Eiji Sakuradani

List of Publications by Year
in descending order

51 papers	1,652 citations	279798 23 h-index	289244 40 g-index
53 all docs	53 docs citations	53 times ranked	1173 citing authors

#	Article	IF	Citations
1	Identification of Î”12-fatty acid desaturase from arachidonic acid-producingMortierellafungus by heterologous expression in the yeastSaccharomyces cerevisiaeand the fungusAspergillus oryzae. FEBS Journal, 1999, 261, 812-820.	0.2	112
2	Î”6-Fatty acid desaturase from an arachidonic acid-producing Mortierella fungus. Gene, 1999, 238, 445-453.	2.2	102
3	Establishment of <i>Agrobacterium tumefaciens</i> -Mediated Transformation of an Oleaginous Fungus, <i>Mortierella alpina</i> 1S-4, and Its Application for Eicosapentaenoic Acid Producer Breeding. Applied and Environmental Microbiology, 2009, 75, 5529-5535.	3.1	100
4	Î”⁹â€Fatty acid desaturase from arachidonic acidâ€producing fungus. FEBS Journal, 1999, 260, 208-216.	0.2	99
5	Improved production of various polyunsaturated fatty acids through filamentous fungus Mortierella alpina breeding. Applied Microbiology and Biotechnology, 2009, 84, 1-10.	3.6	96
6	Selection of oleaginous yeasts with high lipid productivity for practical biodiesel production. Bioresource Technology, 2014, 153, 230-235.	9.6	87
7	A novel fungal ?3-desaturase with wide substrate specificity from arachidonic acid-producing Mortierella alpina 1S-4. Applied Microbiology and Biotechnology, 2005, 66, 648-654.	3.6	86
8	Metabolic engineering for the production of polyunsaturated fatty acids by oleaginous fungus Mortierella alpina 1S-4. Journal of Bioscience and Bioengineering, 2013, 116, 417-422.	2.2	73
9	Arachidonic acid production by the oleaginous fungus Mortierella alpina 1S-4: A review. Journal of Advanced Research, 2018, 11, 15-22.	9.5	62
10	Cryptococcus terricola is a promising oleaginous yeast for biodiesel production from starch through consolidated bioprocessing. Scientific Reports, 2014, 4, 4776.	3.3	61
11	A Novel Î”5-Desaturase-Defective Mutant of Mortierella alpina 1S-4 and Its Dihomo-Î³-Linolenic Acid Productivity. Applied and Environmental Microbiology, 1993, 59, 4300-4304.	3.1	59
12	Gene Cloning and Functional Analysis of a SecondÎ”6-Fatty Acid Desaturase from an Arachidonic Acid-producingMortierellaFungus. Bioscience, Biotechnology and Biochemistry, 2003, 67, 704-711.	1.3	52
13	Advances in the Production of Various Polyunsaturated Fatty Acids through Oleaginous Fungus<i>Mortierella alpina</i>Breeding. Bioscience, Biotechnology and Biochemistry, 2010, 74, 908-917.	1.3	52
14	Improvement of the Fatty Acid Composition of an Oil-Producing Filamentous Fungus, Mortierella alpina 1S-4, through RNA Interference with Î”12-Desaturase Gene Expression. Applied and Environmental Microbiology, 2005, 71, 5124-5128.	3.1	48
15	Eicosapentaenoic acid (EPA) production by an oleaginous fungus <i>Mortierella alpina</i> expressing heterologous the Î”17â€desaturase gene under ordinary temperature. European Journal of Lipid Science and Technology, 2015, 117, 1919-1927.	1.5	42
16	Molecular evidence that the rate-limiting step for the biosynthesis of arachidonic acid in Mortierella alpina is at the level of an elongase. Lipids, 2005, 40, 25-30.	1.7	39
17	Improvement of arachidonic acid production by mutants with lower n-3 desaturation activity derived from Mortierella alpina 1S-4. Applied Microbiology and Biotechnology, 2004, 66, 243-248.	3.6	35
18	Identification of a novel bifunctional Î”12/Î”15 fatty acid desaturase from a basidiomycete,Coprinus cinereusTD#822-2. FEBS Letters, 2007, 581, 315-319.	2.8	33

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19	Functional characterization of Î”9 and Ï‰9 desaturase genes in Mortierella alpina 1S-4 and its derivative mutants. Applied Microbiology and Biotechnology, 2006, 70, 711-719.	3.6	31
20	Identification of a novel fatty acid elongase with a wide substrate specificity from arachidonic acid-producing fungus Mortierella alpina 1S-4. Applied Microbiology and Biotechnology, 2009, 84, 709-716.	3.6	31
21	Characterization of a trifunctional fatty acid desaturase from oleaginous filamentous fungus Mortierella alpina 1S-4 using a yeast expression system. Journal of Bioscience and Bioengineering, 2013, 116, 672-676.	2.2	30
22	Production of 8,11,14,17-cis-eicosatetraenoic acid by Î”5 desaturase-defective mutants of an arachidonic acid-producing fungus,Mortierella alpina. JAOCS, Journal of the American Oil Chemists' Society, 1997, 74, 455-459.	1.9	26
23	Metabolic engineering of oleaginous fungus Mortierella alpina for high production of oleic and linoleic acids. Bioresource Technology, 2017, 245, 1610-1615.	9.6	26
24	Isolation and characterization of an ?3-desaturation-defective mutant of an arachidonic acid-producing fungus, Mortierella alpina 1S-4. Archives of Microbiology, 1994, 161, 316-319.	2.2	25
25	Microbial production of dihomo-Î³-linolenic acid by Î”5-desaturase gene-disruptants of Mortierella alpina 1S-4. Journal of Bioscience and Bioengineering, 2016, 122, 22-26.	2.2	21
26	Production of 8,11-cis-eicosadienoic acid by a Î”5 and Î”12 desaturase-defective mutant derived from the arachidonic acid-producing fungusMortierella alpina1S-4. JAOCS, Journal of the American Oil Chemists' Society, 1999, 76, 1269-1274.	1.9	18
27	Functional analysis of a fatty acid elongase from arachidonic acid-producing Mortierella alpina 1S-4. Applied Microbiology and Biotechnology, 2008, 81, 497-503.	3.6	18
28	Isolation and characterization of a Î”--desaturation-defective mutant of an arachidonic acid-producing fungus,Mortierella alpina1S-4. JAOCS, Journal of the American Oil Chemists' Society, 2002, 79, 1021-1026.	1.9	16
29	Omega-3 eicosatetraenoic acid production by molecular breeding of the mutant strain S14 derived from Mortierella alpina 1S-4. Journal of Bioscience and Bioengineering, 2015, 120, 299-304.	2.2	16
30	Production of 8,11,14,17-cis-eicosatetraenoic acid (20:4Ï‰-3) by a Î”5 and Î”12 desaturase-defective mutant of an arachidonic acid-producing fungusMortierella alpina1S-4. JAOCS, Journal of the American Oil Chemists' Society, 1998, 75, 1495-1500.	1.9	14
31	Identification of mutation sites on Î”12 desaturase genes from Mortierella alpina 1S-4 mutants. Journal of Bioscience and Bioengineering, 2009, 107, 99-101.	2.2	14
32	Mechanistic Insights into Indigo Reduction in Indigo Fermentation: A Voltammetric Study. Electrochemistry, 2021, 89, 25-30.	1.4	14
33	Selection and characterization of promoters based on genomic approach for the molecular breeding of oleaginous fungus Mortierella alpina 1S-4. Current Genetics, 2014, 60, 183-191.	1.7	13
34	Disruption of lig4 improves gene targeting efficiency in the oleaginous fungus Mortierella alpina 1S-4. Journal of Biotechnology, 2015, 208, 63-69.	3.8	13
35	Identification of Mutation Sites on Î”6 Desaturase Genes fromMortierella alpina1S-4 Mutants. Bioscience, Biotechnology and Biochemistry, 2005, 69, 1021-1024.	1.3	11
36	Isolation and Characterization of a Docosahexaenoic Acidâ€Phospholipids Producing Microorganism <i>Crypthecodinium</i> sp. D31. JAOCS, Journal of the American Oil Chemists' Society, 2013, 90, 1837-1844.	1.9	11

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37	Gene targeting in the oil-producing fungus Mortierella alpina 1S-4 and construction of a strain producing a valuable polyunsaturated fatty acid. Current Genetics, 2015, 61, 579-589.	1.7	11
38	Polyunsaturated fatty acids production and transformation by <i>Mortierella alpina</i> and anaerobic bacteria. European Journal of Lipid Science and Technology, 2012, 114, 1107-1113.	1.5	10
39	Identification of mutation sites on Ï‰3 desaturase genes from Mortierella alpina 1S-4 mutants. Journal of Bioscience and Bioengineering, 2009, 107, 7-9.	2.2	8
40	Neurite Outgrowth-Promoting Activity of Compounds in PC12 Cells from Sunflower Seeds. Molecules, 2020, 25, 4748.	3.8	7
41	Recent trends in the field of lipid engineering. Journal of Bioscience and Bioengineering, 2022, 133, 405-413.	2.2	7
42	Fatty Acid Desaturation and Elongation Reactions of <i>Trichoderma</i> sp. 1â€OHâ€2â€3. JAOCS, Journal of the American Oil Chemists' Society, 2009, 86, 227-233.	1.9	5
43	Isolation and characterization of indigo-reducing bacteria and analysis of microbiota from indigo fermentation suspensions. Bioscience, Biotechnology and Biochemistry, 2022, 86, 273-281.	1.3	4
44	Voltammetric in-situ monitoring of leuco-indigo in indigo-fermenting suspensions. Journal of Bioscience and Bioengineering, 2021, 131, 565-571.	2.2	3
45	Quantification of leuco-indigo in indigo-dye-fermenting suspension by normal pulse voltammetry. Journal of Bioscience and Bioengineering, 2022, 134, 84-88.	2.2	3
46	Subterminal oxidation of n-alkanes in achlorophyllous alga Prototheca sp.. Journal of Bioscience and Bioengineering, 2013, 116, 472-474.	2.2	2
47	Characterization of Ï‰3 fatty acid desaturases from oomycetes and their application toward eicosapentaenoic acid production in <i>Mortierella alpina</i>. Bioscience, Biotechnology and Biochemistry, 2021, 85, 1252-1265.	1.3	2
48	Indigo-Mediated Semi-Microbial Biofuel Cell Using an Indigo-Dye Fermenting Suspension. Catalysts, 2021, 11, 1080.	3.5	1
49	Production of Microbial Lipids Containing Arachidonic Acid and Its Related Polyunsaturated Fatty Acids. Oleoscience, 2012, 12, 263-272.	0.0	1
50	Microbial production of hydroxy fatty acids utilizing crude glycerol. Biocatalysis and Agricultural Biotechnology, 2022, 39, 102286.	3.1	1
51	Achlorophyllous alga Prototheca zopfii oxidizes n-alkanes with different carbon-chain lengths through a unique subterminal oxidation pathway. Journal of Bioscience and Bioengineering, 2014, 117, 275-277.	2.2	0