Fumihiko Sato

List of Publications by Year in descending order

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ΕΠΜΙΗΙΚΟ ΟΛΤΟ

#	Article	IF	CITATIONS
1	PGP4, an ATP Binding Cassette P-Glycoprotein, Catalyzes Auxin Transport in Arabidopsis thaliana Roots. Plant Cell, 2005, 17, 2922-2939.	6.6	328
2	Microbial production of plant benzylisoquinoline alkaloids. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 7393-7398.	7.1	307
3	Involvement of CjMDR1, a plant multidrug-resistance-type ATP-binding cassette protein, in alkaloid transport in Coptis japonica. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 751-756.	7.1	256
4	A bacterial platform for fermentative production of plant alkaloids. Nature Communications, 2011, 2, 326.	12.8	241
5	Nitrogen Recycling and Remobilization Are Differentially Controlled by Leaf Senescence and Development Stage in Arabidopsis under Low Nitrogen Nutrition. Plant Physiology, 2008, 147, 1437-1449.	4.8	237
6	High berberine-producing cultures of coptis japonica cells. Phytochemistry, 1984, 23, 281-285.	2.9	222
7	The role of chloroplastic NAD(P)H dehydrogenase in photoprotection. FEBS Letters, 1999, 457, 5-8.	2.8	210
8	Molecular Characterization of the S-Adenosyl-l-methionine:3′-Hydroxy-N-methylcoclaurine 4′-O-Methyltransferase Involved in Isoquinoline Alkaloid Biosynthesis in Coptis japonica. Journal of Biological Chemistry, 2000, 275, 23398-23405.	3.4	181
9	Roles of miR319 and TCP Transcription Factors in Leaf Development. Plant Physiology, 2017, 175, 874-885.	4.8	175
10	PsbP Protein, But Not PsbQ Protein, Is Essential for the Regulation and Stabilization of Photosystem II in Higher Plants. Plant Physiology, 2005, 139, 1175-1184.	4.8	171
11	Molecular Cloning and Characterization of CYP719, a Methylenedioxy Bridge-forming Enzyme That Belongs to a Novel P450 Family, from cultured Coptis japonica Cells. Journal of Biological Chemistry, 2003, 278, 38557-38565.	3.4	170
12	Unusual P450 reactions in plant secondary metabolism. Archives of Biochemistry and Biophysics, 2011, 507, 194-203.	3.0	165
13	Total biosynthesis of opiates by stepwise fermentation using engineered Escherichia coli. Nature Communications, 2016, 7, 10390.	12.8	160
14	ldentification of a WRKY Protein as a Transcriptional Regulator of Benzylisoquinoline Alkaloid Biosynthesis in Coptis japonica. Plant and Cell Physiology, 2007, 48, 8-18.	3.1	153
15	Molecular Cloning and Characterization of CoclaurineN-Methyltransferase from Cultured Cells of Coptis japonica. Journal of Biological Chemistry, 2002, 277, 830-835.	3.4	146
16	The DNA-binding protease, CND41, and the degradation of ribulose-1,5-bisphosphate carboxylase/oxygenase in senescent leaves of tobacco. Planta, 2004, 220, 97-104.	3.2	138
17	Distinct Functions for the Two PsbP-Like Proteins PPL1 and PPL2 in the Chloroplast Thylakoid Lumen of Arabidopsis. Plant Physiology, 2007, 145, 668-679.	4.8	134
18	Geranyl Diphosphate:4-Hydroxybenzoate Geranyltransferase fromLithospermum erythrorhizon. Journal of Biological Chemistry, 2002, 277, 6240-6246.	3.4	133

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19	From The Cover: Differential use of two cyclic electron flows around photosystem I for driving CO2-concentration mechanism in C4 photosynthesis. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 16898-16903.	7.1	132
20	Molecular Cloning and Characterization of CYP80G2, a Cytochrome P450 That Catalyzes an Intramolecular C–C Phenol Coupling of (S)-Reticuline in Magnoflorine Biosynthesis, from Cultured Coptis japonica Cells. Journal of Biological Chemistry, 2008, 283, 8810-8821.	3.4	130
21	Crystal structure of tobacco PR-5d protein at 1.8 Ã resolution reveals a conserved acidic cleft structure in antifungal thaumatin-like proteins 1 1Edited by R. Huber. Journal of Molecular Biology, 1999, 286, 1137-1145.	4.2	126
22	Inaugural Article: Metabolic engineering of plant alkaloid biosynthesis. Proceedings of the National Academy of Sciences of the United States of America, 2001, 98, 367-372.	7.1	124
23	Functional Analysis of Norcoclaurine Synthase in Coptis japonica. Journal of Biological Chemistry, 2007, 282, 6274-6282.	3.4	118
24	Characterization of Vacuolar Transport of the Endogenous Alkaloid Berberine in Coptis japonica. Plant Physiology, 2005, 138, 1939-1946.	4.8	115
25	A novel protein with DNA binding activity from tobacco chloroplast nucleoids Plant Cell, 1997, 9, 1673-1682.	6.6	112
26	Knockdown of berberine bridge enzyme by RNAi accumulates (S)-reticuline and activates a silent pathway in cultured California poppy cells. Transgenic Research, 2007, 16, 363-375.	2.4	107
27	Molecular cloning and characterization of methylenedioxy bridge-forming enzymes involved in stylopine biosynthesis inEschscholzia californica. FEBS Journal, 2007, 274, 1019-1035.	4.7	104
28	A Regulatory Cascade Involving Class II ETHYLENE RESPONSE FACTOR Transcriptional Repressors Operates in the Progression of Leaf Senescence Â. Plant Physiology, 2013, 162, 991-1005.	4.8	103
29	Crystal structure of the PsbP protein of photosystem II from Nicotiana tabacum. EMBO Reports, 2004, 5, 362-367.	4.5	99
30	Ethylene-Induced Gene Expression of Osmotin-Like Protein, a Neutral Isoform of Tobacco PR-5, is Mediated by the AGCCGCC cis-Sequence. Plant and Cell Physiology, 1996, 37, 249-255.	3.1	91
31	Overexpression of Coptis japonica Norcoclaurine 6- O -Methyltransferase Overcomes the Rate-Limiting Step in Benzylisoquinoline Alkaloid Biosynthesis in Cultured Eschscholzia californica. Plant and Cell Physiology, 2007, 48, 252-262.	3.1	88
32	Post-translational regulation of CND41 protease activity in senescent tobacco leaves. Planta, 2005, 222, 643-651.	3.2	86
33	CYP719A subfamily of cytochrome P450 oxygenases and isoquinoline alkaloid biosynthesis in Eschscholzia californica. Plant Cell Reports, 2009, 28, 123-133.	5.6	85
34	Three novel subunits of Arabidopsis chloroplastic NAD(P)H dehydrogenase identified by bioinformatic and reverse genetic approaches. Plant Journal, 2009, 57, 207-219.	5.7	82
35	Molecular cloning of columbamine O -methyltransferase from cultured Coptis japonica cells. FEBS Journal, 2002, 269, 5659-5667.	0.2	81
36	Purification and Characterization of S-adenosyl-l-methionine:norcoclaurine 6-O-Methyltransferase from Cultured Coptis japonica Cells. FEBS Journal, 1994, 225, 125-131.	0.2	80

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37	Functional dissection of two Arabidopsis PsbO proteins. FEBS Journal, 2005, 272, 2165-2175.	4.7	80
38	Functional Analysis of Arabidopsis Ethylene-Responsive Element Binding Protein Conferring Resistance to Bax and Abiotic Stress-Induced Plant Cell Death. Plant Physiology, 2005, 138, 1436-1445.	4.8	80
39	Protease activity of CND41, a chloroplast nucleoid DNAâ€binding protein, isolated from cultured tobacco cells. FEBS Letters, 2000, 468, 15-18.	2.8	79
40	Characterization of anArabidopsis thalianamutant with impairedpsbO, one of two genes encoding extrinsic 33-kDa proteins in photosystem II. FEBS Letters, 2002, 523, 138-142.	2.8	74
41	Isoquinoline Alkaloid Biosynthesis is Regulated by a Unique bHLH-Type Transcription Factor in Coptis japonica. Plant and Cell Physiology, 2011, 52, 1131-1141.	3.1	74
42	Characterization of Coptis japonica CjABCB2, an ATP-binding cassette protein involved in alkaloid transport. Phytochemistry, 2013, 91, 109-116.	2.9	71
43	Three PsbQ-Like Proteins are Required for the Function of the Chloroplast NAD(P)H Dehydrogenase Complex in Arabidopsis. Plant and Cell Physiology, 2010, 51, 866-876.	3.1	70
44	Limonene production in tobacco with Perilla limonene synthase cDNA. Journal of Experimental Botany, 2003, 54, 2635-2642.	4.8	67
45	Metabolic Engineering in Isoquinoline Alkaloid Biosynthesis. Current Pharmaceutical Biotechnology, 2007, 8, 211-218.	1.6	66
46	Characterization of berberine transport into Coptis japonica cells and the involvement of ABC protein. Journal of Experimental Botany, 2002, 53, 1879-1886.	4.8	65
47	Molecular functions of PsbP and PsbQ proteins in the photosystem II supercomplex. Journal of Photochemistry and Photobiology B: Biology, 2011, 104, 158-164.	3.8	64
48	Molecular cloning and characterization of a cytochrome P450 in sanguinarine biosynthesis from Eschscholzia californica cells. Phytochemistry, 2013, 91, 100-108.	2.9	64
49	Structure, function, and evolution of the PsbP protein family in higher plants. Photosynthesis Research, 2008, 98, 427-437.	2.9	63
50	A Novel Dark-Inducible Protein, LeDI-2, and Its Involvement in Root-Specific Secondary Metabolism in Lithospermum erythrorhizon. Plant Physiology, 2001, 125, 1831-1841.	4.8	61
51	Engineering of ubiquinone biosynthesis using the yeast coq2 gene confers oxidative stress tolerance in transgenic tobacco. Plant Journal, 2004, 40, 734-743.	5.7	58
52	A Role of TCP1 in the Longitudinal Elongation of Leaves in Arabidopsis. Bioscience, Biotechnology and Biochemistry, 2010, 74, 2145-2147.	1.3	58
53	Asymmetric synthesis of tetrahydroisoquinolines by enzymatic Pictet–Spengler reaction. Bioscience, Biotechnology and Biochemistry, 2014, 78, 701-707.	1.3	58
54	(R,S)-Tetrahydropapaveroline production by stepwise fermentation using engineered Escherichia coli. Scientific Reports, 2014, 4, 6695.	3.3	57

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55	Production of berberine in cultured cells of Coptis japonica. Phytochemistry, 1981, 20, 545-547.	2.9	56
56	FTIR Evidence That the PsbP Extrinsic Protein Induces Protein Conformational Changes around the Oxygen-Evolving Mn Cluster in Photosystem II. Biochemistry, 2009, 48, 6318-6325.	2.5	56
57	Molecular Functions of Oxygenâ€Evolving Complex Family Proteins in Photosynthetic Electron Flow. Journal of Integrative Plant Biology, 2010, 52, 723-734.	8.5	56
58	Differential electron flow around photosystem I by two C4-photosynthetic-cell-specific ferredoxins. EMBO Journal, 2000, 19, 5041-5050.	7.8	54
59	Knockdown of the PsbP protein does not prevent assembly of the dimeric PSII core complex but impairs accumulation of photosystem II supercomplexes in tobacco. Biochimica Et Biophysica Acta - Bioenergetics, 2009, 1787, 873-881.	1.0	53
60	NDH-Mediated Cyclic Electron Flow Around Photosystem I is Crucial for C ₄ Photosynthesis. Plant and Cell Physiology, 2016, 57, 2020-2028.	3.1	53
61	Shikonin biosynthesis in Lithospermum erythrorhizon. Light-induced negative regulation of secondary metabolism Plant Biotechnology, 1999, 16, 335-342.	1.0	51
62	Improved Salt Tolerance of Transgenic Tobacco Expressing Apoplastic Yeast-Derived Invertase. Plant and Cell Physiology, 2001, 42, 245-249.	3.1	49
63	The PsbQ protein stabilizes the functional binding of the PsbP protein to photosystem II in higher plants. Biochimica Et Biophysica Acta - Bioenergetics, 2012, 1817, 1346-1351.	1.0	48
64	Characterization of Accumulation of Tobacco PR-5 Proteins by IEF-Immunoblot Analysis. Plant and Cell Physiology, 1994, 35, 821-827.	3.1	46
65	Cross-linking Evidence for Multiple Interactions of the PsbP and PsbQ Proteins in a Higher Plant Photosystem II Supercomplex. Journal of Biological Chemistry, 2014, 289, 20150-20157.	3.4	45
66	Entrapment of Lavandula vera cells with synthetic resin prepolymers and its application to pigment production. Applied Microbiology and Biotechnology, 1986, 24, 266.	3.6	44
67	Selection of an atrazine-resistant tobacco cell line having a mutant psbA gene. Molecular Genetics and Genomics, 1988, 214, 358-360.	2.4	44
68	Characterization of Shikonin Derivative Secretion in Lithospermum erythrorhizon Hairy Roots as a Model of Lipid-Soluble Metabolite Secretion from Plants. Frontiers in Plant Science, 2016, 7, 1066.	3.6	44
69	Microbial production of novel sulphated alkaloids for drug discovery. Scientific Reports, 2018, 8, 7980.	3.3	44
70	Purification and characterization of coclaurine N-methyltransferase from cultured Coptis japonica cells. Phytochemistry, 2001, 56, 649-655.	2.9	43
71	Stable transformation of Lithospermum erythrorhizon by Agrobacterium rhizogenes and shikonin production of the transformants. Plant Cell Reports, 1998, 18, 214-219.	5.6	42
72	Importance of the N-terminal sequence of the extrinsic 23 kDa polypeptide in Photosystem II in ion retention in oxygen evolution. BBA - Proteins and Proteomics, 2001, 1546, 196-204.	2.1	42

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73	Ribosomal RNA processing and an RNase R family member in chloroplasts of Arabidopsis. Plant Molecular Biology, 2004, 55, 595-606.	3.9	42
74	Entrapment of Lavandula vera cells and production of pigments by entrapped cells. Journal of Biotechnology, 1985, 2, 107-117.	3.8	41
75	The Mechanism of Herbicide Resistance in Tobacco Cells with a New Mutation in the Q _B Protein. Plant Physiology, 1989, 89, 986-992.	4.8	41
76	A novel Coptis japonica multidrugâ€resistant protein preferentially expressed in the alkaloidâ€accumulating rhizome1. Journal of Experimental Botany, 2001, 52, 877-879.	4.8	41
77	Mining of the Uncharacterized Cytochrome P450 Genes Involved in Alkaloid Biosynthesis in California Poppy Using a Draft Genome Sequence. Plant and Cell Physiology, 2018, 59, 222-233.	3.1	41
78	The function of <i>ETHYLENE RESPONSE FACTOR</i> genes in the light-induced anthocyanin production of <i>Arabidopsis thaliana</i> leaves. Plant Biotechnology, 2018, 35, 87-91.	1.0	41
79	Isolation of tobacco ubiquitinâ€conjugating enzyme cDNA in a yeast twoâ€hybrid system with tobacco ERF3 as bait and its characterization of specific interaction. Journal of Experimental Botany, 2003, 54, 1175-1181.	4.8	40
80	Nucleotide Sequence of a cDNA for Osmotin-Like Protein from Cultured Tobacco Cells. Plant Physiology, 1991, 97, 844-846.	4.8	39
81	S-adenosyl-l-methionine: Scoulerine-9-O-methyltransferase from cultured Coptis japonica cells. Phytochemistry, 1993, 32, 659-664.	2.9	39
82	NDF6: A Thylakoid Protein Specific to Terrestrial Plants is Essential for Activity of Chloroplastic NAD(P)H Dehydrogenase in Arabidopsis. Plant and Cell Physiology, 2008, 49, 1066-1073.	3.1	39
83	Listeria monocytogenes Strain-Specific Impairment of the TetR Regulator Underlies the Drastic Increase in Cyclic di-AMP Secretion and Beta Interferon-Inducing Ability. Infection and Immunity, 2012, 80, 2323-2332.	2.2	39
84	Transcription Factors in Alkaloid Biosynthesis. International Review of Cell and Molecular Biology, 2013, 305, 339-382.	3.2	39
85	Heterologous Expression of a Mammalian ABC Transporter in Plant and its Application to Phytoremediation. Plant Molecular Biology, 2006, 61, 491-503.	3.9	37
86	A Truncated Mutant of the Extrinsic 23-kDa Protein that Absolutely Requires the Extrinsic 17-kDa Protein for Ca2+ Retention in Photosystem II. Plant and Cell Physiology, 2002, 43, 1244-1249.	3.1	36
87	The Conserved His-144 in the PsbP Protein Is Important for the Interaction between the PsbP N-terminus and the Cyt b559 Subunit of Photosystem II. Journal of Biological Chemistry, 2012, 287, 26377-26387.	3.4	36
88	Generation of serrated and wavy petals by inhibition of the activity of TCP transcription factors inArabidopsis thaliana. Plant Signaling and Behavior, 2011, 6, 697-699.	2.4	35
89	CjbHLH1 homologs regulate sanguinarine biosynthesis in Eschscholzia californica cells. Plant and Cell Physiology, 2015, 56, 1019-1030.	3.1	35
90	Expression of (s)-scoulerine 9-O-methyltransferase in Coptis japonica plants. Phytochemistry, 1993, 34, 949-954.	2.9	34

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91	Wounding activates immediate early transcription of genes for ERFs in tobacco plants. Plant Molecular Biology, 2002, 49, 473-482.	3.9	34
92	Functional Analysis of Four Members of the PsbP Family in Photosystem II in Nicotiana tabacum using Differential RNA Interference. Plant and Cell Physiology, 2005, 46, 1885-1893.	3.1	33
93	In Vivo 15N-Enrichment of Metabolites in Suspension Cultured Cells and Its Application to Metabolomics. Biotechnology Progress, 2006, 22, 1003-1011.	2.6	33
94	Structure and function of the PsbP protein of Photosystem II from higher plants. Photosynthesis Research, 2005, 84, 251-255.	2.9	31
95	Bench-top fermentative production of plant benzylisoquinoline alkaloids using a bacterial platform. Bioengineered, 2012, 3, 49-53.	3.2	31
96	Accumulation of the components of cyclic electron flow around photosystem I in C4 plants, with respect to the requirements for ATP. Photosynthesis Research, 2016, 129, 261-277.	2.9	31
97	Unraveling Additional O-Methylation Steps in Benzylisoquinoline Alkaloid Biosynthesis in California Poppy (Eschscholzia californica). Plant and Cell Physiology, 2017, 58, 1528-1540.	3.1	31
98	A Novel Nuclear-Encoded Protein, NDH-Dependent Cyclic Electron Flow 5, is Essential for the Accumulation of Chloroplast NAD(P)H Dehydrogenase Complexes. Plant and Cell Physiology, 2008, 50, 383-393.	3.1	30
99	Characterization of Plant Functions Using Cultured Plant Cells, and Biotechnological Applications. Bioscience, Biotechnology and Biochemistry, 2013, 77, 1-9.	1.3	30
100	Physiological Functions of PsbS-dependent and PsbS-independent NPQ under Naturally Fluctuating Light Conditions. Plant and Cell Physiology, 2014, 55, 1286-1295.	3.1	30
101	PGR5 and NDH Pathways in Photosynthetic Cyclic Electron Transfer Respond Differently to Sublethal Treatment with Photosystem-Interfering Herbicides. Journal of Agricultural and Food Chemistry, 2014, 62, 4083-4089.	5.2	30
102	A multidrug and toxic compound extrusion transporter mediates berberine accumulation into vacuoles in Coptis japonica. Phytochemistry, 2017, 138, 76-82.	2.9	30
103	Post-illumination Reduction of the Plastoquinone Pool in Chloroplast Transformants in which Chloroplastic NAD(P)H Dehydrogenase was Inactivated. Bioscience, Biotechnology and Biochemistry, 2002, 66, 2107-2111.	1.3	29
104	Thalictrum minus cell cultures and ABC-like transporter. Phytochemistry, 2003, 62, 483-489.	2.9	29
105	Stromal Over-reduction by High-light Stress as Measured by Decreases in P700 Oxidation by Far-red Light and its Physiological Relevance. Plant and Cell Physiology, 2005, 46, 775-781.	3.1	29
106	13-Methylberberine, a berberine analogue with stronger anti-adipogenic effects on mouse 3T3-L1 cells. Scientific Reports, 2016, 6, 38129.	3.3	29
107	Sequence analysis of cDNA encoding phosphoenolpyruvate carboxylase from cultured tobacco cells. Plant Molecular Biology, 1991, 17, 535-539.	3.9	28
108	Synthesis and Secretion of Tobacco Neutral PR-5 Protein by Transgenic Tobacco and Yeast. Biochemical and Biophysical Research Communications, 1995, 211, 909-913.	2.1	27

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109	Improvement of Reticuline Productivity from Dopamine by Using Engineered <i>Escherichia coli</i> . Bioscience, Biotechnology and Biochemistry, 2013, 77, 2166-2168.	1.3	27
110	Tyrosine phosphorylation and protein degradation control the transcriptional activity of WRKY involved in benzylisoquinoline alkaloid biosynthesis. Scientific Reports, 2016, 6, 31988.	3.3	27
111	Inhibition of Photosystem II of Spinach by Lichen-derived Depsides. Bioscience, Biotechnology and Biochemistry, 1998, 62, 2023-2027.	1.3	26
112	Characterization of Coptis japonica cells with different alkaloid productivities. Plant Cell, Tissue and Organ Culture, 1994, 38, 249-256.	2.3	25
113	Selection and Characterization of Protoporphyrinogen Oxidase Inhibiting Herbicide (S23142) Resistant Photomixotrophic Cultured Cells of Nicotiana tabacum. Journal of Plant Physiology, 1995, 146, 693-698.	3.5	25
114	Molecular characterization of O-methyltransferases involved in isoquinoline alkaloid biosynthesis in Coptis japonica. Proceedings of the Japan Academy Series B: Physical and Biological Sciences, 2010, 86, 757-768.	3.8	25
115	Microbial production of isoquinoline alkaloids as plant secondary metabolites based on metabolic engineering research. Proceedings of the Japan Academy Series B: Physical and Biological Sciences, 2013, 89, 165-182.	3.8	25
116	Basic helix-loop-helix transcription factors and regulation of alkaloid biosynthesis. Plant Signaling and Behavior, 2011, 6, 1627-1630.	2.4	24
117	Diurnal and Developmental Changes in Energy Allocation of Absorbed Light at PSII in Field-Grown Rice. Plant and Cell Physiology, 2014, 55, 171-182.	3.1	24
118	The N-terminal sequence of the extrinsic PsbP protein modulates the redox potential of Cyt b559 in photosystem II. Scientific Reports, 2016, 6, 21490.	3.3	24
119	A comparison of effects of several herbicides on photoautotrophic, photomixotrophic and heterotrophic cultured tobacco cells and seedlings. Plant Cell Reports, 1987, 6, 401-404.	5.6	24
120	An efficient method of selecting photoautotrophic cells from cultured heterogeneous cells. Plant and Cell Physiology, 1980, 21, 929-932.	3.1	23
121	Allocation of Absorbed Light Energy in PSII to Thermal Dissipations in the Presence or Absence of PsbS Subunits of Rice. Plant and Cell Physiology, 2011, 52, 1822-1831.	3.1	23
122	Chloroplastic NAD(P)H dehydrogenase complex and cyclic electron transport around photosystem I. Molecules and Cells, 2008, 25, 158-62.	2.6	23
123	A binding model for phenylurea herbicides based on analysis of a Thr264 mutation in the D-1 protein of tobacco. Pesticide Biochemistry and Physiology, 1989, 35, 33-41.	3.6	22
124	CND41, a chloroplast nucleoid protein that regulates plastid development, causes reduced gibberellin content and dwarfism in tobacco. Physiologia Plantarum, 2003, 117, 130-136.	5.2	22
125	Identification of the basic amino acid residues on the PsbP protein involved in the electrostatic interaction with photosystem II. Biochimica Et Biophysica Acta - Bioenergetics, 2014, 1837, 1447-1453.	1.0	21
126	Transcriptional activation of phosphoenolpyruvate carboxylase by phosphorus deficiency in tobacco. Journal of Experimental Botany, 2003, 54, 961-969.	4.8	20

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127	Transient RNA Silencing of Scoulerine 9-O-Methyltransferase Expression by Double Stranded RNA inCoptis japonicaProtoplasts. Bioscience, Biotechnology and Biochemistry, 2005, 69, 63-70.	1.3	20
128	Improvement of Benzylisoquinoline Alkaloid Productivity by Overexpression of 3′-Hydroxy- <i>N</i> -methylcoclaurine 4′- <i>O</i> -Methyltransferase in Transgenic <i>Coptis japonica</i> Plants. Biological and Pharmaceutical Bulletin, 2012, 35, 650-659.	1.4	20
129	Pathway engineering of benzylisoquinoline alkaloid biosynthesis in transgenic California poppy cells with ectopic expression of tetrahydroberberine oxidase from <i>Coptis japonica</i> . Plant Biotechnology, 2012, 29, 473-481.	1.0	20
130	Overproduction of PGR5 enhances the electron sink downstream of photosystem I in a C ₄ plant, <i>Flaveria bidentis</i> . Plant Journal, 2020, 103, 814-823.	5.7	20
131	In VivoBioconversion of Tetrahydroisoquinoline by Recombinant CoclaurineN-Methyltransferase. Bioscience, Biotechnology and Biochemistry, 2004, 68, 939-941.	1.3	19
132	Structures of the three homoeologous loci of wheat benzoxazinone biosynthetic genes TaBx3 and TaBx4 and characterization of their promoter sequences. Theoretical and Applied Genetics, 2008, 116, 373-381.	3.6	19
133	Metabolic Diversification of Benzylisoquinoline Alkaloid Biosynthesis Through the Introduction of a Branch Pathway in Eschscholzia californica. Plant and Cell Physiology, 2010, 51, 949-959.	3.1	18
134	Light energy allocation at PSII under field light conditions: How much energy is lost in NPQ-associated dissipation?. Plant Physiology and Biochemistry, 2014, 81, 115-120.	5.8	18
135	Laboratory-scale production of (<i>S</i>)-reticuline, an important intermediate of benzylisoquinoline alkaloids, using a bacterial-based method. Bioscience, Biotechnology and Biochemistry, 2017, 81, 396-402.	1.3	18
136	Genome-wide identification of AP2/ERF transcription factor-encoding genes in California poppy (Eschscholzia californica) and their expression profiles in response to methyl jasmonate. Scientific Reports, 2020, 10, 18066.	3.3	18
137	Modulation of benzylisoquinoline alkaloid biosynthesis by heterologous expression of CjWRKY1 in Eschscholzia californica cells. PLoS ONE, 2017, 12, e0186953.	2.5	18
138	Electron transport activities of Arabidopsis thaliana mutants with impaired chloroplastic NAD(P)H dehydrogenase. Journal of Plant Research, 2008, 121, 521-526.	2.4	17
139	Engineering Formation of Medicinal Compounds in Cell Cultures. Advances in Plant Biochemistry and Molecular Biology, 2008, 1, 311-345.	0.5	17
140	Efficient microbial production of stylopine using a Pichia pastoris expression system. Scientific Reports, 2016, 6, 22201.	3.3	17
141	Bowman–Birk Proteinase Inhibitor Confers Heavy Metal and Multiple Drug Tolerance in Yeast. Plant and Cell Physiology, 2007, 48, 193-197.	3.1	16
142	Over-expression of Rate-Limiting Enzymes to Improve Alkaloid Productivity. Methods in Molecular Biology, 2010, 643, 95-109.	0.9	16
143	Characterization of the Promoter Region of Biosynthetic Enzyme Genes Involved in Berberine Biosynthesis in Coptis japonica. Frontiers in Plant Science, 2016, 7, 1352.	3.6	16
144	Specific RNA Interference inpsbP Genes Encoded by a Multigene Family inNicotiana tabacumwith a Short 3â€2-Untranslated Sequence. Bioscience, Biotechnology and Biochemistry, 2003, 67, 107-113.	1.3	15

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145	Cyclic electron transport around photosystem I and its relationship to non-photochemical quenching in the unicellular green alga Dunaliella salina under nitrogen deficiency. Journal of Plant Research, 2013, 126, 179-186.	2.4	15
146	Genome-Wide Profiling of WRKY Genes Involved in Benzylisoquinoline Alkaloid Biosynthesis in California Poppy (Eschscholzia californica). Frontiers in Plant Science, 2021, 12, 699326.	3.6	15
147	Induction of pigment production by S-containing compounds in cultured Lavandula vera cells Agricultural and Biological Chemistry, 1985, 49, 533-534.	0.3	14
148	Isolation of Putative Glycoprotein Gene from Early Somatic Embryo of Carrot and its Possible Involvement in Somatic Embryo Development. Plant and Cell Physiology, 2004, 45, 1658-1668.	3.1	14
149	Transcription Factors in Alkaloid Engineering. Biomolecules, 2021, 11, 1719.	4.0	14
150	Influence of carbon source on pigment production by immobilized cultured cells of Lavandula vera. Journal of Bioscience and Bioengineering, 1989, 68, 330-333.	0.9	13
151	Photosynthetic Characteristics of Photoautotrophically Cultured Cells of Tobacco. Plant and Cell Physiology, 1989, 30, 885-891.	3.1	13
152	Constitutive expression of the neutral PR-5 (OLP, PR-5d) gene in roots and cultured cells of tobacco is mediated by ethylene-responsive cis -element AGCCGCC sequences. Plant Cell Reports, 1998, 18, 173-179.	5.6	13
153	Application of Vanadate-Induced Nucleotide Trapping to Plant Cells for Detection of ABC Proteins. Plant and Cell Physiology, 2003, 44, 198-200.	3.1	13
154	Inhibition of PSII in Atrazine-Tolerant Tobacco Cells by Barbatic Acid, a Lichen-Derived Depside. Bioscience, Biotechnology and Biochemistry, 2006, 70, 266-268.	1.3	13
155	Engineering the biosynthesis of low molecular weight metabolites for quality traits (essential) Tj ETQq1 1 0.7843	314 rgBT /0	Overlock 10 T
156	11-Hydroxylation of Protoberberine by the Novel Berberine-Utilizing Aerobic Bacterium <i>Sphingobium</i> sp. Strain BD3100. Journal of Natural Products, 2015, 78, 2880-2886.	3.0	12
157	Pigment synthesis by immobilized cultured cells of Lavandula vera and characterization of a component of the pigments Agricultural and Biological Chemistry, 1990, 54, 53-59.	0.3	11
158	Crystallization and preliminary crystallographic studies on the extrinsic 23â€kDa protein in the oxygen-evolving complex of photosystem II. Acta Crystallographica Section D: Biological Crystallography, 2003, 59, 1462-1463.	2.5	11
159	RNAi and functional genomics. Plant Biotechnology, 2005, 22, 431-442.	1.0	11
160	Enantiomeric separation of racemic 1-benzyl-N-methyltetrahydroisoquinolines on chiral columns and chiral purity determinations of the O-methylated metabolites in plant cell cultures by HPLC-CD on-line coupling in combination with HPLC-MS. Phytochemistry, 2009, 70, 198-206.	2.9	11
161	Dihydrosanguinarine Enhances Glucose Uptake in Mouse 3T3-L1 Cells. ACS Omega, 2017, 2, 6916-6925.	3.5	11
162	Cell Growth and Organ Differentiation in Cultured Tobacco Cells under Spaceflight Condition Uchu Seibutsu Kagaku, 1999, 13, 18-24.	0.3	10

#	Article	IF	CITATIONS
163	Metabolic Engineering in Alkaloid Biosynthesis: Case Studies in Tyrosine- and Putrescine-Derived Alkaloids. , 2007, , 145-173.		10
164	Lichen Photobionts Show Tolerance against Lichen Acids Produced by Lichen Mycobionts. Bioscience, Biotechnology and Biochemistry, 2008, 72, 3122-3127.	1.3	10
165	Molecular Cloning of anO-Methyltransferase from Adventitious Roots ofCarapichea ipecacuanha. Bioscience, Biotechnology and Biochemistry, 2011, 75, 107-113.	1.3	10
166	Screening of Isoquinoline Alkaloids for Potent Lipid Metabolism Modulation withCaenorhabditis elegans. Bioscience, Biotechnology and Biochemistry, 2013, 77, 2405-2412.	1.3	10
167	Antimicrobial agent isolated from Coptidis rhizome extract incubated with Rhodococcus sp. strain BD7100. Journal of Antibiotics, 2019, 72, 71-78.	2.0	10
168	Comparative analysis using the draft genome sequence of California poppy (Eschscholzia californica) for exploring the candidate genes involved in benzylisoquinoline alkaloid biosynthesis. Bioscience, Biotechnology and Biochemistry, 2021, 85, 851-859.	1.3	10
169	Transport engineering for improving the production and secretion of valuable alkaloids in Escherichia coli. Metabolic Engineering Communications, 2021, 13, e00184.	3.6	10
170	Lipid compositions of photomixotrophic green calluses and chlorophyll deficient leaves of tobacco Agricultural and Biological Chemistry, 1984, 48, 1699-1706.	0.3	9
171	Stimulation of photosynthesis and growth of photoautotrophically cultured plant cells by choline and its analogs. Plant Cell Reports, 1993, 12, 691-7.	5.6	9
172	Characterization of Coptis japonica cells with different alkaloid productivities. , 1994, , 249-256.		9
173	An improved medium for the photoautotrophic culture of Cytisus scoparius link cells Agricultural and Biological Chemistry, 1981, 45, 2463-2467.	0.3	9
174	Establishment of Rhizobium-mediated transformation of Coptis japonica and molecular analyses of transgenic plants. Plant Biotechnology, 2005, 22, 113-118.	1.0	9
175	Establishment of a co-culture system using Escherichia coli and Pichia pastoris (Komagataella phaffii) for valuable alkaloid production. Microbial Cell Factories, 2021, 20, 200.	4.0	9
176	Enhancement of pigment productivity of immobilized cultured Lavandula vera cells by limitation of nitrogen sources. Journal of Bioscience and Bioengineering, 1989, 67, 306-308.	0.9	8
177	Simple and Rapid Screening Method for Photosystem II Inhibitory Herbicides Using Photoautotrophically Cultured Plant Cells with Chlorophyll Fluorescence Monitoring. Bioscience, Biotechnology and Biochemistry, 1993, 57, 1389-1390.	1.3	8
178	Bioengineering of Isoquinoline Alkaloid Production in Microbial Systems. Advances in Botanical Research, 2013, , 183-203.	1.1	8
179	Transgenerational lipidâ€reducing activity of benzylisoquinoline alkaloids in <i>Caenorhabditis elegans</i> . Genes To Cells, 2019, 24, 70-81.	1.2	8
180	Photosynthetic carbon metabolism in photoautotrophically and photomixotrophically cultured tobacco cells. Plant and Cell Physiology, 0, , .	3.1	7

#	Article	IF	CITATIONS
181	Induction of Pigment Production byS-Containing Compounds in CulturedLavandula veraCells. Agricultural and Biological Chemistry, 1985, 49, 533-534.	0.3	7
182	Characterization of Polypeptides in Cultured Rice Cells Differing in Cryoprotectability. Journal of Plant Physiology, 1992, 139, 443-447.	3.5	7
183	Expression of PR-5d and ERF Genes in Cultured Tobacco Cells and Their NaCl Stress-response. Bioscience, Biotechnology and Biochemistry, 2001, 65, 1270-1273.	1.3	7
184	Inhibition of Photosystem II of Spinach by the Respiration Inhibitors Piericidin A and Thenoyltrifluoroacetone. Bioscience, Biotechnology and Biochemistry, 2002, 66, 1925-1929.	1.3	7
185	In vivo system for analyzing the function of the PsbP protein using Chlamydomonas reinhardtii. Photosynthesis Research, 2017, 133, 117-127.	2.9	7
186	Continuous Production of Blue Pigments by Immobilized Plant Cells and Characterization of the Pigments. Annals of the New York Academy of Sciences, 1990, 613, 542-546.	3.8	6
187	Isolation of Herbicide-Resistant 4-Hydroxyphenylpyruvate Dioxygenase from CulturedCoptis japonicaCells. Bioscience, Biotechnology and Biochemistry, 2008, 72, 3059-3062.	1.3	6
188	Common origin of methylenedioxy ring degradation and demethylation in bacteria. Scientific Reports, 2017, 7, 7422.	3.3	6
189	Phagocytosis in Plant Protoplasts. Cell Structure and Function, 1978, 3, 25-30.	1.1	5
190	Immobilized plant cell reactor for continuous production of blue pigments Agricultural and Biological Chemistry, 1989, 53, 3077-3078.	0.3	5
191	Synthesis of plant triosephosphate isomerase in Escherichia coli Agricultural and Biological Chemistry, 1990, 54, 2189-2191.	0.3	5
192	Cultured green cells of tobacco as a useful material for the study of chloroplast replication. Cytotechnology, 1999, 21, 149-154.	0.7	5
193	Improved Production of Plant Isoquinoline Alkaloids by Metabolic Engineering. Advances in Botanical Research, 2013, 68, 163-181.	1.1	5
194	Microbial Production of Plant Benzylisoquinoline Alkaloids. , 2013, , 3-24.		5
195	Two B-type ATP-binding cassette (ABC) transporters localize to the plasma membrane in <i>Thalictrum minus</i> . Plant Biotechnology, 2015, 32, 243-247.	1.0	5
196	Allocation of Absorbed Light Energy in Photosystem II in NPQ Mutants of Arabidopsis. Plant and Cell Physiology, 2016, 57, pcw072.	3.1	5
197	Cloning and Characterization of Cheilanthifoline and Stylopine Synthase Genes from Chelidonium majus. Plant and Cell Physiology, 2017, 58, 1421-1430.	3.1	5
198	Pigment Synthesis by Immobilized Cultured Cells ofLavandula veraand Characterization of a Component of the Pigments. Agricultural and Biological Chemistry, 1990, 54, 53-59.	0.3	4

#	Article	IF	CITATIONS
199	Synthesis of Plant Triosephosphate Isomerase in <i>Escherichia coli</i> . Agricultural and Biological Chemistry, 1990, 54, 2189-2191.	0.3	4
200	Photoautotrophic Cultured Plant Cells: A Novel System to Survey New Photosynthetic Electron Transport Inhibitors. Zeitschrift Fur Naturforschung - Section C Journal of Biosciences, 1991, 46, 563-568.	1.4	4
201	Development of a simple non-freezing method to preserve cultured plant cells. Journal of Bioscience and Bioengineering, 1991, 72, 71-73.	0.9	4
202	Isolation and identification of berberine and berberrubine metabolites by berberine-utilizing bacterium <i>Rhodococcus</i> sp. strain BD7100. Bioscience, Biotechnology and Biochemistry, 2016, 80, 856-862.	1.3	4
203	Reconstitution of photosynthetic oxygen evolving activity with heterologous OEC23 protein expressed in E. coli. , 1998, , 1439-1442.		4
204	Bacterial Production and Purification of Phosphorylatable Phosphoenolpyruvate Carboxylase from Tobacco. Bioscience, Biotechnology and Biochemistry, 1996, 60, 2089-2091.	1.3	3
205	Functional Similarities of Recombinant OLP and Cytokinin-Binding Protein 2. Bioscience, Biotechnology and Biochemistry, 2001, 65, 2806-2810.	1.3	3
206	CRES-T for the Functional Analysis of Transcription Factors and Modification of Morphological Traits in Plants. Current Biotechnology, 2012, 1, 23-32.	0.4	3
207	Metabolic Engineering and Synthetic Biology for the Production of Isoquinoline Alkaloids. , 2013, , 327-343.		3
208	Knockdown of the NHR-8 nuclear receptor enhanced sensitivity to the lipid-reducing activity of alkaloids in Caenorhabditis elegans. Bioscience, Biotechnology and Biochemistry, 2014, 78, 2008-2013.	1.3	3
209	Secondary plant products from cultured hybrid cells Proceedings of the Japan Academy Series B: Physical and Biological Sciences, 1987, 63, 208-210.	3.8	2
210	Immobilized Plant Cell Reactor for Continuous Production of Blue Pigments. Agricultural and Biological Chemistry, 1989, 53, 3077-3078.	0.3	2
211	Genomic Structure and Promoter Analysis of Phosphoenolpyruvate Carboxylase in a C3 Plant, Nicotiana sylvestris. Bioscience, Biotechnology and Biochemistry, 2002, 66, 1691-1696.	1.3	2
212	Plant Alkaloid Engineering. , 2020, , 700-755.		2
213	Identification of Regulatory Protein Genes Involved in Alkaloid Biosynthesis Using a Transient RNAi System. Methods in Molecular Biology, 2010, 643, 33-45.	0.9	2
214	Functional Analysis of PsbP-Like Protein 1 (PPL1) in Arabidopsis. Advanced Topics in Science and Technology in China, 2013, , 415-417.	0.1	2
215	Photoautotrophic and Photomixotrophic Culture of Green Tobacco Cells in a Jar-Fermenter. Plant and Cell Physiology, 1981, , .	3.1	1
216	Application of the freeze-blast method to disruption of cultured plant cells. Journal of Bioscience and Bioengineering, 1990, 69, 132-134.	0.9	1

#	Article	IF	CITATIONS
217	Possibility of molecular protection of photosynthesis under salinity stress. Studies in Surface Science and Catalysis, 1998, 114, 249-254.	1.5	1
218	Microbial Expression of Alkaloid Biosynthetic Enzymes for Characterization of Their Properties. Methods in Molecular Biology, 2010, 643, 111-120.	0.9	1
219	Identification of a multi-component berberine 11-hydroxylase from <i>Burkholderia</i> sp. strain CJ1. Bioscience, Biotechnology and Biochemistry, 2020, 84, 1274-1284.	1.3	1
220	Transport engineering using tobacco transporter NtJAT1 enhances alkaloid production in <i>Escherichia coli</i> . Bioscience, Biotechnology and Biochemistry, 2022, , .	1.3	1
221	An Improved Medium for the Photoautotrophic Culture of <i>Cytisus scoparius</i> Link Cells. Agricultural and Biological Chemistry, 1981, 45, 2463-2467.	0.3	0
222	Lipid Compositions of Photomixotrophic Green Calluses and Chlorophyll Deficient Leaves of Tobacco. Agricultural and Biological Chemistry, 1984, 48, 1699-1706.	0.3	0
223	Photoautotrophism and its application in cultured plant cells Nippon Nogeikagaku Kaishi, 1989, 63, 1855-1861.	0.0	0
224	Tolerance of Cultured Amaranthus retroflexus Cells to Atrazine. Zeitschrift Fur Naturforschung - Section C Journal of Biosciences, 1993, 48, 275-277.	1.4	0
225	Chloroplast DNA Binding Proteins and Chloroplast Nucleoid. Nippon Nogeikagaku Kaishi, 1997, 71, 1173-1176.	0.0	0
226	Title is missing!. Kagaku To Seibutsu, 2009, 47, 528-530.	0.0	0
227	2L1524 Interaction and function of the PsbP extrinsic protein in the oxygen evolving center of photosystem II(Photobiology: Photosynthesis,The 48th Annual Meeting of the Biophysical Society of) Tj ETQq1 I	l 0 <i>0</i> .8 431	4 rgBT /Over
228	Functional Analysis of PsbR in PsbP Binding to Photosystem II. Advanced Topics in Science and Technology in China, 2013, , 423-426.	0.1	0
229	Data set of differentially expressed microRNAs in sanguinarine-treated Caenorhabditis elegans and its F3 progeny. Data in Brief, 2018, 21, 899-906.	1.0	0
230	Effects of PsbP Knockdown on the Photosynthetic Electron Transfer in Nicotiana tabacum. , 2008, , 605-608.		0
231	The Electron Transport in psbS-Silenced Rice. Advanced Topics in Science and Technology in China, 2013, , 481-484.	0.1	0
232	Functional Roles of the Amino- and Carboxyl-Regions of PsbP Protein in Photosystem II. Advanced Topics in Science and Technology in China, 2013, , 67-70.	0.1	0
233	Screening of Novel Subunits of Chloroplastic NAD(P)H Dehydrogenase in Arabidopsis. Advanced Topics in Science and Technology in China, 2013, , 279-281.	0.1	0
234	Estimation of the Relative Sizes of the Two NPQ-Associated Dissipations in Rice. Advanced Topics in Science and Technology in China, 2013, , 469-472.	0.1	0

#	Article	IF	CITATIONS
235	Structure and expression of phosphoenolpyruvate carboxylase genes in a C3 plant, Nicotiana sylvestris. , 1992, , 531-534.		О
236	Photosystem II Inhibition by Pyran-enamine Derivatives. Zeitschrift Fur Naturforschung - Section C Journal of Biosciences, 1993, 48, 163-167.	1.4	0
237	CND41; a novel chloroplast-nucleoid DNA-binding protein. , 1995, , 2515-2518.		о
238	Purification of CND41; Chloroplast Nucleoid Dna-Binding Protein with Proteolytic Activity. , 1998, , 3035-3038.		0