Christiane Funk

List of Publications by Year
in descending order

119 papers	5,200 citations	81900 39 h-index	98798 67 g-index
120 all docs	120 docs citations	120 times ranked	5381 citing authors

#	Article	IF	Citations
1	Proteome Map of the Chloroplast Lumen of Arabidopsis thaliana. Journal of Biological Chemistry, 2002, 277, 8354-8365.	3.4	388
2	Green Bioplastics as Part of a Circular Bioeconomy. Trends in Plant Science, 2019, 24, 237-249.	8.8	294
3	Intermittent low temperatures constrain spring recovery of photosynthesis in boreal Scots pine forests. Global Change Biology, 2004, 10, 995-1008.	9.5	197
4	Senescenceâ€associated proteases in plants. Physiologia Plantarum, 2012, 145, 130-139.	5.2	170
5	A Cyanobacterial Gene Family Coding for Single-Helix Proteins Resembling Part of the Light-Harvesting Proteins from Higher Plantsâ€. Biochemistry, 1999, 38, 9397-9404.	2.5	151
6	The PSII-S Protein of Higher Plants: A New Type of Pigment-Binding Protein. Biochemistry, 1995, 34, 11133-11141.	2.5	140
7	AtFtsH6 is involved in the degradation of the light-harvesting complex II during high-light acclimation and senescence. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 13699-13704.	7.1	135
8	Photosystem II, a growing complex: Updates on newly discovered components and low molecular mass proteins. Biochimica Et Biophysica Acta - Bioenergetics, 2012, 1817, 13-25.	1.0	132
9	Protease gene families in Populus and Arabidopsis. BMC Plant Biology, 2006, 6, 30.	3.6	129
10	Isolation of Outer Membrane of Synechocystis sp. PCC 6803 and Its Proteomic Characterization. Molecular and Cellular Proteomics, 2004, 3, 586-595.	3.8	115
11	Arabidopsisplants grown in the field and climate chambers significantly differ in leaf morphology and photosystem components. BMC Plant Biology, 2012, 12, 6.	3.6	110
12	FtsH proteases located in the plant chloroplast. Physiologia Plantarum, 2012, 145, 203-214.	5.2	105
13	Northern green algae have the capacity to remove active pharmaceutical ingredients. Ecotoxicology and Environmental Safety, 2019, 170, 644-656.	6.0	103
14	The cell wall of green microalgae and its role in heavy metal removal. Physiologia Plantarum, 2021, 173, 526-535.	5.2	103
15	Multiple Deletions of Small Cab-like Proteins in the Cyanobacterium Synechocystis sp. PCC 6803. Journal of Biological Chemistry, 2004, 279, 27971-27979.	3.4	91
16	Localization of the Small CAB-like Proteins in Photosystem II. Journal of Biological Chemistry, 2007, 282, 267-276.	3.4	86
17	Small Cab-like proteins regulating tetrapyrrole biosynthesis in the cyanobacterium Synechocystis sp. PCC 6803. Plant Molecular Biology, 2002, 49, 149-160.	3.9	81
18	Modulation of PsbS and flexible vs sustained energy dissipation by light environment in different species. Physiologia Plantarum, 2006, 127, 670-680.	5.2	78

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19	The PsbW protein stabilizes the supramolecular organization of photosystemâ€ƒII in higher plants. Plant Journal, 2011, 65, 368-381.	5.7	73
20	Use of pulsed electric field permeabilization to extract astaxanthin from the Nordic microalga Haematococcus pluvialis. Bioresource Technology, 2019, 289, 121694.	9.6	72
21	A genomic approach to investigate developmental cell death in woody tissues of Populus trees. Genome Biology, 2005, 6, R34.	9.6	71
22	Classification and Nomenclature of Metacaspases and Paracaspases: No More Confusion with Caspases. Molecular Cell, 2020, 77, 927-929.	9.7	71
23	The Nuclear-encoded Chlorophyll-binding Photosystem II-S Protein Is Stable in the Absence of Pigments. Journal of Biological Chemistry, 1995, 270, 30141-30147.	3.4	70
24	Isolation and characterization of microalgal strains for biomass production and wastewater reclamation in Northern Sweden. Algal Research, 2018, 32, 44-53.	4.6	67
25	Supermolecular structure of photosystem II and location of the PsbS protein. Philosophical Transactions of the Royal Society B: Biological Sciences, 2000, 355, 1337-1344.	4.0	66
26	Algal Biomass from Wastewater and Flue Gases as a Source of Bioenergy. Energies, 2018, 11, 664.	3.1	65
27	The intrinsic 22 kDa protein is a chlorophyll-binding subunit of photosystem II. FEBS Letters, 1994, 342, 261-266.	2.8	64
28	Metabolomic analysis of extreme freezing tolerance in Siberian spruce (<scp>P</scp>icea) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 382	7.3	63
29	Novel approach reveals localisation and assembly pathway of the PsbS and PsbW proteins into the photosystem II dimer. FEBS Letters, 2002, 513, 217-222.	2.8	60
30	Wastewater treatment by microalgae. Physiologia Plantarum, 2021, 173, 568-578.	5.2	59
31	Fitness analyses of Arabidopsis thaliana mutants depleted of FtsH metalloproteases and characterization of three FtsH6 deletion mutants exposed to high light stress, senescence and chilling. New Phytologist, 2011, 191, 449-458.	7.3	56
32	A Nuclear-encoded Subunit of the Photosystem II Reaction Center. Journal of Biological Chemistry, 1995, 270, 17588-17593.	3.4	54
33	Excitation energy partitioning and quenching during cold acclimation in Scots pine. Tree Physiology, 2006, 26, 325-336.	3.1	54
34	Lack of FTSH4 Protease Affects Protein Carbonylation, Mitochondrial Morphology, and Phospholipid Content in Mitochondria of Arabidopsis: New Insights into a Complex Interplay. Plant Physiology, 2016, 171, 2516-2535.	4.8	54
35	Stable Accumulation of Photosystem II Requires ONE-HELIX PROTEIN1 (OHP1) of the Light Harvesting-Like Family. Plant Physiology, 2018, 176, 2277-2291.	4.8	54
36	Association of small CAB-like proteins (SCPs) of Synechocystis sp. PCC 6803 with Photosystem II. Photosynthesis Research, 2008, 95, 135-145.	2.9	49

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37	Matrix metalloproteinases in plants: a brief overview. Physiologia Plantarum, 2012, 145, 196-202.	5.2	45
38	Subarctic microalgal strains treat wastewater and produce biomass at low temperature and short photoperiod. Algal Research, 2018, 35, 160-167.	4.6	45
39	Structural and functional diversity of caspase homologues in non-metazoan organisms. Protoplasma, 2018, 255, 387-397.	2.1	44
40	Title is missing!. Photosynthesis Research, 1997, 54, 227-236.	2.9	43
41	The TL29 Protein is Lumen Located, Associated with PSII and Not an Ascorbate Peroxidase. Plant and Cell Physiology, 2009, 50, 1898-1910.	3.1	40
42	The small CAB-like proteins of the cyanobacterium Synechocystis sp. PCC 6803: Their involvement in chlorophyll biogenesis for Photosystem II. Biochimica Et Biophysica Acta - Bioenergetics, 2011, 1807, 1143-1151.	1.0	38
43	Functional analysis of the PsbP-like protein (sll1418) in Synechocystis sp. PCC 6803. Photosynthesis Research, 2005, 84, 257-262.	2.9	36
44	Statistical Methods for Rapid Quantification of Proteins, Lipids, and Carbohydrates in Nordic Microalgal Species Using ATRâ€“FTIR Spectroscopy. Molecules, 2019, 24, 3237.	3.8	36
45	Expression of the early light-induced protein but not the PsbS protein is influenced by low temperature and depends on the developmental stage of the plant in field-grown pea cultivars. Plant, Cell and Environment, 2003, 26, 245-253.	5.7	35
46	Family-wide characterization of matrix metalloproteinases from Arabidopsis thaliana reveals their distinct proteolytic activity and cleavage site specificity. Biochemical Journal, 2014, 457, 335-346.	3.7	33
47	Changes in macromolecular allocation in nondividing algal symbionts allow for photosynthetic acclimation in the lichen Lobaria pulmonaria. New Phytologist, 2003, 159, 709-718.	7.3	32
48	The PsbP-like protein (sll1418) of Synechocystis sp. PCC 6803 stabilises the donor side of Photosystem II. Photosynthesis Research, 2007, 93, 101-109.	2.9	32
49	Elucidating the symbiotic interactions between a locally isolated microalga Chlorella vulgaris and its co-occurring bacterium Rhizobium sp. in synthetic municipal wastewater. Journal of Applied Phycology, 2019, 31, 2299-2310.	2.8	32
50	The family of Deg/HtrA proteases: from Escherichia coli to Arabidopsis. Physiologia Plantarum, 2003, 119, 337-346.	5.2	31
51	The PsbY protein of Arabidopsis Photosystem II is important for the redox control of cytochrome b 559. Biochimica Et Biophysica Acta - Bioenergetics, 2016, 1857, 1524-1533.	1.0	30
52	Cryo-XPS analysis reveals surface composition of microalgae. Applied Surface Science, 2020, 526, 146538.	6.1	30
53	Type III metacaspases: calciumâ€dependent activity proposes new function for the p10 domain. New Phytologist, 2018, 218, 1179-1191.	7.3	29
54	Recombinant Deg/HtrA proteases from Synechocystis sp. PCC 6803 differ in substrate specificity, biochemical characteristics and mechanism. Biochemical Journal, 2011, 435, 733-742.	3.7	28

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55	Fate of active pharmaceutical ingredients in a northern high-rate algal pond fed with municipal wastewater. Chemosphere, 2021, 271, 129763.	8.2	28
56	Functional analysis of the PsbX protein by deletion of the corresponding gene in Synechocystis sp. PCC 6803. Plant Molecular Biology, 2000, 44, 815-827.	3.9	27
57	Evolution and structural diversity of metacaspases. Journal of Experimental Botany, 2019, 70, 2039-2047.	4.8	27
58	Modeling biomass production during progressive nitrogen starvation by North Swedish green microalgae. Algal Research, 2020, 47, 101835.	4.6	27
59	DNA metabarcoding reveals microbial community dynamics in a microalgae-based municipal wastewater treatment open photobioreactor. Algal Research, 2020, 51, 102043.	4.6	27
60	The small CAB-like proteins of Synechocystis sp. PCC 6803 bind chlorophyll. Photosynthesis Research, 2008, 98, 479-488.	2.9	25
61	Antisense Inhibition of the PsbX Protein Affects PSII Integrity in the Higher Plant Arabidopsis thaliana. Plant and Cell Physiology, 2009, 50, 191-202.	3.1	25
62	Photoactive Protochlorophyllide Regeneration in Cotyledons and Leaves from Higher Plantsâ€Â¶. Photochemistry and Photobiology, 2000, 72, 660.	2.5	24
63	The Extended Light-Harvesting Complex (LHC) Protein Superfamily: Classification and Evolutionary Dynamics. Advances in Photosynthesis and Respiration, 2012, , 265-284.	1.0	24
64	High light stress and the one-helix LHC-like proteins of the cryptophyte Guillardia theta. Biochimica Et Biophysica Acta - Bioenergetics, 2011, 1807, 841-846.	1.0	23
65	Growth performance and nutrient removal of a Chlorella vulgaris-Rhizobium sp. co-culture during mixotrophic feed-batch cultivation in synthetic wastewater. Algal Research, 2019, 44, 101690.	4.6	23
66	Uptake Kinetics of Methylmercury in a Freshwater Alga Exposed to Methylmercury Complexes with Environmentally Relevant Thiols. Environmental Science & Technology, 2019, 53, 13757-13766.	10.0	23
67	A Review on Microbial Products and Their Perspective Application as Antimicrobial Agents. Biomolecules, 2021, 11, 1860.	4.0	22
68	Presence of state transitions in the cryptophyte algaGuillardia theta. Journal of Experimental Botany, 2015, 66, 6461-6470.	4.8	21
69	Degradation of PsbO by the Deg Protease HhoA Is Thioredoxin Dependent. PLoS ONE, 2012, 7, e45713.	2.5	21
70	Extraordinary Î¼sâ€“ms backbone dynamics in Arabidopsis thaliana peroxiredoxin Q. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2011, 1814, 1880-1890.	2.3	20
71	Deletion of FtsH11 protease has impact on chloroplast structure and function in Arabidopsis thaliana when grown under continuous light. Plant, Cell and Environment, 2016, 39, 2530-2544.	5.7	20
72	Co-expression analysis, proteomic and metabolomic study on the impact of a Deg/HtrA protease triple mutant in Synechocystis sp. PCC 6803 exposed to temperature and high light stress. Journal of Proteomics, 2013, 78, 294-311.	2.4	19

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73	Proteomic analysis of the phycobiliprotein antenna of the cryptophyte alga Guillardia theta cultured under different light intensities. Photosynthesis Research, 2018, 135, 149-163.	2.9	19
74	Abundance of metalloprotease FtsH12 modulates chloroplast development in Arabidopsis thaliana. Journal of Experimental Botany, 2021, 72, 3455-3473.	4.8	19
75	Biosorption of Cd(II) by Nordic microalgae: Tolerance, kinetics and equilibrium studies. Algal Research, 2021, 59, 102471.	4.6	19
76	Phylogenetic Distribution and Diversity of Bacterial Pseudo-Orthocaspases Underline Their Putative Role in Photosynthesis. Frontiers in Plant Science, 2019, 10, 293.	3.6	18
77	Reduced expression of the proteolytically inactive FtsH members has impacts on the Darwinian fitness of Arabidopsis thaliana. Journal of Experimental Botany, 2019, 70, 2173-2184.	4.8	18
78	The PsbS Protein: A Cab-protein with a Function of Its Own. Advances in Photosynthesis and Respiration, 2001, , 453-467.	1.0	16
79	Crystal structure of the TL29 protein from Arabidopsis thaliana: An APX homolog without peroxidase activity. Journal of Structural Biology, 2011, 176, 24-31.	2.8	16
80	Degradation of the main Photosystem II light-harvesting complex. Photochemical and Photobiological Sciences, 2005, 4, 1065.	2.9	15
81	Extraâ€plastidial degradation of chlorophyll and photosystem I in tobacco leaves involving â€˜senescenceâ€associated vacuolesâ€™. Plant Journal, 2019, 99, 465-477.	5.7	15
82	Microalgae Cultivation for the Biotransformation of Birch Wood Hydrolysate and Dairy Effluent. Catalysts, 2019, 9, 150.	3.5	15
83	Proteomic approaches to identify substrates of the three Deg/HtrA proteases of the cyanobacterium Synechocystis sp. PCC 6803. Biochemical Journal, 2015, 468, 373-384.	3.7	14
84	Combining retinal-based and chlorophyll-based (oxygenic) photosynthesis: Proteorhodopsin expression increases growth rate and fitness of a âˆ†PSI strain of Synechocystis sp. PCC6803. Metabolic Engineering, 2019, 52, 68-76.	7.0	14
85	Cryogenic X-ray photoelectron spectroscopy determines surface composition of algal cells and gives insights into their spontaneous sedimentation. Algal Research, 2020, 47, 101836.	4.6	14
86	Inactivation of the Deg protease family in the cyanobacterium Synechocystis sp. PCC 6803 has impact on the outer cell layers. Journal of Photochemistry and Photobiology B: Biology, 2015, 152, 383-394.	3.8	13
87	DEG10 contributes to mitochondrial proteostasis, root growth, and seed yield in Arabidopsis. Journal of Experimental Botany, 2019, 70, 5423-5436.	4.8	13
88	The FtsHi Enzymes of Arabidopsis thaliana: Pseudo-Proteases with an Important Function. International Journal of Molecular Sciences, 2021, 22, 5917.	4.1	13
89	Developmental regulation of the PsbS gene expression in spinach seedlings: the role of phytochrome. Plant Molecular Biology, 1996, 31, 793-802.	3.9	12
90	Insights into the Cyanobacterial Deg/HtrA Proteases. Frontiers in Plant Science, 2016, 7, 694.	3.6	12

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91	The stress-induced SCP/HLIP family of small light-harvesting-like proteins (ScpABCDE) protects Photosystem II from photoinhibitory damages in the cyanobacterium Synechocystis sp. PCC 6803. Photosynthesis Research, 2018, 135, 103-114.	2.9	11
92	Engineering of N-terminal threonines in the D1 protein impairs photosystem II energy transfer inSynechocystis6803. FEBS Letters, 1998, 436, 434-438.	2.8	10
93	D1â€² centers are less efficient than normal photosystem II centers. FEBS Letters, 2001, 505, 113-117.	2.8	9
94	Deletion of the gene family of small chlorophyll-binding proteins (ScpABCDE) offsets C/N homeostasis in Synechocystis PCC 6803. Biochimica Et Biophysica Acta - Bioenergetics, 2016, 1857, 396-407.	1.0	9
95	Improving the content of high value compounds in Nordic Desmodesmus microalgal strains. Bioresource Technology, 2022, 359, 127445.	9.6	9
96	Loss of Arabidopsis matrix metalloproteinaseâ€5 affects root development and root bacterial communities during drought stress. Physiologia Plantarum, 2021, 172, 1045-1058.	5.2	8
97	Functional Expression of Gloeobacter Rhodopsin in PSI-Less Synechocystis sp. PCC6803. Frontiers in Bioengineering and Biotechnology, 2019, 7, 67.	4.1	7
98	Screening Suitability of Northern Hemisphere Algal Strains for Heterotrophic Cultivation and Fatty Acid Methyl Ester Production. Molecules, 2020, 25, 2107.	3.8	7
99	<scp>NordAqua</scp>, a Nordic Center of Excellence to develop an algaeâ€based photosynthetic production platform. Physiologia Plantarum, 2021, 173, 507-513.	5.2	7
100	Refolding and Enzyme Kinetic Studies on the Ferrochelatase of the Cyanobacterium Synechocystis sp. PCC 6803. PLoS ONE, 2013, 8, e55569.	2.5	7
101	Regulation of the scp Genes in the Cyanobacterium Synechocystis sp. PCC 6803â€"What is New?. Molecules, 2015, 20, 14621-14637.	3.8	6
102	The Plastid-Localized AtFtsHi3 Pseudo-Protease of Arabidopsis thaliana Has an Impact on Plant Growth and Drought Tolerance. Frontiers in Plant Science, 2021, 12, 694727.	3.6	5
103	Utilization of Different Carbon Sources by Nordic Microalgae Grown Under Mixotrophic Conditions. Frontiers in Marine Science, 2022, 9, .	2.5	5
104	The HhoA protease from Synechocystis sp. PCC 6803 â€“ Novel insights into structure and activity regulation. Journal of Structural Biology, 2017, 198, 147-153.	2.8	4
105	The Role of Pseudo-Orthocaspase (SyOC) of Synechocystis sp. PCC 6803 in Attenuating the Effect of Oxidative Stress. Frontiers in Microbiology, 2021, 12, 634366.	3.5	4
106	Blue economy in the North: Scandinavian algal biotechnology to the rescue. Physiologia Plantarum, 2021, 173, 479-482.	5.2	4
107	Synergy: A Web Resource for Exploring Gene Regulation in Synechocystis sp. PCC6803. PLoS ONE, 2014, 9, e113496.	2.5	4
108	Amino acid deletions in the cytosolic domains of the chlorophyll a-binding protein CP47 slow Q(A)-oxidation and/or prevent the assembly of photosystem II. Plant Molecular Biology, 2002, 50, 563-572.	3.9	3

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109	The search for new chlorophyll-binding proteins in the cyanobacterium Synechocystis sp. PCC 6803. Journal of Biotechnology, 2012, 162, 124-133.	3.8	3
110	Expression and Purification of the Type II Metacaspase from a Unicellular Green Alga Chlamydomonas reinhardtii. Methods in Molecular Biology, 2022, 2447, 13-20.	0.9	3
111	Hole burning study of cyanobacterial Photosystem II complexes differing in the content of small putative chlorophyll-binding proteins. Journal of Luminescence, 2004, 107, 230-235.	3.1	2
112	Functional Studies on the Newly Discovered 6.1 kDa Protein from Spinach Thylakoids. , 1995, , 2269-2272.		2
113	Psbo Degradation by Deg Proteases under Reducing Conditions. Advanced Topics in Science and Technology in China, 2013, , 599-602.	0.1	1
114	Photoactive Protochlorophyllide Regeneration in Cotyledons and Leaves from Higher Plantsâ€Â¶. Photochemistry and Photobiology, 2007, 72, 660-668.	2.5	0
115	ELIP/CAB-Type Proteins Associated with Photosystem II During Normal Growth of Cyanobacterium Synechocystis sp. PCC 6803. , 2008, , 723-727.		0
116	Further Characterization of the Newly Discovered 6.1 kDA Protein of the Photosystem II Reaction Center. , 1995, , 2265-2268.		0
117	The PSII-S Polypeptide â€" An Atypical Cab Protein. , 1995, , 339-342.		0
118	Antibiotic Disc Assay for Synechocystis sp. PCC6803. Bio-protocol, 2016, 6, .	0.4	0
119	Expression and Purification of the Type I Metacaspase from a Cryptophyte Guillardia theta, GtMCA-I. Methods in Molecular Biology, 2022, 2447, 1-11.	0.9	0