Peter G Kroth

List of Publications by Year
in descending order

111 papers	8,171 citations	66343 42 h-index	49909 87 g-index
115 all docs	115 docs citations	115 times ranked	6309 citing authors

#	Article	IF	Citations
1	Impact of Lhcx2 on Acclimation to Low Iron Conditions in the Diatom Phaeodactylum tricornutum. Frontiers in Plant Science, 2022, 13, 841058.	3.6	3
2	Sensing and Signalling in Diatom Responses to Abiotic Cues. , 2022, , 607-639.		2
3	Mitochondrial phosphoenolpyruvate carboxylase contributes to carbon fixation in the diatom <i>Phaeodactylum tricornutum</i> at low inorganic carbon concentrations. New Phytologist, 2022, 235, 1379-1393.	7.3	5
4	Identification of sequence motifs in Lhcx proteins that confer qEâ€based photoprotection in the diatom <i>Phaeodactylum tricornutum</i>. Plant Journal, 2021, 108, 1721-1734.	5.7	13
5	Complete genome sequence of Dyadobacter sp. 32, isolated from a culture of the freshwater diatom Cymbella microcephala. Marine Genomics, 2020, 52, 100720.	1.1	0
6	The Multifaceted Inhibitory Effects of an Alkylquinolone on the Diatom <i>Phaeodactylum tricornutum</i>. ChemBioChem, 2020, 21, 1206-1216.	2.6	13
7	The Aureochrome Photoreceptor PtAUREO1a Is a Highly Effective Blue Light Switch in Diatoms. IScience, 2020, 23, 101730.	4.1	14
8	Five Non-motile Dinotom Dinoflagellates of the Genus Dinothrix. Frontiers in Plant Science, 2020, 11, 591050.	3.6	9
9	Influence of the algal microbiome on biofouling during industrial cultivation of Nannochloropsis sp. in closed photobioreactors. Algal Research, 2019, 42, 101591.	4.6	6
10	Discovery of a kleptoplastic â€˜dinotomâ€™ dinoflagellate and the unique nuclear dynamics of converting kleptoplastids to permanent plastids. Scientific Reports, 2019, 9, 10474.	3.3	25
11	Lhcx proteins provide photoprotection via thermal dissipation of absorbed light in the diatom Phaeodactylum tricornutum. Nature Communications, 2019, 10, 4167.	12.8	84
12	<i>N</i>-Acyl Homoserine Lactone Derived Tetramic Acids Impair Photosynthesis in <i>Phaeodactylum tricornutum</i>. ACS Chemical Biology, 2019, 14, 198-203.	3.4	29
13	Organelle Studies and Proteome Analyses of Mitochondria and Plastids Fractions from the Diatom <i>Thalassiosira pseudonana</i>. Plant and Cell Physiology, 2019, 60, 1811-1828.	3.1	39
14	A strategy to complement PtAUREO1a in TALEN knockout strains of Phaeodactylum tricornutum. Algal Research, 2019, 39, 101469.	4.6	8
15	Reduced vacuolar Î²-1,3-glucan synthesis affects carbohydrate metabolism as well as plastid homeostasis and structure in <i>Phaeodactylum tricornutum</i>. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 4791-4796.	7.1	39
16	The intracellular distribution of inorganic carbon fixing enzymes does not support the presence of a C4 pathway in the diatom Phaeodactylum tricornutum. Photosynthesis Research, 2018, 137, 263-280.	2.9	39
17	Production of chemicals from microalgae lipids â€" status and perspectives. European Journal of Lipid Science and Technology, 2018, 120, 1700152.	1.5	52
18	Genome editing in diatoms: achievements and goals. Plant Cell Reports, 2018, 37, 1401-1408.	5.6	54

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19	Mitochondrial Glycolysis in a Major Lineage of Eukaryotes. Genome Biology and Evolution, 2018, 10, 2310-2325.	2.5	62
20	Isolation of Plastid Fractions from the Diatoms Thalassiosira pseudonana and Phaeodactylum tricornutum. Methods in Molecular Biology, 2018, 1829, 189-203.	0.9	11
21	Blasticidin-S deaminase, a new selection marker for genetic transformation of the diatom <i>Phaeodactylum tricornutum</i>. PeerJ, 2018, 6, e5884.	2.0	36
22	Evolutionary genomics of the cold-adapted diatom Fragilariopsis cylindrus. Nature, 2017, 541, 536-540.	27.8	332
23	A fast and reliable strategy to generate TALEN-mediated gene knockouts in the diatom Phaeodactylum tricornutum. Algal Research, 2017, 23, 186-195.	4.6	57
24	Plastid thylakoid architecture optimizes photosynthesis in diatoms. Nature Communications, 2017, 8, 15885.	12.8	93
25	Valorization of Unconventional Lipids from Microalgae or Tall Oil via a Selective Dual Catalysis One-Pot Approach. Journal of the American Chemical Society, 2017, 139, 13487-13491.	13.7	20
26	Intracellular metabolic pathway distribution in diatoms and tools for genome-enabled experimental diatom research. Philosophical Transactions of the Royal Society B: Biological Sciences, 2017, 372, 20160402.	4.0	38
27	The peculiar carbon metabolism in diatoms. Philosophical Transactions of the Royal Society B: Biological Sciences, 2017, 372, 20160405.	4.0	16
28	An update on aureochromes: Phylogeny â€“ mechanism â€“ function. Journal of Plant Physiology, 2017, 217, 20-26.	3.5	57
29	Shuttling of (deoxyâ€) purine nucleotides between compartments of the diatom <i>Phaeodactylum tricornutum</i>. New Phytologist, 2017, 213, 193-205.	7.3	20
30	The diatom <i><scp>P</scp>haeodactylum tricornutum</i> adjusts nonphotochemical fluorescence quenching capacity in response to dynamic light via fineâ€tuned <scp>L</scp>hcx and xanthophyll cycle pigment synthesis. New Phytologist, 2017, 214, 205-218.	7.3	71
31	PtAUREO1a and PtAUREO1b knockout mutants of the diatom Phaeodactylum tricornutum are blocked in photoacclimation to blue light. Journal of Plant Physiology, 2017, 217, 44-48.	3.5	39
32	Diatom Vacuolar 1,6â€Î²â€Transglycosylases can Functionally Complement the Respective Yeast Mutants. Journal of Eukaryotic Microbiology, 2016, 63, 536-546.	1.7	29
33	Bacteria may induce the secretion of mucinâ€like proteins by the diatom <i>Phaeodactylum tricornutum</i>. Journal of Phycology, 2016, 52, 463-474.	2.3	36
34	A semi-automated, KNIME-based workflow for biofilm assays. BMC Microbiology, 2016, 16, 61.	3.3	1
35	Defense responses in female gametophytes of Saccharina japonica (Phaeophyta) induced by flg22-derived peptides. Journal of Applied Phycology, 2016, 28, 1793-1801.	2.8	5
36	Allosteric communication between DNA-binding and light-responsive domains of diatom class I aureochromes. Nucleic Acids Research, 2016, 44, 5957-5970.	14.5	53

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37	rRNA and rDNA based assessment of sea ice protist biodiversity from the central Arctic Ocean. European Journal of Phycology, 2016, 51, 31-46.	2.0	31
38	Rapid induction of GFP expression by the nitrate reductase promoter in the diatom<i>Phaeodactylum tricornutum</i>. PeerJ, 2016, 4, e2344.	2.0	32
39	Plastid proteome prediction for diatoms and other algae with secondary plastids of the red lineage. Plant Journal, 2015, 81, 519-528.	5.7	174
40	Comprehensive computational analysis of leucine-rich repeat (LRR) proteins encoded in the genome of the diatom Phaeodactylum tricornutum. Marine Genomics, 2015, 21, 43-51.	1.1	3
41	Biofilm and capsule formation of the diatom <i>Achnanthidium minutissimum</i> are affected by a bacterium. Journal of Phycology, 2015, 51, 343-355.	2.3	28
42	The biodiversity of carbon assimilation. Journal of Plant Physiology, 2015, 172, 76-81.	3.5	48
43	Capsules of the diatom<i>Achnanthidium minutissimum</i>arise from fibrillar precursors and foster attachment of bacteria. PeerJ, 2015, 3, e858.	2.0	12
44	Carbon Fixation in Diatoms. Advances in Photosynthesis and Respiration, 2014, , 335-362.	1.0	15
45	Synthetic Polyester from Algae Oil. Angewandte Chemie - International Edition, 2014, 53, 6800-6804.	13.8	82
46	Influence of bacteria on cell size development and morphology of cultivated diatoms. Phycological Research, 2014, 62, 269-281.	1.6	29
47	Deducing Intracellular Distributions of Metabolic Pathways from Genomic Data. Methods in Molecular Biology, 2014, 1083, 187-211.	0.9	12
48	Getting a grip on genetic modification in brown algae. Journal of Phycology, 2013, 49, 816-818.	2.3	3
49	A novel type of light-harvesting antenna protein of red algal origin in algae with secondary plastids. BMC Evolutionary Biology, 2013, 13, 159.	3.2	32
50	High Light Acclimation in the Secondary Plastids Containing Diatom <i>Phaeodactylum tricornutum</i> is Triggered by the Redox State of the Plastoquinone Pool Â Â. Plant Physiology, 2013, 161, 853-865.	4.8	119
51	The role of <scp>C</scp>₄ metabolism in the marine diatom <i><scp>P</scp>haeodactylum tricornutum</i>. New Phytologist, 2013, 197, 177-185.	7.3	83
52	Blue-Light-Induced Unfolding of the JÎ± Helix Allows for the Dimerization of Aureochrome-LOV from the Diatom <i>Phaeodactylum tricornutum</i>. Biochemistry, 2013, 52, 3094-3101.	2.5	60
53	Post-cryopreservation viability of the benthic freshwater diatom Planothidium frequentissimum depends on light levels. Cryobiology, 2013, 67, 23-29.	0.7	17
54	Analysing size variation during light-starvation response of nutritionally diverse chrysophytes with a Coulter counter. Algological Studies (Stuttgart, Germany: 2007), 2013, 141, 37-51.	0.4	4

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55	AUREOCHROME1a-Mediated Induction of the Diatom-Specific Cyclin <i>dsCYC2</i> Controls the Onset of Cell Division in Diatoms (<i>Phaeodactylum tricornutum</i>). Plant Cell, 2013, 25, 215-228.	6.6	136
56	Aureochrome 1a Is Involved in the Photoacclimation of the Diatom Phaeodactylum tricornutum. PLoS ONE, 2013, 8, e74451.	2.5	77
57	Influence of nutrients and light on autotrophic, mixotrophic and heterotrophic freshwater chrysophytes. Aquatic Microbial Ecology, 2013, 71, 179-191.	1.8	43
58	Evolution and Functional Diversification of Fructose Bisphosphate Aldolase Genes in Photosynthetic Marine Diatoms. Molecular Biology and Evolution, 2012, 29, 367-379.	8.9	68
59	Elstera litoralis gen. nov., sp. nov., isolated from stone biofilms of Lake Constance, Germany. International Journal of Systematic and Evolutionary Microbiology, 2012, 62, 1750-1754.	1.7	32
60	Algal genomes reveal evolutionary mosaicism and the fate of nucleomorphs. Nature, 2012, 492, 59-65.	27.8	377
61	Redox Regulation of Carbonic Anhydrases via Thioredoxin in Chloroplast of the Marine Diatom Phaeodactylum tricornutum. Journal of Biological Chemistry, 2012, 287, 20689-20700.	3.4	37
62	Photoautotrophicâ€“heterotrophic biofilm communities: a laboratory incubator designed for growing axenic diatoms and bacteria in defined mixedâ€species biofilms. Environmental Microbiology Reports, 2012, 4, 133-140.	2.4	22
63	Silencing of the Violaxanthin De-Epoxidase Gene in the Diatom Phaeodactylum tricornutum Reduces Diatoxanthin Synthesis and Non-Photochemical Quenching. PLoS ONE, 2012, 7, e36806.	2.5	65
64	Growth and release of extracellular organic compounds by benthic diatoms depend on interactions with bacteria. Environmental Microbiology, 2011, 13, 1052-1063.	3.8	135
65	Gene expression and activity of digestive proteases in Daphnia: effects of cyanobacterial protease inhibitors. BMC Physiology, 2010, 10, 6.	3.6	91
66	Characterization of a trimeric light-harvesting complex in the diatom Phaeodactylum tricornutum built of FcpA and FcpE proteins. Journal of Experimental Botany, 2010, 61, 3079-3087.	4.8	44
67	The Presence and Localization of Thioredoxins in Diatoms, Unicellular Algae of Secondary Endosymbiotic Origin. Molecular Plant, 2009, 2, 468-477.	8.3	29
68	Diatom plastids depend on nucleotide import from the cytosol. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 3621-3626.	7.1	80
69	Intracellular distribution of the reductive and oxidative pentose phosphate pathways in two diatoms. Journal of Basic Microbiology, 2009, 49, 58-72.	3.3	36
70	PROTOCOLS FOR THE REMOVAL OF BACTERIA FROM FRESHWATER BENTHIC DIATOM CULTURES¹. Journal of Phycology, 2009, 45, 981-986.	2.3	30
71	FIRST INDUCED PLASTID GENOME MUTATIONS IN AN ALGA WITH SECONDARY PLASTIDS: <i>psb</i>A MUTATIONS IN THE DIATOM <i>PHAEODACTYLUM TRICORNUTUM</i> (BACILLARIOPHYCEAE) REVEAL CONSEQUENCES ON THE REGULATION OF PHOTOSYNTHESIS¹. Journal of Phycology, 2009, 45, 838-846.	2.3	24
72	The Phaeodactylum genome reveals the evolutionary history of diatom genomes. Nature, 2008, 456, 239-244.	27.8	1,458

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73	THE COMPLEX EXTRACELLULAR POLYSACCHARIDES OF MAINLY CHAINâ€FORMING FRESHWATER DIATOM SPECIES FROM EPILITHIC BIOFILMS¹. Journal of Phycology, 2008, 44, 1465-1475.	2.3	29
74	A Model for Carbohydrate Metabolism in the Diatom Phaeodactylum tricornutum Deduced from Comparative Whole Genome Analysis. PLoS ONE, 2008, 3, e1426.	2.5	394
75	STRUCTURAL AND FUNCTIONAL CHARACTERIZATION OF PUTATIVE REGULATORY DNA SEQUENCES OFFCPGENES IN THE CENTRIC DIATOMCYCLOTELLA CRYPTICA. Diatom Research, 2008, 23, 31-49.	1.2	6
76	Bacteria Associated with Benthic Diatoms from Lake Constance: Phylogeny and Influences on Diatom Growth and Secretion of Extracellular Polymeric Substances. Applied and Environmental Microbiology, 2008, 74, 7740-7749.	3.1	128
77	Localization of EPS components secreted by freshwater diatoms using differential staining with fluorophore-conjugated lectins and other fluorochromes. European Journal of Phycology, 2007, 42, 199-208.	2.0	32
78	Photoprotection capacity differs among diatoms: Possible consequences on the spatial distribution of diatoms related to fluctuations in the underwater light climate. Limnology and Oceanography, 2007, 52, 1188-1194.	3.1	219
79	Molecular Biology and the Biotechnological Potential of Diatoms. Advances in Experimental Medicine and Biology, 2007, 616, 23-33.	1.6	40
80	Protein targeting into complex diatom plastids: functional characterisation of a specific targeting motif. Plant Molecular Biology, 2007, 64, 519-530.	3.9	181
81	Genetic Transformation. , 2007, , 257-267.		47
82	Genetic transformation: a tool to study protein targeting in diatoms. Methods in Molecular Biology, 2007, 390, 257-67.	0.9	23
83	Protein Targeting into the Complex Plastid of Cryptophytes. Journal of Molecular Evolution, 2006, 62, 674-681.	1.8	94
84	The Regulation of Carbon and Nutrient Assimilation in Diatoms is Significantly Different from Green Algae. Protist, 2006, 157, 91-124.	1.5	239
85	Nucleus-to-Nucleus Gene Transfer and Protein Retargeting into a Remnant Cytoplasm of Cryptophytes and Diatoms. Molecular Biology and Evolution, 2006, 23, 2413-2422.	8.9	80
86	In Diatoms, the Transthylakoid Proton Gradient Regulates the Photoprotective Non-photochemical Fluorescence Quenching Beyond its Control on the Xanthophyll Cycle. Plant and Cell Physiology, 2006, 47, 1010-1016.	3.1	65
87	The peculiar distribution of class I and class II aldolases in diatoms and in red algae. Current Genetics, 2005, 48, 389-400.	1.7	16
88	Diatom Plastids Possess a Phosphoribulokinase with an Altered Regulation and No Oxidative Pentose Phosphate Pathway. Plant Physiology, 2005, 137, 911-920.	4.8	83
89	Identification and characterization of a new conserved motif within the presequence of proteins targeted into complex diatom plastids. Plant Journal, 2004, 41, 175-183.	5.7	180
90	Presequence Acquisition During Secondary Endocytobiosis and thePossible Role of Introns. Journal of Molecular Evolution, 2004, 58, 712-721.	1.8	43

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91	Evolution of Protein Targeting into "Complex" Plastids: The "Secretory Transport Hypothesis". Plant Biology, 2003, 5, 350-358.	3.8	13
92	New Insight into Phaeodactylum tricornutum Fatty Acid Metabolism. Cloning and Functional Characterization of Plastidial and Microsomal Î”12-Fatty Acid Desaturases,. Plant Physiology, 2003, 131, 1648-1660.	4.8	130
93	In vivo characterization of diatom multipartite plastid targeting signals. Journal of Cell Science, 2002, 115, 4061-4069.	2.0	143
94	Protein transport into secondary plastids and the evolution of primary and secondary plastids. International Review of Cytology, 2002, 221, 191-255.	6.2	55
95	Transformation of the diatom Phaeodactylum tricornutum (Bacillariophyceae) with a variety of selectable marker and reporter genes. Journal of Phycology, 2001, 36, 379-386.	2.3	316
96	Diatom Fucoxanthin Chlorophyll a/c-binding Protein (FCP) and Land Plant Light-harvesting Proteins Use a Similar Pathway for Thylakoid Membrane Insertion. Journal of Biological Chemistry, 2001, 276, 7985-7991.	3.4	33
97	Inverse regulation of F1-ATPase activity by a mutation at the regulatory region on the Î³ subunit of chloroplast ATP synthase. Biochemical Journal, 2000, 352, 783.	3.7	12
98	Diatom plastids: Secondary endocytobiosis, plastid genome and protein import. Physiologia Plantarum, 1999, 107, 136-141.	5.2	28
99	Functional characterization of isolated plastids from two marine diatoms. Planta, 1998, 206, 79-85.	3.2	33
100	Protein Transport into â€œComplexâ€• Diatom Plastids Utilizes Two Different Targeting Signals. Journal of Biological Chemistry, 1998, 273, 30973-30978.	3.4	99
101	The Formation or the Reduction of a Disulfide Bridge on the Î³ Subunit of Chloroplast ATP Synthase Affects the Inhibitory Effect of the Îµ Subunit. Journal of Biological Chemistry, 1998, 273, 15901-15905.	3.4	23
102	Characterization and Subunit Structure of the ATP Synthase of the Halophilic Archaeon Haloferax volcanii and Organization of the ATP Synthase Genes. Journal of Biological Chemistry, 1997, 272, 6261-6269.	3.4	32
103	The Regulatory Functions of the gamma and e Subunits from Chloroplast CF1 are Transferred to the Core Complex, alpha3beta3, from Thermophilic Bacterial F1. FEBS Journal, 1997, 247, 1158-1165.	0.2	33
104	Over-expression and localization of an unknown plastid encoded protein in the diatom Odontella sinensis with similarities to a subunit of ABC-transporters. Plant Science, 1996, 114, 171-179.	3.6	10
105	Stable nuclear transformation of the diatom. Molecular Genetics and Genomics, 1996, 252, 572.	2.4	23
106	MOLECULAR STRUCTURE AND EVOLUTION OF THE CHLOROPLAST atpB/E GENE CLUSTER IN THE DIATOM ODONTELLA SINENSIS1. Journal of Phycology, 1995, 31, 962-969.	2.3	6
107	Nucleotide sequence of two cDNAs encoding fucoxanthin chlorophyll a/c proteins in the diatom Odontella sinensis. Plant Molecular Biology, 1995, 27, 825-828.	3.9	37
108	The chloroplast genome of a chlorophylla+c-containing alga,Odontella sinensis. Plant Molecular Biology Reporter, 1995, 13, 336-342.	1.8	206

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109	Nucleotide sequence of the ATPase A- and B-subunits of the halophilic archaebacterium Haloferax volcanii and characterization of the enzyme. BBA - Proteins and Proteomics, 1995, 1249, 137-144.	2.1	19
110	The Î´ subunit of the chloroplast ATPase is plastid-encoded in the diatomOdontella sinensis. FEBS Letters, 1991, 280, 387-392.	2.8	18
111	Genetic Transformation: A Tool to Study Protein Targeting in Diatoms. , 0, , 257-268.		8