylfurfural conversion by fungal arylâ€alcohol oxidase and unspecific peroxygenase. FEBS Journal, 2015, 282, 3218-3229.	2.2	132
40	Isolation and Structural Characterization of Lignin from Cardoon (Cynara cardunculus L.) Stalks. Bioenergy Research, 2015, 8, 1946-1955.	2.2	13
41	Differences in the chemical structure of the lignins from sugarcane bagasse and straw. Biomass and Bioenergy, 2015, 81, 322-338.	2.9	227
42	Demonstration of Lignin-to-Peroxidase Direct Electron Transfer. Journal of Biological Chemistry, 2015, 290, 23201-23213.	1.6	30
43	In-Depth 2D NMR Study of Lignin Modification During Pretreatment of Eucalyptus Wood with Laccase and Mediators. Bioenergy Research, 2015, 8, 211-230.	2.2	35
44	Analysis of the Phlebiopsis gigantea Genome, Transcriptome and Secretome Provides Insight into Its Pioneer Colonization Strategies of Wood. PLoS Genetics, 2014, 10, e1004759.	1.5	90
45	Structural insights on laccase biografting of ferulic acid onto lignocellulosic fibers. Biochemical Engineering Journal, 2014, 86, 16-23.	1.8	20
46	Analysis of ligninâ€“carbohydrate and ligninâ€“lignin linkages after hydrolase treatment of xylanâ€“lignin, glucomannanâ€“lignin and glucanâ€“lignin complexes from spruce wood. Planta, 2014, 239, 1079-90.	1.6	73
47	Comprehensive Study of Valuable Lipophilic Phytochemicals in Wheat Bran. Journal of Agricultural and Food Chemistry, 2014, 62, 1664-1673.	2.4	50
48	Search, engineering, and applications of new oxidative biocatalysts. Biofuels, Bioproducts and Biorefining, 2014, 8, 819-835.	1.9	16
49	Enzymatic degradation of Elephant grass (Pennisetum purpureum) stems: Influence of the pith and bark in the total hydrolysis. Bioresource Technology, 2014, 167, 469-475.	4.8	19
50	Pretreatment with laccase and a phenolic mediator degrades lignin and enhances saccharification of Eucalyptus feedstock. Biotechnology for Biofuels, 2014, 7, 6.	6.2	161
51	Understanding Pulp Delignification by Laccaseâ€“Mediator Systems through Isolation and Characterization of Ligninâ€“Carbohydrate Complexes. Biomacromolecules, 2013, 14, 3073-3080.	2.6	44
52	Oxyfunctionalization of aliphatic compounds by a recombinant peroxygenase from <i>Coprinopsis cinerea</i>. Biotechnology and Bioengineering, 2013, 110, 2323-2332.	1.7	77
53	Chemical composition of lipids in brewer's spent grain: A promising source of valuable phytochemicals. Journal of Cereal Science, 2013, 58, 248-254.	1.8	73
54	Structural Characterization of Lignin Isolated from Coconut (<i>Cocos nucifera</i>) Coir Fibers. Journal of Agricultural and Food Chemistry, 2013, 61, 2434-2445.	2.4	130

#	Article	IF	Citations
55	Modification of the Lignin Structure during Alkaline Delignification of Eucalyptus Wood by Kraft, Soda-AQ, and Soda-O₂Cooking. Industrial & Engineering Chemistry Research, 2013, 52, 15702-15712.	1.8	67
56	A Comprehensive Characterization of Lipids in Wheat Straw. Journal of Agricultural and Food Chemistry, 2013, 61, 1904-1913.	2.4	34
57	Structural Modifications of Residual Lignins from Sisal and Flax Pulps during Soda-AQ Pulping and TCF/ECF Bleaching. Industrial & Engineering Chemistry Research, 2013, 52, 4695-4703.	1.8	13
58	Identification and functional analysis of the cyclopropane fatty acid synthase of Brucella abortus. Microbiology (United Kingdom), 2012, 158, 1037-1044.	0.7	17
59	Demonstration of laccase-based removal of lignin from wood and non-wood plant feedstocks. Bioresource Technology, 2012, 119, 114-122.	4.8	130
60	Lipophilic Extractives from the Cortex and Pith of Elephant Grass (Pennisetum purpureum Schumach.) Stems. Journal of Agricultural and Food Chemistry, 2012, 60, 6408-6417.	2.4	34
61	Structural Characterization of Wheat Straw Lignin as Revealed by Analytical Pyrolysis, 2D-NMR, and Reductive Cleavage Methods. Journal of Agricultural and Food Chemistry, 2012, 60, 5922-5935.	2.4	650
62	Structural Characterization of the Lignin in the Cortex and Pith of Elephant Grass (<i>Pennisetum) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	2.4	172
63	Morphological characteristics and composition of lipophilic extractives and lignin in Brazilian woods from different eucalypt hybrids. Industrial Crops and Products, 2012, 36, 572-583.	2.5	32
64	Origin of the acetylated structures present in white birch (Betula pendula Roth) milled wood lignin. Wood Science and Technology, 2012, 46, 459-471.	1.4	17
65	Structural Characterization of Guaiacyl-rich Lignins in Flax (Linum usitatissimum) Fibers and Shives. Journal of Agricultural and Food Chemistry, 2011, 59, 11088-11099.	2.4	92
66	Regioselective oxygenation of fatty acids, fatty alcohols and other aliphatic compounds by a basidiomycete heme-thiolate peroxidase. Archives of Biochemistry and Biophysics, 2011, 514, 33-43.	1.4	76
67	Selective lignin and polysaccharide removal in natural fungal decay of wood as evidenced by <i>in situ</i> structural analyses. Environmental Microbiology, 2011, 13, 96-107.	1.8	93
68	Exploring the potential of fungal manganese-containing lipoxygenase for pitch control and pulp delignification. Bioresource Technology, 2011, 102, 1338-1343.	4.8	7
69	Towards industrially-feasible delignification and pitch removal by treating paper pulp with Myceliophthora thermophila laccase and a phenolic mediator. Bioresource Technology, 2011, 102, 6717-6722.	4.8	71
70	Lignin Composition and Structure in Young versus Adult<i>Eucalyptus globulus</i>Plants. Plant Physiology, 2011, 155, 667-682.	2.3	263
71	Acetylated heteroxylan from Agave sisalana and its behavior in alkaline pulping and TCF/ECF bleaching. Carbohydrate Polymers, 2010, 81, 517-523.	5.1	30
72	Polymerization of lignosulfonates by the laccase-HBT (1-hydroxybenzotriazole) system improves dispersibility. Bioresource Technology, 2010, 101, 5054-5062.	4.8	112

#	Article	IF	Citations
73	Enzymatic grafting of simple phenols on flax and sisal pulp fibres using laccases. Bioresource Technology, 2010, 101, 8211-8216.	4.8	83
74	Lipophilic extractives from several nonwoody lignocellulosic crops (flax, hemp, sisal, abaca) and their fate during alkaline pulping and TCF/ECF bleaching. Bioresource Technology, 2010, 101, 260-267.	4.8	43
75	Delignification of eucalypt kraft pulp with manganese-substituted polyoxometalate assisted by fungal versatile peroxidase. Bioresource Technology, 2010, 101, 5935-5940.	4.8	19
76	Kinetic and chemical characterization of aldehyde oxidation by fungal aryl-alcohol oxidase. Biochemical Journal, 2010, 425, 585-593.	1.7	69
77	Sterols and lignin in <i>Eucalyptus globulus</i> Labill. wood: Spatial distribution and fungal removal as revealed by microscopy and chemical analyses. Holzforschung, 2009, 63, 362-370.	0.9	16
78	HSQC-NMR analysis of lignin in woody (<i>Eucalyptus globulus</i> and <i>Picea abies</i>) and non-woody (<i>Agave sisalana</i>) ball-milled plant materials at the gel state 10th EWLP, Stockholm, Sweden, August 25â€“28, 2008. Holzforschung, 2009, 63, 691-698.	0.9	130
79	Isolation and structural characterization of the milled-wood lignin from Paulownia fortunei wood. Industrial Crops and Products, 2009, 30, 137-143.	2.5	135
80	Chemical composition of lipophilic extractives from jute (Corchorus capsularis) fibers used for manufacturing of high-quality paper pulps. Industrial Crops and Products, 2009, 30, 241-249.	2.5	15
81	Microbial and enzymatic control of pitch in the pulp and paper industry. Applied Microbiology and Biotechnology, 2009, 82, 1005-1018.	1.7	91
82	Influence of operation conditions on laccase-mediator removal of sterols from eucalypt pulp. Process Biochemistry, 2009, 44, 1032-1038.	1.8	18
83	Enzymatic delignification of plant cell wall: from nature to mill. Current Opinion in Biotechnology, 2009, 20, 348-357.	3.3	271
84	Structural Characterization of the Lignin from Jute (<i>Corchorus capsularis</i>) Fibers. Journal of Agricultural and Food Chemistry, 2009, 57, 10271-10281.	2.4	163
85	Oxidative degradation of model lipids representative for main paper pulp lipophilic extractives by the laccaseâ€“mediator system. Applied Microbiology and Biotechnology, 2008, 80, 211-222.	1.7	31
86	Monolignol acylation and lignin structure in some nonwoody plants: A 2D NMR study. Phytochemistry, 2008, 69, 2831-2843.	1.4	197
87	Chemical composition of lignin and lipids from tagasaste (Chamaecytisus proliferus spp. palmensis). Industrial Crops and Products, 2008, 28, 29-36.	2.5	13
88	Chemical composition of lipophilic extractives from sisal (Agave sisalana) fibers. Industrial Crops and Products, 2008, 28, 81-87.	2.5	55
89	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
90	Structural characterization of milled wood lignins from different eucalypt species. Holzforschung, 2008, 62, 514-526.	0.9	147

#	ARTICLE	IF	CITATIONS
91	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
92	Lipid and lignin composition of woods from different eucalypt species. Holzforschung, 2007, 61, 165-174.	0.9	83
93	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
94	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
95	Occurrence of Naturally Acetylated Lignin Units. Journal of Agricultural and Food Chemistry, 2007, 55, 5461-5468.	2.4	173
96	Chemical Characterization of Lignin and Lipophilic Fractions from Leaf Fibers of Curaua (Ananas) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 5	2.4	37
97	Paper pulp delignification using laccase and natural mediators. Enzyme and Microbial Technology, 2007, 40, 1264-1271.	1.6	228
98	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
99	Presence of 5-hydroxyguaiacyl units as native lignin constituents in plants as seen by Py-GC/MS. Journal of Analytical and Applied Pyrolysis, 2007, 79, 33-38.	2.6	24
100	Chemical characterization of the lipophilic fraction of giant reed (Arundo donax) fibres used for pulp and paper manufacturing. Industrial Crops and Products, 2007, 26, 229-236.	2.5	38
101	Phenylphenalenone Type Compounds from the Leaf Fibers of Abaca (Musa textilis). Journal of Agricultural and Food Chemistry, 2006, 54, 8744-8748.	2.4	16
102	Chemical Composition of Abaca (Musa textilis) Leaf Fibers Used for Manufacturing of High Quality Paper Pulps. Journal of Agricultural and Food Chemistry, 2006, 54, 4600-4610.	2.4	57
103	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
104	Chemical Characterization of Lignin and Lipid Fractions in Industrial Hemp Bast Fibers Used for Manufacturing High-Quality Paper Pulps. Journal of Agricultural and Food Chemistry, 2006, 54, 2138-2144.	2.4	68
105	Determining the influence of eucalypt lignin composition in paper pulp yield using Py-GC/MS. Journal of Analytical and Applied Pyrolysis, 2005, 74, 110-115.	2.6	157
106	Chemical characterization of pitch deposits produced in the manufacturing of high-quality paper pulps from hemp fibers. Bioresource Technology, 2005, 96, 1445-1450.	4.8	44
107	Chemical characterization of residual lignins from eucalypt paper pulps. Journal of Analytical and Applied Pyrolysis, 2005, 74, 116-122.	2.6	68
108	Identification of intact long-chainp-hydroxycinnamate esters in leaf fibers of abaca (Musa textilis) using gas chromatography/mass spectrometry. Rapid Communications in Mass Spectrometry, 2004, 18, 2691-2696.	0.7	22

#	Article	IF	Citations
109	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
110	Efficient bleaching of non-wood high-quality paper pulp using laccase-mediator system. Enzyme and Microbial Technology, 2004, 35, 113-120.	1.6	164
111	Chemical Characterization of Lignin and Lipid Fractions in Kenaf Bast Fibers Used for Manufacturing High-Quality Papers. Journal of Agricultural and Food Chemistry, 2004, 52, 4764-4773.	2.4	37
112	Hydrolysis of sterol esters by an esterase from Ophiostoma piceae: application to pitch control in pulping of Eucalyptus globulus wood. International Journal of Biotechnology, 2004, 6, 367.	1.2	12
113	A comprehensive study of different types of speck impurities present in bleached eucalypt kraft pulps using PY-GC/MS. Journal of Analytical and Applied Pyrolysis, 2003, 68-69, 251-268.	2.6	5
114	Lipids from Flax Fibers and Their Fate in Alkaline Pulping. Journal of Agricultural and Food Chemistry, 2003, 51, 4965-4971.	2.4	37
115	Production of New Unsaturated Lipids during Wood Decay by Ligninolytic Basidiomycetes. Applied and Environmental Microbiology, 2002, 68, 1344-1350.	1.4	69
116	Identification of a novel series of alkylitaconic acids in wood cultures ofCeriporiopsis subvermisporaby gas chromatography/mass spectrometry. Rapid Communications in Mass Spectrometry, 2002, 16, 62-68.	0.7	10
117	Lipophilic extractives in process waters during manufacturing of totally chlorine free kraft pulp from eucalypt wood. Chemosphere, 2001, 44, 1237-1242.	4.2	28
118	Gas chromatography/mass spectrometry demonstration of steryl glycosides in eucalypt wood, Kraft pulp and process liquids. Rapid Communications in Mass Spectrometry, 2001, 15, 2515-2520.	0.7	55
119	Analysis of pitch deposits produced in Kraft pulp mills using a totally chlorine free bleaching sequence. Journal of Chromatography A, 2000, 874, 235-245.	1.8	57
120	Fungal Pretreatment ofEucalyptusWood Can Strongly Decrease the Amount of Lipophilic Extractives during Chlorine Free Kraft Pulping. Environmental Science & Technology, 2000, 34, 3705-3709.	4.6	25
121	Analysis of impurities occurring in a totally chlorine free-bleached Kraft pulp. Journal of Chromatography A, 1999, 830, 227-232.	1.8	25
122	Characterization of organic deposits produced in the kraft pulping of Eucalyptus globulus wood. Journal of Chromatography A, 1998, 823, 457-465.	1.8	65
123	Analysis of lipophilic extractives from wood and pitch deposits by solid-phase extraction and gas chromatography. Journal of Chromatography A, 1998, 823, 449-455.	1.8	104
124	Structural characterization of extracellular polysaccharides produced by fungi from the genus Pleurotus. Carbohydrate Research, 1996, 281, 143-154.	1.1	136