Thomas Brner

List of Publications by Citations

112 papers	8,182 citations	53 h-index	89 g-index
117 ext. papers	8,986 ext. citations	6.8 avg, IF	5.75 L-index

#	Paper	IF	Citations
112	Structural organization of microcystin biosynthesis in Microcystis aeruginosa PCC7806: an integrated peptide-polyketide synthetase system. *Chemistry and Biology*, **2000**, 7, 753-64		671
111	Phylogenetic evidence for the early evolution of microcystin synthesis. *Proceedings of the National Academy of Sciences of the United States of America*, **2004**, 101, 568-73	11.5	372
110	Insertional mutagenesis of a peptide synthetase gene that is responsible for hepatotoxin production in the cyanobacterium Microcystis aeruginosa PCC 7806. *Molecular Microbiology*, **1997**, 26, 779-87	4.1	312
109	A prokaryotic phytochrome. *Nature*, **1997**, 386, 663	50.4	293
108	Microcystin biosynthesis in planktothrix: genes, evolution, and manipulation. *Journal of Bacteriology*, **2003**, 185, 564-72	3.5	277
107	The cyanobacterial hepatotoxin microcystin binds to proteins and increases the fitness of microcystis under oxidative stress conditions. *PLoS ONE*, **2011**, 6, e17615	3.7	269
106	Organellar RNA polymerases of higher plants. *International Review of Cytology*, **1999**, 190, 1-59		198
105	PCR-based identification of microcystin-producing genotypes of different cyanobacterial genera. *Archives of Microbiology*, **2003**, 180, 402-10	3	192
104	One RNA polymerase serving two genomes. *EMBO Reports*, **2000**, 1, 435-40	6.5	186
103	Cytoplasmic synthesis of plastid polypeptides may be controlled by plastid-synthesised RNA. *Nature*, **1979**, 279, 816-817	50.4	173
102	The transcription machineries of plant mitochondria and chloroplasts: Composition, function, and regulation. *Journal of Plant Physiology*, **2011**, 168, 1345-60	3.6	172
101	Towards clarification of the biological role of microcystins, a family of cyanobacterial toxins. *Environmental Microbiology*, **2007**, 9, 965-70	5.2	160
100	The primary transcriptome of barley chloroplasts: numerous noncoding RNAs and the dominating role of the plastid-encoded RNA polymerase. *Plant Cell*, **2012**, 24, 123-36	11.6	155
99	Abundance of active and inactive microcystin genotypes in populations of the toxic cyanobacterium Planktothrix spp. *Environmental Microbiology*, **2004**, 6, 831-41	5.2	149
98	From seedling to mature plant: arabidopsis plastidial genome copy number, RNA accumulation and transcription are differentially regulated during leaf development. *Plant Journal*, **2007**, 50, 710-22	6.9	145
97	Chloroplast RNA polymerases: Role in chloroplast biogenesis. *Biochimica Et Biophysica Acta - Bioenergetics*, **2015**, 1847, 761-9	4.6	133
96	Inactivation of an ABC transporter gene, mcyH, results in loss of microcystin production in the cyanobacterium Microcystis aeruginosa PCC 7806. *Applied and Environmental Microbiology*, **2004**, 70, 6370-8	4.8	130

95	The mystery of the rings: structure and replication of mitochondrial genomes from higher plants. *Trends in Plant Science*, **1997**, 2, 477-483	13.1	126
94	An organellar maturase associates with multiple group II introns. *Proceedings of the National Academy of Sciences of the United States of America*, **2010**, 107, 3245-50	11.5	119
93	Phage-type RNA polymerase RPOTmp performs gene-specific transcription in mitochondria of Arabidopsis thaliana. *Plant Cell*, **2009**, 21, 2762-79	11.6	116
92	Multiple promoters are a common feature of mitochondrial genes in Arabidopsis. *Nucleic Acids Research*, **2005**, 33, 337-46	20.1	108
91	Fewer genes than organelles: extremely low and variable gene copy numbers in mitochondria of somatic plant cells. *Plant Journal*, **2010**, 64, 948-59	6.9	107
90	Protein-mediated protection as the predominant mechanism for defining processed mRNA termini in land plant chloroplasts. *Nucleic Acids Research*, **2012**, 40, 3092-105	20.1	97
89	The cyanobacterial phytochrome Cph2 inhibits phototaxis towards blue light. *Molecular Microbiology*, **2002**, 44, 981-8	4.1	94
88	Cytokinin stimulates chloroplast transcription in detached barley leaves. *Plant Physiology*, **2008**, 148, 1082-93	6.6	92
87	Relaxed transcription in Arabidopsis mitochondria is counterbalanced by RNA stability control mediated by polyadenylation and polynucleotide phosphorylase. *Molecular and Cellular Biology*, **2006**, 26, 2869-76	4.8	91
86	Mitochondrial effects on flower and pollen development. *Mitochondrion*, **2005**, 5, 389-402	4.9	90
85	Altered expression of two light-dependent genes in a microcystin-lacking mutant of Microcystis aeruginosa PCC 7806. *Microbiology (United Kingdom)*, **2001**, 147, 3113-9	2.9	90
84	Two RpoT genes of Physcomitrella patens encode phage-type RNA polymerases with dual targeting to mitochondria and plastids. *Gene*, **2002**, 290, 95-105	3.8	89
83	Six active phage-type RNA polymerase genes in Nicotiana tabacum. *Plant Journal*, **2002**, 30, 625-37	6.9	87
82	Phage T4-like intermediates of DNA replication and recombination in the mitochondria of the higher plant Chenopodium album (L.). *Current Genetics*, **2000**, 37, 304-14	2.9	87
81	Inter-organellar crosstalk in higher plants: impaired chloroplast development affects mitochondrial gene and transcript levels. *Plant Journal*, **1999**, 19, 635-43	6.9	87
80	Flower development in carrot CMS plants: mitochondria affect the expression of MADS box genes homologous to GLOBOSA and DEFICIENS. *Plant Journal*, **2003**, 34, 27-37	6.9	86
79	Disruption of a Synechocystis sp. PCC 6803 gene with partial similarity to phytochrome genes alters growth under changing light qualities. *FEBS Letters*, **1997**, 406, 89-92	3.8	85
78	Biosynthesis and structure of aeruginoside 126A and 126B, cyanobacterial peptide glycosides bearing a 2-carboxy-6-hydroxyoctahydroindole moiety. *Chemistry and Biology*, **2007**, 14, 565-576		85

77	Chloroplast development affects expression of phage-type RNA polymerases in barley leaves. *Plant Journal*, **2004**, 38, 460-72	6.9	82
76	Splicing and intron-internal RNA editing of trnK-matK transcripts in barley plastids: support for MatK as an essential splice factor. *Journal of Molecular Biology*, **1997**, 270, 179-87	6.5	78
75	Ingestion of microcystins by Daphnia: Intestinal uptake and toxic effects. *Limnology and Oceanography*, **2005**, 50, 440-448	4.8	78
74	Genetic contributions to the risk assessment of microcystin in the environment. *Toxicology and Applied Pharmacology*, **2005**, 203, 192-200	4.6	78
73	Toxic and non-toxic strains of the cyanobacterium Microcystis aeruginosa contain sequences homologous to peptide synthetase genes. *FEMS Microbiology Letters*, **1996**, 135, 295-303	2.9	76
72	Complex chloroplast RNA metabolism: just debugging the genetic programme?. *BMC Biology*, **2008**, 6, 36	7.3	74
71	Characterization of the Cph1 holo-phytochrome from Synechocystis sp. PCC 6803. *FEBS Journal*, **2001**, 268, 2055-63		72
70	High diversity of plastidial promoters in Arabidopsis thaliana. *Molecular Genetics and Genomics*, **2007**, 277, 725-34	3.1	68
69	Transposons inactivate biosynthesis of the nonribosomal peptide microcystin in naturally occurring Planktothrix spp. *Applied and Environmental Microbiology*, **2006**, 72, 117-23	4.8	68
68	Transcription and transcriptional regulation in plastids. *Topics in Current Genetics*, **2007**, 121-174		63
67	Green fluorescent protein as a marker to investigate targeting of organellar RNA polymerases of higher plants in vivo. *Plant Journal*, **1999**, 17, 557-61	6.9	61
66	Phototaxis in the cyanobacterium Synechocystis sp. PCC 6803: role of different photoreceptors. *Photochemistry and Photobiology*, **2005**, 81, 1481-8	3.6	60
65	Impaired function of the phage-type RNA polymerase RpoTp in transcription of chloroplast genes is compensated by a second phage-type RNA polymerase. *Nucleic Acids Research*, **2008**, 36, 785-92	20.1	58
64	Transcription and the architecture of promoters in chloroplasts. *Trends in Plant Science*, **1999**, 4, 169-170	13.1	58
63	Arabidopsis phage-type RNA polymerases: accurate in vitro transcription of organellar genes. *Plant Cell*, **2007**, 19, 959-71	11.6	57
62	Detection of hepatotoxic Microcystis strains by PCR with intact cells from both culture and environmental samples. *Archives of Microbiology*, **2002**, 178, 421-7	3	57
61	An extracellular glycoprotein is implicated in cell-cell contacts in the toxic cyanobacterium Microcystis aeruginosa PCC 7806. *Journal of Bacteriology*, **2008**, 190, 2871-9	3.5	56
60	Abscisic acid affects transcription of chloroplast genes via protein phosphatase 2C-dependent activation of nuclear genes: repression by guanosine-3′5′bisdiphosphate and activation by sigma factor 5. *Plant Journal*, **2015**, 82, 1030-1041	6.9	53

59	Characterisation of transcript initiation sites in ribosome-deficient barley plastids. *Plant Molecular Biology*, **1998**, 36, 493-6	4.6	53
58	A gene family encoding glutathione peroxidase homologues in Hordeum vulgare (barley). *FEBS Letters*, **1999**, 459, 33-8	3.8	51
57	Transcriptomic response to prolonged ethanol production in the cyanobacterium Synechocystis sp. PCC6803. *Biotechnology for Biofuels*, **2014**, 7, 21	7.8	49
56	Overexpression of phage-type RNA polymerase RpoTp in tobacco demonstrates its role in chloroplast transcription by recognizing a distinct promoter type. *Nucleic Acids Research*, **2004**, 32, 1159-65	20.1	49
55	Impaired splicing of the rps12 transcript in ribosome-deficient plastids. *Plant Molecular Biology*, **1996**, 30, 109-23	4.6	48
54	The mcyF gene of the microcystin biosynthetic gene cluster from Microcystis aeruginosa encodes an aspartate racemase. *Biochemical Journal*, **2003**, 373, 909-16	3.8	47
53	Metabolic control of the tetrapyrrole biosynthetic pathway for porphyrin distribution in the barley mutant albostrians. *Plant Journal*, **2003**, 35, 512-22	6.9	46
52	Plastome mutants. *Plant Molecular Biology Reporter*, **1986**, 4, 69-92	1.7	43
51	Abscisic acid represses the transcription of chloroplast genes. *Journal of Experimental Botany*, **2013**, 64, 4491-502	7	42
50	Mutation of the pentatricopeptide repeat-SMR protein SVR7 impairs accumulation and translation of chloroplast ATP synthase subunits in Arabidopsis thaliana. *Journal of Plant Research*, **2013**, 126, 403-14	2.6	40
49	Chloroplast DNA in mature and senescing leaves: a reappraisal. *Plant Cell*, **2014**, 26, 847-54	11.6	38
48	Polar lipid composition of a plastid ribosome-deficient barley mutant. *Plant Physiology*, **1982**, 69, 1467-70	6.6	34
47	Biparental inheritance of plastidial and mitochondrial DNA and hybrid variegation in Pelargonium. *Molecular Genetics and Genomics*, **2009**, 282, 587-93	3.1	33
46	Development- and tissue-specific expression of the RpoT gene family of Arabidopsis encoding mitochondrial and plastid RNA polymerases. *Planta*, **2006**, 223, 998-1009	4.7	33
45	Hybrid variegation in the genus Pelargonium. *Current Genetics*, **1982**, 5, 245-9	2.9	32
44	Leaf Variegation and Impaired Chloroplast Development Caused by a Truncated CCT Domain Gene in Barley. *Plant Cell*, **2019**, 31, 1430-1445	11.6	31
43	High content, size and distribution of single-stranded DNA in the mitochondria of Chenopodium album (L.). *Plant Molecular Biology*, **1997**, 33, 1037-50	4.6	31
42	Red and far-red light alter the transcript profile in the cyanobacterium Synechocystis sp. PCC 6803: impact of cyanobacterial phytochromes. *FEBS Letters*, **2005**, 579, 1613-8	3.8	31

41	Methyl jasmonate, gibberellic acid, and auxin affect transcription and transcript accumulation of chloroplast genes in barley. *Journal of Plant Physiology*, **2011**, 168, 1335-44	3.6	30
40	A mitochondrial rRNA dimethyladenosine methyltransferase in Arabidopsis. *Plant Journal*, **2010**, 61, 558-69	6.9	28
39	Identification of Early Nuclear Target Genes of Plastidial Redox Signals that Trigger the Long-Term Response of Arabidopsis to Light Quality Shifts. *Molecular Plant*, **2015**, 8, 1237-52	14.4	26
38	Cloning and characterization of three cDNAs encoding chloroplast RNA-binding proteins from barley (Hordeum vulgare L.): differential regulation of expression by light and plastid development. *Current Genetics*, **1999**, 36, 173-81	2.9	26
37	Chloroplasts affect the leaf response to cytokinin. *Journal of Plant Physiology*, **2002**, 159, 1309-1316	3.6	25
36	Involvement of cyanobacterial phytochromes in growth under different light qualities and quantities. *Photochemistry and Photobiology*, **2004**, 79, 551-5	3.6	24
35	The discovery of plastid-to-nucleus retrograde signaling-a personal perspective. *Protoplasma*, **2017**, 254, 1845-1855	3.4	23
34	Analysis of randomly selected cDNAs reveals the expression of stress- and defence-related genes in the barley mutant albostrians. *Plant Science*, **1998**, 133, 191-201	5.3	22
33	Cloning and sequencing of mutantpsbB genes of the cyanobacteriumSynechocystis PCC 6803. *Photosynthesis Research*, **1993**, 37, 139-46	3.7	21
32	Molecular Biology of Cyanobacterial Toxins **2005**, 25-40		20
31	Transcription of Plastid Genes184-224		19
30	Faithful transcription initiation from a mitochondrial promoter in transgenic plastids. *Nucleic Acids Research*, **2007**, 35, 7256-66	20.1	19
29	Mitochondrial atp9 genes from petaloid male-sterile and male-fertile carrots differ in their status of heteroplasmy, recombination involvement, post-transcriptional processing as well as accumulation of RNA and protein product. *Theoretical and Applied Genetics*, **2014**, 127, 1689-701	6	18
28	Evolution of plant phage-type RNA polymerases: the genome of the basal angiosperm Nuphar advena encodes two mitochondrial and one plastid phage-type RNA polymerases. *BMC Evolutionary Biology*, **2010**, 10, 379	3	17
27	The white barley mutant albostrians shows enhanced resistance to the biotroph Blumeria graminis f. sp. hordei. *Molecular Plant-Microbe Interactions*, **2004**, 17, 374-82	3.6	16
26	Evolution of phage-type RNA polymerases in higher plants: characterization of the single phage-type RNA polymerase gene from Selaginella moellendorffii. *Journal of Molecular Evolution*, **2009**, 68, 528-38	3.1	15
25	Decrease in glycolate pathway enzyme activities in plastids and peroxisomes of the albostrians mutant of barley (Hordeum vulgare L.). *Plant Science*, **1997**, 124, 33-40	5.3	15
24	Chloroplast nucleoids are highly dynamic in ploidy, number, and structure during angiosperm leaf development. *Plant Journal*, **2020**, 102, 730-746	6.9	15

23	Chlorophyll Synthetase and Chloroplast tRNAglu are Present in Heat-Bleached, Ribosome-Deficient Plastids. *Journal of Plant Physiology*, **1992**, 139, 427-430	3.6	14
22	Development-Dependent Changes in the Amount and Structural Organization of Plastid DNA. *Advances in Photosynthesis and Respiration*, **2013**, 215-237	1.7	13
21	A putative cytochrome c biogenesis gene in Synechocystis sp. PCC 6803. *FEBS Letters*, **1997**, 408, 201-5	3.8	13
20	Inhibition of the electron transport strongly affects transcription and transcript levels in Arabidopsis mitochondria. *Mitochondrion*, **2014**, 19 Pt B, 222-30	4.9	9
19	Biparental inheritance of organelles in Pelargonium: evidence for intergenomic recombination of mitochondrial DNA. *Planta*, **2013**, 237, 509-15	4.7	9
18	The barley plastome mutant CL2 affects expression of nuclear and chloroplast housekeeping genes in a cell-age dependent manner. *Molecular Genetics and Genomics*, **2008**, 279, 403-14	3.1	9
17	Components of chlorophyll biosynthesis in a barley albina mutant unable to synthesize □aminolevulinic acid by utilizing the transfer RNA for glutamic acid. *Planta*, **1992**, 188, 19-27	4.7	9
16	Measurement of transcription rates in Arabidopsis chloroplasts. *Methods in Molecular Biology*, **2011**, 774, 171-82	1.4	8
15	Transcription in Plant Mitochondria **2011**, 85-105		7
14	Cloning and expression of a new cDNA from monocotyledonous plants coding for a diadenosine 5□,5□□□P1,P4-tetraphosphate hydrolase from barley (Hordeum vulgare). *FEBS Letters*, **1998**, 431, 481-5	3.8	6
13	Chloroplast Gene Expression□RNA Synthesis and Processing **2014**, 3-47		5
12	Reverse protection assay: a tool to analyze transcriptional rates from individual promoters. *Plant Methods*, **2011**, 7, 47	5.8	5
11	A third mitochondrial RNA polymerase in the moss Physcomitrella patens. *Current Genetics*, **2014**, 60, 25-34	2.9	4
10	Transcription and Transcription Regulation in Chloroplasts and Mitochondria of Higher Plants **2012**, 297-325		4
9	Mutation of the ALBOSTRIANS Ohnologous Gene HvCMF3 Impairs Chloroplast Development and Thylakoid Architecture in Barley due to Reduced Plastid Translation		4
8	The Arabidopsis AAC Proteins CIL and CIA2 Are Sub-functionalized Paralogs Involved in Chloroplast Development. *Frontiers in Plant Science*, **2021**, 12, 681375	6.2	4
7	Enzymes of Plastid Ribosome-deficient Mutants. Ferredoxin-NADP+ Reductase. *Biochemie Und Physiologie Der Pflanzen*, **1981**, 176, 737-743		3
6	In vitro promoter recognition by the catalytic subunit of plant phage-type RNA polymerases. *Plant Molecular Biology*, **2016**, 92, 357-69	4.6	2

5	Mutation of the Ohnologous Gene Impairs Chloroplast Development and Thylakoid Architecture in Barley. *Frontiers in Plant Science*, **2021**, 12, 732608	6.2	2
4	Leaf Variegation and Impaired Chloroplast Development Caused by a Truncated CCT Domain gene in albostrians Barley		1
3	, , Is a Strong Candidate Gene for Barley Variegation Mutant as Revealed by Genetic Mapping and Genomic Re-sequencing. *Frontiers in Plant Science*, **2021**, 12, 664085	6.2	0
2	Involvement of Cyanobacterial Phytochromes in Growth Under Different Light Qualitities and Quantities¶. *Photochemistry and Photobiology*, **2007**, 79, 551-555	3.6	
1	Transcription of Plastid Genes **2018**, 184-224		