Lene Lange

List of Publications by Year
in descending order

104 papers	2,618 citations	186265 28 h-index	243625 44 g-index
110 all docs	110 docs citations	110 times ranked	3360 citing authors

#	Article	IF	Citations
1	Microbial decomposition of keratin in natureâ€"a new hypothesis of industrial relevance. Applied Microbiology and Biotechnology, 2016, 100, 2083-2096.	3.6	191
2	The ectomycorrhizal fungus <i>Paxillus involutus</i> converts organic matter in plant litter using a trimmed brownâ€rot mechanism involving Fenton chemistry. Environmental Microbiology, 2012, 14, 1477-1487.	3.8	173
3	Beringian Paleoecology Inferred from Permafrost-Preserved Fungal DNA. Applied and Environmental Microbiology, 2005, 71, 1012-1017.	3.1	148
4	Classification of fungal and bacterial lytic polysaccharide monooxygenases. BMC Genomics, 2015, 16, 368.	2.8	84
5	Maximizing renewable hydrogen production from biomass in a bio/catalytic refinery. International Journal of Hydrogen Energy, 2007, 32, 4135-4141.	7.1	77
6	Function-Based Classification of Carbohydrate-Active Enzymes by Recognition of Short, Conserved Peptide Motifs. Applied and Environmental Microbiology, 2013, 79, 3380-3391.	3.1	65
7	Towards a molecular understanding of symbiont function: Identification of a fungal gene for the degradation of xylan in the fungus gardens of leaf-cutting ants. BMC Microbiology, 2008, 8, 40.	3.3	60
8	Peptide-based functional annotation of carbohydrate-active enzymes by conserved unique peptide patterns (CUPP). Biotechnology for Biofuels, 2019, 12, 102.	6.2	55
9	Cellulolytic potential of thermophilic species from four fungal orders. AMB Express, 2013, 3, 47.	3.0	54
10	Genome and secretome analyses provide insights into keratin decomposition by novel proteases from the non-pathogenic fungus Onygena corvina. Applied Microbiology and Biotechnology, 2015, 99, 9635-9649.	3.6	52
11	The fungal symbiont of Acromyrmex leaf-cutting ants expresses the full spectrum of genes to degrade cellulose and other plant cell wall polysaccharides. BMC Genomics, 2013, 14, 928.	2.8	47
12	The importance of fungi and mycology for addressing major global challenges. IMA Fungus, 2014, 5, 463-471.	3.8	46
13	Transcriptome of an entomophthoralean fungus (Pandora formicae) shows molecular machinery adjusted for successful host exploitation and transmission. Journal of Invertebrate Pathology, 2015, 128, 47-56.	3.2	42
14	Cellulase production by white-rot basidiomycetous fungi: solid-state versus submerged cultivation. Applied Microbiology and Biotechnology, 2018, 102, 5827-5839.	3.6	39
15	Several Genes Encoding Enzymes with the Same Activity Are Necessary for Aerobic Fungal Degradation of Cellulose in Nature. PLoS ONE, 2014, 9, e114138.	2.5	37
16	The importance of fungi and of mycology for a global development of the bioeconomy. IMA Fungus, 2012, 3, 87-92.	3.8	36
17	Origin of fungal biomass degrading enzymes: Evolution, diversity and function of enzymes of early lineage fungi. Fungal Biology Reviews, 2019, 33, 82-97.	4.7	36
18	Diversity of microbial carbohydrate-active enzymes in Danish anaerobic digesters fed with wastewater treatment sludge. Biotechnology for Biofuels, 2017, 10, 158.	6.2	35

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19	Fungiculture in Termites Is Associated with a Mycolytic Gut Bacterial Community. MSphere, 2019, 4, .	2.9	35
20	Conserved unique peptide patterns (CUPP) online platform: peptide-based functional annotation of carbohydrate active enzymes. Nucleic Acids Research, 2020, 48, W110-W115.	14.5	35
21	Aspergillus hancockii sp. nov., a biosynthetically talented fungus endemic to southeastern Australian soils. PLoS ONE, 2017, 12, e0170254.	2.5	35
22	Proteomic enzyme analysis of the marine fungus Paradendryphiella salina reveals alginate lyase as a minimal adaptation strategy for brown algae degradation. Scientific Reports, 2019, 9, 12338.	3.3	34
23	Root-inhabiting Olpidium species: The O. radicale complex. Transactions of the British Mycological Society, 1977, 69, 377-384.	0.6	33
24	Screening for cellulose and hemicellulose degrading enzymes from the fungal genus Ulocladium. International Biodeterioration and Biodegradation, 2009, 63, 484-489.	3.9	33
25	Enrichment of syngas-converting mixed microbial consortia for ethanol production and thermodynamics-based design of enrichment strategies. Biotechnology for Biofuels, 2018, 11, 198.	6.2	32
26	Using molecular techniques to identify new microbial biocatalysts. Trends in Biotechnology, 1998, 16, 265-272.	9.3	31
27	Enzyme Activities at Different Stages of Plant Biomass Decomposition in Three Species of Fungus-Growing Termites. Applied and Environmental Microbiology, 2018, 84, .	3.1	31
28	Secretome of fungus-infected aphids documents high pathogen activity and weak host response. Fungal Genetics and Biology, 2011, 48, 343-352.	2.1	30
29	Identification of a Î²-glucosidase from the Mucor circinelloides genome by peptide pattern recognition. Enzyme and Microbial Technology, 2014, 67, 47-52.	3.2	30
30	Enzymes of early-diverging, zoosporic fungi. Applied Microbiology and Biotechnology, 2019, 103, 6885-6902.	3.6	30
31	Advances in bio-nylon 5X: discovery of new lysine decarboxylases for the high-level production of cadaverine. Green Chemistry, 2020, 22, 8656-8668.	9.0	29
32	Zoosporogenesis in Pseudoperonospora cubensis, the causal agent of cucurbit downy mildew. Nordic Journal of Botany, 1989, 8, 497-504.	0.5	28
33	Microbial fungicides-the natural choice. Pest Management Science, 1993, 39, 155-160.	0.4	27
34	The zoospore ofOlpidium brassicae. Protoplasma, 1976, 90, 33-45.	2.1	25
35	Potentials and possible safety issues of using biorefinery products in food value chains. Trends in Food Science and Technology, 2019, 84, 7-11.	15.1	25
36	Metagenomic analysis of a keratin-degrading bacterial consortium provides insight into the keratinolytic mechanisms. Science of the Total Environment, 2021, 761, 143281.	8.0	25

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37	Enzyme Enhanced Protein Recovery from Green Biomass Pulp. Waste and Biomass Valorization, 2017, 8, 1257-1264.	3.4	24
38	The prominent role of fungi and fungal enzymes in the antâ€“fungus biomass conversion symbiosis. Applied Microbiology and Biotechnology, 2014, 98, 4839-4851.	3.6	23
39	Cellulose and hemicellulose-degrading enzymes in Fusarium commune transcriptome and functional characterization of three identified xylanases. Enzyme and Microbial Technology, 2015, 73-74, 9-19.	3.2	22
40	A New Functional Classification of Glucuronoyl Esterases by Peptide Pattern Recognition. Frontiers in Microbiology, 2017, 08, 309.	3.5	22
41	Identification and characterization of GH11 xylanase and GH43 xylosidase from the chytridiomycetous fungus, Rhizophlyctis rosea. Applied Microbiology and Biotechnology, 2019, 103, 777-791.	3.6	22
42	Deacylation studies on furanose triesters using an immobilized lipase: Synthesis of a key precursor for bicyclonucleosides. Chemical Communications, 2007, , 2616.	4.1	21
43	Dot immuno binding (DIB) for detection of virus in seed. Canadian Journal of Plant Pathology, 1986, 8, 373-379.	1.4	20
44	Culture independent PCR: an alternative enzyme discovery strategy. Journal of Microbiological Methods, 2005, 60, 63-71.	1.6	19
45	Comprehensive chemotaxonomic and genomic profiling of a biosynthetically talented Australian fungus, Aspergillus burnettii sp. nov.. Fungal Genetics and Biology, 2020, 143, 103435.	2.1	19
46	The zoospore ofPhlyctochytrium aestuarii. Protoplasma, 1977, 93, 27-43.	2.1	18
47	The meiospore ofPhysoderma maydis. The causal agent ofPhysoderma disease of maize. Protoplasma, 1978, 97, 275-290.	2.1	18
48	Germination of the resting sporangia ofPhysoderma maydis, the causal agent ofPhysoderma disease of maize. Protoplasma, 1980, 102, 323-342.	2.1	18
49	Detection of potato leaf roll virus and potato viruses M, S, X and Y by dot immunobinding on plain paper. Potato Research, 1988, 31, 367-373.	2.7	18
50	Selective biocatalytic deacylation studies on furanose triesters: a novel and efficient approach towards bicyclonucleosides. Organic and Biomolecular Chemistry, 2007, 5, 3524.	2.8	18
51	Germination and parasitation of the resting sporangia ofSynchytrium endobioticum. Protoplasma, 1981, 106, 69-82.	2.1	17
52	New insights into the molecular mechanism of methanol-induced inactivation of<i>Thermomyces lanuginosus</i>lipase: a molecular dynamics simulation study. Molecular Simulation, 2016, 42, 434-445.	2.0	17
53	Enzymatic production of wheat and ryegrass derived xylooligosaccharides and evaluation of their in vitro effect on pig gut microbiota. Biomass Conversion and Biorefinery, 2018, 8, 497-507.	4.6	17
54	The importance of fungi for a more sustainable future on our planet. Fungal Biology Reviews, 2010, 24, 90-92.	4.7	16

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55	Fungal Enzymes and Yeasts for Conversion of Plant Biomass to Bioenergy and High-Value Products. Microbiology Spectrum, 2017, 5, .	3.0	16
56	Novel keratinolytic enzymes, discovered from a talented and efficient bacterial keratin degrader. Scientific Reports, 2020, 10, 10033.	3.3	16
57	The effect of monensin on gametogenesis and zoosporogenesis in the aquatic fungus,Allomyces macrogynus. Protoplasma, 1986, 133, 129-139.	2.1	15
58	Discovery, cloning and heterologous expression of secreted potato proteins reveal erroneous pre-mRNA splicing in Aspergillus oryzae. Journal of Biotechnology, 2006, 126, 265-276.	3.8	15
59	Some bog chytrids. Canadian Journal of Botany, 1977, 55, 1879-1890.	1.1	14
60	The zoospore and meiospore of the aquatic phycomyceteCatenaria anguillulae. Protoplasma, 1978, 94, 53-71.	2.1	14
61	Development of the resting sporangia ofSynchytrium endobioticum, the causal agent of potato wart disease. Protoplasma, 1981, 106, 83-95.	2.1	14
62	The gamma body: A vesicle generating structure. Nordic Journal of Botany, 1983, 3, 673-680.	0.5	14
63	Solistatinol, a novel phenolic compactin analogue from Penicillium solitum. Tetrahedron Letters, 2007, 48, 1261-1264.	1.4	14
64	Structure, computational and biochemical analysis of PcCel45A endoglucanase from Phanerochaete chrysosporium and catalytic mechanisms of GH45 subfamily C members. Scientific Reports, 2018, 8, 3678.	3.3	14
65	The flagellar apparatus and striated rhizoplast of the zoospore ofOlpidium brassicae. Protoplasma, 1976, 89, 339-351.	2.1	13
66	Transfer of the physodermataceae from the chytridiales to the blastocladiales. Transactions of the British Mycological Society, 1980, 74, 449-457.	0.6	13
67	Microbial metabolites - an infinite source of novel chemistry. Pure and Applied Chemistry, 1996, 68, 745-748.	1.9	13
68	Ionozyme: ionic liquids as solvent and stabilizer for efficient bioactivation of CO₂. Green Chemistry, 2021, 23, 6990-7000.	9.0	13
69	Pearl millet downy mildew (Sclerospora graminicola): Zoosporogenesis. Protoplasma, 1984, 119, 178-187.	2.1	12
70	Development of the zoosporangia ofSynchytrium endobioticum, the causal agent of potato wart disease. Protoplasma, 1981, 106, 97-108.	2.1	11
71	Characterization of a new <i>sn</i>â€‑1,3â€‑regioselective triacylglycerol lipase from <i>Malbranchea cinnamomea</i>. Biotechnology and Applied Biochemistry, 2016, 63, 471-478.	3.1	11
72	Remodelling Pectin Structure In Potato. Developments in Plant Genetics and Breeding, 2000, 6, 245-256.	0.6	10

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73	High-level expression of the native barley Î±-amylase/subtilisin inhibitor in Pichia pastoris. Journal of Biotechnology, 2008, 133, 424-432.	3.8	10
74	The potential of integrated bio- and chemical-engineeringâ€"for a more sustainable world. Green Chemical Engineering, 2020, 1, 9-15.	6.3	10
75	Microbiome Research as an Effective Driver of Success Stories in Agrifood Systems â€" A Selection of Case Studies. Frontiers in Microbiology, 0, 13, .	3.5	10
76	Infection of Daucus carota by Tobacco Necrosis Virus. Journal of Phytopathology, 1975, 83, 136-143.	1.0	9
77	Abnormal spore cleavage: Abnormal spores of Allomyces macrogynus. Nordic Journal of Botany, 1983, 3, 657-664.	0.5	9
78	The zoospore of Pseudoperonospora cubensis, the causal agent of cucurbit downy mildew. Nordic Journal of Botany, 1989, 8, 511-516.	0.5	9
79	Microbes and Microbial Products in Plant Protection. , 1992, , 252-270.		9
80	Hydrolysis of Wheat Arabinoxylan by Two Acetyl Xylan Esterases from Chaetomium thermophilum. Applied Biochemistry and Biotechnology, 2015, 175, 1139-1152.	2.9	8
81	What has happened to the â€œaquatic phycomycetesâ€•(sensu Sparrow)? Part I: A brief historical perspective. Fungal Biology Reviews, 2018, 32, 26-33.	4.7	8
82	Green seaweeds (Ulva fasciata sp.) as nitrogen source for fungal cellulase production. World Journal of Microbiology and Biotechnology, 2019, 35, 82.	3.6	8
83	Biofouling Mitigation Approaches during Water Recovery from Fermented Broth via Forward Osmosis. Membranes, 2020, 10, 307.	3.0	8
84	Exceptionally rich keratinolytic enzyme profile found in the rare actinomycetes Amycolatopsis keratiniphila D2T. Applied Microbiology and Biotechnology, 2021, 105, 8129-8138.	3.6	8
85	Synchytrium endobioticum and Potato Virus X. Journal of Phytopathology, 1978, 92, 132-142.	1.0	7
86	Internal mycelium of Pseudoperonospora cubensis, the causal agent of cucurbit downy mildew. Nordic Journal of Botany, 1989, 8, 505-510.	0.5	6
87	Xanthofusin, an antifungal tetronic acid from Fusicoccum sp.: production, isolation and Structure.. Journal of Antibiotics, 1993, 46, 1013-1015.	2.0	6
88	What has happened to the â€œaquatic phycomycetesâ€•(sensu Sparrow)? Part II: Shared properties of zoosporic true fungi and fungus-like microorganisms. Fungal Biology Reviews, 2018, 32, 52-61.	4.7	5
89	Fungal Biotechnology: Unlocking the Full Potential of Fungi for a More Sustainable World. Grand Challenges in Biology and Biotechnology, 2020, , 3-32.	2.4	5
90	Statistical model semiquantitatively approximates arabinoxylooligosaccharides' structural diversity. Carbohydrate Research, 2016, 426, 9-14.	2.3	4

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91	Acidicâ€"alkaline ferulic acid esterase from Chaetomium thermophilum var. dissitum: Molecular cloning and characterization of recombinant enzyme expressed in Pichia pastoris. Biocatalysis and Agricultural Biotechnology, 2016, 5, 48-55.	3.1	4
92	Business Models, Including Higher Value Products for the New Circular, Resource-Efficient Biobased Industry. Frontiers in Sustainability, 2022, 3, .	2.6	4
93	Experiments on Establishing BSMV Infections in three Phytopathogenic Fungi. Journal of Phytopathology, 1977, 90, 184-188.	1.0	3
94	The endobiotic thallus ofPhysoderma maydis, the causal agent ofPhysoderma disease of maize. Protoplasma, 1980, 103, 1-16.	2.1	3
95	Osmotic regulation of the uniflagellate phycomycete spore. Nordic Journal of Botany, 1983, 3, 665-672.	0.5	3
96	Highâ€throughput microarray mapping of cell wall polymers in roots and tubers during the viscosityâ€reducing process. Biotechnology and Applied Biochemistry, 2016, 63, 178-189.	3.1	3
97	Fungal Enzymes and Yeasts for Conversion of Plant Biomass to Bioenergy and High-Value Products. , 2017, , 1027-1048.		3
98	Virusâ€like Particles in <i>Synchytrium endobioticum</i> the Infectious Agent of Potato Wart Disease. Journal of Phytopathology, 1979, 95, 217-227.	1.0	2
99	Ultrastructural Studies of Zoosporangium and Resting Sporangium of Synchytrium desmodii. Journal of Phytopathology, 1989, 125, 361-371.	1.0	2
100	A global need for women's biotech leadership. Nature Biotechnology, 2011, 29, 948-949.	17.5	2
101	Beyond ruminants: discussing opportunities for alternative pasture uses in New Zealand. Journal of New Zealand Grasslands, 0, , 217-222.	0.0	2
102	The 7 Aarhus Statements on Climate Change. IOP Conference Series: Earth and Environmental Science, 2009, 8, 011002.	0.3	1
103	Augusta Disease in Tulips The Spread of TNV to the Offspring and the Occurrence of Latent Infections. Journal of Phytopathology, 1977, 88, 369-371.	1.0	0
104	Lauritz William Olson, 1945â€"1992. Mycologia, 1996, 88, 151-157.	1.9	0