Giuseppe Zucchelli

List of Publications by Year
in descending order

82	2,170	172457	243625
papers	citations	29 h-index	44 g-index

84	84	84	1011
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Excited State Equilibration in the Photosystem Iâ”Light-Harvesting I Complex:â€‰ P700 Is Almost Isoenergetic with Its Antenna. Biochemistry, 1996, 35, 8572-8579.	2.5	169
2	A Thermal Broadening Study of the Antenna Chlorophylls in PSI-200, LHCI, and PSI Core. Biochemistry, 1998, 37, 17355-17360.	2.5	118
3	Distribution of the chlorophyll spectral forms in the chlorophyll-protein complexes of photosystem II antenna. Biochemistry, 1993, 32, 3203-3210.	2.5	100
4	The importance of PS I chlorophyll red forms in light-harvesting by leaves. Photosynthesis Research, 1999, 60, 209-215.	2.9	89
5	The photochemical trapping rate from red spectral states in PSIâ€“LHCI is determined by thermal activation of energy transfer to bulk chlorophylls. Biochimica Et Biophysica Acta - Bioenergetics, 2003, 1557, 91-98.	1.0	84
6	Involvement of uncoupled antenna chlorophylls in photoinhibition in thylakoids. FEBS Letters, 2001, 491, 109-113.	2.8	82
7	Analysis of Some Optical Properties of a Native and Reconstituted Photosystem II Antenna Complex, CP29:â€‰ Pigment Binding Sites Can Be Occupied by Chlorophyll a or Chlorophyll b and Determine Spectral Forms. Biochemistry, 1997, 36, 12984-12993.	2.5	76
8	Light-induced fluorescence quenching in the light-harvesting chlorophyll a/b protein complex. Photosynthesis Research, 1991, 27, 57-64.	2.9	73
9	Gaussian Decomposition of Absorption and Linear Dichroism Spectra of Outer Antenna Complexes of Photosystem II. Biochemistry, 1994, 33, 8982-8990.	2.5	66
10	Chlorophyll Ring Deformation Modulates Qy Electronic Energy in Chlorophyll-Protein Complexes and Generates Spectral Forms. Biophysical Journal, 2007, 93, 2240-2254.	0.5	66
11	Influence of the Photosystem Iâ”Light Harvesting Complex I Antenna Domains on Fluorescence Decay. Biochemistry, 2006, 45, 6947-6955.	2.5	57
12	The Calculated In Vitro and In Vivo Chlorophyll a Absorption Bandshape. Biophysical Journal, 2002, 82, 378-390.	0.5	49
13	Thermal Broadening Analysis of the Light Harvesting Complex II Absorption Spectrum. Biochemistry, 1996, 35, 16247-16254.	2.5	47
14	Photoinhibition in vivo and in vitro Involves Weakly Coupled Chlorophyllâ€“Protein Complexesâ€¡Â¶. Photochemistry and Photobiology, 2002, 75, 613.	2.5	47
15	The presence of long-wavelength chlorophyll a spectral forms in the light-harvesting chlorophyll a/b protein complex II. Journal of Photochemistry and Photobiology B: Biology, 1990, 6, 381-394.	3.8	46
16	Studies on light absorption and photochemical activity changes in chloroplast suspensions and leaves due to light scattering and light filtration across chloroplast and vegetation layers. Photosynthesis Research, 1989, 20, 207-220.	2.9	44
17	Kinetic Analysis of the Lightâ€induced Fluorescence Quenching in Lightâ€harvesting Chlorophylla/bPigmentâ€Protein Complex of Photosystem II. Photochemistry and Photobiology, 1999, 70, 751-759.	2.5	38
18	Kinetic Analysis of the Light-induced Fluorescence Quenching in Light-harvesting Chlorophyll a/b Pigmentâ€“Protein Complex of Photosystem II. Photochemistry and Photobiology, 1999, 70, 751.	2.5	37

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19	CD spectroscopy provides evidence for excitonic interactions involving red-shifted chlorophyll forms in photosystem I. FEBS Letters, 2001, 499, 112-115.	2.8	36
20	Energy transfer processes in the isolated core antenna complexes CP43 and CP47 of photosystem II. Biochimica Et Biophysica Acta - Bioenergetics, 2010, 1797, 1606-1616.	1.0	36
21	Thermal Behavior of Long Wavelength Absorption Transitions in Spirulina platensis Photosystem I Trimers. Biophysical Journal, 2000, 79, 3235-3243.	0.5	33
22	The quenching of photosystem II fluorescence does not protect the D1 protein against light induced degradation in thylakoids. FEBS Letters, 2001, 505, 159-162.	2.8	33
23	Photochemical trapping heterogeneity as a function of wavelength, in plant photosystem I (PSIâ€“LHCI). Biochimica Et Biophysica Acta - Bioenergetics, 2013, 1827, 779-785.	1.0	33
24	Independent fluorescence emission of the chlorophyll spectral forms in higher plant Photosystem II. Biochimica Et Biophysica Acta - Bioenergetics, 1992, 1099, 163-169.	1.0	32
25	The Long-Wavelength Chlorophyll States of Plant LHCI at Room Temperature: A Comparison with PSI-LHCI. Biophysical Journal, 2004, 87, 488-497.	0.5	32
26	The Q_y Absorption Spectrum of the Light-Harvesting Complex II As Determined by Structure-Based Analysis of Chlorophyll Macrocycle Deformations. Biochemistry, 2012, 51, 2717-2736.	2.5	32
27	The effect of outer antenna complexes on the photochemical trapping rate in barley thylakoid Photosystem II. Biochimica Et Biophysica Acta - Bioenergetics, 2005, 1706, 276-286.	1.0	31
28	A study of Photosystem II fluorescence emission in terms of the antenna chlorophyll-protein complexes. Biochimica Et Biophysica Acta - Bioenergetics, 1993, 1183, 194-200.	1.0	30
29	Photosynthesis and negative entropy production. Biochimica Et Biophysica Acta - Bioenergetics, 2005, 1709, 251-255.	1.0	30
30	Selective quenching of the fluorescence of core chlorophyll-protein complexes by photochemistry indicates that Photosystem II is partly diffusion limited. Photosynthesis Research, 2000, 66, 225-233.	2.9	29
31	Fluorescence Lifetime Spectrum of the Plant Photosystem II Core Complex: Photochemistry Does Not Induce Specific Reaction Center Quenching. Biochemistry, 2008, 47, 10449-10457.	2.5	27
32	Antenna structure and energy transfer in higher plant photosystems. Topics in Current Chemistry, 1996, , 147-181.	4.0	25
33	Trapping Dynamics in Photosystem I-Light Harvesting Complex I of Higher Plants Is Governed by the Competition Between Excited State Diffusion from Low Energy States and Photochemical Charge Separation. Journal of Physical Chemistry B, 2017, 121, 9816-9830.	2.6	24
34	Spinach-thylakoid phosphorylation: Studies on the kinetics of changes in photosystem antenna size, spill-over and phosphorylation of light-harvesting chlorophyll ab protein. Biochimica Et Biophysica Acta - Bioenergetics, 1986, 850, 483-489.	1.0	23
35	Gaussian band analysis of absorption, fluorescence and photobleaching difference spectra of D1/D2/cytb-559 complex. Photosynthesis Research, 1994, 41, 465-473.	2.9	21
36	A Thermal Broadening Analysis of Absorption Spectra of the D1/D2/Cytochrome b-559 Complex in Terms of Gaussian Decomposition Sub-bands. Biochemistry, 1995, 34, 15267-15275.	2.5	21

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37	A Stepanov relation analysis of steady-state absorption and fluorescence spectra in the isolated D1/D2/cytochrome b-559 complex. Biochimica Et Biophysica Acta - Bioenergetics, 1995, 1229, 59-63.	1.0	19
38	The effect of excited state population in Photosystem II on the photoinhibition-induced changes in chlorophyll fluorescence parameters. Biochimica Et Biophysica Acta - Bioenergetics, 1999, 1409, 165-170.	1.0	19
39	The room temperature emission band shape of the lowest energy chlorophyll spectral form of LHCI. FEBS Letters, 2003, 547, 107-110.	2.8	19
40	The influence of quenching by open reaction centres on the photosystem II fluorescence emission spectrum. Biochimica Et Biophysica Acta - Bioenergetics, 1991, 1060, 245-250.	1.0	18
41	Spectroscopic analysis of chlorophyll photobleaching in spinach thylakoids, grana and light-harvesting chlorophyll a/b protein complex. Journal of Photochemistry and Photobiology B: Biology, 1988, 2, 483-490.	3.8	17
42	Influence of electrostatic screening by cations on energy coupling between Photosystem II reaction centres and the light-harvesting chlorophyll ab protein complex II. Biochimica Et Biophysica Acta - Bioenergetics, 1988, 934, 144-150.	1.0	16
43	Excitation energy transfer from the chlorophyll spectral forms to Photosystem II reaction centres: A fluorescence induction study. Biochimica Et Biophysica Acta - Bioenergetics, 1990, 1016, 259-265.	1.0	16
44	Band Shape Heterogeneity of the Low-Energy Chlorophylls of CP29: Absence of Mixed Binding Sites and Excitonic Interactions. Biochemistry, 2010, 49, 882-892.	2.5	16
45	Title is missing!. Photosynthesis Research, 1997, 52, 245-253.	2.9	15
46	Wavelength dependence of the fluorescence emission under conditions of open and closed Photosystem II reaction centres in the green alga Chlorella sorokiniana. Biochimica Et Biophysica Acta - Bioenergetics, 2014, 1837, 726-733.	1.0	15
47	Light Absorption by the Chlorophyll aâ€“b Complexes of Photosystem II in a Leaf with Special Reference to LHCIIÂ¶. Photochemistry and Photobiology, 2004, 80, 492.	2.5	14
48	Studies on thylakoid phosphorylation and noncyclic electron transport. Archives of Biochemistry and Biophysics, 1986, 246, 108-113.	3.0	13
49	Carotenoid triplet states in photosystem II: Coupling with low-energy states of the core complex. Biochimica Et Biophysica Acta - Bioenergetics, 2015, 1847, 262-275.	1.0	13
50	Slow exciton trapping in Photosystem II: A possible physiological role. Photosynthesis Research, 1996, 47, 167-173.	2.9	12
51	The influence of reducing the chlorophyll concentration by photobleaching on energy transfer to artificial traps within Photosystem II antenna systems. Biochimica Et Biophysica Acta - Bioenergetics, 1989, 975, 29-33.	1.0	9
52	The relation between the minor chlorophyll spectral forms and fluorescence quenching in aggregated light harvesting chlorophyll ab complex II. Biochimica Et Biophysica Acta - Bioenergetics, 1994, 1184, 279-283.	1.0	9
53	The low energy emitting states of the Lhca4 subunit of higher plant photosystem I. FEBS Letters, 2005, 579, 2071-2076.	2.8	9
54	Photosynthesis research in Italy: a review. Photosynthesis Research, 2006, 88, 211-240.	2.9	9

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55	Photosystem I, when excited in the chlorophyll Q y absorption band, feeds on negative entropy. Biophysical Chemistry, 2018, 233, 36-46.	2.8	9
56	Does maximal entropy production play a role in the evolution of biological complexity? A biological point of view. Rendiconti Lincei, 2020, 31, 259-268.	2.2	9
57	A comparison of the light-induced, non-reversible fluorescence quenching in Photosystem II with quenching due to open reaction centres in terms of the chlorophyll emission spectral forms. Biochimica Et Biophysica Acta - Bioenergetics, 1992, 1101, 79-83.	1.0	8
58	Long wavelength absorption transitions in the D1/D2/cytochrome b-559 complex as revealed by selective pigment photobleaching and circular dichroism measurements. Biochimica Et Biophysica Acta - Bioenergetics, 1998, 1366, 256-264.	1.0	8
59	Entropy consumption in primary photosynthesis. Biochimica Et Biophysica Acta - Bioenergetics, 2007, 1767, 1194-1197.	1.0	8
60	High photochemical trapping efficiency in Photosystem I from the red clade algae Chromera velia and Phaeodactylum tricornutum. Biochimica Et Biophysica Acta - Bioenergetics, 2017, 1858, 56-63.	1.0	8
61	Comparative kinetic and energetic modelling of phyllosemiquinone oxidation in Photosystem I. Physical Chemistry Chemical Physics, 2016, 18, 9687-9701.	2.8	7
62	Photoinhibition in vivo and in vitro Involves Weakly Coupled Chlorophyll-Protein Complexesâ€Â¶. Photochemistry and Photobiology, 2007, 75, 613-618.	2.5	5
63	Reconstituted CP29: multicomponent fluorescence decay from an optically homogeneous sample. Photosynthesis Research, 2012, 111, 53-62.	2.9	5
64	Thermal Sensitivity of the Red Absorption Tail of the Photosystem II Reaction Center Complexâ€. Biochemistry, 1999, 38, 10627-10631.	2.5	4
65	Excited State Trapping and the Stepanov Relation with Reference to Photosystem I. Biophysical Journal, 2003, 85, 3923-3927.	0.5	4
66	Circular dichroism of the peripheral chlorophylls in photosystem II reaction centers revealed by electrochemical oxidation. Biochimica Et Biophysica Acta - Bioenergetics, 2005, 1709, 119-126.	1.0	4
67	Additive decomposition for the product of two Î¸3 functions and modular equations. Journal of Mathematical Physics, 1989, 30, 2012-2015.	1.1	3
68	Effects of Quasi-Equilibrium States on the Kinetics of Electron Transfer and Radical Pair Stabilisation in Photosystem I. , 2014, , 241-274.		3
69	Antenna entropy in plant photosystems does not reduce the free energy for primary charge separation. Biophysical Chemistry, 2014, 195, 16-21.	2.8	2
70	A Thermal Broadening Analysis of the Light Harvesting Chlorophyll a/b Complex II Absorption Spectrum in Terms of Sub-Bands. , 1995, , 179-182.		2
71	Corrigendum to: The room temperature emission band shape of the lowest energy chlorophyll spectral form of LHCI (FEBS 27430). FEBS Letters, 2003, 549, 181-181.	2.8	1
72	On phytochrome absorption and the phytochrome photoequilibrium in a green leaf: environmental sensitivity and photoequilibrium time. Photochemical and Photobiological Sciences, 2008, 7, 986.	2.9	1

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73	Ergodicity, configurational entropy and free energy in pigment solutions and plant photosystems: Influence of excited state lifetime. Biophysical Chemistry, 2014, 187-188, 29-32.	2.8	1
74	Equilibrium thermodynamics and the genesis of proteinâ€“protein complexes in cells. Rendiconti Lincei, 2021, 32, 417-426.	2.2	1
75	Spectral Heterogeneity and Energy Equilibration in Higher Plant Photosystems. , 1996, , 65-74.		1
76	Light Absorption by the Chlorophyll aâ€“b Complexes of Photosystem II in a Leaf with Special Reference to LHCIIÂ¶. Photochemistry and Photobiology, 2004, 80, 492.	2.5	1
77	On the class operator of the su(2) group. Milan Journal of Mathematics, 1994, 64, 217-222.	0.1	0
78	Two wavelengthâ€dependent mechanisms of sensitisation of lightâ€induced quenching in the isolated lightâ€harvesting complex <scp>II</scp>. FEBS Letters, 2016, 590, 2549-2557.	2.8	0
79	Chlorophyll Spectral Heterogeneity and Energy Transfer to PSII Reaction Centres. , 1990, , 1273-1276.		0
80	Thermal Equilibration of Excited States in Antenna of PSI-200. , 1995, , 183-186.		0
81	A Thermal Broadening Analysis of the Red Absorption Tail of the D1/D2/cytb559 Complex. , 1998, , 1077-1080.		0
82	The thermodynamics of light absorption for a two-level system. Rendiconti Lincei, 0, , 1.	2.2	0