

# Martin Hofrichter

## List of Publications by Citations

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179 papers	9,389 citations	54 h-index	90 g-index
194 ext. papers	10,508 ext. citations	4.9 avg, IF	6.25 L-index

#	Paper	IF	Citations
179	Review: lignin conversion by manganese peroxidase (MnP). <i>Enzyme and Microbial Technology</i> , <b>2002</b> , 30, 454-466	3.8	643
178	New and classic families of secreted fungal heme peroxidases. <i>Applied Microbiology and Biotechnology</i> , <b>2010</b> , 87, 871-97	5.7	435
177	Fungal laccase: properties and activity on lignin. <i>Journal of Basic Microbiology</i> , <b>2001</b> , 41, 185-227	2.7	412
176	Biodegradation of lignin by white rot fungi. <i>Fungal Genetics and Biology</i> , <b>1999</b> , 27, 175-85	3.9	315
175	Enzymatic hydroxylation of aromatic compounds. <i>Cellular and Molecular Life Sciences</i> , <b>2007</b> , 64, 271-93	10.3	251
174	Novel haloperoxidase from the agaric basidiomycete <i>Agrocybe aegerita</i> oxidizes aryl alcohols and aldehydes. <i>Applied and Environmental Microbiology</i> , <b>2004</b> , 70, 4575-81	4.8	234
173	Heme-thiolate haloperoxidases: versatile biocatalysts with biotechnological and environmental significance. <i>Applied Microbiology and Biotechnology</i> , <b>2006</b> , 71, 276-88	5.7	186
172	Life in leaf litter: novel insights into community dynamics of bacteria and fungi during litter decomposition. <i>Molecular Ecology</i> , <b>2016</b> , 25, 4059-74	5.7	173
171	Oxidations catalyzed by fungal peroxygenases. <i>Current Opinion in Chemical Biology</i> , <b>2014</b> , 19, 116-25	9.7	171
170	Oxidoreductases on their way to industrial biotransformations. <i>Biotechnology Advances</i> , <b>2017</b> , 35, 815-831	11.8	150
169	DyP-like peroxidases of the jelly fungus <i>Auricularia auricula-judae</i> oxidize nonphenolic lignin model compounds and high-redox potential dyes. <i>Applied Microbiology and Biotechnology</i> , <b>2010</b> , 85, 1869-79	5.7	141
168	Production of lignocellulose-degrading enzymes and degradation of leaf litter by saprotrophic basidiomycetes isolated from a <i>Quercus petraea</i> forest. <i>Soil Biology and Biochemistry</i> , <b>2007</b> , 39, 2651-2660	7.5	134
167	Enzymatic Combustion of Aromatic and Aliphatic Compounds by Manganese Peroxidase from <i>Nematoloma frowardii</i> . <i>Applied and Environmental Microbiology</i> , <b>1998</b> , 64, 399-404	4.8	130
166	Production of manganese peroxidase and organic acids and mineralization of <sup>14</sup> C-labelled lignin (14C-DHP) during solid-state fermentation of wheat straw with the white rot fungus <i>nematoloma frowardii</i> . <i>Applied and Environmental Microbiology</i> , <b>1999</b> , 65, 1864-70	4.8	125
165	Degradation of humic acids by the litter-decomposing basidiomycete <i>Collybia dryophila</i> . <i>Applied and Environmental Microbiology</i> , <b>2002</b> , 68, 3442-8	4.8	122
164	Directed evolution of unspecific peroxygenase from <i>Agrocybe aegerita</i> . <i>Applied and Environmental Microbiology</i> , <b>2014</b> , 80, 3496-507	4.8	114
163	Kinetics of the enzymatic decolorization of textile dyes by laccase from <i>Cerrena unicolor</i> . <i>Dyes and Pigments</i> , <b>2008</b> , 77, 295-302	4.6	106

162	5-hydroxymethylfurfural conversion by fungal aryl-alcohol oxidase and unspecific peroxygenase. <i>FEBS Journal</i> , <b>2015</b> , 282, 3218-29	5.7	105
161	Specific photobiocatalytic oxyfunctionalization reactions. <i>Angewandte Chemie - International Edition</i> , <b>2011</b> , 50, 10716-9	16.4	105
160	Detection and kinetic characterization of a highly reactive heme-thiolate peroxygenase compound I. <i>Journal of the American Chemical Society</i> , <b>2012</b> , 134, 12897-900	16.4	103
159	Patterns of lignin degradation and oxidative enzyme secretion by different wood- and litter-colonizing basidiomycetes and ascomycetes grown on beech-wood. <i>FEMS Microbiology Ecology</i> , <b>2011</b> , 78, 91-102	4.3	103
158	Selective hydroxylation of alkanes by an extracellular fungal peroxygenase. <i>FEBS Journal</i> , <b>2011</b> , 278, 3667-75	5.7	98
157	Peroxygenase-Catalyzed Oxyfunctionalization Reactions Promoted by the Complete Oxidation of Methanol. <i>Angewandte Chemie - International Edition</i> , <b>2016</b> , 55, 798-801	16.4	96
156	Structural basis of substrate conversion in a new aromatic peroxygenase: cytochrome P450 functionality with benefits. <i>Journal of Biological Chemistry</i> , <b>2013</b> , 288, 34767-76	5.4	95
155	Conversion of milled pine wood by manganese peroxidase from <i>Phlebia radiata</i> . <i>Applied and Environmental Microbiology</i> , <b>2001</b> , 67, 4588-93	4.8	94
154	The coprophilous mushroom <i>Coprinus radians</i> secretes a haloperoxidase that catalyzes aromatic peroxygenation. <i>Applied and Environmental Microbiology</i> , <b>2007</b> , 73, 5477-85	4.8	93
153	The haloperoxidase of the agaric fungus <i>Agrocybe aegerita</i> hydroxylates toluene and naphthalene. <i>FEBS Letters</i> , <b>2005</b> , 579, 6247-50	3.8	93
152	Molecular characterization of aromatic peroxygenase from <i>Agrocybe aegerita</i> . <i>Applied Microbiology and Biotechnology</i> , <b>2009</b> , 84, 885-97	5.7	92
151	Degradation of benzo[a]pyrene by the litter-decomposing basidiomycete <i>Stropharia coronilla</i> : role of manganese peroxidase. <i>Applied and Environmental Microbiology</i> , <b>2003</b> , 69, 3957-64	4.8	91
150	Wood decay rates of 13 temperate tree species in relation to wood properties, enzyme activities and organismic diversities. <i>Forest Ecology and Management</i> , <b>2017</b> , 391, 86-95	3.9	86
149	Coupling of manganese peroxidase-mediated lipid peroxidation with destruction of nonphenolic lignin model compounds and <sup>14</sup> C-labeled lignins. <i>Biochemical and Biophysical Research Communications</i> , <b>1999</b> , 259, 212-9	3.4	86
148	Substrate oxidation by dye-decolorizing peroxidases (DyPs) from wood- and litter-degrading agaricomycetes compared to other fungal and plant heme-peroxidases. <i>Applied Microbiology and Biotechnology</i> , <b>2013</b> , 97, 5839-49	5.7	83
147	The white-rot fungus <i>Cerrena unicolor</i> strain 137 produces two laccase isoforms with different physico-chemical and catalytic properties. <i>Applied Microbiology and Biotechnology</i> , <b>2006</b> , 69, 682-8	5.7	83
146	Linking molecular deadwood-inhabiting fungal diversity and community dynamics to ecosystem functions and processes in Central European forests. <i>Fungal Diversity</i> , <b>2016</b> , 77, 367-379	17.6	82
145	Stereoselective benzylic hydroxylation of alkylbenzenes and epoxidation of styrene derivatives catalyzed by the peroxygenase of <i>Agrocybe aegerita</i> . <i>Green Chemistry</i> , <b>2012</b> , 14, 440-446	10	82

144	Fungal unspecific peroxygenases: heme-thiolate proteins that combine peroxidase and cytochrome p450 properties. <i>Advances in Experimental Medicine and Biology</i> , <b>2015</b> , 851, 341-68	3.6	81
143	Degradation of polycyclic aromatic hydrocarbons by manganese peroxidase of <i>Nematoloma frowardii</i> . <i>FEMS Microbiology Letters</i> , <b>1997</b> , 152, 227-34	2.9	81
142	Oxidative cleavage of diverse ethers by an extracellular fungal peroxygenase. <i>Journal of Biological Chemistry</i> , <b>2009</b> , 284, 29343-9	5.4	79
141	Laccase from the medicinal mushroom <i>Agaricus blazei</i> : production, purification and characterization. <i>Applied Microbiology and Biotechnology</i> , <b>2005</b> , 67, 357-63	5.7	78
140	Enhancement of bioconversion of high-molecular mass polycyclic aromatic hydrocarbons in contaminated non-sterile soil by litter-decomposing fungi. <i>Biodegradation</i> , <b>2007</b> , 18, 359-69	4.1	75
139	First crystal structure of a fungal high-redox potential dye-decolorizing peroxidase: substrate interaction sites and long-range electron transfer. <i>Journal of Biological Chemistry</i> , <b>2013</b> , 288, 4095-102	5.4	72
138	Widespread occurrence of expressed fungal secretory peroxidases in forest soils. <i>PLoS ONE</i> , <b>2014</b> , 9, e95557	3.7	71
137	High-yield production of aromatic peroxygenase by the agaric fungus <i>Marasmius rotula</i> . <i>AMB Express</i> , <b>2011</b> , 1, 31	4.1	71
136	Pyridine as novel substrate for regioselective oxygenation with aromatic peroxygenase from <i>Agrocybe aegerita</i> . <i>FEBS Letters</i> , <b>2008</b> , 582, 4100-6	3.8	67
135	Hydroxylation of naphthalene by aromatic peroxygenase from <i>Agrocybe aegerita</i> proceeds via oxygen transfer from H <sub>2</sub> O <sub>2</sub> and intermediary epoxidation. <i>Applied Microbiology and Biotechnology</i> , <b>2009</b> , 81, 1071-6	5.7	66
134	Conversion of dibenzothiophene by the mushrooms <i>Agrocybe aegerita</i> and <i>Coprinellus radians</i> and their extracellular peroxygenases. <i>Applied Microbiology and Biotechnology</i> , <b>2009</b> , 82, 1057-66	5.7	65
133	Conversion of polycyclic aromatic hydrocarbons, methyl naphthalenes and dibenzofuran by two fungal peroxygenases. <i>Biodegradation</i> , <b>2010</b> , 21, 267-81	4.1	64
132	Synthesis of 1-Naphthol by a Natural Peroxygenase Engineered by Directed Evolution. <i>ChemBioChem</i> , <b>2016</b> , 17, 341-9	3.8	64
131	Regioselective oxygenation of fatty acids, fatty alcohols and other aliphatic compounds by a basidiomycete heme-thiolate peroxidase. <i>Archives of Biochemistry and Biophysics</i> , <b>2011</b> , 514, 33-43	4.1	62
130	Transformation and mineralization of 2,4,6-trinitrotoluene (TNT) by manganese peroxidase from the white-rot basidiomycete <i>Phlebia radiata</i> . <i>Biodegradation</i> , <b>1999</b> , 10, 83-91	4.1	62
129	Heme-thiolate ferryl of aromatic peroxygenase is basic and reactive. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2015</b> , 112, 3686-91	11.5	61
128	Preparation of human drug metabolites using fungal peroxygenases. <i>Biochemical Pharmacology</i> , <b>2011</b> , 82, 789-96	6	57
127	Production, purification and partial enzymatic and molecular characterization of a laccase from the wood-rotting ascomycete <i>Xylaria polymorpha</i> . <i>Enzyme and Microbial Technology</i> , <b>2007</b> , 41, 785-793	3.8	57

126	Oxidation of PAH and PAH-derivatives by fungal and plant oxidoreductases. <i>Journal of Basic Microbiology</i> , <b>1998</b> , 38, 113-122	2.7	56
125	Regioselective preparation of (R)-2-(4-hydroxyphenoxy)propionic acid with a fungal peroxygenase. <i>Tetrahedron Letters</i> , <b>2008</b> , 49, 5950-5953	2	53
124	Regioselective preparation of 5-hydroxypropranolol and 4Shydroxydiclofenac with a fungal peroxygenase. <i>Bioorganic and Medicinal Chemistry Letters</i> , <b>2009</b> , 19, 3085-7	2.9	52
123	Unspecific degradation of halogenated phenols by the soil fungus <i>Penicillium frequentans</i> Bi 7/2. <i>Journal of Basic Microbiology</i> , <b>1994</b> , 34, 163-72	2.7	51
122	Epoxidation of linear, branched and cyclic alkenes catalyzed by unspecific peroxygenase. <i>Enzyme and Microbial Technology</i> , <b>2013</b> , 52, 370-6	3.8	50
121	Enzymatic Preparation of 2,5-Furandicarboxylic Acid (FDCA)-A Substitute of Terephthalic Acid-By the Joined Action of Three Fungal Enzymes. <i>Microorganisms</i> , <b>2018</b> , 6,	4.9	49
120	Crystallization of a 45 kDa peroxygenase/peroxidase from the mushroom <i>Agrocybe aegerita</i> and structure determination by SAD utilizing only the haem iron. <i>Acta Crystallographica Section F: Structural Biology Communications</i> , <b>2010</b> , 66, 693-8		49
119	Purification and characterization of manganese peroxidases from the litter-decomposing basidiomycetes <i>Agrocybe praecox</i> and <i>Stropharia coronilla</i> . <i>Enzyme and Microbial Technology</i> , <b>2002</b> , 30, 550-555	3.8	48
118	Stepwise oxygenations of toluene and 4-nitrotoluene by a fungal peroxygenase. <i>Biochemical and Biophysical Research Communications</i> , <b>2010</b> , 397, 18-21	3.4	47
117	Selective Synthesis of the Human Drug Metabolite 5?-Hydroxypropranolol by an Evolved Self-Sufficient Peroxygenase. <i>ACS Catalysis</i> , <b>2018</b> , 8, 4789-4799	13.1	46
116	Driving force for oxygen-atom transfer by heme-thiolate enzymes. <i>Angewandte Chemie - International Edition</i> , <b>2013</b> , 52, 9238-41	16.4	45
115	A Peroxygenase from <i>Chaetomium globosum</i> Catalyzes the Selective Oxygenation of Testosterone. <i>ChemBioChem</i> , <b>2017</b> , 18, 563-569	3.8	44
114	Uncoupling of microbial community structure and function in decomposing litter across beech forest ecosystems in Central Europe. <i>Scientific Reports</i> , <b>2014</b> , 4, 7014	4.9	42
113	Influence of different forest system management practices on leaf litter decomposition rates, nutrient dynamics and the activity of ligninolytic enzymes: a case study from central European forests. <i>PLoS ONE</i> , <b>2014</b> , 9, e93700	3.7	42
112	Specific Photobiocatalytic Oxyfunctionalization Reactions. <i>Angewandte Chemie</i> , <b>2011</b> , 123, 10904-10907	3.6	40
111	Phenol oxidation by DyP-type peroxidases in comparison to fungal and plant peroxidases. <i>Journal of Molecular Catalysis B: Enzymatic</i> , <b>2014</b> , 103, 41-46		39
110	Spectrophotometric assay for detection of aromatic hydroxylation catalyzed by fungal haloperoxidase-peroxygenase. <i>Applied Microbiology and Biotechnology</i> , <b>2007</b> , 75, 1473-8	5.7	39
109	Fungal Unspecific Peroxygenases Oxidize the Majority of Organic EPA Priority Pollutants. <i>Frontiers in Microbiology</i> , <b>2017</b> , 8, 1463	5.7	38

108	Transformation of <sup>14</sup> C-labelled lignin and humic substances in forest soil by the saprobic basidiomycetes <i>Gymnopus erythropus</i> and <i>Hypholoma fasciculare</i> . <i>Soil Biology and Biochemistry</i> , <b>2010</b> , 42, 1541-1548	7.5	38
107	Influence of Pb contamination in boreal forest soil on the growth and ligninolytic activity of litter-decomposing fungi. <i>FEMS Microbiology Ecology</i> , <b>2005</b> , 53, 179-86	4.3	38
106	Effects of forest management practices in temperate beech forests on bacterial and fungal communities involved in leaf litter degradation. <i>Microbial Ecology</i> , <b>2015</b> , 69, 905-13	4.4	35
105	Self-sustained enzymatic cascade for the production of 2,5-furandicarboxylic acid from 5-methoxymethylfurfural. <i>Biotechnology for Biofuels</i> , <b>2018</b> , 11, 86	7.8	35
104	Purification of homogeneous forms of fungal peroxygenase. <i>Biotechnology Journal</i> , <b>2009</b> , 4, 1619-26	5.6	35
103	Conversion of aminonitrotoluenes by fungal manganese peroxidase. <i>Journal of Basic Microbiology</i> , <b>1998</b> , 38, 51-59	2.7	35
102	Metabolism of phenol, chloro- and nitrophenols by the <i>Penicillium</i> strain Bi 7/2 isolated from a contaminated soil. <i>Biodegradation</i> , <b>1993</b> , 3, 415	4.1	35
101	The genome sequence of the commercially cultivated mushroom <i>Agrocybe aegerita</i> reveals a conserved repertoire of fruiting-related genes and a versatile suite of biopolymer-degrading enzymes. <i>BMC Genomics</i> , <b>2018</b> , 19, 48	4.5	34
100	Enzymatic one-pot conversion of cyclohexane into cyclohexanone: Comparison of four fungal peroxygenases. <i>Journal of Molecular Catalysis B: Enzymatic</i> , <b>2014</b> , 103, 47-51		34
99	Fungal biomass and extracellular enzyme activities in coarse woody debris of 13 tree species in the early phase of decomposition. <i>Forest Ecology and Management</i> , <b>2016</b> , 378, 181-192	3.9	33
98	A heme peroxidase of the ascomyceteous lichen <i>Leptogium saturninum</i> oxidizes high-redox potential substrates. <i>Fungal Genetics and Biology</i> , <b>2011</b> , 48, 1139-45	3.9	33
97	Regioselective hydroxylation of diverse flavonoids by an aromatic peroxygenase. <i>Tetrahedron</i> , <b>2011</b> , 67, 4874-4878	2.4	33
96	Molecular characterization of the basidiomycete isolate <i>Nematoloma frowardii</i> b19 and its manganese peroxidase places the fungus in the corticioid genus <i>Phlebia</i> . <i>Microbiology (United Kingdom)</i> , <b>2008</b> , 154, 2371-2379	2.9	33
95	Molecular fungal community and its decomposition activity in sapwood and heartwood of 13 temperate European tree species. <i>PLoS ONE</i> , <b>2019</b> , 14, e0212120	3.7	32
94	Benzene oxygenation and oxidation by the peroxygenase of <i>Agrocybe aegerita</i> . <i>AMB Express</i> , <b>2013</b> , 3, 5	4.1	32
93	Fungal Peroxygenases: A Phylogenetically Old Superfamily of Heme Enzymes with Promiscuity for Oxygen Transfer Reactions. <i>Grand Challenges in Biology and Biotechnology</i> , <b>2020</b> , 369-403	2.4	32
92	Exploring the catalase activity of unspecific peroxygenases and the mechanism of peroxide-dependent heme destruction. <i>Journal of Molecular Catalysis B: Enzymatic</i> , <b>2016</b> , 134, 238-246		31
91	Dynamics of fungal community composition, decomposition and resulting deadwood properties in logs of <i>Fagus sylvatica</i> , <i>Picea abies</i> and <i>Pinus sylvestris</i> . <i>Forest Ecology and Management</i> , <b>2016</b> , 382, 129-142	3.0	31



90	Are correlations between deadwood fungal community structure, wood physico-chemical properties and lignin-modifying enzymes stable across different geographical regions?. <i>Fungal Ecology</i> , <b>2016</b> , 22, 98-105	4.1	31
89	Oxidative cleavage of non-phenolic E0-4 lignin model dimers by an extracellular aromatic peroxygenase. <i>Holzforschung</i> , <b>2011</b> , 65,	2	31
88	Heterologous expression and physicochemical characterization of a fungal dye-decolorizing peroxidase from <i>Auricularia auricula-judae</i> . <i>Protein Expression and Purification</i> , <b>2014</b> , 103, 28-37	2	30
87	The toolbox of <i>Auricularia auricula-judae</i> dye-decolorizing peroxidase - Identification of three new potential substrate-interaction sites. <i>Archives of Biochemistry and Biophysics</i> , <b>2015</b> , 574, 75-85	4.1	30
86	Involvement of lipid peroxidation in the degradation of a non-phenolic lignin model compound by manganese peroxidase of the litter-decomposing fungus <i>Stropharia coronilla</i> . <i>Biochemical and Biophysical Research Communications</i> , <b>2005</b> , 330, 371-7	3.4	30
85	Peroxygenase-katalysierte Oxyfunktionalisierung angetrieben durch Methanoloxidation. <i>Angewandte Chemie</i> , <b>2016</b> , 128, 809-812	3.6	29
84	Fatty Acid Chain Shortening by a Fungal Peroxygenase. <i>Chemistry - A European Journal</i> , <b>2017</b> , 23, 16985-16989	1.9	28
83	Fate of bisphenol A during treatment with the litter-decomposing fungi <i>Stropharia rugosoannulata</i> and <i>Stropharia coronilla</i> . <i>Chemosphere</i> , <b>2011</b> , 83, 226-32	8.4	28
82	Molecular determinants for selective C25-hydroxylation of vitamins D2 and D3 by fungal peroxygenases. <i>Catalysis Science and Technology</i> , <b>2016</b> , 6, 288-295	5.5	27
81	The secretome of <i>Trametes versicolor</i> grown on tomato juice medium and purification of the secreted oxidoreductases including a versatile peroxidase. <i>Journal of Biotechnology</i> , <b>2013</b> , 168, 15-23	3.7	27
80	Steroid hydroxylation by basidiomycete peroxygenases: a combined experimental and computational study. <i>Applied and Environmental Microbiology</i> , <b>2015</b> , 81, 4130-42	4.8	27
79	The wood rot ascomycete <i>Xylaria polymorpha</i> produces a novel GH78 glycoside hydrolase that exhibits $\beta$ -rhamnosidase and feruloyl esterase activities and releases hydroxycinnamic acids from lignocelluloses. <i>Applied and Environmental Microbiology</i> , <b>2012</b> , 78, 4893-901	4.8	27
78	Manganese Peroxidase and Its Role in the Degradation of Wood Lignin. <i>ACS Symposium Series</i> , <b>2003</b> , 230-243	0.4	27
77	Bacteria inhabiting deadwood of 13 tree species are heterogeneously distributed between sapwood and heartwood. <i>Environmental Microbiology</i> , <b>2018</b> , 20, 3744-3756	5.2	26
76	Depolymerization and solubilization of chemically pretreated powder river basin subbituminous coal by manganese peroxidase (MnP) from <i>Bjerkandera adusta</i> . <i>Fuel</i> , <b>2013</b> , 112, 295-301	7.1	26
75	Trophic level, successional age and trait matching determine specialization of deadwood-based interaction networks of saproxylic beetles. <i>Proceedings of the Royal Society B: Biological Sciences</i> , <b>2017</b> , 284,	4.4	25
74	Modification of humic acids by the compost-dwelling deuteromycete <i>Paecilomyces inflatus</i> . <i>Applied Microbiology and Biotechnology</i> , <b>2005</b> , 66, 443-9	5.7	25
73	Determinants of Deadwood-Inhabiting Fungal Communities in Temperate Forests: Molecular Evidence From a Large Scale Deadwood Decomposition Experiment. <i>Frontiers in Microbiology</i> , <b>2018</b> , 9, 2120	5.7	25

72	Structural Insights into the Substrate Promiscuity of a Laboratory-Evolved Peroxygenase. <i>ACS Chemical Biology</i> , <b>2018</b> , 13, 3259-3268	4.9	25
71	Radical formation on a conserved tyrosine residue is crucial for DyP activity. <i>Archives of Biochemistry and Biophysics</i> , <b>2013</b> , 537, 161-7	4.1	23
70	Aerobic Degradation by Microorganisms <b>2008</b> , 144-167		23
69	Side chain removal from corticosteroids by unspecific peroxxygenase. <i>Journal of Inorganic Biochemistry</i> , <b>2018</b> , 183, 84-93	4.2	22
68	Degradation of atrazine by <i>Frankia alni</i> ACN14a: gene regulation, dealkylation, and dechlorination. <i>Applied Microbiology and Biotechnology</i> , <b>2014</b> , 98, 6125-35	5.7	22
67	Degradation and enzymatic activities of three <i>Paecilomyces inflatus</i> strains grown on diverse lignocellulosic substrates. <i>International Biodeterioration and Biodegradation</i> , <b>2007</b> , 59, 283-291	4.8	22
66	Depolymerization of Straw Lignin by Manganese Peroxidase from <i>Nematoloma frowardii</i> is Accompanied by Release of Carbon Dioxide. <i>Holzforschung</i> , <b>1999</b> , 53, 161-166	2	22
65	Selective synthesis of 4-hydroxyisophorone and 4-ketoisophorone by fungal peroxxygenases. <i>Catalysis Science and Technology</i> , <b>2019</b> , 9, 1398-1405	5.5	21
64	Selective synthesis of the resveratrol analogue 4,4'-dihydroxy-trans-stilbene and stilbenoids modification by fungal peroxxygenases. <i>Catalysis Science and Technology</i> , <b>2018</b> , 8, 2394-2401	5.5	21
63	Degradation of humic acids by manganese peroxidase from the white-rot fungus <i>Clitocybula dusenii</i> . <i>Journal of Basic Microbiology</i> , <b>1998</b> , 38, 289-299	2.7	21
62	Aerobic Degradation of Recalcitrant Organic Compounds by Microorganisms <b>2005</b> , 203-227		21
61	One-pot synthesis of human metabolites of SAR548304 by fungal peroxxygenases. <i>Bioorganic and Medicinal Chemistry</i> , <b>2015</b> , 23, 4324-4332	3.4	20
60	Immobilization of unspecific peroxxygenases (EC 1.11.2.1) in PVA/PEG gel and hollow fiber modules. <i>Biochemical Engineering Journal</i> , <b>2015</b> , 98, 144-150	4.2	20
59	Degradation of 4-nitrophenol by the white-rot polypore <i>Trametes versicolor</i> . <i>International Biodeterioration and Biodegradation</i> , <b>2016</b> , 107, 174-179	4.8	19
58	A spectrophotometric assay for the detection of fungal peroxxygenases. <i>Analytical Biochemistry</i> , <b>2012</b> , 421, 327-9	3.1	19
57	Degradation of phenanthrene and pyrene by <i>Nematoloma frowardii</i> . <i>Journal of Basic Microbiology</i> , <b>1997</b> , 37, 287-93	2.7	18
56	Utilization of aromatic compounds by the <i>Penicillium</i> strain Bi 7/2. <i>Journal of Basic Microbiology</i> , <b>1993</b> , 33, 227-32	2.7	18
55	Patterns of laccase and peroxidases in coarse woody debris of <i>Fagus sylvatica</i> , <i>Picea abies</i> and <i>Pinus sylvestris</i> and their relation to different wood parameters. <i>European Journal of Forest Research</i> , <b>2016</b> , 135, 109-124	2.7	16



54	Peroxygenase based sensor for aromatic compounds. <i>Biosensors and Bioelectronics</i> , <b>2010</b> , 26, 1432-6	11.8	16
53	Cometabolic degradation of o-cresol and 2,6-dimethylphenol by <i>Penicillium frequentans</i> Bi 7/2. <i>Journal of Basic Microbiology</i> , <b>1995</b> , 35, 303-13	2.7	16
52	Increasing N deposition impacts neither diversity nor functions of deadwood-inhabiting fungal communities, but adaptation and functional redundancy ensure ecosystem function. <i>Environmental Microbiology</i> , <b>2018</b> , 20, 1693-1710	5.2	15
51	Search, engineering, and applications of new oxidative biocatalysts. <i>Biofuels, Bioproducts and Biorefining</i> , <b>2014</b> , 8, 819-835	5.3	15
50	Biochemical and molecular characterization of an atypical manganese peroxidase of the litter-decomposing fungus <i>Agrocybe praecox</i> . <i>Fungal Genetics and Biology</i> , <b>2014</b> , 72, 131-136	3.9	15
49	Bioelectrocatalytic properties of <i>Agrocybe aegerita</i> peroxygenase. <i>Electrochimica Acta</i> , <b>2010</b> , 55, 7809-7813	6.7	15
48	Transformation of difluorinated phenols by <i>Penicillium frequentans</i> Bi 7/2. <i>Biodegradation</i> , <b>1997</b> , 8, 379-85	4.1	14
47	Aerobic Degradation by Microorganisms <b>2001</b> , 144-167		14
46	Preparation of labeled human drug metabolites and drug-drug interaction-probes with fungal peroxygenases. <i>Journal of Labelled Compounds and Radiopharmaceuticals</i> , <b>2013</b> , 56, 513-9	1.9	13
45	Fatty-Acid Oxygenation by Fungal Peroxygenases: From Computational Simulations to Preparative Regio- and Stereoselective Epoxidation. <i>ACS Catalysis</i> , <b>2020</b> , 10, 13584-13595	13.1	13
44	Genome and secretome of <i>Chondrostereum purpureum</i> correspond to saprotrophic and phytopathogenic life styles. <i>PLoS ONE</i> , <b>2019</b> , 14, e0212769	3.7	11
43	Oxidation and nitration of mononitrophenols by a DyP-type peroxidase. <i>Archives of Biochemistry and Biophysics</i> , <b>2015</b> , 574, 86-92	4.1	11
42	The aromatic peroxygenase from <i>Marasmius rutola</i> --a new enzyme for biosensor applications. <i>Analytical and Bioanalytical Chemistry</i> , <b>2012</b> , 402, 405-12	4.4	11
41	Can peroxygenase and microperoxidase substitute cytochrome P450 in biosensors. <i>Bioanalytical Reviews</i> , <b>2011</b> , 3, 67-94	1	9
40	Removal of Phenol by Immobilization of <i>Trametes versicolor</i> in Silica-Alginate-Bungus Biocomposites and Loofa Sponge. <i>Clean - Soil, Air, Water</i> , <b>2016</b> , 44, 180-188	1.6	9
39	Draft Genome Sequence of the Sordariomycete () CBS 245.38. <i>Genome Announcements</i> , <b>2018</b> , 6,		8
38	Direct electron transfer of <i>Agrocybe aegerita</i> peroxygenase at electrodes modified with chitosan-capped Au nanoparticles and its bioelectrocatalysis to aniline. <i>Sensors and Actuators B: Chemical</i> , <b>2011</b> , 160, 1419-1426	8.5	8
37	Endoglucanase Activity of Compost-Dwelling Fungus <i>Paecilomyces inflatus</i> is Stimulated by Humic Acids and Other Low Molecular Mass Aromatics. <i>World Journal of Microbiology and Biotechnology</i> , <b>2005</b> , 21, 1603-1609	4.4	8

36	Draft Genome Sequence of the Chloroperoxidase-Producing Fungus <i>Caldariomyces fumago</i> Woronichin DSM1256. <i>Genome Announcements</i> , <b>2016</b> , 4,		7
35	Experimental approach to follow the spatiotemporal wood degradation in fungal microcosms. <i>Biotechnology Journal</i> , <b>2013</b> , 8, 127-32	5.6	7
34	Multilocus phylogeny- and fruiting feature-assisted delimitation of European from a new Asian species complex and related species. <i>Mycological Progress</i> , <b>2020</b> , 19, 1001-1016	1.9	7
33	Directed evolution of unspecific peroxygenase in organic solvents. <i>Biotechnology and Bioengineering</i> , <b>2021</b> , 118, 3002-3014	4.9	7
32	Biodegradation of Humic Substances <b>2001</b> ,		7
31	Formation of naphthalene hydrates in the enzymatic conversion of 1,2-dihydronaphthalene by two fungal peroxygenases and subsequent naphthalene formation. <i>Journal of Molecular Catalysis B: Enzymatic</i> , <b>2014</b> , 103, 56-60		6
30	Driving Force for Oxygen-Atom Transfer by Heme-Thiolate Enzymes. <i>Angewandte Chemie</i> , <b>2013</b> , 125, 9408-9411	3.6	6
29	Peroxide-Mediated Oxygenation of Organic Compounds by Fungal Peroxygenases.. <i>Antioxidants</i> , <b>2022</b> , 11,	7.1	6
28	Opening the s-triazine ring and biuret hydrolysis during conversion of atrazine by <i>Frankia</i> sp. strain Eul1c. <i>International Biodeterioration and Biodegradation</i> , <b>2017</b> , 117, 14-21	4.8	5
27	Selective Oxygenation of Ionones and Damascones by Fungal Peroxygenases. <i>Journal of Agricultural and Food Chemistry</i> , <b>2020</b> , 68, 5375-5383	5.7	5
26	New Trends in Fungal Biooxidation <b>2011</b> , 425-449		4
25	Regioselective and Stereoselective Epoxidation of n-3 and n-6 Fatty Acids by Fungal Peroxygenases.. <i>Antioxidants</i> , <b>2021</b> , 10,	7.1	4
24	Functional Expression of Two Unusual Acidic Peroxygenases from in Yeasts by Adopting Evolved Secretion Mutations. <i>Applied and Environmental Microbiology</i> , <b>2021</b> , 87, e0087821	4.8	4
23	The ascomycete <i>Xylaria polymorpha</i> produces an acetyl esterase that solubilises beech wood material to release water-soluble lignin fragments <b>2015</b> , 58, 415-421		3
22	Optimization of a biocatalytic process to gain (R)-1-phenylethanol by applying the software tool Sabento for ecological assessment during the early stages of development. <i>Journal of Molecular Catalysis B: Enzymatic</i> , <b>2014</b> , 103, 36-40		3
21	Fungal Degradation of Explosives <b>2000</b> ,		3
20	Amplicon Sequencing-Based Bipartite Network Analysis Confirms a High Degree of Specialization and Modularity for Fungi and Prokaryotes in Deadwood. <i>MSphere</i> , <b>2021</b> , 6,	5	3
19	Draft Genome Sequence of the Wood-Degrading Ascomycete DSM 104547. <i>Genome Announcements</i> , <b>2017</b> , 5,		2

18	Broadening the Biocatalytic Toolbox-Screening and Expression of New Unspecific Peroxygenases.. <i>Antioxidants</i> , <b>2022</b> , 11,	7.1	2
17	Bioremediation of Oil and Oil Products Bacterial Species of the Genus <i>Pseudomonas</i> . <i>Eurasian Chemico-Technological Journal</i> , <b>2015</b> , 12, 157	0.8	2
16	Draft Genome Sequence of DSM 108379, a Ubiquitous Fungus on Hardwood. <i>Microbiology Resource Announcements</i> , <b>2019</b> , 8,	1.3	2
15	Fungal Peroxygenases [A Versatile Tool for Biocatalysis <b>2021</b> , 260-280		2
14	Draft Genome Sequence of <i>Scytalidium lignicola</i> DSM 105466, a Ubiquitous Saprotrophic Fungus. <i>Microbiology Resource Announcements</i> , <b>2018</b> , 7,	1.3	2
13	Draft Genome Sequence of the Wood-Staining Ascomycete DSM 107184. <i>Microbiology Resource Announcements</i> , <b>2019</b> , 8,	1.3	1
12	Unspezifische Peroxygenasen [Oxyfunktionalisierung außerhalb der Pilzhyphe. <i>BioSpektrum</i> , <b>2020</b> , 26, 103-106	0.1	1
11	Regio- and Stereoselective Hydroxylation <b>2012</b> , 129-162		1
10	Enzymatische Umsetzung von Arsenkampfstoffen durch das Pilzenzym Mangan-Peroxidase. <i>Environmental Sciences Europe</i> , <b>2003</b> , 15, 224		1
9	Synthesis of Indigo-Dyes from Indole Derivatives by Unspecific Peroxygenases and Their Application for In-Situ Dyeing. <i>Catalysts</i> , <b>2021</b> , 11, 1495	4	1
8	Biotechnology of Coal <b>2001</b> , 152-189		1
7	Biocatalytic Syntheses of Antiplatelet Metabolites of the Thienopyridines Clopidogrel and Prasugrel Using Fungal Peroxygenases. <i>Journal of Fungi (Basel, Switzerland)</i> , <b>2021</b> , 7,	5.6	1
6	Enzymatic Epoxidation of Long-Chain Terminal Alkenes by Fungal Peroxygenases.. <i>Antioxidants</i> , <b>2022</b> , 11,	7.1	1
5	Disentangling the importance of space and host tree for the beta-diversity of beetles, fungi, and bacteria: Lessons from a large dead-wood experiment. <i>Biological Conservation</i> , <b>2022</b> , 268, 109521	6.2	1
4	Biotechnology of Coal <b>2008</b> , 152-189		0
3	Die moderne Biotechnologie am Beispiel des Einsatzes von Pilzen <b>2010</b> , 723-742		
2	Can peroxygenase and microperoxidase substitute cytochrome P450 in biosensors <b>2013</b> , 197-224		
1	Bioconversion of Lignocellulosic Materials with the Contribution of a Multifunctional GH78 Glycoside Hydrolase from to Release Aromatic Fragments and Carbohydrates. <i>Journal of Microbiology and Biotechnology</i> , <b>2021</b> , 31, 1438-1445	3.3	

