

Giuseppe Zucchelli

List of Publications by Year in descending order

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82
papers

2,170
citations

172457

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84
all docs

84
docs citations

84
times ranked

1011
citing authors

#	ARTICLE	IF	CITATIONS
1	Equilibrium thermodynamics and the genesis of protein-protein complexes in cells. <i>Rendiconti Lincei</i> , 2021, 32, 417-426.	2.2	1
2	Does maximal entropy production play a role in the evolution of biological complexity? A biological point of view. <i>Rendiconti Lincei</i> , 2020, 31, 259-268.	2.2	9
3	Photosystem I, when excited in the chlorophyll Q _y absorption band, feeds on negative entropy. <i>Biophysical Chemistry</i> , 2018, 233, 36-46.	2.8	9
4	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. <i>Journal of Physical Chemistry B</i> , 2017, 121, 9816-9830.	2.6	24
5	High photochemical trapping efficiency in Photosystem I from the red clade algae <i>Chromera velia</i> and <i>Phaeodactylum tricornutum</i> . <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 2017, 1858, 56-63.	1.0	8
6	Two wavelength-dependent mechanisms of sensitisation of light-induced quenching in the isolated light-harvesting complex <i>scp>II</scp></i> . <i>FEBS Letters</i> , 2016, 590, 2549-2557.	2.8	0
7	Comparative kinetic and energetic modelling of phyllosemiquinone oxidation in Photosystem I. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 9687-9701.	2.8	7
8	Carotenoid triplet states in photosystem II: Coupling with low-energy states of the core complex. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 2015, 1847, 262-275.	1.0	13
9	Wavelength dependence of the fluorescence emission under conditions of open and closed Photosystem II reaction centres in the green alga <i>Chlorella sorokiniana</i> . <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 2014, 1837, 726-733.	1.0	15
10	Antenna entropy in plant photosystems does not reduce the free energy for primary charge separation. <i>Biophysical Chemistry</i> , 2014, 195, 16-21.	2.8	2
11	Ergodicity, configurational entropy and free energy in pigment solutions and plant photosystems: Influence of excited state lifetime. <i>Biophysical Chemistry</i> , 2014, 187-188, 29-32.	2.8	1
12	Effects of Quasi-Equilibrium States on the Kinetics of Electron Transfer and Radical Pair Stabilisation in Photosystem I. , 2014, , 241-274.		3
13	Photochemical trapping heterogeneity as a function of wavelength, in plant photosystem I (PSI-LHCI). <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 2013, 1827, 779-785.	1.0	33
14	The Q _y Absorption Spectrum of the Light-Harvesting Complex II As Determined by Structure-Based Analysis of Chlorophyll Macrocycle Deformations. <i>Biochemistry</i> , 2012, 51, 2717-2736.	2.5	32
15	Reconstituted CP29: multicomponent fluorescence decay from an optically homogeneous sample. <i>Photosynthesis Research</i> , 2012, 111, 53-62.	2.9	5
16	Energy transfer processes in the isolated core antenna complexes CP43 and CP47 of photosystem II. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 2010, 1797, 1606-1616.	1.0	36
17	Band Shape Heterogeneity of the Low-Energy Chlorophylls of CP29: Absence of Mixed Binding Sites and Excitonic Interactions. <i>Biochemistry</i> , 2010, 49, 882-892.	2.5	16
18	On phytochrome absorption and the phytochrome photoequilibrium in a green leaf: environmental sensitivity and photoequilibrium time. <i>Photochemical and Photobiological Sciences</i> , 2008, 7, 986.	2.9	1

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19	Fluorescence Lifetime Spectrum of the Plant Photosystem II Core Complex: Photochemistry Does Not Induce Specific Reaction Center Quenching. <i>Biochemistry</i> , 2008, 47, 10449-10457.	2.5	27
20	Chlorophyll Ring Deformation Modulates Qy Electronic Energy in Chlorophyll-Protein Complexes and Generates Spectral Forms. <i>Biophysical Journal</i> , 2007, 93, 2240-2254.	0.5	66
21	Entropy consumption in primary photosynthesis. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 2007, 1767, 1194-1197.	1.0	8
22	Photoinhibition in vivo and in vitro Involves Weakly Coupled Chlorophyll-Protein Complexes. <i>Photochemistry and Photobiology</i> , 2007, 75, 613-618.	2.5	5
23	Influence of the Photosystem II Light Harvesting Complex I Antenna Domains on Fluorescence Decay. <i>Biochemistry</i> , 2006, 45, 6947-6955.	2.5	57
24	Photosynthesis research in Italy: a review. <i>Photosynthesis Research</i> , 2006, 88, 211-240.	2.9	9
25	The low energy emitting states of the Lhca4 subunit of higher plant photosystem I. <i>FEBS Letters</i> , 2005, 579, 2071-2076.	2.8	9
26	The effect of outer antenna complexes on the photochemical trapping rate in barley thylakoid Photosystem II. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 2005, 1706, 276-286.	1.0	31
27	Circular dichroism of the peripheral chlorophylls in photosystem II reaction centers revealed by electrochemical oxidation. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 2005, 1709, 119-126.	1.0	4
28	Photosynthesis and negative entropy production. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 2005, 1709, 251-255.	1.0	30
29	Light Absorption by the Chlorophyll a-b Complexes of Photosystem II in a Leaf with Special Reference to LHCI. <i>Photochemistry and Photobiology</i> , 2004, 80, 492.	2.5	14
30	The Long-Wavelength Chlorophyll States of Plant LHCI at Room Temperature: A Comparison with PSI-LHCI. <i>Biophysical Journal</i> , 2004, 87, 488-497.	0.5	32
31	Light Absorption by the Chlorophyll a-b Complexes of Photosystem II in a Leaf with Special Reference to LHCI. <i>Photochemistry and Photobiology</i> , 2004, 80, 492.	2.5	1
32	The room temperature emission band shape of the lowest energy chlorophyll spectral form of LHCI. <i>FEBS Letters</i> , 2003, 547, 107-110.	2.8	19
33	Corrigendum to: The room temperature emission band shape of the lowest energy chlorophyll spectral form of LHCI (FEBS 27430). <i>FEBS Letters</i> , 2003, 549, 181-181.	2.8	1
34	The photochemical trapping rate from red spectral states in PSI-LHCI is determined by thermal activation of energy transfer to bulk chlorophylls. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 2003, 1557, 91-98.	1.0	84
35	Excited State Trapping and the Stepanov Relation with Reference to Photosystem I. <i>Biophysical Journal</i> , 2003, 85, 3923-3927.	0.5	4
36	The Calculated In Vitro and In Vivo Chlorophyll a Absorption Bandshape. <i>Biophysical Journal</i> , 2002, 82, 378-390.	0.5	49

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37	Photoinhibition in vivo and in vitro Involves Weakly Coupled Chlorophyll-Protein Complexes. <i>Photochemistry and Photobiology</i> , 2002, 75, 613.	2.5	47
38	Involvement of uncoupled antenna chlorophylls in photoinhibition in thylakoids. <i>FEBS Letters</i> , 2001, 491, 109-113.	2.8	82
39	CD spectroscopy provides evidence for excitonic interactions involving red-shifted chlorophyll forms in photosystem I. <i>FEBS Letters</i> , 2001, 499, 112-115.	2.8	36
40	The quenching of photosystem II fluorescence does not protect the D1 protein against light induced degradation in thylakoids. <i>FEBS Letters</i> , 2001, 505, 159-162.	2.8	33
41	Selective quenching of the fluorescence of core chlorophyll-protein complexes by photochemistry indicates that Photosystem II is partly diffusion limited. <i>Photosynthesis Research</i> , 2000, 66, 225-233.	2.9	29
42	Thermal Behavior of Long Wavelength Absorption Transitions in <i>Spirulina platensis</i> Photosystem I Trimers. <i>Biophysical Journal</i> , 2000, 79, 3235-3243.	0.5	33
43	Kinetic Analysis of the Light-induced Fluorescence Quenching in Light-harvesting Chlorophyll <i>a/b</i> Pigment-Protein Complex of Photosystem II. <i>Photochemistry and Photobiology</i> , 1999, 70, 751-759.	2.5	38
44	The importance of PS I chlorophyll red forms in light-harvesting by leaves. <i>Photosynthesis Research</i> , 1999, 60, 209-215.	2.9	89
45	The effect of excited state population in Photosystem II on the photoinhibition-induced changes in chlorophyll fluorescence parameters. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 1999, 1409, 165-170.	1.0	19
46	Thermal Sensitivity of the Red Absorption Tail of the Photosystem II Reaction Center Complex. <i>Biochemistry</i> , 1999, 38, 10627-10631.	2.5	4
47	Kinetic Analysis of the Light-induced Fluorescence Quenching in Light-harvesting Chlorophyll <i>a/b</i> Pigment-Protein Complex of Photosystem II. <i>Photochemistry and Photobiology</i> , 1999, 70, 751.	2.5	37
48	Long wavelength absorption transitions in the D1/D2/cytochrome <i>b</i> -559 complex as revealed by selective pigment photobleaching and circular dichroism measurements. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 1998, 1366, 256-264.	1.0	8
49	A Thermal Broadening Study of the Antenna Chlorophylls in PSI-200, LHCl, and PSI Core. <i>Biochemistry</i> , 1998, 37, 17355-17360.	2.5	118
50	A Thermal Broadening Analysis of the Red Absorption Tail of the D1/D2/cytb559 Complex. , 1998, , 1077-1080.		0
51	Analysis of Some Optical Properties of a Native and Reconstituted Photosystem II Antenna Complex, CP29: Pigment Binding Sites Can Be Occupied by Chlorophyll <i>a</i> or Chlorophyll <i>b</i> and Determine Spectral Forms. <i>Biochemistry</i> , 1997, 36, 12984-12993.	2.5	76
52	Title is missing!. <i>Photosynthesis Research</i> , 1997, 52, 245-253.	2.9	15
53	Excited State Equilibration in the Photosystem II Light-Harvesting I Complex: P700 Is Almost Isoenergetic with Its Antenna. <i>Biochemistry</i> , 1996, 35, 8572-8579.	2.5	169
54	Thermal Broadening Analysis of the Light Harvesting Complex II Absorption Spectrum. <i>Biochemistry</i> , 1996, 35, 16247-16254.	2.5	47

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55	Slow exciton trapping in Photosystem II: A possible physiological role. <i>Photosynthesis Research</i> , 1996, 47, 167-173.	2.9	12
56	Antenna structure and energy transfer in higher plant photosystems. <i>Topics in Current Chemistry</i> , 1996, , 147-181.	4.0	25
57	Spectral Heterogeneity and Energy Equilibration in Higher Plant Photosystems. , 1996, , 65-74.		1
58	A Thermal Broadening Analysis of Absorption Spectra of the D1/D2/Cytochrome b-559 Complex in Terms of Gaussian Decomposition Sub-bands. <i>Biochemistry</i> , 1995, 34, 15267-15275.	2.5	21
59	A Stepanov relation analysis of steady-state absorption and fluorescence spectra in the isolated D1/D2/cytochrome b-559 complex. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 1995, 1229, 59-63.	1.0	19
60	A Thermal Broadening Analysis of the Light Harvesting Chlorophyll a/b Complex II Absorption Spectrum in Terms of Sub-Bands. , 1995, , 179-182.		2
61	Thermal Equilibration of Excited States in Antenna of PSI-200. , 1995, , 183-186.		0
62	On the class operator of the su(2) group. <i>Milan Journal of Mathematics</i> , 1994, 64, 217-222.	0.1	0
63	Gaussian band analysis of absorption, fluorescence and photobleaching difference spectra of D1/D2/cytb-559 complex. <i>Photosynthesis Research</i> , 1994, 41, 465-473.	2.9	21
64	The relation between the minor chlorophyll spectral forms and fluorescence quenching in aggregated light harvesting chlorophyll ab complex II. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 1994, 1184, 279-283.	1.0	9
65	Gaussian Decomposition of Absorption and Linear Dichroism Spectra of Outer Antenna Complexes of Photosystem II. <i>Biochemistry</i> , 1994, 33, 8982-8990.	2.5	66
66	A study of Photosystem II fluorescence emission in terms of the antenna chlorophyll-protein complexes. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 1993, 1183, 194-200.	1.0	30
67	Distribution of the chlorophyll spectral forms in the chlorophyll-protein complexes of photosystem II antenna. <i>Biochemistry</i> , 1993, 32, 3203-3210.	2.5	100
68	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. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 1992, 1101, 79-83.	1.0	8
69	Independent fluorescence emission of the chlorophyll spectral forms in higher plant Photosystem II. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 1992, 1099, 163-169.	1.0	32
70	The influence of quenching by open reaction centres on the photosystem II fluorescence emission spectrum. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 1991, 1060, 245-250.	1.0	18
71	Light-induced fluorescence quenching in the light-harvesting chlorophyll a/b protein complex. <i>Photosynthesis Research</i> , 1991, 27, 57-64.	2.9	73
72	The presence of long-wavelength chlorophyll a spectral forms in the light-harvesting chlorophyll a/b protein complex II. <i>Journal of Photochemistry and Photobiology B: Biology</i> , 1990, 6, 381-394.	3.8	46

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73	Excitation energy transfer from the chlorophyll spectral forms to Photosystem II reaction centres: A fluorescence induction study. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 1990, 1016, 259-265.	1.0	16
74	Chlorophyll Spectral Heterogeneity and Energy Transfer to PSII Reaction Centres. , 1990, , 1273-1276.		0
75	Additive decomposition for the product of two $\hat{1},3$ functions and modular equations. <i>Journal of Mathematical Physics</i> , 1989, 30, 2012-2015.	1.1	3
76	The influence of reducing the chlorophyll concentration by photobleaching on energy transfer to artificial traps within Photosystem II antenna systems. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 1989, 975, 29-33.	1.0	9
77	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. <i>Photosynthesis Research</i> , 1989, 20, 207-220.	2.9	44
78	Spectroscopic analysis of chlorophyll photobleaching in spinach thylakoids, grana and light-harvesting chlorophyll a/b protein complex. <i>Journal of Photochemistry and Photobiology B: Biology</i> , 1988, 2, 483-490.	3.8	17
79	Influence of electrostatic screening by cations on energy coupling between Photosystem II reaction centres and the light-harvesting chlorophyll ab protein complex II. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 1988, 934, 144-150.	1.0	16
80	Studies on thylakoid phosphorylation and noncyclic electron transport. <i>Archives of Biochemistry and Biophysics</i> , 1986, 246, 108-113.	3.0	13
81	Spinach-thylakoid phosphorylation: Studies on the kinetics of changes in photosystem antenna size, spill-over and phosphorylation of light-harvesting chlorophyll ab protein. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 1986, 850, 483-489.	1.0	23
82	The thermodynamics of light absorption for a two-level system. <i>Rendiconti Lincei</i> , 0, , 1.	2.2	0