Angel T MartÃ-nez

List of Publications by Year
in descending order

310 papers	23,324 citations	6233 80 h-index	11288 136 g-index
317 all docs	317 docs citations	317 times ranked	13591 citing authors

#	Article	IF	Citations
1	The Paleozoic Origin of Enzymatic Lignin Decomposition Reconstructed from 31 Fungal Genomes. Science, 2012, 336, 1715-1719.	6.0	1,424
2	Biodegradation of lignocellulosics: microbial, chemical, and enzymatic aspects of the fungal attack of lignin. International Microbiology, 2005, 8, 195-204.	1.1	673
3	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
4	Genome, transcriptome, and secretome analysis of wood decay fungus <i>Postia placenta</i> supports unique mechanisms of lignocellulose conversion. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 1954-1959.	3.3	530
5	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
6	Microbial degradation of lignin: how a bulky recalcitrant polymer is efficiently recycled in nature and how we can take advantage of this. Microbial Biotechnology, 2009, 2, 164-177.	2.0	434
7	Molecular biology and structure-function of lignin-degrading heme peroxidases. Enzyme and Microbial Technology, 2002, 30, 425-444.	1.6	358
8	Description of a Versatile Peroxidase Involved in the Natural Degradation of Lignin That Has Both Manganese Peroxidase and Lignin Peroxidase Substrate Interaction Sites. Journal of Biological Chemistry, 1999, 274, 10324-10330.	1.6	326
9	Purification and Catalytic Properties of Two Manganese Peroxidase Isoenzymes from Pleurotus eryngii. FEBS Journal, 1996, 237, 424-432.	0.2	323
10	Fungal pretreatment: An alternative in second-generation ethanol from wheat straw. Bioresource Technology, 2011, 102, 7500-7506.	4.8	282
11	Enzymatic delignification of plant cell wall: from nature to mill. Current Opinion in Biotechnology, 2009, 20, 348-357.	3.3	271
12	Lignin Composition and Structure in Young versus Adult<i>Eucalyptus globulus</i>Plants. Plant Physiology, 2011, 155, 667-682.	2.3	263
13	Comparative genomics of <i>Ceriporiopsis subvermispora</i> and <i>Phanerochaete chrysosporium</i> provide insight into selective ligninolysis. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 5458-5463.	3.3	259
14	Versatile Peroxidase Oxidation of High Redox Potential Aromatic Compounds: Site-directed Mutagenesis, Spectroscopic and Crystallographic Investigation of Three Long-range Electron Transfer Pathways. Journal of Molecular Biology, 2005, 354, 385-402.	2.0	248
15	Substrate oxidation sites in versatile peroxidase and other basidiomycete peroxidases. Journal of Experimental Botany, 2009, 60, 441-452.	2.4	237
16	Paper pulp delignification using laccase and natural mediators. Enzyme and Microbial Technology, 2007, 40, 1264-1271.	1.6	228
17	Substrate specificity and properties of the aryl-alcohol oxidase from the ligninolytic fungus Pleurotus eryngii. FEBS Journal, 1992, 209, 603-611.	0.2	227
18	Differences in the chemical structure of the lignins from sugarcane bagasse and straw. Biomass and Bioenergy, 2015, 81, 322-338.	2.9	227

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19	Oxidoreductases on their way to industrial biotransformations. Biotechnology Advances, 2017, 35, 815-831.	6.0	205
20	Molecular characterization of a novel peroxidase isolated from the ligninolytic fungus Pleurotus eryngii. Molecular Microbiology, 1999, 31, 223-235.	1.2	203
21	Laccase purification and characterization from Trametes trogii isolated in Tunisia: decolorization of textile dyes by the purified enzyme. Enzyme and Microbial Technology, 2006, 39, 141-148.	1.6	201
22	Monolignol acylation and lignin structure in some nonwoody plants: A 2D NMR study. Phytochemistry, 2008, 69, 2831-2843.	1.4	197
23	A study on reducing substrates of manganese-oxidizing peroxidases fromPleurotus eryngiiandBjerkandera adusta. FEBS Letters, 1998, 428, 141-146.	1.3	188
24	Laccase detoxification of steam-exploded wheat straw for second generation bioethanol. Bioresource Technology, 2009, 100, 6378-6384.	4.8	180
25	Occurrence of Naturally Acetylated Lignin Units. Journal of Agricultural and Food Chemistry, 2007, 55, 5461-5468.	2.4	173
26	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
27	Structural Characterization of the Lignin in the Cortex and Pith of Elephant Grass (<i>Pennisetum) Tj ETQq1 1 0.784314 rgBT /Overlo	2.4	172
28	Induction and Characterization of Laccase in the Ligninolytic Fungus Pleurotus eryngii. Current Microbiology, 1997, 34, 1-5.	1.0	168
29	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
30	Efficient bleaching of non-wood high-quality paper pulp using laccase-mediator system. Enzyme and Microbial Technology, 2004, 35, 113-120.	1.6	164
31	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
32	Pretreatment with laccase and a phenolic mediator degrades lignin and enhances saccharification of Eucalyptus feedstock. Biotechnology for Biofuels, 2014, 7, 6.	6.2	161
33	Screening of 68 species of basidiomycetes for enzymes involved in lignin degradation. Mycological Research, 1995, 99, 37-42.	2.5	159
34	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
35	Transformation of Polycyclic Aromatic Hydrocarbons by Laccase Is Strongly Enhanced by Phenolic Compounds Present in Soil. Environmental Science & Technology, 2007, 41, 2964-2971.	4.6	147
36	Structural characterization of milled wood lignins from different eucalypt species. Holzforschung, 2008, 62, 514-526.	0.9	147

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37	Induction of Extracellular Hydroxyl Radical Production by White-Rot Fungi through Quinone Redox Cycling. Applied and Environmental Microbiology, 2009, 75, 3944-3953.	1.4	146
38	Fungal aryl-alcohol oxidase: a peroxide-producing flavoenzyme involved in lignin degradation. Applied Microbiology and Biotechnology, 2012, 93, 1395-1410.	1.7	145
39	Comparison of different fungal enzymes for bleaching high-quality paper pulps. Journal of Biotechnology, 2005, 115, 333-343.	1.9	140
40	Structural characterization of extracellular polysaccharides produced by fungi from the genus Pleurotus. Carbohydrate Research, 1996, 281, 143-154.	1.1	136
41	Isolation and structural characterization of the milled-wood lignin from Paulownia fortunei wood. Industrial Crops and Products, 2009, 30, 137-143.	2.5	135
42	Lignin-degrading peroxidases in Polyporales: an evolutionary survey based on 10 sequenced genomes. Mycologia, 2013, 105, 1428-1444.	0.8	134
43	5â€hydroxymethylfurfural conversion by fungal arylâ€alcohol oxidase and unspecific peroxygenase. FEBS Journal, 2015, 282, 3218-3229.	2.2	132
44	Production of hydrogen peroxide by aryl-alcohol oxidase from the ligninolytic fungusPleurotus eryngii. Applied Microbiology and Biotechnology, 1990, 32, 465-469.	1.7	130
45	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
46	Demonstration of laccase-based removal of lignin from wood and non-wood plant feedstocks. Bioresource Technology, 2012, 119, 114-122.	4.8	130
47	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
48	Degradation of phenolic and non-phenolic aromatic pollutants by four Pleurotus species: the role of laccase and versatile peroxidase. Soil Biology and Biochemistry, 2004, 36, 909-916.	4.2	129
49	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.	1.4	125
50	Quinone Redox Cycling in the Ligninolytic FungusPleurotus eryngiiLeading to Extracellular Production of Superoxide Anion Radical. Archives of Biochemistry and Biophysics, 1997, 339, 190-199.	1.4	124
51	Engineering Platforms for Directed Evolution of Laccase from Pycnoporus cinnabarinus. Applied and Environmental Microbiology, 2012, 78, 1370-1384.	1.4	123
52	Role of Pycnoporus coccineus laccase in the degradation of aromatic compounds in olive oil mill wastewater. Enzyme and Microbial Technology, 2005, 36, 478-486.	1.6	122
53	Lignin Modification duringEucalyptus globulusKraft Pulping Followed by Totally Chlorine-Free Bleaching:Â A Two-Dimensional Nuclear Magnetic Resonance, Fourier Transform Infrared, and Pyrolysisâˆ’Gas Chromatography/Mass Spectrometry Study. Journal of Agricultural and Food Chemistry, 2007, 55, 3477-3490.	2.4	118
54	Induction, Isolation, and Characterization of Two Laccases from the White Rot Basidiomycete Coriolopsis rigida. Applied and Environmental Microbiology, 2002, 68, 1534-1540.	1.4	112

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55	Polymerization of lignosulfonates by the laccase-HBT (1-hydroxybenzotriazole) system improves dispersibility. Bioresource Technology, 2010, 101, 5054-5062.	4.8	112
56	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
57	Ligninolytic peroxidase genes in the oyster mushroom genome: heterologous expression, molecular structure, catalytic and stability properties, and lignin-degrading ability. Biotechnology for Biofuels, 2014, 7, 2.	6.2	107
58	The biotechnological control of pitch in paper pulp manufacturing. Trends in Biotechnology, 2001, 19, 340-348.	4.9	104
59	Exploring the enzymatic parameters for optimal delignification of eucalypt pulp by laccase-mediator. Enzyme and Microbial Technology, 2006, 39, 1319-1327.	1.6	104
60	Oxygen Activation during Oxidation of Methoxyhydroquinones by Laccase from <i>Pleurotus eryngii</i>. Applied and Environmental Microbiology, 2000, 66, 170-175.	1.4	102
61	Biochemical and molecular characterization of a manganese peroxidase isoenzyme from Pleurotus ostreatus. BBA - Proteins and Proteomics, 1997, 1339, 23-30.	2.1	100
62	Directed evolution of a temperature-, peroxide- and alkaline pH-tolerant versatile peroxidase. Biochemical Journal, 2012, 441, 487-498.	1.7	98
63	Production of Hydroxyl Radical by the Synergistic Action of Fungal Laccase and Aryl Alcohol Oxidase. Archives of Biochemistry and Biophysics, 2000, 383, 142-147.	1.4	96
64	<i>p</i>-Hydroxycinnamic Acids as Natural Mediators for Laccase Oxidation of Recalcitrant Compounds. Environmental Science & Technology, 2008, 42, 6703-6709.	4.6	96
65	Manganese Oxidation Site inPleurotus eryngiiVersatile Peroxidase:Â A Site-Directed Mutagenesis, Kinetic, and Crystallographic Studyâ€‚â€¡. Biochemistry, 2007, 46, 66-77.	1.2	95
66	A Tryptophan Neutral Radical in the Oxidized State of Versatile Peroxidase from Pleurotus eryngii. Journal of Biological Chemistry, 2006, 281, 9517-9526.	1.6	93
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	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
69	Preferential degradation of phenolic lignin units by two white rot fungi. Applied and Environmental Microbiology, 1994, 60, 4509-4516.	1.4	92
70	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
71	Microbial and enzymatic control of pitch in the pulp and paper industry. Applied Microbiology and Biotechnology, 2009, 82, 1005-1018.	1.7	91
72	The genome of the white-rot fungus Pycnoporus cinnabarinus: a basidiomycete model with a versatile arsenal for lignocellulosic biomass breakdown. BMC Genomics, 2014, 15, 486.	1.2	91

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73	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
74	Identifying acetylated lignin units in non-wood fibers using pyrolysis-gas chromatography/mass spectrometry. Rapid Communications in Mass Spectrometry, 2004, 18, 1181-1185.	0.7	88
75	Different fungal manganese-oxidizing peroxidases: a comparison between Bjerkandera sp. and Phanerochaete chrysosporium. Journal of Biotechnology, 2000, 77, 235-245.	1.9	87
76	Expression of Pleurotus eryngii versatile peroxidase in Escherichia coli and optimisation of in vitro folding. Enzyme and Microbial Technology, 2002, 30, 518-524.	1.6	86
77	A secretomic view of woody and nonwoody lignocellulose degradation by Pleurotus ostreatus. Biotechnology for Biofuels, 2016, 9, 49.	6.2	85
78	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
79	Catalytic surface radical in dye-decolorizing peroxidase: a computational, spectroscopic and site-directed mutagenesis study. Biochemical Journal, 2015, 466, 253-262.	1.7	84
80	Lignin depolymerization by fungal secretomes and a microbial sink. Green Chemistry, 2016, 18, 6046-6062.	4.6	84
81	Kinetics of wheat straw solid-state fermentation with Trametes versicolor and Pleurotus ostreatus ? lignin and polysaccharide alteration and production of related enzymatic activities. Applied Microbiology and Biotechnology, 1991, 35, 817.	1.7	83
82	Enzymatic grafting of simple phenols on flax and sisal pulp fibres using laccases. Bioresource Technology, 2010, 101, 8211-8216.	4.8	83
83	The two manganese peroxidases Pr-MnP2 and Pr-MnP3 of Phlebia radiata, a lignin-degrading basidiomycete, are phylogenetically and structurally divergent. Fungal Genetics and Biology, 2005, 42, 403-419.	0.9	81
84	Lignin-degrading Peroxidases from Genome of Selective Ligninolytic Fungus Ceriporiopsis subvermispora. Journal of Biological Chemistry, 2012, 287, 16903-16916.	1.6	81
85	Identification of residual lignin markers in eucalypt kraft pulps by Pyâ€“GC/MS. Journal of Analytical and Applied Pyrolysis, 2001, 58-59, 425-439.	2.6	79
86	Spectral and catalytic properties of aryl-alcohol oxidase, a fungal flavoenzyme acting on polyunsaturated alcohols. Biochemical Journal, 2005, 389, 731-738.	1.7	79
87	Oxyfunctionalization of aliphatic compounds by a recombinant peroxygenase from <i>Coprinopsis cinerea</i>. Biotechnology and Bioengineering, 2013, 110, 2323-2332.	1.7	77
88	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
89	Solid-state spectroscopic analysis of lignins from several Austral hardwoods. Solid State Nuclear Magnetic Resonance, 1999, 15, 41-48.	1.5	74
90	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

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91	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
92	Genomic Analysis Enlightens Agaricales Lifestyle Evolution and Increasing Peroxidase Diversity. Molecular Biology and Evolution, 2021, 38, 1428-1446.	3.5	72
93	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
94	Basidiomycete DyPs: Genomic diversity, structuralâ€“functional aspects, reaction mechanism and environmental significance. Archives of Biochemistry and Biophysics, 2015, 574, 66-74.	1.4	71
95	Pyâ€“GC/MS study of Eucalyptus globulus wood treated with different fungi. Journal of Analytical and Applied Pyrolysis, 2001, 58-59, 441-452.	2.6	70
96	Novel structural features in the GMC family of oxidoreductases revealed by the crystal structure of fungal aryl-alcohol oxidase. Acta Crystallographica Section D: Biological Crystallography, 2009, 65, 1196-1205.	2.5	70
97	Comparative study of fractions from alkaline extraction of wheat straw through chemical degradation, analytical pyrolysis, and spectroscopic techniques. Journal of Agricultural and Food Chemistry, 1993, 41, 1621-1626.	2.4	69
98	Production of New Unsaturated Lipids during Wood Decay by Ligninolytic Basidiomycetes. Applied and Environmental Microbiology, 2002, 68, 1344-1350.	1.4	69
99	Kinetic and chemical characterization of aldehyde oxidation by fungal aryl-alcohol oxidase. Biochemical Journal, 2010, 425, 585-593.	1.7	69
100	Chemical characterization of residual lignins from eucalypt paper pulps. Journal of Analytical and Applied Pyrolysis, 2005, 74, 116-122.	2.6	68
101	Ligninolytic peroxidase gene expression by Pleurotus ostreatus : Differential regulation in lignocellulose medium and effect of temperature and pH. Fungal Genetics and Biology, 2014, 72, 150-161.	0.9	68
102	Enhancing the Production of Hydroxyl Radicals by <i>Pleurotus eryngii</i> via Quinone Redox Cycling for Pollutant Removal. Applied and Environmental Microbiology, 2009, 75, 3954-3962.	1.4	67
103	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
104	Enhanced degradation of softwood versus hardwood by the white-rot fungus Pycnoporus coccineus. Biotechnology for Biofuels, 2015, 8, 216.	6.2	67
105	Description of the first fungal dye-decolorizing peroxidase oxidizing manganese(II). Applied Microbiology and Biotechnology, 2015, 99, 8927-8942.	1.7	66
106	Transformation of wheat straw in the course of solid-state fermentation by four ligninolytic basidiomycetes. Enzyme and Microbial Technology, 1999, 25, 605-612.	1.6	65
107	Site-Directed Mutagenesis of the Catalytic Tryptophan Environment in <i>Pleurotus eryngii</i> Versatile Peroxidase[,]. Biochemistry, 2008, 47, 1685-1695.	1.2	65
108	Two Oxidation Sites for Low Redox Potential Substrates. Journal of Biological Chemistry, 2012, 287, 41053-41067.	1.6	65

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109	Evolving thermostability in mutant libraries of ligninolytic oxidoreductases expressed in yeast. Microbial Cell Factories, 2010, 9, 17.	1.9	64
110	Lignin attack during eucalypt wood decay by selected basidiomycetes: a Py-GC/MS study. Journal of Analytical and Applied Pyrolysis, 2002, 64, 421-431.	2.6	63
111	Understanding lignin biodegradation for the improved utilization of plant biomass in modern biorefineries. Biofuels, Bioproducts and Biorefining, 2014, 8, 615-625.	1.9	63
112	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
113	Substrate diffusion and oxidation in GMC oxidoreductases: an experimental and computational study on fungal aryl-alcohol oxidase. Biochemical Journal, 2011, 436, 341-350.	1.7	62
114	Enzymatic deinking of secondary fibers: cellulases/hemicellulases versus laccase-mediator system. Journal of Industrial Microbiology and Biotechnology, 2012, 39, 1-9.	1.4	62
115	Studies on wheat lignin degradation by Pleurotus species using analytical pyrolysis. Journal of Analytical and Applied Pyrolysis, 2001, 58-59, 401-411.	2.6	61
116	Evolutionary convergence in lignin-degrading enzymes. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 6428-6433.	3.3	61
117	Hydrogen-peroxide-producing system ofPleurotus eryngii involving the extracellular enzyme aryl-alcohol oxidase. Applied Microbiology and Biotechnology, 1994, 41, 465-470.	1.7	60
118	Absolute quantitation of lignin pyrolysis products using an internal standard. Journal of Chromatography A, 1997, 773, 227-232.	1.8	60
119	Oxidation of hydroquinones by the versatile ligninolytic peroxidase fromPleurotus eryngii. FEBS Journal, 2001, 268, 4787-4793.	0.2	59
120	Lignin degradation and detoxification of eucalyptus wastes by on-site manufacturing fungal enzymes to enhance second-generation ethanol yield. Applied Energy, 2020, 262, 114493.	5.1	59
121	Optimization of a Laccase-Mediator Stage for TCF Bleaching of Flax Pulp. Holzforschung, 2003, 57, 513-519.	0.9	58
122	In vitro activation, purification, and characterization of Escherichia coli expressed aryl-alcohol oxidase, a unique H2O2-producing enzyme. Protein Expression and Purification, 2006, 45, 191-199.	0.6	57
123	An analytical pyrolysis mass spectrometric study of Eucryphia cordifolia wood decayed by white-rot and brown-rot fungi. Journal of Analytical and Applied Pyrolysis, 1991, 19, 175-191.	2.6	56
124	Pleurotus ostreatus heme peroxidases: An in silico analysis from the genome sequence to the enzyme molecular structure. Comptes Rendus - Biologies, 2011, 334, 795-805.	0.1	56
125	Re-designing the substrate binding pocket of laccase for enhanced oxidation of sinapic acid. Catalysis Science and Technology, 2016, 6, 3900-3910.	2.1	56
126	Hyphal-sheath polysaccharides in fungal deterioration. Science of the Total Environment, 1995, 167, 315-328.	3.9	55

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127	The cloning of a new peroxidase found in lignocellulose cultures ofPleurotus eryngiiand sequence comparison with other fungal peroxidases. FEMS Microbiology Letters, 2000, 191, 37-43.	0.7	55
128	Protein Radicals in Fungal Versatile Peroxidase. Journal of Biological Chemistry, 2009, 284, 7986-7994.	1.6	55
129	Insights into Laccase Engineering from Molecular Simulations: Toward a Binding-Focused Strategy. Journal of Physical Chemistry Letters, 2015, 6, 1447-1453.	2.1	55
130	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
131	Computer-Aided Laccase Engineering: Toward Biological Oxidation of Arylamines. ACS Catalysis, 2016, 6, 5415-5423.	5.5	54
132	Modulating Fatty Acid Epoxidation vs Hydroxylation in a Fungal Peroxygenase. ACS Catalysis, 2019, 9, 6234-6242.	5.5	54
133	Substrate-dependent degradation patterns in the decay of wheat straw and beech wood by ligninolytic fungi. Applied Microbiology and Biotechnology, 1990, 33, 481.	1.7	53
134	Isolation of two laccase genes from the white-rot fungus Pleurotus eryngii and heterologous expression of the pel3 encoded protein. Journal of Biotechnology, 2008, 134, 9-19.	1.9	53
135	Aryl-alcohol Oxidase Involved in Lignin Degradation. Journal of Biological Chemistry, 2009, 284, 24840-24847.	1.6	53
136	A survey of genes encoding H2O2-producing GMC oxidoreductases in 10 Polyporales genomes. Mycologia, 2015, 107, 1105-1119.	0.8	53
137	Delignification and Saccharification Enhancement of Sugarcane Byproducts by a Laccase-Based Pretreatment. ACS Sustainable Chemistry and Engineering, 2017, 5, 7145-7154.	3.2	53
138	Crystallographic, Kinetic, and Spectroscopic Study of the First Ligninolytic Peroxidase Presenting a Catalytic Tyrosine. Journal of Biological Chemistry, 2011, 286, 15525-15534.	1.6	52
139	Laccase-Mediator Pretreatment of Wheat Straw Degrades Lignin and Improves Saccharification. Bioenergy Research, 2016, 9, 917-930.	2.2	52
140	Role of Active Site Histidines in the Two Half-Reactions of the Aryl-Alcohol Oxidase Catalytic Cycle. Biochemistry, 2012, 51, 6595-6608.	1.2	51
141	Sugar recoveries from wheat straw following treatments with the fungus Irpex lacteus. Bioresource Technology, 2013, 131, 218-225.	4.8	51
142	Fungal Degradation of Lipophilic Extractives in Eucalyptus globulus Wood. Applied and Environmental Microbiology, 1999, 65, 1367-1371.	1.4	51
143	Aryl-alcohol oxidase protein sequence: a comparison with glucose oxidase and other FAD oxidoreductases. BBA - Proteins and Proteomics, 2000, 1481, 202-208.	2.1	50
144	Complete oxidation of hydroxymethylfurfural to furandicarboxylic acid by aryl-alcohol oxidase. Biotechnology for Biofuels, 2019, 12, 217.	6.2	50

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145	A study of yeasts during the delignification and fungal transformation of wood into cattle feed in Chilean rain forest. Antonie Van Leeuwenhoek, 1989, 55, 221-236.	0.7	49
146	CPMAS carbon-13 NMR study of lignin preparations from wheat straw transformed by five lignocellulose-degrading fungi. Journal of Agricultural and Food Chemistry, 1992, 40, 1297-1302.	2.4	49
147	Self-sustained enzymatic cascade for the production of 2,5-furandicarboxylic acid from 5-methoxymethylfurfural. Biotechnology for Biofuels, 2018, 11, 86.	6.2	49
148	Immobilization of<i>pycnoporus coccineus</i>laccase on Eupergit C: Stabilization and treatment of olive oil mill wastewaters. Biocatalysis and Biotransformation, 2007, 25, 130-134.	1.1	48
149	Stereoselective Hydride Transfer by Arylâ€Alcohol Oxidase, a Member of the GMC Superfamily. ChemBioChem, 2012, 13, 427-435.	1.3	48
150	Rational Enzyme Engineering Through Biophysical and Biochemical Modeling. ACS Catalysis, 2016, 6, 1624-1629.	5.5	48
151	Solid-State NMR Studies of Lignin and Plant Polysaccharide Degradation by Fungi. Holzforschung, 1991, 45, 49-54.	0.9	47
152	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
153	Peroxidase evolution in white-rot fungi follows wood lignin evolution in plants. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 17900-17905.	3.3	47
154	Production, isolation and characterization of a sterol esterase from Ophiostoma piceae. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2002, 1599, 28-35.	1.1	46
155	Modulating O2 Reactivity in a Fungal Flavoenzyme. Journal of Biological Chemistry, 2011, 286, 41105-41114.	1.6	46
156	Engineering a fungal peroxidase that degrades lignin at very acidic pH. Biotechnology for Biofuels, 2014, 7, 114.	6.2	46
157	Understanding Pulp Delignification by Laccaseâ€“Mediator Systems through Isolation and Characterization of Ligninâ€“Carbohydrate Complexes. Biomacromolecules, 2013, 14, 3073-3080.	2.6	44
158	Gene family expansions and transcriptome signatures uncover fungal adaptations to wood decay. Environmental Microbiology, 2021, 23, 5716-5732.	1.8	44
159	Pyrolysis-gas chromatography/Mass spectrometry analysis of phenolic and etherified units in natural and industrial lignins. Rapid Communications in Mass Spectrometry, 1999, 13, 630-636.	0.7	43
160	Influence of organic co-solvents on the activity and substrate specificity of feruloyl esterases. Bioresource Technology, 2011, 102, 4962-4967.	4.8	43
161	From Alkanes to Carboxylic Acids: Terminal Oxygenation by a Fungal Peroxygenase. Angewandte Chemie - International Edition, 2016, 55, 12248-12251.	7.2	43
162	Two New Unspecific Peroxygenases from Heterologous Expression of Fungal Genes in Escherichia coli. Applied and Environmental Microbiology, 2020, 86, .	1.4	43

#	ARTICLE	IF	CITATIONS
163	Time course of fungal removal of lipophilic extractives from Eucalyptus globulus wood. Journal of Biotechnology, 2000, 84, 119-126.	1.9	42
164	Biodeinking of flexographic inks by fungal laccases using synthetic and natural mediators. Biochemical Engineering Journal, 2012, 67, 97-103.	1.8	41
165	How to break down crystalline cellulose. Science, 2016, 352, 1050-1051.	6.0	41
166	Experimental recreation of the evolution of lignin-degrading enzymes from the Jurassic to date. Biotechnology for Biofuels, 2017, 10, 67.	6.2	41
167	Chemical transformation of wheat straw constituents after solid-state fermentation with selected lignocellulose-degrading fungi. Biomass and Bioenergy, 1991, 1, 261-266.	2.9	39
168	Improving the pH-stability of Versatile Peroxidase by Comparative Structural Analysis with a Naturally-Stable Manganese Peroxidase. PLoS ONE, 2015, 10, e0140984.	1.1	39
169	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
170	Advanced Synthesis of Conductive Polyaniline Using Laccase as Biocatalyst. PLoS ONE, 2016, 11, e0164958.	1.1	38
171	Focused Directed Evolution of Aryl-Alcohol Oxidase in Saccharomyces cerevisiae by Using Chimeric Signal Peptides. Applied and Environmental Microbiology, 2015, 81, 6451-6462.	1.4	37
172	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
173	Role of surface tryptophan for peroxidase oxidation of nonphenolic lignin. Biotechnology for Biofuels, 2016, 9, 198.	6.2	37
174	Fatty Acid Chain Shortening by a Fungal Peroxygenase. Chemistry - A European Journal, 2017, 23, 16985-16989.	1.7	37
175	A highly stable laccase obtained by swapping the second cupredoxin domain. Scientific Reports, 2018, 8, 15669.	1.6	37
176	Southern blot screening for lignin peroxidase and aryl-alcohol oxidase genes in 30 fungal species. Journal of Biotechnology, 2000, 83, 245-251.	1.9	36
177	New oxidase from Bjerkandera arthroconidial anamorph that oxidizes both phenolic and nonphenolic benzyl alcohols. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2009, 1794, 689-697.	1.1	36
178	Steroid Hydroxylation by Basidiomycete Peroxygenases: a Combined Experimental and Computational Study. Applied and Environmental Microbiology, 2015, 81, 4130-4142.	1.4	36
179	Engineering of a fungal laccase to develop a robust, versatile and highly-expressed biocatalyst for sustainable chemistry. Green Chemistry, 2019, 21, 5374-5385.	4.6	36
180	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

#	ARTICLE	IF	CITATIONS
181	Sequential oxidation of 5-hydroxymethylfurfural to furan-2,5-dicarboxylic acid by an evolved aryl-alcohol oxidase. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2020, 1868, 140293.	1.1	35
182	Improving the Oxidative Stability of a High Redox Potential Fungal Peroxidase by Rational Design. PLoS ONE, 2015, 10, e0124750.	1.1	34
183	Ultrastructural Aspects of Fungal Delignification of Chilean Woods by<i>Ganoderma australe</i>and<i>Phlebia chrysocrea.</i>A Study of Natural and<i>In Vitro</i>Degradation. Holzforschung, 1992, 46, 1-8.	0.9	33
184	Expression of Pleurotus eryngii aryl-alcohol oxidase in Aspergillus nidulans: purification and characterization of the recombinant enzyme. BBA - Proteins and Proteomics, 2001, 1546, 107-113.	2.1	33
185	Structural implications of the C-terminal tail in the catalytic and stability properties of manganese peroxidases from ligninolytic fungi. Acta Crystallographica Section D: Biological Crystallography, 2014, 70, 3253-3265.	2.5	33
186	Heterologous expression and physicochemical characterization of a fungal dye-decolorizing peroxidase from Auricularia auricula-judae. Protein Expression and Purification, 2014, 103, 28-37.	0.6	33
187	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
188	Conserved white-rot enzymatic mechanism for wood decay in the Basidiomycota genus <i>Pycnoporus</i>. DNA Research, 2020, 27, .	1.5	32
189	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
190	Structural Determinants of Oxidative Stabilization in an Evolved Versatile Peroxidase. ACS Catalysis, 2014, 4, 3891-3901.	5.5	31
191	Advances in enzymatic oxyfunctionalization of aliphatic compounds. Biotechnology Advances, 2021, 51, 107703.	6.0	31
192	Escherichia coli expression and in vitro activation of a unique ligninolytic peroxidase that has a catalytic tyrosine residue. Protein Expression and Purification, 2009, 68, 208-214.	0.6	30
193	EPR parameters of amino acid radicals in P. eryngii versatile peroxidase and its W164Y variant computed at the QM/MM level. Physical Chemistry Chemical Physics, 2011, 13, 5078.	1.3	30
194	Versatile peroxidase as a valuable tool for generating new biomolecules by homogeneous and heterogeneous cross-linking. Enzyme and Microbial Technology, 2013, 52, 303-311.	1.6	30
195	Demonstration of Lignin-to-Peroxidase Direct Electron Transfer. Journal of Biological Chemistry, 2015, 290, 23201-23213.	1.6	30
196	Fungal lignin peroxidase does not produce the veratryl alcohol cation radical as a diffusible ligninolytic oxidant. Journal of Biological Chemistry, 2018, 293, 4702-4712.	1.6	30
197	Contribution by pigmented fungi to P-type humic acid formation in two forest soils. Soil Biology and Biochemistry, 1989, 21, 23-28.	4.2	29
198	Matrix-assisted Laser Desorption/Ionization Mass Spectrometry of Natural and Synthetic Lignin. Rapid Communications in Mass Spectrometry, 1996, 10, 1144-1147.	0.7	29

#	Article	IF	Citations
199	Molecular cloning of aryl-alcohol oxidase from the fungus Pleurotus eryngii, an enzyme involved in lignin degradation. Biochemical Journal, 1999, 341, 113-117.	1.7	29
200	Biochemical characterization, cDNA cloning and protein crystallization of aryl-alcohol oxidase from Pleurotus pulmonarius. BBA - Proteins and Proteomics, 2000, 1476, 129-138.	2.1	29
201	Molecular determinants for selective C₂₅-hydroxylation of vitamins D₂and D₃by fungal peroxygenases. Catalysis Science and Technology, 2016, 6, 288-295.	2.1	29
202	Fatty acid epoxidation by<i>Collariella virescens</i>peroxygenase and heme-channel variants. Catalysis Science and Technology, 2020, 10, 717-725.	2.1	29
203	Electron and Fluorescence Microscopy of Extracellular Glucan and Aryl-Alcohol Oxidase during Wheat-Straw Degradation by <i>Pleurotus eryngii</i>. Applied and Environmental Microbiology, 1998, 64, 325-332.	1.4	28
204	Mapping the Long-Range Electron Transfer Route in Ligninolytic Peroxidases. Journal of Physical Chemistry B, 2017, 121, 3946-3954.	1.2	28
205	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
206	Studies on homoveratric acid transformation by the ligninolytic fungus Pleurotus eryngii. Applied Microbiology and Biotechnology, 1994, 41, 500-504.	1.7	27
207	Compositional changes of wheat lignin by a fungal peroxidase analyzed by pyrolysis-GC-MS. Journal of Analytical and Applied Pyrolysis, 2001, 58-59, 413-423.	2.6	27
208	Effect of pH on the stability of Pleurotus eryngii versatile peroxidase during heterologous production in Emericella nidulans. Bioprocess and Biosystems Engineering, 2004, 26, 287-293.	1.7	27
209	Structureâ€Guided Evolution of Aryl Alcohol Oxidase from Pleurotus eryngii for the Selective Oxidation of Secondary Benzyl Alcohols. Advanced Synthesis and Catalysis, 2019, 361, 2514.	2.1	27
210	Screening of yeasts isolated from decayed wood for lignocellulose-degrading enzyme activities. Mycological Research, 1991, 95, 1299-1302.	2.5	26
211	An anamorph of the white-rot fungus<i>Bjerkandera adusta</i>capable of colonizing and degrading compact disc components. FEMS Microbiology Letters, 2007, 275, 122-129.	0.7	26
212	Effect of culture temperature on the heterologous expression of Pleurotus eryngii versatile peroxidase in Aspergillus hosts. Bioprocess and Biosystems Engineering, 2009, 32, 129-134.	1.7	26
213	Selective Epoxidation of Fatty Acids and Fatty Acid Methyl Esters by Fungal Peroxygenases. ChemCatChem, 2018, 10, 3964-3968.	1.8	26
214	Selective synthesis of 4-hydroxyisophorone and 4-ketoisophorone by fungal peroxygenases. Catalysis Science and Technology, 2019, 9, 1398-1405.	2.1	26
215	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
216	Site-directed mutagenesis of selected residues at the active site of aryl-alcohol oxidase, an H2O2-producing ligninolytic enzyme. FEBS Journal, 2006, 273, 4878-4888.	2.2	25

#	Article	IF	Citations
217	Isolation and selection of novel basidiomycetes for decolorization of recalcitrant dyes. Folia Microbiologica, 2009, 54, 59-66.	1.1	25
218	Formation of a tyrosine adduct involved in lignin degradation by Trametopsis cervina lignin peroxidase: a novel peroxidase activation mechanism. Biochemical Journal, 2013, 452, 575-584.	1.7	25
219	Simulating Substrate Recognition and Oxidation in Laccases: From Description to Design. Journal of Chemical Theory and Computation, 2017, 13, 1462-1467.	2.3	25
220	Fatty-Acid Oxygenation by Fungal Peroxygenases: From Computational Simulations to Preparative Regio- and Stereoselective Epoxidation. ACS Catalysis, 2020, 10, 13584-13595.	5.5	25
221	Production of brown and green humic-like substances by Ulocladium atrum. Soil Biology and Biochemistry, 1985, 17, 257-259.	4.2	24
222	NMR study of manganese(II) binding by a new versatile peroxidase from the white-rot fungus Pleurotus eryngii. Journal of Biological Inorganic Chemistry, 2003, 8, 751-760.	1.1	24
223	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
224	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
225	In vitro decay of Aextoxicon punctatum and Fagus sylvatica woods by white and brown-rot fungi. Wood Science and Technology, 1993, 27, 295-307.	1.4	23
226	Regioselective Hydroxylation in the Production of 25â€Hydroxyvitaminâ€...D by <i>Coprinopsis cinerea</i> Peroxygenase. ChemCatChem, 2015, 7, 283-290.	1.8	23
227	Syringyl-type simple plant phenolics as mediating oxidants in laccase catalyzed degradation of lignocellulosic materials: Model compound studies 10th EWLP, Stockholm, Sweden, August 25â€“28, 2008. Holzforschung, 2009, 63, .	0.9	22
228	Aromatic stacking interactions govern catalysis in arylâ€alcohol oxidase. FEBS Journal, 2015, 282, 3091-3106.	2.2	22
229	Binding and Catalytic Mechanisms of Veratryl Alcohol Oxidation by Lignin Peroxidase: A Theoretical and Experimental Study. Computational and Structural Biotechnology Journal, 2019, 17, 1066-1074.	1.9	22
230	Fungal screening for biological removal of extractives from <i>Eucalyptus globulus</i> wood. Canadian Journal of Botany, 1999, 77, 1513-1522.	1.2	22
231	p-Hydroxyphenyl:Guaiacyl:Syringyl Ratio of Lignin in Some Austral Hardwoods Estimated by CuO-Oxidation and Solid-State NMR. Holzforschung, 1991, 45, 279-284.	0.9	21
232	Study of a sterol esterase secreted by Ophiostoma piceae: Sequence, model and biochemical properties. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2009, 1794, 1099-1106.	1.1	21
233	Alkaline versatile peroxidase by directed evolution. Catalysis Science and Technology, 2016, 6, 6625-6636.	2.1	21
234	Description of a Non-Canonical Mn(II)-Oxidation Site in Peroxidases. ACS Catalysis, 2018, 8, 8386-8395.	5.5	21

#	Article	IF	Citations
235	Structural insights on laccase biografting of ferulic acid onto lignocellulosic fibers. Biochemical Engineering Journal, 2014, 86, 16-23.	1.8	20
236	Protein dynamics promote hydride tunnelling in substrate oxidation by aryl-alcohol oxidase. Physical Chemistry Chemical Physics, 2017, 19, 28666-28675.	1.3	20
237	Screening and Evaluation of New Hydroxymethylfurfural Oxidases for Furandicarboxylic Acid Production. Applied and Environmental Microbiology, 2020, 86, .	1.4	20
238	Comparing Ligninolytic Capabilities of Bacterial and Fungal Dye-Decolorizing Peroxidases and Class-II Peroxidase-Catalases. International Journal of Molecular Sciences, 2021, 22, 2629.	1.8	20
239	Fatty acid composition and taxonomic status of Ganoderma australe from southern chile. Mycological Research, 1991, 95, 782-784.	2.5	19
240	Molecular cloning of aryl-alcohol oxidase from the fungus Pleurotus eryngii, an enzyme involved in lignin degradation. Biochemical Journal, 1999, 341, 113.	1.7	19
241	Delignification of eucalypt kraft pulp with manganese-substituted polyoxometalate assisted by fungal versatile peroxidase. Bioresource Technology, 2010, 101, 5935-5940.	4.8	19
242	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
243	Draft genome sequence of a monokaryotic model brown-rot fungus Postia (Rhodonia) placenta SB12. Genomics Data, 2017, 14, 21-23.	1.3	19
244	Pyrolysis products as markers in the chemical characterization of paperboards from waste paper and wheat straw pulps. Bioresource Technology, 1997, 60, 51-58.	4.8	18
245	Demonstration ofIn Situ Oxidative Degradation of Lignin Side Chains by Two White-rot Fungi Using Analytical Pyrolysis of Methylated Wheat Straw. Rapid Communications in Mass Spectrometry, 1997, 11, 331-334.	0.7	18
246	Influence of operation conditions on laccase-mediator removal of sterols from eucalypt pulp. Process Biochemistry, 2009, 44, 1032-1038.	1.8	18
247	Wood and humus decay strategies by white-rot basidiomycetes correlate with two different dye decolorization and enzyme secretion patterns on agar plates. Fungal Genetics and Biology, 2014, 72, 106-114.	0.9	18
248	A new versatile peroxidase from Pleurotus. Biochemical Society Transactions, 2001, 29, 116-22.	1.6	18
249	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
250	Asymmetric sulfoxidation by engineering the heme pocket of a dye-decolorizing peroxidase. Catalysis Science and Technology, 2016, 6, 6277-6285.	2.1	17
251	A Sustainable Approach of Enzymatic Grafting onEucalyptus globulusWood by Laccase from the Newly Isolated White-Rot BasidiomyceteMarasmiellus palmivorusVE111. ACS Sustainable Chemistry and Engineering, 2019, 7, 13418-13424.	3.2	17
252	Structural and biochemical insights into an engineered high-redox potential laccase overproduced in Aspergillus. International Journal of Biological Macromolecules, 2019, 141, 855-867.	3.6	17

#	Article	IF	Citations
253	Switching the substrate preference of fungal aryl-alcohol oxidase: towards stereoselective oxidation of secondary benzyl alcohols. Catalysis Science and Technology, 2019, 9, 833-841.	2.1	17
254	New Insights on Structures Forming the Lignin-Like Fractions of Ancestral Plants. Frontiers in Plant Science, 2021, 12, 740923.	1.7	17
255	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
256	Search, engineering, and applications of new oxidative biocatalysts. Biofuels, Bioproducts and Biorefining, 2014, 8, 819-835.	1.9	16
257	Redox-Active Sites in <i>Auricularia auricula-judae</i> Dye-Decolorizing Peroxidase and Several Directed Variants: A Multifrequency EPR Study. Journal of Physical Chemistry B, 2015, 119, 13583-13592.	1.2	16
258	Increase of Redox Potential during the Evolution of Enzymes Degrading Recalcitrant Lignin. Chemistry - A European Journal, 2019, 25, 2708-2712.	1.7	16
259	Genome sequencing of Rigidoporus microporus provides insights on genes important for wood decay, latex tolerance and interspecific fungal interactions. Scientific Reports, 2020, 10, 5250.	1.6	16
260	High Epoxidation Yields of Vegetable Oil Hydrolyzates and Methyl Esters by Selected Fungal Peroxygenases. Frontiers in Bioengineering and Biotechnology, 2020, 8, 605854.	2.0	16
261	Flax pulp bleaching and residual lignin modification by laccase-mediator systems* *This work has been funded by the Spanish project 2FD97-0896-C02-02 and the EU project QLK3-99-590.. Progress in Biotechnology, 2002, , 213-222.	0.2	15
262	Multiple implications of an active site phenylalanine in the catalysis of aryl-alcohol oxidase. Scientific Reports, 2018, 8, 8121.	1.6	15
263	Penicillium fagi sp. nov., isolated from beech leaves. Mycopathologia, 1978, 63, 57-59.	1.3	14
264	Comparative analysis of wheat straw paperboards prepared after biomechanical and semichemical pulping. Bioresource Technology, 1996, 57, 217-227.	4.8	14
265	From Alkanes to Carboxylic Acids: Terminal Oxygenation by a Fungal Peroxygenase. Angewandte Chemie, 2016, 128, 12436-12439.	1.6	14
266	Fungal bioturbation paths in a compact disk. Die Naturwissenschaften, 2001, 88, 351-354.	0.6	13
267	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
268	Unveiling the basis of alkaline stability of an evolved versatile peroxidase. Biochemical Journal, 2016, 473, 1917-1928.	1.7	13
269	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
270	Selective Oxygenation of Ionones and Damascones by Fungal Peroxygenases. Journal of Agricultural and Food Chemistry, 2020, 68, 5375-5383.	2.4	13

#	Article	IF	Citations
271	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
272	Early-stage sustainability assessment of enzyme production in the framework of lignocellulosic biorefinery. Journal of Cleaner Production, 2021, 285, 125461.	4.6	12
273	Agaricales Mushroom Lignin Peroxidase: From Structureâ€"Function to Degradative Capabilities. Antioxidants, 2021, 10, 1446.	2.2	12
274	High Redox Potential Peroxidases. , 2007, , 477-488.		12
275	Reaction mechanisms and applications of aryl-alcohol oxidase. The Enzymes, 2020, 47, 167-192.	0.7	12
276	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
277	Stepwise Hydrogen Atom and Proton Transfers in Dioxygen Reduction by Aryl-Alcohol Oxidase. Biochemistry, 2018, 57, 1790-1797.	1.2	10
278	Gene cloning, heterologous expression,<i>in vitro</i>reconstitution and catalytic properties of a versatile peroxidase. Biocatalysis and Biotransformation, 2007, 25, 276-285.	1.1	9
279	Fungal Aryl-Alcohol Oxidase in Lignocellulose Degradation and Bioconversion. Biofuel and Biorefinery Technologies, 2016, , 301-322.	0.1	9
280	A Multiomic Approach to Understand How Pleurotus eryngii Transforms Non-Woody Lignocellulosic Material. Journal of Fungi (Basel, Switzerland), 2021, 7, 426.	1.5	9
281	Three new species of penicillium. Mycopathologia, 1978, 66, 77-82.	1.3	8
282	Four new species of Penicillium isolated from different substrata. Mycopathologia, 1981, 74, 163-171.	1.3	8
283	Scanning electron microscopy of Penicillium conidia. Antonie Van Leeuwenhoek, 1982, 48, 245-255.	0.7	8
284	Microscopy studies reveal delignification and sterol removal from eucalypt kraft pulps by laccaseâ€"HBT. Biocatalysis and Biotransformation, 2007, 25, 251-259.	1.1	8
285	Bioelectrochemical investigations of aryl-alcohol oxidase from Pleurotus eryngii. Journal of Electroanalytical Chemistry, 2008, 618, 83-86.	1.9	8
286	Regioselective and Stereoselective Epoxidation of n-3 and n-6 Fatty Acids by Fungal Peroxygenases. Antioxidants, 2021, 10, 1888.	2.2	8
287	Enzymatic Epoxidation of Long-Chain Terminal Alkenes by Fungal Peroxygenases. Antioxidants, 2022, 11, 522.	2.2	8
288	Microfungal biomass and number of propagules in an andosol. Soil Biology and Biochemistry, 1978, 10, 529-531.	4.2	7

#	Article	IF	Citations
289	Some new species of Penicillium recovered from the atmosphere in Madrid and from other substrata. Mycopathologia, 1980, 72, 181-191.	1.3	7
290	Degradative oxidation products of the melanin of Ulocladium atrum. Soil Biology and Biochemistry, 1985, 17, 723-726.	4.2	7
291	Production of lipolytic enzymes in batch cultures ofOphiostoma piceae. Journal of Chemical Technology and Biotechnology, 2001, 76, 991-996.	1.6	7
292	Cloning, Overexpression in Escherichia coli, and Characterization of a Thermostable Fungal Acetylxylan Esterase from Talaromyces emersonii. Applied and Environmental Microbiology, 2012, 78, 3759-3762.	1.4	7
293	Structural Characterization of Two Short Unspecific Peroxygenases: Two Different Dimeric Arrangements. Antioxidants, 2022, 11, 891.	2.2	7
294	Fungal screening for biological removal of extractives from Eucalyptus globulus wood. Canadian Journal of Botany, 2000, 77, 1513-1522.	1.2	6
295	Different fungal peroxidases oxidize nitrophenols at a surface catalytic tryptophan. Archives of Biochemistry and Biophysics, 2019, 668, 23-28.	1.4	6
296	Optimizing operational parameters for the enzymatic production of furandicarboxylic acid building block. Microbial Cell Factories, 2021, 20, 180.	1.9	6
297	Rhizosphaera oudemansii (Sphaeropsidales) associated with a needle cast of Spanish Abies pinsapo. Mycopathologia, 1983, 83, 175-182.	1.3	5
298	Extracellular (1 Ã¥ 3),(1 â†' 6)-linked Î²-d-glucan produced by the soil fungus Ulocladium atrum. Soil Biology and Biochemistry, 1986, 18, 469-474.	4.2	5
299	Changes in the polydispersity of colloidal lignins by ligninolytic basidiomycetes. Journal of Biotechnology, 1992, 25, 333-339.	1.9	5
300	Use of analytical pyrolysis for the characterization of paper industry effluents. Analytica Chimica Acta, 1996, 335, 245-251.	2.6	5
301	Purification and characterization of peroxidases from the dye-decolorizing fungus Bjerkandera adusta. , 0, .		5
302	A new Botryoascus from the air of a poultry farm. Canadian Journal of Botany, 1990, 68, 1738-1740.	1.2	4
303	Four new species of Penicillium isolated from the air. Mycopathologia, 1980, 72, 27-34.	1.3	3
304	A 13C CP/MAS NMR evaluation of the structural changes in wheat straw subjected to different chemical and biological pulping conditions. Bioresource Technology, 1997, 60, 245-249.	4.8	3
305	Fungi and Their Enzymes for Pitch Control in the Pulp and Paper Industry. , 2011, , 357-377.		3
306	Lignin-degrading peroxidases from genome of selective ligninolytic fungus Ceriporiopsis subvermispora.. Journal of Biological Chemistry, 2012, 287, 41744.	1.6	2

#	Article	IF	Citations
307	Novel Fatty Acid Chain-Shortening by Fungal Peroxygenases Yielding 2C-Shorter Dicarboxylic Acids. Antioxidants, 2022, 11, 744.	2.2	2
308	Engineering Collariella virescens Peroxygenase for Epoxides Production from Vegetable Oil. Antioxidants, 2022, 11, 915.	2.2	2
309	Taxonomic relationships of Geotrichum flavo-brunneum. Antonie Van Leeuwenhoek, 1982, 48, 57-59.	0.7	0
310	Computational Modeling Methods for Understanding the Interaction of Lignin and Its Derivatives with Oxidoreductases as Biocatalysts. , 2018, , .		0