H Chen

List of Publications by Year
in descending order

111 papers	2,984 citations	159358 30 h-index	205818 48 g-index
114 all docs	114 docs citations	114 times ranked	3324 citing authors

#	Article	IF	Citations
1	Review of the roles of conjugated linoleic acid in health and disease. Journal of Functional Foods, 2015, 15, 314-325.	1.6	185
2	Genome Characterization of the Oleaginous Fungus Mortierella alpina. PLoS ONE, 2011, 6, e28319.	1.1	133
3	Reconstruction and analysis of a genome-scale metabolic model of the oleaginous fungus Mortierella alpina. BMC Systems Biology, 2015, 9, 1.	3.0	131
4	Microbial Biogeography and Core Microbiota of the Rat Digestive Tract. Scientific Reports, 2017, 7, 45840.	1.6	127
5	Regulatory properties of malic enzyme in the oleaginous yeast, Yarrowia lipolytica, and its non-involvement in lipid accumulation. Biotechnology Letters, 2013, 35, 2091-2098.	1.1	89
6	Enhanced lipid accumulation in the yeast Yarrowia lipolytica by over-expression of ATP:citrate lyase from Mus musculus. Journal of Biotechnology, 2014, 192, 78-84.	1.9	87
7	Role of Malic Enzyme during Fatty Acid Synthesis in the Oleaginous Fungus Mortierella alpina. Applied and Environmental Microbiology, 2014, 80, 2672-2678.	1.4	87
8	Identification of a critical determinant that enables efficient fatty acid synthesis in oleaginous fungi. Scientific Reports, 2015, 5, 11247.	1.6	83
9	Synthesis of conjugated linoleic acid by the linoleate isomerase complex in food-derived lactobacilli. Journal of Applied Microbiology, 2014, 117, 430-439.	1.4	73
10	Bacterial conjugated linoleic acid production and their applications. Progress in Lipid Research, 2017, 68, 26-36.	5.3	71
11	Comparison of Biochemical Activities between High and Low Lipid-Producing Strains of Mucor circinelloides: An Explanation for the High Oleaginicity of Strain WJ11. PLoS ONE, 2015, 10, e0128396.	1.1	66
12	n-3 Polyunsaturated Fatty Acids and Their Role in Cancer Chemoprevention. Current Pharmacology Reports, 2015, 1, 283-294.	1.5	65
13	Bifidobacterium breve CCFM683 could ameliorate DSS-induced colitis in mice primarily via conjugated linoleic acid production and gut microbiota modulation. Journal of Functional Foods, 2018, 49, 61-72.	1.6	63
14	Myosin-cross-reactive antigens from four different lactic acid bacteria are fatty acid hydratases. Biotechnology Letters, 2013, 35, 75-81.	1.1	57
15	Metabolic Engineering of Mortierella alpina for Enhanced Arachidonic Acid Production through the NADPH-Supplying Strategy. Applied and Environmental Microbiology, 2016, 82, 3280-3288.	1.4	56
16	Molecular tools for gene manipulation in filamentous fungi. Applied Microbiology and Biotechnology, 2017, 101, 8063-8075.	1.7	54
17	Proteomics analysis of high lipid-producing strain Mucor circinelloides WJ11: an explanation for the mechanism of lipid accumulation at the proteomic level. Microbial Cell Factories, 2016, 15, 35.	1.9	53
18	Complete Genome Sequence of a High Lipid-Producing Strain of Mucor circinelloides WJ11 and Comparative Genome Analysis with a Low Lipid-Producing Strain CBS 277.49. PLoS ONE, 2015, 10, e0137543.	1.1	52

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19	13 C-metabolic flux analysis of lipid accumulation in the oleaginous fungus Mucor circinelloides. Bioresource Technology, 2015, 197, 23-29.	4.8	51
20	Application of a delta-6 desaturase with Î±-linolenic acid preference on eicosapentaenoic acid production in Mortierella alpina. Microbial Cell Factories, 2016, 15, 117.	1.9	45
21	Ï‰3 fatty acid desaturases from microorganisms: structure, function, evolution, and biotechnological use. Applied Microbiology and Biotechnology, 2013, 97, 10255-10262.	1.7	42
22	Role of malate transporter in lipid accumulation of oleaginous fungus Mucor circinelloides. Applied Microbiology and Biotechnology, 2016, 100, 1297-1305.	1.7	42
23	Increased fatty acid unsaturation and production of arachidonic acid by homologous over-expression of the mitochondrial malic enzyme in Mortierella alpina. Biotechnology Letters, 2014, 36, 1827-1834.	1.1	41
24	Molecular mechanism of substrate specificity for delta 6 desaturase from Mortierella alpina and Micromonas pusilla. Journal of Lipid Research, 2015, 56, 2309-2321.	2.0	36
25	Lactobacillus plantarum ZS2058 produces CLA to ameliorate DSS-induced acute colitis in mice. RSC Advances, 2016, 6, 14457-14464.	1.7	35
26	Changes in microbial community during Chinese traditional soybean paste fermentation. International Journal of Food Science and Technology, 2009, 44, 2526-2530.	1.3	34
27	Metabolic engineering of Mortierella alpina for arachidonic acid production with glycerol as carbon source. Microbial Cell Factories, 2015, 14, 205.	1.9	34
28	Role of pentose phosphate pathway in lipid accumulation of oleaginous fungus Mucor circinelloides. RSC Advances, 2015, 5, 97658-97664.	1.7	34
29	A new regulatory mechanism controlling carotenogenesis in the fungus Mucor circinelloides as a target to generate Î²-carotene over-producing strains by genetic engineering. Microbial Cell Factories, 2016, 15, 99.	1.9	33
30	Fatty acid metabolism: Implications for diet, genetic variation, and disease. Food Bioscience, 2013, 4, 1-12.	2.0	32
31	Lipid metabolism research in oleaginous fungus Mortierella alpina: Current progress and future prospects. Biotechnology Advances, 2022, 54, 107794.	6.0	30
32	Bifidobacterium longum Ameliorates Dextran Sulfate Sodium-Induced Colitis by Producing Conjugated Linoleic Acid, Protecting Intestinal Mechanical Barrier, Restoring Unbalanced Gut Microbiota, and Regulating the Toll-Like Receptor-4/Nuclear Factor-Î¹ºB Signaling Pathway. Journal of Agricultural and Food Chemistry, 2021, 69, 14593-14608.	2.4	29
33	Biochemical characterization of the tetrahydrobiopterin synthesis pathway in the oleaginous fungus Mortierella alpina. Microbiology (United Kingdom), 2011, 157, 3059-3070.	0.7	28
34	Dietary supplementation of Î±-linolenic acid induced conversion of n-3 LCPUFAs and reduced prostate cancer growth in a mouse model. Lipids in Health and Disease, 2017, 16, 136.	1.2	28
35	Dietary intake of n-3 PUFAs modifies the absorption, distribution and bioavailability of fatty acids in the mouse gastrointestinal tract. Lipids in Health and Disease, 2017, 16, 10.	1.2	27
36	Evaluation of metabolome sample preparation and extraction methodologies for oleaginous filamentous fungi Mortierella alpina. Metabolomics, 2019, 15, 50.	1.4	27

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37	Time-resolved multi-omics analysis reveals the role of nutrient stress-induced resource reallocation for TAG accumulation in oleaginous fungus Mortierella alpina. Biotechnology for Biofuels, 2020, 13, 116.	6.2	26
38	Application of a Ï‰-3 Desaturase with an Arachidonic Acid Preference to Eicosapentaenoic Acid Production in Mortierella alpina. Frontiers in Bioengineering and Biotechnology, 2017, 5, 89.	2.0	25
39	Expression and Purification of Integral Membrane Fatty Acid Desaturases. PLoS ONE, 2013, 8, e58139.	1.1	24
40	Characterization of an Omega-3 Desaturase From Phytophthora parasitica and Application for Eicosapentaenoic Acid Production in Mortierella alpina. Frontiers in Microbiology, 2018, 9, 1878.	1.5	24
41	Cloning and heterologous expression of a bacteriocin sakacin P from Lactobacillus sakei in Escherichia coli. Applied Microbiology and Biotechnology, 2012, 94, 1061-1068.	1.7	23
42	Characterization of the triple-component linoleic acid isomerase inLactobacillus plantarumZS2058 by genetic manipulation. Journal of Applied Microbiology, 2017, 123, 1263-1273.	1.4	23
43	Clove extract functions as a natural fatty acid synthesis inhibitor and prevents obesity in a mouse model. Food and Function, 2017, 8, 2847-2856.	2.1	23
44	A new potential secretion pathway for recombinant proteins in Bacillus subtilis. Microbial Cell Factories, 2015, 14, 179.	1.9	22
45	Comparative Proteome Analysis between High Lipid-Producing Strain Mucor circinelloides WJ11 and Low Lipid-Producing Strain CBS 277.49. Journal of Agricultural and Food Chemistry, 2017, 65, 5074-5082.	2.4	22
46	Ultra Performance Liquid Chromatographyâ€“Q Exactive Orbitrap/Mass Spectrometry-Based Lipidomics Reveals the Influence of Nitrogen Sources on Lipid Biosynthesis of Mortierella alpina. Journal of Agricultural and Food Chemistry, 2019, 67, 10984-10993.	2.4	22
47	Effects of 20 Standard Amino Acids on the Growth, Total Fatty Acids Production, and Î³-Linolenic Acid Yield in Mucor circinelloides. Current Microbiology, 2014, 69, 899-908.	1.0	21
48	Role of Adenosine Monophosphate Deaminase during Fatty Acid Accumulation in Oleaginous Fungus Mortierella alpina. Journal of Agricultural and Food Chemistry, 2019, 67, 9551-9559.	2.4	21
49	The Role of Glyceraldehyde-3-Phosphate Dehydrogenases in NADPH Supply in the Oleaginous Filamentous Fungus Mortierella alpina. Frontiers in Microbiology, 2020, 11, 818.	1.5	21
50	Mining bifidobacteria from the neonatal gastrointestinal tract for conjugated linolenic acid production. Bioengineered, 2017, 8, 232-238.	1.4	20
51	c9, t11, c15-CLNA and t9, t11, c15-CLNA from Lactobacillus plantarum ZS2058 Ameliorate Dextran Sodium Sulfate-Induced Colitis in Mice. Journal of Agricultural and Food Chemistry, 2020, 68, 3758-3769.	2.4	20
52	Lipase genes in Mucor circinelloides: identification, sub-cellular location, phylogenetic analysis and expression profiling during growth and lipid accumulation. Journal of Industrial Microbiology and Biotechnology, 2016, 43, 1467-1480.	1.4	18
53	Distinct Gut Microbiota Induced by Different Fat-to-Sugar-Ratio High-Energy Diets Share Similar Pro-obesity Genetic and Metabolite Profiles in Prediabetic Mice. MSystems, 2019, 4, .	1.7	18
54	The Protective Effect of Myristica fragrans Houtt. Extracts Against Obesity and Inflammation by Regulating Free Fatty Acids Metabolism in Nonalcoholic Fatty Liver Disease. Nutrients, 2020, 12, 2507.	1.7	16

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55	Role of g6pdh and leuB on Lipid Accumulation in Mucor circinelloides. Journal of Agricultural and Food Chemistry, 2020, 68, 4245-4251.	2.4	16
56	Two-stage pH control combined with oxygen-enriched air strategies for the highly efficient production of EPA by Mortierella alpina CCFM698 with fed-batch fermentation. Bioprocess and Biosystems Engineering, 2020, 43, 1725-1733.	1.7	15
57	Research progress on conjugated linoleic acid bio-conversion in Bifidobacterium. International Journal of Food Microbiology, 2022, 369, 109593.	2.1	15
58	Optimization of the quenching and extraction procedures for a metabolomic analysis of Lactobacillus plantarum. Analytical Biochemistry, 2018, 557, 62-68.	1.1	14
59	Role of 10-hydroxy-cis-12-octadecenic acid in transforming linoleic acid into conjugated linoleic acid by bifidobacteria. Applied Microbiology and Biotechnology, 2019, 103, 7151-7160.	1.7	14
60	The role of a xylose isomerase pathway in the conversion of xylose to lipid in Mucor circinelloides. RSC Advances, 2016, 6, 77944-77952.	1.7	13
61	Substrate specificity and membrane topologies of the iron-containing Ï‰3 and Ï‰6 desaturases from Mortierella alpina. Applied Microbiology and Biotechnology, 2018, 102, 211-223.	1.7	13
62	Characteristics of bifidobacterial conjugated fatty acid and hydroxy fatty acid production and its potential application in fermented milk. LWT - Food Science and Technology, 2020, 120, 108940.	2.5	13
63	An efficient strategy for screening polyunsaturated fatty acid-producing oleaginous filamentous fungi from soil. Journal of Microbiological Methods, 2019, 158, 80-85.	0.7	12
64	Metabolomics analysis reveals the role of oxygen control in the nitrogen limitation induced lipid accumulation in Mortierella alpina. Journal of Biotechnology, 2021, 325, 325-333.	1.9	12
65	Advances in improving the biotechnological application of oleaginous fungus Mortierella alpina. Applied Microbiology and Biotechnology, 2021, 105, 6275-6289.	1.7	12
66	Optimizing lactose hydrolysis by computer-guided modification of the catalytic site of a wild-type enzyme. Molecular Diversity, 2013, 17, 371-382.	2.1	11
67	Complete genome sequence of Lactobacillus plantarum ZS2058, a probiotic strain with high conjugated linoleic acid production ability. Journal of Biotechnology, 2015, 214, 212-213.	1.9	11
68	Production of conjugated linoleic acid by heterologous expression of linoleic acid isomerase in oleaginous fungus Mortierella alpina. Biotechnology Letters, 2015, 37, 1983-1992.	1.1	11
69	Optimization of Agrobacterium tumefaciens-mediated transformation method of oleaginous filamentous fungus Mortierella alpina on co-cultivation materials choice. Journal of Microbiological Methods, 2018, 152, 179-185.	0.7	11
70	Bioinformatical analysis and preliminary study of the role of lipase in lipid metabolism in Mucor circinelloides. RSC Advances, 2016, 6, 60673-60682.	1.7	10
71	Generation of lycopene-overproducing strains of the fungus Mucor circinelloides reveals important aspects of lycopene formation and accumulation. Biotechnology Letters, 2017, 39, 439-446.	1.1	10
72	Molecular mechanism of substrate preference for Ï‰-3 fatty acid desaturase from Mortierella alpina by mutational analysis and molecular docking. Applied Microbiology and Biotechnology, 2018, 102, 9679-9689.	1.7	10

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73	Genetic determinates for conjugated linolenic acid production in Lactobacillus plantarum ZS2058. Journal of Applied Microbiology, 2020, 128, 191-201.	1.4	10
74	Î”6 fatty acid desaturases in polyunsaturated fatty acid biosynthesis: insights into the evolution, function with substrate specificities and biotechnological use. Applied Microbiology and Biotechnology, 2020, 104, 9947-9963.	1.7	10
75	Synergistic Effect of Eugenol and Probiotic Lactobacillus Plantarum Zs2058 against Salmonella Infection in C57bl/6 Mice. Nutrients, 2020, 12, 1611.	1.7	10
76	Antiproliferation Activity and Mechanism of c9, t11, c15-CLNA and t9, t11, c15-CLNA from Lactobacillus plantarum ZS2058 on Colon Cancer Cells. Molecules, 2020, 25, 1225.	1.7	10
77	Substrate specificity ofMortierella alpinaÎ”9-III fatty acid desaturase and its value for the production of omega-9 MUFA. European Journal of Lipid Science and Technology, 2016, 118, 753-760.	1.0	9
78	Characterization of an fungal l-fucokinase involved inMortierella alpinaGDP-l-fucose salvage pathway. Glycobiology, 2016, 26, 880-887.	1.3	9
79	Effects of Agrobacterium tumefaciens strain types on the Agrobacteriumâ€ mediated transformation efficiency of filamentous fungus Mortierella alpina. Letters in Applied Microbiology, 2020, 70, 388-393.	1.0	9
80	Role of beta-isopropylmalate dehydrogenase in lipid biosynthesis of the oleaginous fungus Mortierella alpina. Fungal Genetics and Biology, 2021, 152, 103572.	0.9	9
81	Linoleic Acid Triggered a Metabolomic Stress Condition in Three Species of Bifidobacteria Characterized by Different Conjugated Linoleic Acid-Producing Abilities. Journal of Agricultural and Food Chemistry, 2021, 69, 11311-11321.	2.4	9
82	Role of dihydrofolate reductase in tetrahydrobiopterin biosynthesis and lipid metabolism in the oleaginous fungus Mortierella alpina. Microbiology (United Kingdom), 2016, 162, 1544-1553.	0.7	9
83	The relationship between amino acid and lipid metabolism in oleaginous eukaryotic microorganism. Applied Microbiology and Biotechnology, 2022, 106, 3405-3417.	1.7	9
84	Carbohydrate analysis of Mortierella alpina by colorimetry and HPLCâ€“ELSD to reveal accumulation differences of sugar and lipid. Biotechnology Letters, 2021, 43, 1289-1301.	1.1	8
85	Production of trans-10,cis-12-conjugated linoleic acid using permeabilized whole-cell biocatalyst of Yarrowia lipolytica. Biotechnology Letters, 2016, 38, 1917-1922.	1.1	7
86	Mortierella alpina feed supplementation enriched hen eggs with DHA and AA. RSC Advances, 2016, 6, 1694-1699.	1.7	7
87	Characterization and molecular docking of new Î”17 fatty acid desaturase genes from Rhizophagus irregularis and Octopus bimaculoides. RSC Advances, 2019, 9, 6871-6880.	1.7	7
88	Tetrahydrobiopterin Plays a Functionally Significant Role in Lipogenesis in the Oleaginous Fungus Mortierella alpina. Frontiers in Microbiology, 2020, 11, 250.	1.5	7
89	Extract of Syzygium aromaticum suppress eEF1A protein expression and fungal growth. Journal of Applied Microbiology, 2017, 123, 80-91.	1.4	6
90	Role of the mitochondrial citrate-oxoglutarate carrier in lipid accumulation in the oleaginous fungus Mortierella alpina. Biotechnology Letters, 2021, 43, 1455-1466.	1.1	6

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91	The role of acyl-CoA thioesterase ACOT8I in mediating intracellular lipid metabolism in oleaginous fungus Mortierella alpina. Journal of Industrial Microbiology and Biotechnology, 2018, 45, 281-291.	1.4	5
92	Structural Determinants of Substrate Specificity of Omega-3 Desaturases from Mortierella alpina and Rhizophagus irregularis by Domain-Swapping and Molecular Docking. International Journal of Molecular Sciences, 2019, 20, 1603.	1.8	5
93	Improved Lipogenesis in Mortierella alpina by Abolishing the Snf4-Mediated Energy-Saving Mode under Low Glucose. Journal of Agricultural and Food Chemistry, 2020, 68, 10787-10798.	2.4	5
94	Linoleic acid induces different metabolic modes in two Bifidobacterium breve strains with different conjugated linoleic acid-producing abilities. LWT - Food Science and Technology, 2021, 142, 110974.	2.5	5
95	Cloning, expression, and identification of a novel class IIa bacteriocin in the Escherichia coli cell-free protein expression system. Biotechnology Letters, 2012, 34, 359-364.	1.1	4
96	Increased fatty acid accumulation following overexpression of glycerolâ€3â€phosphate dehydrogenase and suppression of Î²â€oxidation in oleaginous fungus Mortierella alpina. European Journal of Lipid Science and Technology, 2017, 119, 1600113.	1.0	4
97	Potential Functions of the Gastrointestinal Microbiome Inhabiting the Length of the Rat Digest Tract. International Journal of Molecular Sciences, 2019, 20, 1232.	1.8	4
98	Functional characterization of two diacylglycerol acyltransferase 1 genes in Mortierella alpina. Letters in Applied Microbiology, 2022, 74, 194-203.	1.0	4
99	Biochemical characterization of an isoform of GDP-d-mannose-4,6-dehydratase from Mortierella alpina. Biotechnology Letters, 2016, 38, 1761-1768.	1.1	3
100	Application of the cbh1 promoter in Mortierella alpina and optimization of induction conditions. Letters in Applied Microbiology, 2020, 71, 164-170.	1.0	3
101	The role of phenylalanine hydroxylase in lipogenesis in the oleaginous fungus Mortierella alpina. Microbiology (United Kingdom), 2021, 167, .	0.7	3
102	Characterization of NAD+/NADP+-Specific Isocitrate Dehydrogenases From Oleaginous Fungus Mortierella alpina Involved in Lipid Accumulation. Frontiers in Nutrition, 2021, 8, 746342.	1.6	3
103	Application of high EPA-producing Mortierella alpina in laying hen feed for egg DHA accumulation. RSC Advances, 2018, 8, 39005-39012.	1.7	2
104	The role of MTHFDL in mediating intracellular lipogenesis in oleaginous Mortierella alpina. Microbiology (United Kingdom), 2020, 166, 617-623.	0.7	2
105	Consensus mutagenesis and computational simulation provide insight into the desaturation catalytic mechanism for delta 6 fatty acid desaturase. Biochemical and Biophysical Research Communications, 2022, 586, 74-80.	1.0	2
106	SNF1Î²-Modulated Glucose Uptake and the Balance between Polyunsaturated Fatty Acids and Carbohydrates in Mortierella alpina. Journal of Agricultural and Food Chemistry, 2021, 69, 13849-13858.	2.4	2
107	Autophagy Improves ARA-Rich TAG Accumulation in Mortierella alpina by Regulating Resource Allocation. Microbiology Spectrum, 2022, 10, e0130021.	1.2	2
108	Characterization and Molecular Mechanism of a Novel Cytochrome b₅ Reductase with NAD(P)H Specificity from Mortierella alpina. Journal of Agricultural and Food Chemistry, 2022, 70, 5186-5196.	2.4	2

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109	Linoleate Isomerase Complex Contributes to Metabolism and Remission of DSS-Induced Colitis in Mice of Lactobacillus plantarum ZS2058. Journal of Agricultural and Food Chemistry, 2021, 69, 8160-8171.	2.4	1
110	Production of GDP-l-fucose from exogenous fucose through the salvage pathway in Mortierella alpina. RSC Advances, 2016, 6, 46308-46316.	1.7	0
111	Molecular mechanism of interaction between fatty acid delta 6 desaturase and acyl-CoA by computational prediction. AMB Express, 2022, 12, .	1.4	0