Peter D Nichols

List of Publications by Year
in descending order

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74 papers	7,783 citations	50244 46 h-index	76872 74 g-index
77 all docs	77 docs citations	77 times ranked	7414 citing authors

#	Article	IF	Citations
1	Feeding aquaculture in an era of finite resources. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 15103-15110.	3.3	1,111
2	Phospholipid, ester-linked fatty acid profiles as reproducible assays for changes in prokaryotic community structure of estuarine sediments. FEMS Microbiology Letters, 1985, 31, 147-158.	0.7	597
3	Determination of monosaturated fatty acid double-bond position and geometry for microbial monocultures and complex consortia by capillary GC-MS of their dimethyl disulphide adducts. Journal of Microbiological Methods, 1986, 5, 49-55.	0.7	388
4	Evaluation of extraction methods for recovery of fatty acids from lipid-producing microheterotrophs. Journal of Microbiological Methods, 2000, 43, 107-116.	0.7	338
5	Metabolic engineering of biomass for high energy density: oilseedâ€like triacylglycerol yields from plant leaves. Plant Biotechnology Journal, 2014, 12, 231-239.	4.1	256
6	Acid habituation of Escherichia coli and the potential role of cyclopropane fatty acids in low pH tolerance. International Journal of Food Microbiology, 1997, 37, 163-173.	2.1	235
7	The Biotechnological Potential of Thraustochytrids. Marine Biotechnology, 1999, 1, 580-587.	1.1	194
8	Effects of bacterial exopolymer adhesion on the entrainment of sand. Geomicrobiology Journal, 1990, 8, 1-16.	1.0	179
9	Chemical Characterization of Exopolysaccharides from Antarctic Marine Bacteria. Microbial Ecology, 2005, 49, 578-589.	1.4	164
10	Phospholipid fatty acid and lipopolysaccharide fatty acid signature lipids in methane-utilizing bacteria. FEMS Microbiology Letters, 1991, 85, 15-22.	0.7	157
11	Replacement of fish oil with sunflower oil in feeds for Atlantic salmon (Salmo salar L.): effect on growth performance, tissue fatty acid composition and disease resistance. Comparative Biochemistry and Physiology - B Biochemistry and Molecular Biology, 2003, 135, 611-625.	0.7	154
12	Fourier transform-infrared spectroscopic methods for microbial ecology: analysis of bacteria, bacteri-polymer mixtures and biofilms. Journal of Microbiological Methods, 1985, 4, 79-94.	0.7	151
13	n-3 Oil sources for use in aquaculture â€“ alternatives to the unsustainable harvest of wild fish. Nutrition Research Reviews, 2008, 21, 85-96.	2.1	143
14	Taxonomy, ecology and biotechnological applications of thraustochytrids: A review. Biotechnology Advances, 2018, 36, 26-46.	6.0	141
15	Replacement of fish oil with thraustochytrid Schizochytrium sp. L oil in Atlantic salmon parr (Salmo) Tj ETQq1 1 0.784314 rgBT /Overl Physiology, 2007, 148, 382-392.	0.8	140
16	Metabolic engineering of Arabidopsis to produce nutritionally important DHA in seed oil. Functional Plant Biology, 2005, 32, 473.	1.1	127
17	Metabolic Engineering Plant Seeds with Fish Oil-Like Levels of DHA. PLoS ONE, 2012, 7, e49165.	1.1	126
18	Lipid and fatty acid yield of nine stationary-phase microalgae: Applications and unusual C24â€“C28 polyunsaturated fatty acids. Journal of Applied Phycology, 2005, 17, 287-300.	1.5	125

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19	Phospholipid and lipopolysaccharide normal and hydroxy fatty acids as potential signatures for methane-oxidizing bacteria. FEMS Microbiology Letters, 1985, 31, 327-335.	0.7	119
20	Lipid, FA, and sterol composition of New Zealand green lipped mussel (Perna canaliculus) and tasmanian blue mussel (Mytilus edulis). Lipids, 2002, 37, 587-595.	0.7	114
21	Progress in Understanding Algal Bloom-Mediated Fish Kills: The Role of Superoxide Radicals, Phycotoxins and Fatty Acids. PLoS ONE, 2015, 10, e0133549.	1.1	112
22	Polyunsaturated fatty acids in Antarctic bacteria. Antarctic Science, 1993, 5, 149-160.	0.5	109
23	Interannual and between species comparison of the lipids, fatty acids and sterols of Antarctic krill from the US AMLR Elephant Island survey area. Comparative Biochemistry and Physiology - B Biochemistry and Molecular Biology, 2002, 131, 733-747.	0.7	107
24	Comparison of Thraustochytrids Aurantiochytrium sp., Schizochytrium sp., Thraustochytrium sp., and Ulkenia sp. for Production of Biodiesel, Long-Chain Omega-3 Oils, and Exopolysaccharide. Marine Biotechnology, 2014, 16, 396-411.	1.1	104
25	Biodiscovery of new Australian thraustochytrids for production of biodiesel and long-chain omega-3 oils. Applied Microbiology and Biotechnology, 2012, 93, 2215-2231.	1.7	102
26	Validation of signature polarlipid fatty acid biomarkers for alkane-utilizing bacteria in soils and subsurface aquifer materials. FEMS Microbiology Letters, 1989, 62, 39-50.	0.7	100
27	Lipids and trophodynamics of Antarctic zooplankton. Comparative Biochemistry and Physiology - B Biochemistry and Molecular Biology, 1998, 120, 311-323.	0.7	99
28	Long-Chain Omega-3 Oilsâ€“An Update on Sustainable Sources. Nutrients, 2010, 2, 572-585.	1.7	99
29	Lipids of Antarctic Ocean amphipods: food chain interactions and the occurrence of novel biomarkers. Marine Chemistry, 2001, 73, 53-64.	0.9	97
30	Lipid, fatty acid and squalene composition of liver oil from six species of deep-sea sharks collected in southern australian waters. Comparative Biochemistry and Physiology - B Biochemistry and Molecular Biology, 1995, 110, 267-275.	0.7	94
31	Comparison of growth and lipid composition in the green abalone, Haliotis fulgens, provided specific macroalgal diets. Comparative Biochemistry and Physiology - B Biochemistry and Molecular Biology, 2002, 131, 695-712.	0.7	84
32	Readily Available Sources of Long-Chain Omega-3 Oils: Is Farmed Australian Seafood a Better Source of the Good Oil than Wild-Caught Seafood?. Nutrients, 2014, 6, 1063-1079.	1.7	81
33	Signature fatty acids in the polar lipids of acid-producingThiobacillusspp.: Methoxy, cyclopropyl, alpha-hydroxy-cyclopropyl and branched and normal monoenoic fatty acids. FEMS Microbiology Letters, 1986, 38, 67-77.	0.7	71
34	Replacement of dietary fish oil for Atlantic salmon parr (Salmo salar L.) with a stearidonic acid containing oil has no effect on omega-3 long-chain polyunsaturated fatty acid concentrations. Comparative Biochemistry and Physiology - B Biochemistry and Molecular Biology, 2007, 146, 197-206.	0.7	71
35	Hydrocarbons and sterols in marine sediments and soils at Davis Station, Antarctica: a survey for human-derived contaminants. Antarctic Science, 1995, 7, 137-144.	0.5	70
36	Fatty acid, sterol and hydrocarbon composition of Antarctic sea ice diatom communities during the spring bloom in McMurdo Sound. Antarctic Science, 1993, 5, 271-278.	0.5	67

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37	DHA-Containing Oilseed: A Timely Solution for the Sustainability Issues Surrounding Fish Oil Sources of the Health-Benefitting Long-Chain Omega-3 Oils. Nutrients, 2014, 6, 2035-2058.	1.7	66
38	Detection of a microbial consortium, including type II methanotrophs, by use of phospholipid fatty acids in an aerobic halogenated hydrocarbonâ€degrading soil column enriched with natural gas. Environmental Toxicology and Chemistry, 1987, 6, 89-97.	2.2	65
39	Lipids of gelatinous antarctic zooplankton: Cnidaria and Ctenophora. Lipids, 2000, 35, 551-559.	0.7	65
40	Measurement of methanotroph and methanogen signature phosopholipids for use in assessment of biomass and community structure in model systems. Organic Geochemistry, 1987, 11, 451-461.	0.9	61
41	High cell density cultivation of a novel Aurantiochytrium sp. strain TC 20 in a fed-batch system using glycerol to produce feedstock for biodiesel and omega-3 oils. Applied Microbiology and Biotechnology, 2013, 97, 6907-6918.	1.7	59
42	Direct determination of fatty acids in fish tissues: quantifying top predator trophic connections. Oecologia, 2015, 177, 85-95.	0.9	57
43	The â€œnâˆ’3 LC-PUFA sparing effectâ€•of modified dietary nâˆ’3 LC-PUFA content and DHA to EPA ratio in Atlantic salmon smolt. Aquaculture, 2012, 356-357, 135-140.	1.7	55
44	Jumping on the Omega-3 Bandwagon: Distinguishing the Role of Long-Chain and Short-Chain Omega-3 Fatty Acids. Critical Reviews in Food Science and Nutrition, 2012, 52, 795-803.	5.4	55
45	Lipids and buoyancy in Southern Ocean pteropods. Lipids, 1997, 32, 1093-1100.	0.7	52
46	Spatial Patterns and Temperature Predictions of Tuna Fatty Acids: Tracing Essential Nutrients and Changes in Primary Producers. PLoS ONE, 2015, 10, e0131598.	1.1	52
47	Recruiting a New Substrate for Triacylglycerol Synthesis in Plants: The Monoacylglycerol Acyltransferase Pathway. PLoS ONE, 2012, 7, e35214.	1.1	45
48	Development of a Brassica napus (Canola) Crop Containing Fish Oil-Like Levels of DHA in the Seed Oil. Frontiers in Plant Science, 2020, 11, 727.	1.7	45
49	Enrichment of the rotifer Brachionus plicatilis fed an Antarctic bacterium containing polyunsaturated fatty acids. Aquaculture, 1996, 147, 115-125.	1.7	44
50	Polyunsaturated fatty acids in the psychrophilic bacterium Shewanella gelidimarina ACAM 456T: molecular species analysis of major phospholipids and biosynthesis of eicosapentaenoic acid. Lipids and Lipid Metabolism, 1997, 1347, 164-176.	2.6	42
51	Sustainable alternatives to dietary fish oil in tropical fish aquaculture. Reviews in Aquaculture, 2019, 11, 1195-1218.	4.6	42
52	Nutritional and bacterial profiles of juvenile Artemia fed different enrichments and during starvation. Aquaculture, 2004, 239, 351-373.	1.7	39
53	Life cycle assessment: heterotrophic cultivation of thraustochytrids for biodiesel production. Journal of Applied Phycology, 2015, 27, 639-647.	1.5	38
54	Simultaneous estimation of microbial phospholipid fatty acids and diether lipids by capillary gas chromatography. Journal of Microbiological Methods, 1996, 25, 177-185.	0.7	37

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55	Screening of new British thraustochytrids isolates for docosahexaenoic acid (DHA) production. Journal of Applied Phycology, 2017, 29, 2831-2843.	1.5	36
56	Effect of feeding Atlantic salmon (Salmo salar L.) a diet enriched with stearidonic acid from parr to smolt on growth and n-3 long-chain PUFA biosynthesis. British Journal of Nutrition, 2011, 105, 1772-1782.	1.2	35
57	Phospholipid fatty acid and infra-red spectroscopic analysis of a sulphate-reducing consortium. FEMS Microbiology Letters, 1988, 53, 325-333.	0.7	34
58	The Digestibility and Accumulation of Dietary Phytosterols in Atlantic Salmon (Salmo salar L.) Smolt Fed Diets with Replacement Plant Oils. Lipids, 2008, 43, 549-557.	0.7	32
59	State of art and best practices for fatty acid analysis in aquatic sciences. ICES Journal of Marine Science, 2020, 77, 2375-2395.	1.2	32
60	Anaerobic production of polyunsaturated fatty acids byShewanella putrefaciensstrain ACAM 342. FEMS Microbiology Letters, 1992, 98, 117-122.	0.7	27
61	Transgenic production of arachidonic acid in oilseeds. Transgenic Research, 2012, 21, 139-147.	1.3	27
62	Enrichment of Rotifers Brachionus plicatilis with Eicosapentaenoic Acid and Docosahexaenoic Acid Produced by Bacteria. Journal of the World Aquaculture Society, 1998, 29, 313-318.	1.2	22
63	Association of acid-producing thiobacilli with degradation of concrete: analysis by â€˜signatureâ€™ fatty acids from the polar lipids and lipopolysaccharide. Journal of Industrial Microbiology, 1987, 2, 63-69.	0.9	21
64	LIPIDS ANDCHEMOTAXONOMY OF PROCHLOROTHRIX HOLLANDICA, A PLANKTONIC PROKARYOTE CONTAINING CHLOROPHYLLS a AND b. Journal of Phycology, 1988, 24, 554-559.	1.0	21
65	Restoration of EPA and DHA in rainbow trout (Oncorhynchus mykiss) using a finishing fish oil diet at two different water temperatures. Food Chemistry, 2013, 141, 236-244.	4.2	20
66	Future aquafeeds may compromise reproductive fitness in a marine invertebrate. Marine Environmental Research, 2016, 122, 67-75.	1.1	20
67	Determination of the double bond position and geometry in monoenoic fatty acids from complex microbial and environmental samples by capillary GC-MS of their Diels-Alder adducts. Journal of Microbiological Methods, 1985, 3, 311-319.	0.7	18
68	LIPIDS AND CHEMOTAXONOMY OF PROCHLOROTHRIX HOLLANDICA, A PLANKTONIC PROKARYOTE CONTAINING CHLOROPHYLLS a AND b. Journal of Phycology, 1988, 24, 554-559.	1.0	17
69	Fatty acid composition of Antarctic and temperate fish of commercial interest. Comparative Biochemistry and Physiology Part B: Comparative Biochemistry, 1994, 107, 357-363.	0.2	16
70	Microbial signature lipid profiling and exopolysaccharides: Experiences initiated with Professor David C White and transported to Tasmania, Australia. Journal of Microbiological Methods, 2008, 74, 33-46.	0.7	14
71	Restoration of Fillet n-3 Long-Chain Polyunsaturated Fatty Acid Is Improved by a Modified Fish Oil Finishing Diet Strategy for Atlantic Salmon (<u>Salmo salar</u> L.) Smolts Fed Palm Fatty Acid Distillate. Journal of Agricultural and Food Chemistry, 2012, 60, 458-466.	2.4	14
72	Triacylglycerol fatty acid and sterol composition of sediment microorganisms from McMurdo Sound, Antarctica. Polar Biology, 1989, 9, 273-279.	0.5	9

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73	Comparative benzene-induced fatty acid changes in a Rhodococcus species and its benzene-sensitive mutant: possible role of myristic and oleic acids in tolerance. Journal of Chemical Ecology, 2003, 29, 2369-2378.	0.9	9
74	Phospholipid fatty acid and lipopolysaccharide fatty acid signature lipids in methane-utilizing bacteria. FEMS Microbiology Ecology, 1991, 8, 15-21.	1.3	6