Anastasios Melis

List of Publications by Year
in descending order

106 papers	12,015 citations	25014 57 h-index	30058 103 g-index
107 all docs	107 docs citations	107 times ranked	7234 citing authors

#	Article	IF	Citations
1	Phycocyanin Fusion Constructs for Heterologous Protein Expression Accumulate as Functional Heterohexameric Complexes in Cyanobacteria. ACS Synthetic Biology, 2022, 11, 1152-1166.	1.9	4
2	Heterologous Î²-phellandrene production by alginate immobilized Synechocystis sp. PCC 6803. Journal of Applied Phycology, 2021, 33, 2157-2168.	1.5	5
3	Recombinant Protein Stability in Cyanobacteria. ACS Synthetic Biology, 2021, 10, 810-825.	1.9	14
4	Engineering microalgae: transition from empirical design to programmable cells. Critical Reviews in Biotechnology, 2021, 41, 1233-1256.	5.1	28
5	Role of an ancient light-harvesting protein of PSI in light absorption and photoprotection. Nature Communications, 2021, 12, 679.	5.8	28
6	Cyanobacterial Production of Biopharmaceutical and Biotherapeutic Proteins. Frontiers in Plant Science, 2020, 11, 237.	1.7	16
7	Fusion constructs enhance heterologous Î²-phellandrene production in Synechocystis sp. PCC 6803. Journal of Applied Phycology, 2020, 32, 2889-2902.	1.5	7
8	Genetic attenuation of alkaloids and nicotine content in tobacco (Nicotiana tabacum). Planta, 2020, 251, 92.	1.6	12
9	Loss of ALBINO3b Insertase Results in Truncated Light-Harvesting Antenna in Diatoms. Plant Physiology, 2019, 181, 1257-1276.	2.3	25
10	Photosynthetic generation of heterologous terpenoids in cyanobacteria. Biotechnology and Bioengineering, 2019, 116, 2041-2051.	1.7	32
11	Engineering isoprene synthesis in cyanobacteria. FEBS Letters, 2018, 592, 2059-2069.	1.3	30
12	Downregulation of the CpSRP43 gene expression confers a truncated light-harvesting antenna (TLA) and enhances biomass and leaf-to-stem ratio in Nicotiana tabacum canopies. Planta, 2018, 248, 139-154.	1.6	25
13	Heterologous Leader Sequences in Fusion Constructs Enhance Expression of Geranyl Diphosphate Synthase and Yield of Î²-Phellandrene Production in Cyanobacteria (<i>Synechocystis</i>). ACS Synthetic Biology, 2018, 7, 912-921.	1.9	30
14	Deletion of the chloroplast LTD protein impedes LHCI import and PSIâ€“LHCI assembly in Chlamydomonas reinhardtii. Journal of Experimental Botany, 2018, 69, 1147-1158.	2.4	37
15	Cyanobacterial production of plant essential oils. Planta, 2018, 248, 933-946.	1.6	13
16	Biotechnology of cyanobacterial isoprene production. Applied Microbiology and Biotechnology, 2018, 102, 6451-6458.	1.7	44
17	CHAPTER 14. Improving Photosynthetic Solar Energy Conversion Efficiency: the Truncated Light-harvesting Antenna (TLA) Concept. Comprehensive Series in Photochemical and Photobiological Sciences, 2018, , 335-354.	0.3	3
18	Heterologous synthesis of geranyllinalool, a diterpenol plant product, in the cyanobacterium Synechocystis. Applied Microbiology and Biotechnology, 2017, 101, 2791-2800.	1.7	38

#	Article	IF	Citations
19	Photosynthetic antenna engineering to improve crop yields. Planta, 2017, 245, 1009-1020.	1.6	94
20	Engineering Isoprene Synthase Expression and Activity in Cyanobacteria. ACS Synthetic Biology, 2017, 6, 2281-2292.	1.9	66
21	Loss of CpSRP54 function leads to a truncated light-harvesting antenna size in Chlamydomonas reinhardtii. Biochimica Et Biophysica Acta - Bioenergetics, 2017, 1858, 45-55.	0.5	49
22	Terpene Hydrocarbons Production in Cyanobacteria. , 2017, , .		2
23	Role of isopentenyl-diphosphate isomerase in heterologous cyanobacterial (Synechocystis) isoprene production. Photosynthesis Research, 2016, 130, 517-527.	1.6	30
24	DNA-free two-gene knockout in Chlamydomonas reinhardtii via CRISPR-Cas9 ribonucleoproteins. Scientific Reports, 2016, 6, 30620.	1.6	253
25	Microalgal hydrogen production research. International Journal of Hydrogen Energy, 2016, 41, 12772-12798.	3.8	117
26	Sustainable heterologous production of terpene hydrocarbons in cyanobacteria. Photosynthesis Research, 2016, 130, 123-135.	1.6	60
27	Isoprene production in Synechocystis under alkaline and saline growth conditions. Journal of Applied Phycology, 2015, 27, 1089-1097.	1.5	25
28	A phycocyaninÂ·phellandrene synthase fusion enhances recombinant protein expression and Î²-phellandrene (monoterpene) hydrocarbons production in Synechocystis (cyanobacteria). Metabolic Engineering, 2015, 32, 116-124.	3.6	80
29	The chloroplast signal recognition particle (CpSRP) pathway as a tool to minimize chlorophyll antenna size and maximize photosynthetic productivity. Biotechnology Advances, 2014, 32, 66-72.	6.0	64
30	Carbon partitioning to the terpenoid biosynthetic pathway enables heterologous Î²-phellandrene production in Escherichia coli cultures. Archives of Microbiology, 2014, 196, 853-861.	1.0	24
31	Maximizing photosynthetic efficiency and culture productivity in cyanobacteria upon minimizing the phycobilisome light-harvesting antenna size. Biochimica Et Biophysica Acta - Bioenergetics, 2014, 1837, 1653-1664.	0.5	154
32	Regulation of Î²-phellandrene synthase gene expression, recombinant protein accumulation, and monoterpene hydrocarbons production in Synechocystis transformants. Planta, 2014, 240, 309-324.	1.6	63
33	Heterologous Expression of the Mevalonic Acid Pathway in Cyanobacteria Enhances Endogenous Carbon Partitioning to Isoprene. Molecular Plant, 2014, 7, 71-86.	3.9	170
34	Paradigm of Monoterpene (Î²-phellandrene) Hydrocarbons Production via Photosynthesis in Cyanobacteria. Bioenergy Research, 2013, 6, 917-929.	2.2	69
35	Carbon partitioning in photosynthesis. Current Opinion in Chemical Biology, 2013, 17, 453-456.	2.8	88
36	Markerâ€free genetic engineering of the chloroplast in the green microalga <i><scp>C</scp>hlamydomonas reinhardtii</i>. Plant Biotechnology Journal, 2013, 11, 818-828.	4.1	33

#	Article	IF	Citations
37	Modulation of the light-harvesting chlorophyll antenna size in <i>Chlamydomonas reinhardtii</i> by <i>TLA1</i> gene over-expression and RNA interference. Philosophical Transactions of the Royal Society B: Biological Sciences, 2012, 367, 3430-3443.	1.8	43
38	Assembly of the Light-Harvesting Chlorophyll Antenna in the Green Alga <i>Chlamydomonas reinhardtii</i> Requires Expression of the <i>TLA2</i>-<i>CpFTSY</i> Gene Â Â Â. Plant Physiology, 2012, 158, 930-945.	2.3	97
39	Truncated Photosystem Chlorophyll Antenna Size in the Green Microalga <i>Chlamydomonas reinhardtii</i> upon Deletion of the <i>TLA3-CpSRP43</i> Gene. Plant Physiology, 2012, 160, 2251-2260.	2.3	142
40	Isoprene Production Via the Mevalonic Acid Pathway in Escherichia coli (Bacteria). Bioenergy Research, 2012, 5, 814-828.	2.2	104
41	Photosynthesis-to-fuels: from sunlight to hydrogen, isoprene, and botryococcene production. Energy and Environmental Science, 2012, 5, 5531-5539.	15.6	161
42	Polyclonal antibodies against the TLA1 protein also recognize with high specificity the D2 reaction center protein of PSII in the green alga Chlamydomonas reinhardtii. Photosynthesis Research, 2012, 112, 39-47.	1.6	1
43	Diffusionâ€based process for carbon dioxide uptake and isoprene emission in gaseous/aqueous twoâ€phase photobioreactors by photosynthetic microorganisms. Biotechnology and Bioengineering, 2012, 109, 100-109.	1.7	102
44	Optimizing Antenna Size to Maximize Photosynthetic Efficiency. Plant Physiology, 2011, 155, 79-85.	2.3	266
45	Photobiological hydrogen production: Recent advances and state of the art. Bioresource Technology, 2011, 102, 8403-8413.	4.8	261
46	Hydrocarbon productivities in different Botryococcus strains: comparative methods in product quantification. Journal of Applied Phycology, 2011, 23, 763-775.	1.5	65
47	The TLA1 Protein Family Members Contain a Variant of the Plain MOV34/MPN Domain. American Journal of Biochemistry and Molecular Biology, 2011, 2, 1-18.	0.6	4
48	Genetic and biochemical analysis of the TLA1 gene in Chlamydomonas reinhardtii. Planta, 2010, 231, 729-740.	1.6	29
49	Engineering a platform for photosynthetic isoprene production in cyanobacteria, using Synechocystis as the model organism. Metabolic Engineering, 2010, 12, 70-79.	3.6	537
50	Extracellular terpenoid hydrocarbon extraction and quantitation from the green microalgae Botryococcus braunii var. Showa. Bioresource Technology, 2010, 101, 2359-2366.	4.8	78
51	Mechanism of REP27 Protein Action in the D1 Protein Turnover and Photosystem II Repair from Photodamage Â Â. Plant Physiology, 2009, 151, 88-99.	2.3	24
52	â€œDensity equilibriumâ€•method for the quantitative and rapid in situ determination of lipid, hydrocarbon, or biopolymer content in microorganisms. Biotechnology and Bioengineering, 2009, 102, 1406-1415.	1.7	41
53	Solar energy conversion efficiencies in photosynthesis: Minimizing the chlorophyll antennae to maximize efficiency. Plant Science, 2009, 177, 272-280.	1.7	651
54	Optical properties of microalgae for enhanced biofuels production. Optics Express, 2008, 16, 21807.	1.7	61

#	Article	IF	Citations
55	REP27, a Tetratricopeptide Repeat Nuclear-Encoded and Chloroplast-Localized Protein, Functions in D1/32-kD Reaction Center Protein Turnover and Photosystem II Repair from Photodamage. Plant Physiology, 2007, 143, 1547-1560.	2.3	40
56	Development of the light-harvesting chlorophyll antenna in the green alga Chlamydomonas reinhardtii is regulated by the novel Tla1 gene. Planta, 2007, 225, 813-829.	1.6	85
57	Photosynthetic H2 metabolism in Chlamydomonas reinhardtii (unicellular green algae). Planta, 2007, 226, 1075-1086.	1.6	226
58	Hydrogen Fuel Production by Transgenic Microalgae. Advances in Experimental Medicine and Biology, 2007, 616, 110-121.	0.8	35
59	REP27, a tetratricopeptide repeat nuclear-encoded and chloroplast-localized protein, functions in D1/32-kD reaction center protein turnover and photosystem II repair from photodamage. Plant Physiology, 2007, 143, 1547-60.	2.3	18
60	Bioengineering of Green Algae to Enhance Photosynthesis and Hydrogen Production. , 2006, , 229-240.		9
61	Chloroplast sulfate transport in green algae â€" genes, proteins and effects. Photosynthesis Research, 2005, 86, 299-307.	1.6	92
62	Trails of Green Alga Hydrogen Research â€" from Hans Gaffron to New Frontiers. Photosynthesis Research, 2004, 80, 401-409.	1.6	79
63	Genomics of green algal hydrogen research. Photosynthesis Research, 2004, 82, 277-288.	1.6	47
64	Chlorophyll antenna size adjustments by irradiance in Dunaliella salina involve coordinate regulation of chlorophyll a oxygenase (CAO) and Lhcb gene expression. Plant Molecular Biology, 2003, 51, 757-771.	2.0	111
65	Microalgal biotechnology: Carotenoid production by the green algaeDunaliella salina. Biotechnology and Bioprocess Engineering, 2003, 8, 331-337.	1.4	68
66	tla1, a DNA insertional transformant of the green alga Chlamydomonas reinhardtii with a truncated light-harvesting chlorophyll antenna size. Planta, 2003, 217, 49-59.	1.6	239
67	Biosynthesis and Distribution of Chlorophyll among the Photosystems during Recovery of the Green Alga Dunaliella salina from Irradiance Stress. Plant Physiology, 2002, 128, 603-614.	2.3	67
68	Biochemical and morphological characterization of sulfur-deprived and H 2 -producing Chlamydomonas reinhardtii (green alga). Planta, 2002, 214, 552-561.	1.6	364
69	6Fe9-hydrogenases in green algae: photo-fermentation and hydrogen evolution under sulfur deprivation. International Journal of Hydrogen Energy, 2002, 27, 1431-1439.	3.8	130
70	Green alga hydrogen production: progress, challenges and prospects. International Journal of Hydrogen Energy, 2002, 27, 1217-1228.	3.8	267
71	Truncated chlorophyll antenna size of the photosystems?a practical method to improve microalgal productivity and hydrogen production in mass culture. International Journal of Hydrogen Energy, 2002, 27, 1257-1264.	3.8	181
72	Hydrogen Production. Green Algae as a Source of Energy. Plant Physiology, 2001, 127, 740-748.	2.3	564

#	Article	IF	Citations
73	Hydrogen Production. Green Algae as a Source of Energy. Plant Physiology, 2001, 127, 740-748.	2.3	34
74	Title is missing!. Journal of Applied Phycology, 2001, 13, 25-34.	1.5	46
75	Absence of Lutein, Violaxanthin and Neoxanthin Affects the Functional Chlorophyll Antenna Size of Photosystem-II but not that of Photosystem-I in the Green Alga Chlamydomonas reinhardtii. Plant and Cell Physiology, 2001, 42, 482-491.	1.5	87
76	Photosynthetic apparatus organization and function in the wild type and a chlorophyll b -less mutant of Chlamydomonas reinhardtii . Dependence on carbon source. Planta, 2000, 211, 335-344.	1.6	124
77	Sustained Photobiological Hydrogen Gas Production upon Reversible Inactivation of Oxygen Evolution in the Green AlgaChlamydomonas reinhardtii. Plant Physiology, 2000, 122, 127-136.	2.3	1,014
78	Photosystem-II damage and repair cycle in chloroplasts: what modulates the rate of photodamage in vivo?. Trends in Plant Science, 1999, 4, 130-135.	4.3	678
79	Title is missing!. Photosynthesis Research, 1998, 56, 175-184.	1.6	130
80	Title is missing!. Journal of Applied Phycology, 1998, 10, 515-525.	1.5	237
81	Photoinhibitory damage is modulated by the rate of photosynthesis and by the photosystem II light-harvesting chlorophyll antenna size. Planta, 1998, 205, 288-296.	1.6	104
82	Title is missing!. Photosynthesis Research, 1997, 53, 173-184.	1.6	12
83	Chromatic regulation inChlamydomonas reinhardtii alters photosystem stoichiometry and improves the quantum efficiency of photosynthesis. Photosynthesis Research, 1996, 47, 253-265.	1.6	80
84	Photoinhibition and repair in Dunaliella salina acclimated to different growth irradiances. Planta, 1996, 198, 640-646.	1.6	116
85	A nomenclature for the genes encoding the chlorophylla/b-binding proteins of higher plants. Plant Molecular Biology Reporter, 1992, 10, 242-253.	1.0	155
86	Dynamics of photosynthetic membrane composition and function. Biochimica Et Biophysica Acta - Bioenergetics, 1991, 1058, 87-106.	0.5	437
87	The physiological significance of photosystem II heterogeneity in chloroplasts. Photosynthesis Research, 1990, 23, 105-109.	1.6	155
88	Response of the Photosynthetic Apparatus in <i>Dunaliella salina</i> (Green Algae) to Irradiance Stress. Plant Physiology, 1990, 93, 1433-1440.	2.3	162
89	Minimum photosynthetic unit size in System I and System II of barley chloroplasts. Biochimica Et Biophysica Acta - Bioenergetics, 1988, 934, 151-155.	0.5	73
90	Chlorophyll b deficiency in soybean mutants. I. Effects on photosystem stoichiometry and chlorophyll antenna size. Biochimica Et Biophysica Acta - Bioenergetics, 1988, 932, 130-137.	0.5	61

#	Article	IF	Citations
91	Compensatory Alterations in the Photochemical Apparatus of a Photoregulatory, Chlorophyll <i>b</i>-Deficient Mutant of Maize. Plant Physiology, 1988, 87, 365-370.	2.3	50
92	Photoinhibition: Impairment of the primary charge separation between P-680 and pheophytin in photosystem II of chloroplasts. FEBS Letters, 1987, 214, 370-374.	1.3	70
93	QUANTITATION OF PHOTOSYSTEM II ACTIVITY IN SPINACH CHLOROPLASTS. EFFECT OF ARTIFICIAL QUINONE ACCEPTORS. Photochemistry and Photobiology, 1987, 46, 543-550.	1.3	16
94	LIGHTâ€ABSORPTION AND ELECTRONâ€TRANSPORT BALANCE BETWEEN PHOTOSYSTEM II AND PHOTOSYSTEM I IN SPINACH CHLOROPLASTS. Photochemistry and Photobiology, 1987, 45, 129-136.	1.3	146
95	Photochemical apparatus organization in the thylakoid membrane of Hordeum vulgare wild type and chlorophyll b-less chlorina f2 mutant. Biochimica Et Biophysica Acta - Bioenergetics, 1986, 851, 331-339.	0.5	83
96	Quantitation of plastoquinone photoreduction in spinach chloroplasts. Photosynthesis Research, 1986, 8, 3-16.	1.6	51
97	BIMANESâ€"26. AN ELECTRON TRANSFER REACTION BETWEEN PHOTOSYSTEM I1 AND MONOBROMOBIMANE INDUCES STATIC CHLOROPHYLL a QUENCHING IN SPINACH CHLOROPLASTS. Photochemistry and Photobiology, 1986, 43, 583-589.	1.3	7
98	Differential detergent-solubilization of integral thylakoid membrane complexes in spinach chloroplasts. Localization of photosystem II, cytochrome b6-f complex and photosystem I. FEBS Journal, 1986, 160, 389-393.	0.2	19
99	Photochemical Apparatus Organization in the Chloroplasts of Two <i>Beta vulgaris</i> Genotypes. Plant Physiology, 1985, 79, 872-878.	2.3	22
100	Phycobilisome-photosystem II association in Synechococcus 6301 (Cyanophyceae). FEBS Letters, 1985, 181, 79-82.	1.3	46
101	Photochemical Apparatus Organization in Anacystis nidulans (Cyanophyceae). Plant Physiology, 1984, 74, 67-71.	2.3	68
102	Light regulation of photosynthetic membrane structure, organization, and function. Journal of Cellular Biochemistry, 1984, 24, 271-285.	1.2	83
103	Structural and functional organization of the photosystems in spinach chloroplasts. Antenna size, relative electron-transport capacity, and chlorophyll composition. Biochimica Et Biophysica Acta - Bioenergetics, 1983, 724, 473-484.	0.5	186
104	Phosphorylation of chloroplast thylakoid membrane proteins does not increase the absorption cross-section of photosystem 1. FEBS Letters, 1983, 160, 277-280.	1.3	49
105	HETEROGENEITY OF THE PHOTOCHEMICAL CENTERS IN SYSTEM II OF CHLOROPLASTS*. Photochemistry and Photobiology, 1976, 23, 343-350.	1.3	277
106	Photosynthetic Water-Splitting for Hydrogen Production. , 0, , 273-291.		15