

# Peter G Kroth

## List of Publications by Year in descending order

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111  
papers

8,171  
citations

66234

42  
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49773

87  
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115  
all docs

115  
docs citations

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times ranked

6309  
citing authors

#	ARTICLE	IF	CITATIONS
1	Impact of Lhc2 on Acclimation to Low Iron Conditions in the Diatom <i>Phaeodactylum tricornutum</i> . <i>Frontiers in Plant Science</i> , 2022, 13, 841058.	1.7	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. <i>New Phytologist</i> , 2022, 235, 1379-1393.	3.5	5
4	Identification of sequence motifs in LhcX proteins that confer qE-based photoprotection in the diatom <i>Phaeodactylum tricornutum</i> . <i>Plant Journal</i> , 2021, 108, 1721-1734.	2.8	13
5	Complete genome sequence of <i>Dyadobacter</i> sp. 32, isolated from a culture of the freshwater diatom <i>Cymbella microcephala</i> . <i>Marine Genomics</i> , 2020, 52, 100720.	0.4	0
6	The Multifaceted Inhibitory Effects of an Alkylquinolone on the Diatom <i>Phaeodactylum tricornutum</i> . <i>ChemBioChem</i> , 2020, 21, 1206-1216.	1.3	13
7	The Aureochrome Photoreceptor PtAUREO1a Is a Highly Effective Blue Light Switch in Diatoms. <i>IScience</i> , 2020, 23, 101730.	1.9	14
8	Five Non-motile Dinotom Dinoflagellates of the Genus <i>Dinotrix</i> . <i>Frontiers in Plant Science</i> , 2020, 11, 591050.	1.7	9
9	Influence of the algal microbiome on biofouling during industrial cultivation of <i>Nannochloropsis</i> sp. in closed photobioreactors. <i>Algal Research</i> , 2019, 42, 101591.	2.4	6
10	Discovery of a kleptoplastic "dinotom" dinoflagellate and the unique nuclear dynamics of converting kleptoplastids to permanent plastids. <i>Scientific Reports</i> , 2019, 9, 10474.	1.6	25
11	LhcX proteins provide photoprotection via thermal dissipation of absorbed light in the diatom <i>Phaeodactylum tricornutum</i> . <i>Nature Communications</i> , 2019, 10, 4167.	5.8	84
12	<i>N</i> -Acyl Homoserine Lactone Derived Tetramic Acids Impair Photosynthesis in <i>Phaeodactylum tricornutum</i> . <i>ACS Chemical Biology</i> , 2019, 14, 198-203.	1.6	29
13	Organelle Studies and Proteome Analyses of Mitochondria and Plastids Fractions from the Diatom <i>Thalassiosira pseudonana</i> . <i>Plant and Cell Physiology</i> , 2019, 60, 1811-1828.	1.5	39
14	A strategy to complement PtAUREO1a in TALEN knockout strains of <i>Phaeodactylum tricornutum</i> . <i>Algal Research</i> , 2019, 39, 101469.	2.4	8
15	Reduced vacuolar $\beta$ -1,3-glucan synthesis affects carbohydrate metabolism as well as plastid homeostasis and structure in <i>Phaeodactylum tricornutum</i> . <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, 4791-4796.	3.3	39
16	The intracellular distribution of inorganic carbon fixing enzymes does not support the presence of a C4 pathway in the diatom <i>Phaeodactylum tricornutum</i> . <i>Photosynthesis Research</i> , 2018, 137, 263-280.	1.6	39
17	Production of chemicals from microalgae lipids " status and perspectives. <i>European Journal of Lipid Science and Technology</i> , 2018, 120, 1700152.	1.0	52
18	Genome editing in diatoms: achievements and goals. <i>Plant Cell Reports</i> , 2018, 37, 1401-1408.	2.8	54

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19	Mitochondrial Glycolysis in a Major Lineage of Eukaryotes. <i>Genome Biology and Evolution</i> , 2018, 10, 2310-2325.	1.1	62
20	Isolation of Plastid Fractions from the Diatoms <i>Thalassiosira pseudonana</i> and <i>Phaeodactylum tricornutum</i> . <i>Methods in Molecular Biology</i> , 2018, 1829, 189-203.	0.4	11
21	Blasticidin-S deaminase, a new selection marker for genetic transformation of the diatom <i>Phaeodactylum tricornutum</i> . <i>PeerJ</i> , 2018, 6, e5884.	0.9	36
22	Evolutionary genomics of the cold-adapted diatom <i>Fragilariopsis cylindrus</i> . <i>Nature</i> , 2017, 541, 536-540.	13.7	332
23	A fast and reliable strategy to generate TALEN-mediated gene knockouts in the diatom <i>Phaeodactylum tricornutum</i> . <i>Algal Research</i> , 2017, 23, 186-195.	2.4	57
24	Plastid thylakoid architecture optimizes photosynthesis in diatoms. <i>Nature Communications</i> , 2017, 8, 15885.	5.8	93
25	Valorization of Unconventional Lipids from Microalgae or Tall Oil via a Selective Dual Catalysis One-Pot Approach. <i>Journal of the American Chemical Society</i> , 2017, 139, 13487-13491.	6.6	20
26	Intracellular metabolic pathway distribution in diatoms and tools for genome-enabled experimental diatom research. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , 2017, 372, 20160402.	1.8	38
27	The peculiar carbon metabolism in diatoms. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , 2017, 372, 20160405.	1.8	16
28	An update on aureochromes: Phylogeny – mechanism – function. <i>Journal of Plant Physiology</i> , 2017, 217, 20-26.	1.6	57
29	Shuttling of (deoxy) purine nucleotides between compartments of the diatom <i>Phaeodactylum tricornutum</i> . <i>New Phytologist</i> , 2017, 213, 193-205.	3.5	20
30	The diatom <i>Phaeodactylum tricornutum</i> adjusts nonphotochemical fluorescence quenching capacity in response to dynamic light via fine-tuned Lx and xanthophyll cycle pigment synthesis. <i>New Phytologist</i> , 2017, 214, 205-218.	3.5	71
31	PtAUREO1a and PtAUREO1b knockout mutants of the diatom <i>Phaeodactylum tricornutum</i> are blocked in photoacclimation to blue light. <i>Journal of Plant Physiology</i> , 2017, 217, 44-48.	1.6	39
32	Diatom Vacuolar 1,6-Transglycosylases can Functionally Complement the Respective Yeast Mutants. <i>Journal of Eukaryotic Microbiology</i> , 2016, 63, 536-546.	0.8	29
33	Bacteria may induce the secretion of mucin-like proteins by the diatom <i>Phaeodactylum tricornutum</i> . <i>Journal of Phycology</i> , 2016, 52, 463-474.	1.0	36
34	A semi-automated, KNIME-based workflow for biofilm assays. <i>BMC Microbiology</i> , 2016, 16, 61.	1.3	1
35	Defense responses in female gametophytes of <i>Saccharina japonica</i> (Phaeophyta) induced by flg22-derived peptides. <i>Journal of Applied Phycology</i> , 2016, 28, 1793-1801.	1.5	5
36	Allosteric communication between DNA-binding and light-responsive domains of diatom class I aureochromes. <i>Nucleic Acids Research</i> , 2016, 44, 5957-5970.	6.5	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.	0.9	31
38	Rapid induction of GFP expression by the nitrate reductase promoter in the diatom <i>Phaeodactylum tricornutum</i> . PeerJ, 2016, 4, e2344.	0.9	32
39	Plastid proteome prediction for diatoms and other algae with secondary plastids of the red lineage. Plant Journal, 2015, 81, 519-528.	2.8	174
40	Comprehensive computational analysis of leucine-rich repeat (LRR) proteins encoded in the genome of the diatom <i>Phaeodactylum tricornutum</i> . Marine Genomics, 2015, 21, 43-51.	0.4	3
41	Biofilm and capsule formation of the diatom <i>Achnanthisidium minutissimum</i> are affected by a bacterium. Journal of Phycology, 2015, 51, 343-355.	1.0	28
42	The biodiversity of carbon assimilation. Journal of Plant Physiology, 2015, 172, 76-81.	1.6	48
43	Capsules of the diatom <i>Achnanthisidium minutissimum</i> arise from fibrillar precursors and foster attachment of bacteria. PeerJ, 2015, 3, e858.	0.9	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.	7.2	82
46	Influence of bacteria on cell size development and morphology of cultivated diatoms. Phycological Research, 2014, 62, 269-281.	0.8	29
47	Deducing Intracellular Distributions of Metabolic Pathways from Genomic Data. Methods in Molecular Biology, 2014, 1083, 187-211.	0.4	12
48	Getting a grip on genetic modification in brown algae. Journal of Phycology, 2013, 49, 816-818.	1.0	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. Plant Physiology, 2013, 161, 853-865.	2.3	119
51	The role of C <sub>4</sub> metabolism in the marine diatom <i>Phaeodactylum tricornutum</i> . New Phytologist, 2013, 197, 177-185.	3.5	83
52	Blue-Light-Induced Unfolding of the $\pm$ Helix Allows for the Dimerization of Aureochrome-LOV from the Diatom <i>Phaeodactylum tricornutum</i> . Biochemistry, 2013, 52, 3094-3101.	1.2	60
53	Post-cryopreservation viability of the benthic freshwater diatom <i>Planorbulina mediterranensis</i> depends on light levels. Cryobiology, 2013, 67, 23-29.	0.3	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> ). <i>Plant Cell</i> , 2013, 25, 215-228.	3.1	136
56	Aureochrome 1a Is Involved in the Photoacclimation of the Diatom <i>Phaeodactylum tricornutum</i> . <i>PLoS ONE</i> , 2013, 8, e74451.	1.1	77
57	Influence of nutrients and light on autotrophic, mixotrophic and heterotrophic freshwater chrysophytes. <i>Aquatic Microbial Ecology</i> , 2013, 71, 179-191.	0.9	43
58	Evolution and Functional Diversification of Fructose Bisphosphate Aldolase Genes in Photosynthetic Marine Diatoms. <i>Molecular Biology and Evolution</i> , 2012, 29, 367-379.	3.5	68
59	<i>Elstera litoralis</i> gen. nov., sp. nov., isolated from stone biofilms of Lake Constance, Germany. <i>International Journal of Systematic and Evolutionary Microbiology</i> , 2012, 62, 1750-1754.	0.8	32
60	Algal genomes reveal evolutionary mosaicism and the fate of nucleomorphs. <i>Nature</i> , 2012, 492, 59-65.	13.7	377
61	Redox Regulation of Carbonic Anhydrases via Thioredoxin in Chloroplast of the Marine Diatom <i>Phaeodactylum tricornutum</i> . <i>Journal of Biological Chemistry</i> , 2012, 287, 20689-20700.	1.6	37
62	Photoautotrophic-heterotrophic biofilm communities: a laboratory incubator designed for growing axenic diatoms and bacteria in defined mixed-species biofilms. <i>Environmental Microbiology Reports</i> , 2012, 4, 133-140.	1.0	22
63	Silencing of the Violaxanthin De-Epoxidase Gene in the Diatom <i>Phaeodactylum tricornutum</i> Reduces Diatoxanthin Synthesis and Non-Photochemical Quenching. <i>PLoS ONE</i> , 2012, 7, e36806.	1.1	65
64	Growth and release of extracellular organic compounds by benthic diatoms depend on interactions with bacteria. <i>Environmental Microbiology</i> , 2011, 13, 1052-1063.	1.8	135
65	Gene expression and activity of digestive proteases in <i>Daphnia</i> : effects of cyanobacterial protease inhibitors. <i>BMC Physiology</i> , 2010, 10, 6.	3.6	91
66	Characterization of a trimeric light-harvesting complex in the diatom <i>Phaeodactylum tricornutum</i> built of FcpA and FcpE proteins. <i>Journal of Experimental Botany</i> , 2010, 61, 3079-3087.	2.4	44
67	The Presence and Localization of Thioredoxins in Diatoms, Unicellular Algae of Secondary Endosymbiotic Origin. <i>Molecular Plant</i> , 2009, 2, 468-477.	3.9	29
68	Diatom plastids depend on nucleotide import from the cytosol. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009, 106, 3621-3626.	3.3	80
69	Intracellular distribution of the reductive and oxidative pentose phosphate pathways in two diatoms. <i>Journal of Basic Microbiology</i> , 2009, 49, 58-72.	1.8	36
70	PROTOCOLS FOR THE REMOVAL OF BACTERIA FROM FRESHWATER BENTHIC DIATOM CULTURES. <i>Journal of Phycology</i> , 2009, 45, 981-986.	1.0	30
71	FIRST INDUCED PLASTID GENOME MUTATIONS IN AN ALGA WITH SECONDARY PLASTIDS: A MUTATIONS IN THE DIATOM <i>PHAEODACTYLLUM TRICORNUTUM</i> (BACILLARIOPHYCEAE) REVEAL CONSEQUENCES ON THE REGULATION OF PHOTOSYNTHESIS. <i>Journal of Phycology</i> , 2009, 45, 838-846.	1.0	24
72	The <i>Phaeodactylum</i> genome reveals the evolutionary history of diatom genomes. <i>Nature</i> , 2008, 456, 239-244.	13.7	1,458

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73	THE COMPLEX EXTRACELLULAR POLYSACCHARIDES OF MAINLY CHAIN-FORMING FRESHWATER DIATOM SPECIES FROM EPILITHIC BIOFILMS. <i>Journal of Phycology</i> , 2008, 44, 1465-1475.	1.0	29
74	A Model for Carbohydrate Metabolism in the Diatom <i>Phaeodactylum tricornutum</i> Deduced from Comparative Whole Genome Analysis. <i>PLoS ONE</i> , 2008, 3, e1426.	1.1	394
75	STRUCTURAL AND FUNCTIONAL CHARACTERIZATION OF PUTATIVE REGULATORY DNA SEQUENCES OFFCPGENES IN THE CENTRIC DIATOMCYCLOTELLA CRYPTICA. <i>Diatom Research</i> , 2008, 23, 31-49.	0.5	6
76	Bacteria Associated with Benthic Diatoms from Lake Constance: Phylogeny and Influences on Diatom Growth and Secretion of Extracellular Polymeric Substances. <i>Applied and Environmental Microbiology</i> , 2008, 74, 7740-7749.	1.4	128
77	Localization of EPS components secreted by freshwater diatoms using differential staining with fluorophore-conjugated lectins and other fluorochromes. <i>European Journal of Phycology</i> , 2007, 42, 199-208.	0.9	32
78	Photoprotection capacity differs among diatoms: Possible consequences on the spatial distribution of diatoms related to fluctuations in the underwater light climate. <i>Limnology and Oceanography</i> , 2007, 52, 1188-1194.	1.6	219
79	Molecular Biology and the Biotechnological Potential of Diatoms. <i>Advances in Experimental Medicine and Biology</i> , 2007, 616, 23-33.	0.8	40
80	Protein targeting into complex diatom plastids: functional characterisation of a specific targeting motif. <i>Plant Molecular Biology</i> , 2007, 64, 519-530.	2.0	181
81	Genetic Transformation. , 2007, , 257-267.		47
82	Genetic transformation: a tool to study protein targeting in diatoms. <i>Methods in Molecular Biology</i> , 2007, 390, 257-67.	0.4	23
83	Protein Targeting into the Complex Plastid of Cryptophytes. <i>Journal of Molecular Evolution</i> , 2006, 62, 674-681.	0.8	94
84	The Regulation of Carbon and Nutrient Assimilation in Diatoms is Significantly Different from Green Algae. <i>Protist</i> , 2006, 157, 91-124.	0.6	239
85	Nucleus-to-Nucleus Gene Transfer and Protein Retargeting into a Remnant Cytoplasm of Cryptophytes and Diatoms. <i>Molecular Biology and Evolution</i> , 2006, 23, 2413-2422.	3.5	80
86	In Diatoms, the Transthylakoid Proton Gradient Regulates the Photoprotective Non-photochemical Fluorescence Quenching Beyond its Control on the Xanthophyll Cycle. <i>Plant and Cell Physiology</i> , 2006, 47, 1010-1016.	1.5	65
87	The peculiar distribution of class I and class II aldolases in diatoms and in red algae. <i>Current Genetics</i> , 2005, 48, 389-400.	0.8	16
88	Diatom Plastids Possess a Phosphoribulokinase with an Altered Regulation and No Oxidative Pentose Phosphate Pathway. <i>Plant Physiology</i> , 2005, 137, 911-920.	2.3	83
89	Identification and characterization of a new conserved motif within the presequence of proteins targeted into complex diatom plastids. <i>Plant Journal</i> , 2004, 41, 175-183.	2.8	180
90	Presequence Acquisition During Secondary Endocytobiosis and the Possible Role of Introns. <i>Journal of Molecular Evolution</i> , 2004, 58, 712-721.	0.8	43

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91	Evolution of Protein Targeting into "Complex" Plastids: The "Secretory Transport Hypothesis". <i>Plant Biology</i> , 2003, 5, 350-358.	1.8	13
92	New Insight into <i>Phaeodactylum tricornutum</i> Fatty Acid Metabolism. Cloning and Functional Characterization of Plastidial and Microsomal $\Delta^12$ -Fatty Acid Desaturases. <i>Plant Physiology</i> , 2003, 131, 1648-1660.	2.3	130
93	In vivo characterization of diatom multipartite plastid targeting signals. <i>Journal of Cell Science</i> , 2002, 115, 4061-4069.	1.2	143
94	Protein transport into secondary plastids and the evolution of primary and secondary plastids. <i>International Review of Cytology</i> , 2002, 221, 191-255.	6.2	55
95	Transformation of the diatom <i>Phaeodactylum tricornutum</i> (Bacillariophyceae) with a variety of selectable marker and reporter genes. <i>Journal of Phycology</i> , 2001, 36, 379-386.	1.0	316
96	Diatom Fucoxanthin Chlorophyll a/c-binding Protein (FCP) and Land Plant Light-harvesting Proteins Use a Similar Pathway for Thylakoid Membrane Insertion. <i>Journal of Biological Chemistry</i> , 2001, 276, 7985-7991.	1.6	33
97	Inverse regulation of F1-ATPase activity by a mutation at the regulatory region on the $\hat{\gamma}$ subunit of chloroplast ATP synthase. <i>Biochemical Journal</i> , 2000, 352, 783.	1.7	12
98	Diatom plastids: Secondary endocytobiosis, plastid genome and protein import. <i>Physiologia Plantarum</i> , 1999, 107, 136-141.	2.6	28
99	Functional characterization of isolated plastids from two marine diatoms. <i>Planta</i> , 1998, 206, 79-85.	1.6	33
100	Protein Transport into "Complex" Diatom Plastids Utilizes Two Different Targeting Signals. <i>Journal of Biological Chemistry</i> , 1998, 273, 30973-30978.	1.6	99
101	The Formation or the Reduction of a Disulfide Bridge on the $\hat{\gamma}$ Subunit of Chloroplast ATP Synthase Affects the Inhibitory Effect of the $\hat{\mu}$ Subunit. <i>Journal of Biological Chemistry</i> , 1998, 273, 15901-15905.	1.6	23
102	Characterization and Subunit Structure of the ATP Synthase of the Halophilic Archaeon <i>Haloferax volcanii</i> and Organization of the ATP Synthase Genes. <i>Journal of Biological Chemistry</i> , 1997, 272, 6261-6269.	1.6	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. <i>FEBS Journal</i> , 1997, 247, 1158-1165.	0.2	33
104	Over-expression and localization of an unknown plastid encoded protein in the diatom <i>Odontella sinensis</i> with similarities to a subunit of ABC-transporters. <i>Plant Science</i> , 1996, 114, 171-179.	1.7	10
105	Stable nuclear transformation of the diatom. <i>Molecular Genetics and Genomics</i> , 1996, 252, 572.	2.4	23
106	MOLECULAR STRUCTURE AND EVOLUTION OF THE CHLOROPLAST atpB/E GENE CLUSTER IN THE DIATOM <i>ODONTELLA SINENSIS</i> 1. <i>Journal of Phycology</i> , 1995, 31, 962-969.	1.0	6
107	Nucleotide sequence of two cDNAs encoding fucoxanthin chlorophyll a/c proteins in the diatom <i>Odontella sinensis</i> . <i>Plant Molecular Biology</i> , 1995, 27, 825-828.	2.0	37
108	The chloroplast genome of a chlorophylla+c-containing alga, <i>Odontella sinensis</i> . <i>Plant Molecular Biology Reporter</i> , 1995, 13, 336-342.	1.0	206

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109	Nucleotide sequence of the ATPase A- and B-subunits of the halophilic archaebacterium <i>Haloferax volcanii</i> and characterization of the enzyme. <i>BBA - Proteins and Proteomics</i> , 1995, 1249, 137-144.	2.1	19
110	The $\hat{\Gamma}$ subunit of the chloroplast ATPase is plastid-encoded in the diatom <i>Odontella sinensis</i> . <i>FEBS Letters</i> , 1991, 280, 387-392.	1.3	18
111	Genetic Transformation: A Tool to Study Protein Targeting in Diatoms. , 0, , 257-268.		8