PÃ¡l Maliga

List of Publications by Year
in descending order

123 papers	10,294 citations	26567 56 h-index	33814 99 g-index
126 all docs	126 docs citations	126 times ranked	5192 citing authors

#	Article	IF	Citations
1	The small, versatilepPZP family ofAgrobacterium binary vectors for plant transformation. Plant Molecular Biology, 1994, 25, 989-994.	2.0	1,474
2	The two RNA polymerases encoded by the nuclear and the plastid compartments transcribe distinct groups of genes in tobacco plastids. EMBO Journal, 1997, 16, 4041-4048.	3.5	476
3	PLASTID TRANSFORMATION IN HIGHER PLANTS. Annual Review of Plant Biology, 2004, 55, 289-313.	8.6	449
4	Amplification of a Chimeric Bacillus Gene in Chloroplasts Leads to an Extraordinary Level of an Insecticidal Protein in Tobacco. Nature Biotechnology, 1995, 13, 362-365.	9.4	253
5	Fluorescent antibiotic resistance marker for tracking plastid transformation in higher plants. Nature Biotechnology, 1999, 17, 910-915.	9.4	222
6	Expression of tetanus toxin Fragment C in tobacco chloroplasts. Nucleic Acids Research, 2003, 31, 1174-1179.	6.5	204
7	The plastid clpP1 protease gene is essential for plant development. Nature, 2003, 425, 86-89.	13.7	189
8	Efficient targeting of foreign genes into the tobacco plastid genome. Nucleic Acids Research, 1994, 22, 3819-3824.	6.5	179
9	Engineering the plastid genome of higher plants. Current Opinion in Plant Biology, 2002, 5, 164-172.	3.5	179
10	Plastid Biotechnology: Food, Fuel, and Medicine for the 21st Century. Plant Physiology, 2011, 155, 1501-1510.	2.3	169
11	Translation of psbA mRNA is regulated by light via the 5'-untranslated region in tobacco plastids. Plant Journal, 1994, 6, 547-553.	2.8	166
12	Efficient elimination of selectable marker genes from the plastid genome by the CRE-lox site-specific recombination system. Plant Journal, 2001, 27, 171-178.	2.8	165
13	Kanamycin resistance as a selectable marker for plastid transformation in tobacco. Molecular Genetics and Genomics, 1993, 241-241, 49-56.	2.4	163
14	Chloroplast transfer in Nicotiana based on metabolic complementation between irradiated and iodoacetate treated protoplasts. Planta, 1981, 152, 341-345.	1.6	162
15	Plastid transformation in Arabidopsis thaliana. Plant Cell Reports, 1998, 18, 20-24.	2.8	160
16	The use of cytoplasmic streptomycin resistance: Chloroplast transfer from Nicotiana tabacum into Nicotiana sylvestris, and Isolation of their somatic hybrids. Molecular Genetics and Genomics, 1980, 179, 693-698.	2.4	156
17	Progress towards commercialization of plastid transformation technology. Trends in Biotechnology, 2003, 21, 20-28.	4.9	156
18	The pFF plasmids: cassettes utilising CaMV sequences for expression of foreign genes in plants. Journal of Biotechnology, 1990, 14, 333-344.	1.9	151

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19	Exceptional transmission of plastids and mitochondria from the transplastomic pollen parent and its impact on transgene containment. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 7003-7008.	3.3	151
20	Expression of bar in the Plastid Genome Confers Herbicide Resistance. Plant Physiology, 2001, 125, 1585-1590.	2.3	142
21	Sequences Downstream of the Translation Initiation Codon Are Important Determinants of Translation Efficiency in Chloroplasts. Plant Physiology, 2001, 125, 430-436.	2.3	139
22	Two plastid RNA polymerases of higher plants: an evolving story. Trends in Plant Science, 1998, 3, 4-6.	4.3	136
23	RNA Polymerase Subunits Encoded by the Plastid rpoGenes Are Not Shared with the Nucleus-Encoded Plastid Enzyme1. Plant Physiology, 1998, 117, 1165-1170.	2.3	117
24	Plastome Engineering of Ribulose-1,5-Bisphosphate Carboxylase/Oxygenase in Tobacco to Form a Sunflower Large Subunit and Tobacco Small Subunit Hybrid1. Plant Physiology, 1999, 119, 133-142.	2.3	117
25	Complementarity of the 16S rRNA penultimate stem with sequences downstream of the AUG destabilizes the plastid mRNAs. Nucleic Acids Research, 2001, 29, 970-975.	6.5	114
26	Stable Plastid Transformation in PEG-treated Protoplasts of Nicotiana tabacum. Nature Biotechnology, 1993, 11, 95-97.	9.4	109
27	The Catalytic Properties of Hybrid Rubisco Comprising Tobacco Small and Sunflower Large Subunits Mirror the Kinetically Equivalent Source Rubiscos and Can Support Tobacco Growth. Plant Physiology, 2008, 146, 83-96.	2.3	109
28	EFFECT OF RADIATION DOSAGE ON EFFICIENCY OF CHLOROPLAST TRANSFER BY PROTOPLAST FUSION IN NICOTIANA. Genetics, 1982, 100, 487-495.	1.2	109
29	rbcL Transcript Levels in Tobacco Plastids Are Independent of Light: Reduced Dark Transcription Rate Is Compensated by Increased mRNA Stability. Plant Cell, 1998, 10, 1713-1722.	3.1	105
30	Plastid transformation in Lesquerella fendleri, an oilseed Brassicacea. Transgenic Research, 2003, 12, 115-122.	1.3	103
31	Restoration of morphogenic potential in Nicotiana by somatic hybridisation. Molecular Genetics and Genomics, 1977, 157, 291-296.	2.4	102
32	Affinity purification of the tobacco plastid RNA polymerase and in vitro reconstitution of the holoenzyme. Plant Journal, 2004, 40, 164-172.	2.8	101
33	Cytoplast-protoplast fusion for interspecific chloroplast transfer in Nicotiana. Molecular Genetics and Genomics, 1982, 185, 211-215.	2.4	100
34	Extensive rearrangements in the mitochondrial DNA in somatic hybrids of Nicotiana tabacum and Nicotiana knightiana. Molecular Genetics and Genomics, 1981, 183, 437-439.	2.4	93
35	Expression of the cry9Aa2 B.t. gene in tobacco chloroplasts confers resistance to potato tuber moth. Transgenic Research, 2006, 15, 481-488.	1.3	93
36	Nitrate reductase deficient cell lines from haploid protoplast cultures ofNicotiana plumbaginifolia. Molecular Genetics and Genomics, 1982, 186, 301-304.	2.4	92

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37	Towards plastid transformation in flowering plants. Trends in Biotechnology, 1993, 11, 101-107.	4.9	91
38	Rapid chloroplast segregation and recombination of mitochondrial DNA in brassica cybrids. Molecular Genetics and Genomics, 1987, 209, 240-246.	2.4	90
39	Expression of a chimeric uidA gene indicates that polycistronic mRNAs are efficiently translated in tobacco plastids. Plant Journal, 1995, 7, 845-848.	2.8	85
40	A novel approach to plastid transformation utilizes the phiC31 phage integrase. Plant Journal, 2004, 37, 906-913.	2.8	83
41	Mutation proximal to the tRNA binding region of the Nicotiana plastid 16S rRNA confers resistance to spectinomycin. Molecular Genetics and Genomics, 1991, 228, 316-319.	2.4	82
42	Exceptional paternal inheritance of plastids in Arabidopsis suggests that lowâ€frequency leakage of plastids via pollen may be universal in plants. Plant Journal, 2007, 52, 817-823.	2.8	80
43	Chloroplasts as expression platforms for plant-produced vaccines. Expert Review of Vaccines, 2010, 9, 893-911.	2.0	80
44	Translational fusion of chloroplast-expressed human papillomavirus type 16 L1 capsid protein enhances antigen accumulation in transplastomic tobacco. Transgenic Research, 2008, 17, 1091-1102.	1.3	78
45	Isoleucine-requiring Nicotiana plant deficient in threonine deaminase. Nature, 1981, 294, 87-88.	13.7	75
46	Plastid marker gene excision by the phiC31 phage site-specific recombinase. Plant Molecular Biology, 2007, 64, 137-143.	2.0	70
47	Cell-to-cell movement of plastids in plants. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 2439-2443.	3.3	69
48	Autoluminescent Plants. PLoS ONE, 2010, 5, e15461.	1.1	65
49	Two Distinct Plastid Genome Configurations and Unprecedented Intraspecies Length Variation in the accD Coding Region in Medicago truncatula. DNA Research, 2014, 21, 417-427.	1.5	65
50	Genetic instability in somatic hybrids of Nicotiana tabacum and Nicotiana knightiana. Molecular Genetics and Genomics, 1978, 163, 145-151.	2.4	62
51	Complementation in somatic hybrids indicates four types of nitrate reductase deficient lines in Nicotiana plumbaginifolia. Molecular Genetics and Genomics, 1982, 187, 1-3.	2.4	61
52	Construction of marker-free transplastomic tobacco using the Cre-loxP site-specific recombination system. Nature Protocols, 2006, 1, 900-910.	5.5	61
53	A Guide to Choosing Vectors for Transformation of the Plastid Genome of Higher Plants. Plant Physiology, 2007, 145, 1201-1210.	2.3	60
54	Aminoglycoside-3?-adenyltransferase confers resistance to spectinomycin and streptomycin in Nicotiana tabacum. Plant Molecular Biology, 1990, 14, 197-205.	2.0	59

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55	Construction of marker-free transplastomic plants. Current Opinion in Biotechnology, 2007, 18, 107-114.	3.3	58
56	Transfer of cytoplasmic male sterility by selection for streptomycin resistance after protoplast fusion in Nicotiana. Molecular Genetics and Genomics, 1983, 189, 365-369.	2.4	57
57	Efficient Plastid Transformation in Arabidopsis. Plant Physiology, 2017, 175, 186-193.	2.3	57
58	Protection against tetanus toxin using a plant-based vaccine. European Journal of Immunology, 2005, 35, 1320-1326.	1.6	56
59	Transcription from Heterologous rRNA Operon Promoters in Chloroplasts Reveals Requirement for Specific Activating Factors1. Plant Physiology, 1998, 117, 1495-1499.	2.3	55
60	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, 1159-1165.	6.5	54
61	Plastid marker-gene excision by transiently expressed CRE recombinase. Plant Journal, 2006, 45, 447-456.	2.8	54
62	Unique Architecture of the Plastid Ribosomal RNA Operon Promoter Recognized by the Multisubunit RNA Polymerase in Tobacco and Other Higher Plants. Plant Cell, 2003, 15, 195-205.	3.1	51
63	Cell-to-cell movement of mitochondria in plants. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 3395-3400.	3.3	51
64	Transient cycloheximide resistance in a tobacco cell line. Molecular Genetics and Genomics, 1976, 149, 267-271.	2.4	50
65	Triazine-resistant Nicotiana mutants from photomixotrophic cell cultures. Molecular Genetics and Genomics, 1985, 200, 508-510.	2.4	50
66	Deletion of the tobacco plastidpsbAgene triggers an upregulation of the thylakoid-associated NAD(P)H dehydrogenase complex and the plastid terminal oxidase (PTOX). Plant Journal, 2003, 35, 704-716.	2.8	50
67	Engineered PPR proteins as inducible switches to activate the expression of chloroplast transgenes. Nature Plants, 2019, 5, 505-511.	4.7	49
68	Large scale isolation of maternally inherited lincomycin resistance mutations, in diploid Nicotiana plumbaginifolia protoplast cultures. Molecular Genetics and Genomics, 1984, 196, 407-412.	2.4	48
69	Targeted Insertion of Foreign Genes into the Tobacco Plastid Genome without Physical Linkage to the Selectable Marker Gene. Bio/technology, 1995, 13, 791-794.	1.9	48
70	Lincomycin resistance, a new type of maternally inherited mutation in Nicotiana plumbaginifolia. Current Genetics, 1982, 6, 105-109.	0.8	44
71	Overexpression of the clpP 5â€²-Untranslated Region in a Chimeric Context Causes a Mutant Phenotype, Suggesting Competition for a clpP-Specific RNA Maturation Factor in Tobacco Chloroplasts. Plant Physiology, 2002, 129, 1600-1606.	2.3	43
72	A dominant nuclear streptomycin resistance marker for plant cell transformation. Molecular Genetics and Genomics, 1987, 210, 86-91.	2.4	42

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73	Fusion-mediated transfer of triazine-resistant chloroplasts: Characterization of Nicotiana tabacum cybrid plants. Molecular Genetics and Genomics, 1986, 205, 201-205.	2.4	41
74	Improved expression of streptomycin resistance in plants due to a deletion in the streptomycin phosphotransferase coding sequence. Molecular Genetics and Genomics, 1988, 214, 456-459.	2.4	39
75	In vivo testing of a tobacco plastid DNA segment for guide RNA function in psbL editing. Molecular Genetics and Genomics, 1995, 247, 439-443.	2.4	39
76	Rapid clonal multiplication of Digitalis lanata in tissue culture. Plant Cell Reports, 1981, 1, 34-35.	2.8	38
77	New advances in the production of edible plant vaccines: chloroplast expression of a tetanus vaccine antigen, TetC. Phytochemistry, 2004, 65, 989-994.	1.4	37
78	Engineered RNA-binding protein for transgene activation in non-green plastids. Nature Plants, 2019, 5, 486-490.	4.7	36
79	Fusion-complementation analysis of auxotrophic and chlorophyll-deficient lines isolated in haploidNicotiana plumbaginifolia protoplast cultures. Molecular Genetics and Genomics, 1982, 186, 328-332.	2.4	34
80	Next generation synthetic vectors for transformation of the plastid genome of higher plants. Plant Molecular Biology, 2009, 70, 487-498.	2.0	33
81	Interspecific protoplast fusion to rescue a cytoplasmic lincomycin resistance mutation into fertile Nicotiana plumbaginifolia plants. Molecular Genetics and Genomics, 1984, 198, 7-11.	2.4	32
82	Identification of functionalloxsites in the plastid genome. Plant Journal, 2003, 35, 753-762.	2.8	32
83	Gene activation in plastids by the CRE site-specific recombinase. Plant Molecular Biology, 2006, 61, 711-718.	2.0	30
84	Judging the homoplastomic state of plastid transformants. Trends in Plant Science, 1998, 3, 376-377.	4.3	29
85	Lack of conservation of editing sites in mRNAs that encode subunits of the NAD(P)H dehydrogenase complex in plastids and mitochondria of Arabidopsis thaliana. Current Genetics, 2001, 40, 214-219.	0.8	29
86	Streptomycin and lincomycin resistances are selective plastid markers in cultured Nicotiana cells. Molecular Genetics and Genomics, 1990, 221, 245.	2.4	28
87	Gentamycin resistance in Nicotiana conferred by AAC(3)-I, a narrow substrate specificity acetyltransferase. Plant Molecular Biology, 1991, 17, 301-303.	2.0	28
88	Exceptional inheritance of plastids via pollen in Nicotiana sylvestris with no detectable paternal mitochondrial DNA in the progeny. Plant Journal, 2012, 72, 84-88.	2.8	28
89	RNA Editing in Chloroplasts of Spirodela polyrhiza, an Aquatic Monocotelydonous Species. PLoS ONE, 2015, 10, e0140285.	1.1	27
90	Correct splicing of a group II intron from a chimeric reporter gene transcript in tobacco plastids. Nucleic Acids Research, 1995, 23, 2544-2547.	6.5	26

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91	Plastid genomes in a regenerating tobacco shoot derive from a small number of copies selected through a stochastic process. Plant Journal, 2008, 56, 975-983.	2.8	24
92	Engineering the Plastid Genome of Nicotiana sylvestris, a Diploid Model Species for Plastid Genetics. Methods in Molecular Biology, 2011, 701, 37-50.	0.4	24
93	Steroid-inducible BABY BOOM system for development of fertile Arabidopsis thaliana plants after prolonged tissue culture. Plant Cell Reports, 2015, 34, 1849-1856.	2.8	23
94	Tobacco lines with high copy number of replicating recombinant geminivirus vectors after biolistic DNA delivery. Plant Journal, 1992, 2, 457-463.	2.8	22
95	A negative selection scheme based on the expression of cytosine deaminase in plastids. Plant Journal, 1997, 12, 697-701.	2.8	20
96	Plastid engineering bears fruit. Nature Biotechnology, 2001, 19, 826-827.	9.4	20
97	Transformation of the Plastid Genome to Study RNA Editing. Methods in Enzymology, 2007, 424, 501-518.	0.4	20
98	Plastid Genotyping Reveals Uniformity of cms-T Maize Cytoplasms. Plant Physiology, 2015, 169, pp.01147.2015.	2.3	20
99	Plant biotechnology. Current Opinion in Plant Biology, 2004, 7, 149-151.	3.5	18
100	Visual spectinomycin resistance (aadA au) gene for facile identification of transplastomic sectors in tobacco leaves. Plant Molecular Biology, 2011, 76, 453-461.	2.0	17
101	Plastid Transformation in Nicotiana tabacum and Nicotiana sylvestris by Biolistic DNA Delivery to Leaves. Methods in Molecular Biology, 2014, 1132, 147-163.	0.4	17
102	Plastid Transformation in Flowering Plants. Advances in Photosynthesis and Respiration, 2012, , 393-414.	1.0	16
103	New vectors and marker excision systems mark progress in engineering the plastid genome of higher plants. Photochemical and Photobiological Sciences, 2005, 4, 971.	1.6	13
104	Engineering of the rpl23 gene cluster to replace the plastid RNA polymerase Î± subunit with the Escherichia coli homologue. Current Genetics, 2000, 38, 218-225.	0.8	12
105	Study of Plastid Genome Stability in Tobacco Reveals That the Loss of Marker Genes Is More Likely by Gene Conversion Than by Recombination between 34-bp loxP Repeats. Plant Physiology, 2010, 153, 252-259.	2.3	11
106	New Tools for Engineering the Arabidopsis Plastid Genome. Plant Physiology, 2019, 181, 394-398.	2.3	11
107	Visual marker and Agrobacteriumâ€delivered recombinase enable the manipulation of the plastid genome in greenhouseâ€grown tobacco plants. Plant Journal, 2012, 70, 717-725.	2.8	10
108	Independent translation of ORFs in dicistronic operons, synthetic building blocks for polycistronic chloroplast gene expression. Plant Journal, 2020, 103, 2318-2329.	2.8	10

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109	Mobile plastid genes. Nature, 2003, 422, 31-32.	13.7	9
110	rbcL Transcript Levels in Tobacco Plastids Are Independent of Light: Reduced Dark Transcription Rate Is Compensated by Increased mRNA Stability. Plant Cell, 1998, 10, 1713.	3.1	7
111	Transplastomics in Arabidopsis: Progress Toward Developing an Efficient Method. Methods in Molecular Biology, 2011, 774, 133-147.	0.4	7
112	Spectinomycin resistance mutations in the rrn16 gene are new plastid markers in Medicago sativa. Theoretical and Applied Genetics, 2012, 125, 1517-1523.	1.8	7
113	Rapid sequence evolution is associated with genetic incompatibilities in the plastid Clp complex. Plant Molecular Biology, 2022, 108, 277-287.	2.0	6
114	Reply... Chlororespiration: only half a story. Trends in Plant Science, 1999, 4, 51.	4.3	5
115	Multiple sgRNAs for one-step inactivation of the duplicatedacetyl-coenzyme A carboxylase 2(ACC2) genes inBrassica napus. Plant Physiology, 2022, 189, 178-187.	2.3	5
116	DNA markers define plastid haplotypes in Arabidopsis thaliana. Current Genetics, 2007, 51, 269-275.	0.8	4
117	Covalent-display of an active chimeric-recombinant tissue plasminogen activator on polyhydroxybutyrate granules surface. Biotechnology Letters, 2017, 39, 1683-1688.	1.1	3
118	Transformation of the Plastid Genome in Tobacco: The Model System for Chloroplast Genome Engineering. Methods in Molecular Biology, 2021, 2317, 135-153.	0.4	3
119	Prospects for Reengineering Agrobacterium tumefaciens for T-DNA Delivery to Chloroplasts. Plant Physiology, 2021, 186, 215-220.	2.3	3
120	Transplastomic Technology for Safer and Better Transgenic Crops. Nature Biotechnology, 1999, 17, 28-28.	9.4	1
121	Plastid Marker Gene Excision in the Tobacco Shoot Apex by Agrobacterium-Delivered Cre Recombinase. Methods in Molecular Biology, 2021, 2317, 177-193.	0.4	1
122	When is it appropriate to cite?â€"A reply. Plant Molecular Biology Reporter, 1991, 9, 100-101.	1.0	0
123	Plastid Marker Gene Excision in Greenhouse-Grown Tobacco by Agrobacterium-Delivered Cre Recombinase. Methods in Molecular Biology, 2014, 1132, 205-220.	0.4	0