Kenneth E Hammel

List of Publications by Year
in descending order

72 papers	7,072 citations	44069 48 h-index	82547 72 g-index
73 all docs	73 docs citations	73 times ranked	5041 citing authors

#	Article	IF	Citations
1	Lignin lags, leads, or limits the decomposition of litter and soil organic carbon. Ecology, 2020, 101, e03113.	3.2	44
2	Enrichment of Lignin-Derived Carbon in Mineral-Associated Soil Organic Matter. Environmental Science & Technology, 2019, 53, 7522-7531.	10.0	63
3	Fungal lignin peroxidase does not produce the veratryl alcohol cation radical as a diffusible ligninolytic oxidant. Journal of Biological Chemistry, 2018, 293, 4702-4712.	3.4	30
4	An optical method for carbon dioxide isotopes and mole fractions in small gas samples: Tracing microbial respiration from soil, litter, and lignin. Rapid Communications in Mass Spectrometry, 2017, 31, 1938-1946.	1.5	24
5	Iron addition to soil specifically stabilized lignin. Soil Biology and Biochemistry, 2016, 98, 95-98.	8.8	66
6	Construction of a genetic linkage map and analysis of quantitative trait loci associated with the agronomically important traits of Pleurotus eryngii. Fungal Genetics and Biology, 2016, 92, 50-64.	2.1	26
7	Localizing gene regulation reveals a staggered wood decay mechanism for the brown rot fungus <i>Postia placenta</i>. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 10968-10973.	7.1	160
8	Acridine Orange Indicates Early Oxidation of Wood Cell Walls by Fungi. PLoS ONE, 2016, 11, e0159715.	2.5	20
9	Basidiomycete DyPs: Genomic diversity, structuralâ€"functional aspects, reaction mechanism and environmental significance. Archives of Biochemistry and Biophysics, 2015, 574, 66-74.	3.0	71
10	Lignin decomposition is sustained under fluctuating redox conditions in humid tropical forest soils. Global Change Biology, 2015, 21, 2818-2828.	9.5	59
11	Regulation of Gene Expression during the Onset of Ligninolytic Oxidation by Phanerochaete chrysosporium on Spruce Wood. Applied and Environmental Microbiology, 2015, 81, 7802-7812.	3.1	58
12	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
13	A Highly Diastereoselective Oxidant Contributes to Ligninolysis by the White Rot Basidiomycete Ceriporiopsis subvermispora. Applied and Environmental Microbiology, 2014, 80, 7536-7544.	3.1	14
14	Spatial mapping of extracellular oxidant production by a white rot basidiomycete on wood reveals details of ligninolytic mechanism. Environmental Microbiology, 2013, 15, 956-966.	3.8	17
15	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.	3.7	25
16	Evidence from Serpula lacrymans that 2,5-Dimethoxyhydroquinone Is a Lignocellulolytic Agent of Divergent Brown Rot Basidiomycetes. Applied and Environmental Microbiology, 2013, 79, 2377-2383.	3.1	50
17	Lignin-degrading peroxidases from genome of selective ligninolytic fungus Ceriporiopsis subvermispora.. Journal of Biological Chemistry, 2012, 287, 41744.	3.4	2
18	Lignin-degrading Peroxidases from Genome of Selective Ligninolytic Fungus Ceriporiopsis subvermispora. Journal of Biological Chemistry, 2012, 287, 16903-16916.	3.4	81

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19	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.	7.1	259
20	Exploring new strategies for cellulosic biofuels production. Energy and Environmental Science, 2011, 4, 3820.	30.8	79
21	Fungal Biodegradation of Lignocelluloses. , 2011, , 319-340.		107
22	Multidimensional NMR analysis reveals truncated lignin structures in wood decayed by the brown rot basidiomycete <i>Postia placenta</i>. Environmental Microbiology, 2011, 13, 1091-1100.	3.8	131
23	Preparation of human drug metabolites using fungal peroxygenases. Biochemical Pharmacology, 2011, 82, 789-796.	4.4	66
24	Comparative evaluation of manganese peroxidase- and Mn(III)-initiated peroxidation of C18 unsaturated fatty acids by different methods. Enzyme and Microbial Technology, 2011, 49, 25-29.	3.2	9
25	Oxidative cleavage of non-phenolic Î²-O-4 lignin model dimers by an extracellular aromatic peroxygenase. Holzforschung, 2011, 65, .	1.9	35
26	Proteomic and Functional Analysis of the Cellulase System Expressed by Postia placenta during Brown Rot of Solid Wood. Applied and Environmental Microbiology, 2011, 77, 7933-7941.	3.1	46
27	Oxidizability of unsaturated fatty acids and of a non-phenolic lignin structure in the manganese peroxidase-dependent lipid peroxidation system. Enzyme and Microbial Technology, 2010, 46, 136-140.	3.2	33
28	Laccase and Its Role in Production of Extracellular Reactive Oxygen Species during Wood Decay by the Brown Rot Basidiomycete <i>Postia placenta</i>. Applied and Environmental Microbiology, 2010, 76, 2091-2097.	3.1	110
29	Stepwise oxygenations of toluene and 4-nitrotoluene by a fungal peroxygenase. Biochemical and Biophysical Research Communications, 2010, 397, 18-21.	2.1	51
30	Oxidative Cleavage of Diverse Ethers by an Extracellular Fungal Peroxygenase. Journal of Biological Chemistry, 2009, 284, 29343-29349.	3.4	86
31	Regioselective preparation of 5-hydroxypropranolol and 4â€²-hydroxydiclofenac with a fungal peroxygenase. Bioorganic and Medicinal Chemistry Letters, 2009, 19, 3085-3087.	2.2	59
32	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.	7.1	530
33	Regioselective preparation of (R)-2-(4-hydroxyphenoxy)propionic acid with a fungal peroxygenase. Tetrahedron Letters, 2008, 49, 5950-5953.	1.4	55
34	Evidence for cleavage of lignin by a brown rot basidiomycete. Environmental Microbiology, 2008, 10, 1844-1849.	3.8	232
35	Role of fungal peroxidases in biological ligninolysis. Current Opinion in Plant Biology, 2008, 11, 349-355.	7.1	337
36	Differential Expression in <i>Phanerochaete chrysosporium</i> of Membrane-Associated Proteins Relevant to Lignin Degradation. Applied and Environmental Microbiology, 2008, 74, 7252-7257.	3.1	46

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37	New Insights into the Ligninolytic Capability of a Wood Decay Ascomycete. Applied and Environmental Microbiology, 2007, 73, 6691-6694.	3.1	65
38	Chlorination of lignin by ubiquitous fungi has a likely role in global organochlorine production. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 3895-3900.	7.1	68
39	Fungal hydroquinones contribute to brown rot of wood. Environmental Microbiology, 2006, 8, 2214-2223.	3.8	127
40	Processive Endoglucanase Active in Crystalline Cellulose Hydrolysis by the Brown Rot Basidiomycete Gloeophyllum trabeum. Applied and Environmental Microbiology, 2005, 71, 2412-2417.	3.1	126
41	Differential Stress-Induced Regulation of Two Quinone Reductases in the Brown Rot Basidiomycete Gloeophyllum trabeum. Applied and Environmental Microbiology, 2004, 70, 324-331.	3.1	56
42	Chlorination and Cleavage of Lignin Structures by Fungal Chloroperoxidases. Applied and Environmental Microbiology, 2003, 69, 5015-5018.	3.1	69
43	An NADH:Quinone Oxidoreductase Active during Biodegradation by the Brown-Rot Basidiomycete Gloeophyllum trabeum. Applied and Environmental Microbiology, 2002, 68, 2699-2703.	3.1	102
44	Significant levels of extracellular reactive oxygen species produced by brown rot basidiomycetes on cellulose. FEBS Letters, 2002, 531, 483-488.	2.8	76
45	Reactive oxygen species as agents of wood decay by fungi. Enzyme and Microbial Technology, 2002, 30, 445-453.	3.2	345
46	Pathways for Extracellular Fenton Chemistry in the Brown Rot Basidiomycete Gloeophyllum trabeum. Applied and Environmental Microbiology, 2001, 67, 2705-2711.	3.1	201
47	Degradation of nonphenolic lignin by the laccase/1-hydroxybenzotriazole system. Journal of Biotechnology, 2000, 81, 179-188.	3.8	143
48	Biodegradative mechanism of the brown rot basidiomyceteGloeophyllum trabeum: evidence for an extracellular hydroquinone-driven fenton reaction. FEBS Letters, 1999, 446, 49-54.	2.8	246
49	Peroxyl radicals are potential agents of lignin biodegradation. FEBS Letters, 1999, 461, 115-119.	2.8	131
50	Selective Transition-Metal Catalysis of Oxygen Delignification. Using Water-Soluble Salts of Polyoxometalate (POM) Anions. Part II. Reactions of Î±-[SiVW_{11}O_{40}]^{5-}with Phenolic Lignin-Model Compounds. Holzforschung, 1998, 52, 311-318.	1.9	46
51	Rapid polyether cleavage via extracellular one-electron oxidation by a brown-rot basidiomycete. Proceedings of the National Academy of Sciences of the United States of America, 1998, 95, 10373-10377.	7.1	79
52	A new environmentally benign technology for transforming wood pulp into paper. Engineering polyoxometalates as catalysts for multiple processes. Journal of Molecular Catalysis A, 1997, 116, 59-84.	4.8	107
53	Mechanisms for Polycyclic Aromatic Hydrocarbon Degradation by Ligninolytic Fungi. Environmental Health Perspectives, 1995, 103, 41.	6.0	9
54	Oxidative degradation of non-phenolic lignin during lipid peroxidation by fungal manganese peroxidase. FEBS Letters, 1994, 354, 297-300.	2.8	190

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55	H2O2 Recycling during Oxidation of the Arylglycerol .beta.-Aryl Ether Lignin Structure by Lignin Peroxidase and Glyoxal Oxidase. Biochemistry, 1994, 33, 13349-13354.	2.5	82
56	Fungal degradation of recalcitrant nonphenolic lignin structures without lignin peroxidase.. Proceedings of the National Academy of Sciences of the United States of America, 1994, 91, 12794-12797.	7.1	67
57	Biosynthetic Pathway for Veratryl Alcohol in the Ligninolytic Fungus <i>Phanerochaete chrysosporium</i>. Applied and Environmental Microbiology, 1994, 60, 709-714.	3.1	101
58	Lipid Peroxidation by the Manganese Peroxidase of <i>Phanerochaete chrysosporium</i> Is the Basis for Phenanthrene Oxidation by the Intact Fungus. Applied and Environmental Microbiology, 1994, 60, 1956-1961.	3.1	174
59	Oxidative degradation of phenanthrene by the ligninolytic fungus Phanerochaete chrysosporium. Applied and Environmental Microbiology, 1992, 58, 1832-1838.	3.1	152
60	Ring fission of anthracene by a eukaryote.. Proceedings of the National Academy of Sciences of the United States of America, 1991, 88, 10605-10608.	7.1	140
61	Depolymerization of a synthetic lignin in vitro by lignin peroxidase. Enzyme and Microbial Technology, 1991, 13, 15-18.	3.2	177
62	Lignin degradation and lignin peroxidase production in cultures of Phanerochaete chrysosporium immobilized on porous ceramic supports. Enzyme and Microbial Technology, 1990, 12, 916-920.	3.2	32
63	[27] Lignin peroxidase from fungi: Phanerochaete chrysosporium. Methods in Enzymology, 1990, , 159-171.	1.0	39
64	Organopollutant degradation by ligninolytic fungi. Enzyme and Microbial Technology, 1989, 11, 776-777.	3.2	136
65	Biomimetic oxidation of nonphenolic lignin models by Mn(III): New observations on the oxidizability of guaiacyl and syringyl substructures. Archives of Biochemistry and Biophysics, 1989, 270, 404-409.	3.0	45
66	The oxidative 4-dechlorination of polychlorinated phenols is catalyzed by extracellular fungal lignin peroxidases. Biochemistry, 1988, 27, 6563-6568.	2.5	201
67	Substrate free radicals are intermediates in ligninase catalysis.. Proceedings of the National Academy of Sciences of the United States of America, 1986, 83, 3708-3712.	7.1	92
68	Evidence for a nickel-containing carbon monoxide dehydrogenase in Methanobrevibacter arboriphilicus. Journal of Bacteriology, 1984, 157, 975-978.	2.2	44
69	Carbon monoxide fixation into the carboxyl group of acetyl coenzyme A during autotrophic growth ofMethanobacterium. FEBS Letters, 1983, 152, 21-23.	2.8	86
70	Ferredoxin/flavoprotein-linked pathway for the reduction of thioredoxin.. Proceedings of the National Academy of Sciences of the United States of America, 1983, 80, 3681-3685.	7.1	40
71	Thioredoxin and ferredoxin-thioredoxin reductase activity occur in a fermentative bacterium. FEBS Letters, 1981, 130, 88-92.	2.8	11
72	Stimulation of dark CO2 fixation by ammonia in isolated mesophyll cells of Papaver somniferum L.. Plant and Cell Physiology, 1979, 20, 1523-1529.	3.1	36