

Miloš Barták

List of Publications by Year in descending order

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71
papers

1,586
citations

279487

23
h-index

329751

37
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71
all docs

71
docs citations

71
times ranked

1305
citing authors

#	ARTICLE	IF	CITATIONS
1	Technique of the Modulated Chlorophyll Fluorescence: Basic Concepts, Useful Parameters, and Some Applications. <i>Photosynthetica</i> , 1999, 37, 339.	0.9	297
2	Description of <i>Massilia rubra</i> sp. nov., <i>Massilia aquatica</i> sp. nov., <i>Massilia mucilaginoso</i> sp. nov., <i>Massilia frigida</i> sp. nov., and one <i>Massilia</i> genomospecies isolated from Antarctic streams, lakes and regoliths. <i>Systematic and Applied Microbiology</i> , 2020, 43, 126112.	1.2	60
3	Annual variation in photoacclimation and photoprotection of the photobiont in the foliose lichen <i>Xanthoria parietina</i> . <i>Journal of Photochemistry and Photobiology B: Biology</i> , 2006, 83, 151-162.	1.7	56
4	Low-temperature limitation of primary photosynthetic processes in Antarctic lichens <i>Umbilicaria antarctica</i> and <i>Xanthoria elegans</i> . <i>Polar Biology</i> , 2007, 31, 47-51.	0.5	49
5	Climatic and ecological characteristics of deglaciated area of James Ross Island, Antarctica, with a special respect to vegetation cover. <i>Czech Polar Reports</i> , 2011, 1, 49-62.	0.2	48
6	Curling during desiccation protects the foliose lichen <i>Lobaria pulmonaria</i> against photoinhibition. <i>Oecologia</i> , 2006, 149, 553-560.	0.9	47
7	High Light Stress and Photoprotection in <i>Umbilicaria antarctica</i> Monitored by Chlorophyll Fluorescence Imaging and Changes in Zeaxanthin and Glutathione. <i>Plant Biology</i> , 2004, 6, 333-341.	1.8	45
8	A dip in the chlorophyll fluorescence induction at 0.2 s in <i>Trebouxia</i> -possessing lichens reflects a fast reoxidation of photosystem I. A comparison with higher plants. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 2006, 1757, 12-20.	0.5	44
9	Visualized photosynthetic characteristics of the lichen <i>Xanthoria elegans</i> related to daily courses of light, temperature and hydration: a field study from Galindez Island, maritime Antarctica. <i>Lichenologist</i> , 2005, 37, 433-443.	0.5	39
10	Inhibitory Effect of Fluoranthene on Photosynthetic Processes in Lichens Detected by Chlorophyll Fluorescence. <i>Ecotoxicology</i> , 2006, 15, 121-131.	1.1	36
11	Heterogeneity of Chlorophyll Fluorescence over Thalli of Several Foliose Macrolichens Exposed to Adverse Environmental Factors: Interspecific Differences as Related to Thallus Hydration and High Irradiance. <i>Photosynthetica</i> , 2000, 38, 531-537.	0.9	35
12	Inhibition of photosynthetic processes in foliose lichens induced by temperature and osmotic stress. <i>Biologia Plantarum</i> , 2006, 50, 624-634.	1.9	34
13	Red-pink pigmented <i>Hymenobacter coccineus</i> sp. nov., <i>Hymenobacter lapidarius</i> sp. nov. and <i>Hymenobacter glacialis</i> sp. nov., isolated from rocks in Antarctica. <i>International Journal of Systematic and Evolutionary Microbiology</i> , 2017, 67, 1975-1983.	0.8	33
14	Sensitivity of Photosystem 2 of Antarctic Lichens to High Irradiance Stress: Fluorometric Study of Fruticose (<i>Usnea antarctica</i>) and Foliose (<i>Umbilicaria decussata</i>) Species. <i>Photosynthetica</i> , 2003, 41, 497-504.	0.9	32
15	<i>Pedobacter jamesrossensis</i> sp. nov., <i>Pedobacter lithocola</i> sp. nov., <i>Pedobacter mendelii</i> sp. nov. and <i>Pedobacter petrophilus</i> sp. nov., isolated from the Antarctic environment. <i>International Journal of Systematic and Evolutionary Microbiology</i> , 2017, 67, 1499-1507.	0.8	32
16	Effects of Thallus Temperature and Hydration on Photosynthetic Parameters of <i>Cetraria Islandica</i> from Contrasting Habitats. <i>Photosynthetica</i> , 2001, 39, 427-435.	0.9	30
17	Interspecific differences in cryoresistance of lichen symbiotic algae of genus <i>Trebouxia</i> assessed by cell viability and chlorophyll fluorescence. <i>Cryobiology</i> , 2012, 64, 215-222.	0.3	30
18	Sensitivity of photosynthetic processes to freezing temperature in extremophilic lichens evaluated by linear cooling and chlorophyll fluorescence. <i>Cryobiology</i> , 2016, 73, 329-334.	0.3	30

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19	Changes in glutathione and xanthophyll cycle pigments in the high light-stressed lichens <i>Umbilicaria antarctica</i> and <i>Lasallia pustulata</i> . <i>Journal of Photochemistry and Photobiology B: Biology</i> , 2005, 79, 35-41.	1.7	28
20	Lichens – a new source or yet unknown host of herbaceous plant viruses?. <i>European Journal of Plant Pathology</i> , 2014, 138, 549-559.	0.8	27
21	Changes in photosynthesis, pigment composition and glutathione contents in two Antarctic lichens during a light stress and recovery. <i>Photosynthetica</i> , 2014, 52, 538-547.	0.9	26
22	Death age, seasonality, taphonomy and colonization of seal carcasses from Ulu Peninsula, James Ross Island, Antarctic Peninsula. <i>Antarctic Science</i> , 2016, 28, 3-16.	0.5	25
23	Vegetation mapping of moss-dominated areas of northern part of James Ross Island (Antarctica) and a suggestion of protective measures. <i>Czech Polar Reports</i> , 2015, 5, 75-87.	0.2	25
24	Eco-Physiological Screening of Different Tomato Genotypes in Response to High Temperatures: A Combined Field-to-Laboratory Approach. <i>Plants</i> , 2020, 9, 508.	1.6	23
25	Temperature effects on photosynthetic performance of Antarctic lichen <i>Dermatocarpon polyphyllizum</i> : a chlorophyll fluorescence study. <i>Polar Biology</i> , 2019, 42, 685-701.	0.5	21
26	Features of chlorophyll fluorescence transients can be used to investigate low temperature induced effects on photosystem II of algal lichens from polar regions (Short Communication). <i>Czech Polar Reports</i> , 2015, 5, 99-111.	0.2	21
27	Effect of dehydration on spectral reflectance and photosynthetic efficiency in <i>Umbilicaria arctica</i> and <i>U. hyperborea</i> . <i>Biologia Plantarum</i> , 2015, 59, 357-365.	1.9	19
28	Description of <i>Pseudomonas gregormendelii</i> sp. nov., a Novel Psychrotrophic Bacterium from James Ross Island, Antarctica. <i>Current Microbiology</i> , 2016, 73, 84-90.	1.0	19
29	<i>Pedobacter psychrophilus</i> sp. nov., isolated from fragmentary rock. <i>International Journal of Systematic and Evolutionary Microbiology</i> , 2017, 67, 2538-2543.	0.8	18
30	Cryoprotective role of ribitol in <i>Xanthoparmelia somloensis</i> . <i>Biologia Plantarum</i> , 2009, 53, 677-684.	1.9	17
31	<i>Flavobacterium circumlabens</i> sp. nov. and <i>Flavobacterium cupreum</i> sp. nov., two psychrotrophic species isolated from Antarctic environmental samples. <i>Systematic and Applied Microbiology</i> , 2019, 42, 291-301.	1.2	17
32	Photosynthetic electron transport at low temperatures in the green algal foliose lichens <i>Lasallia pustulata</i> and <i>Umbilicaria hirsuta</i> affected by manipulated levels of ribitol. <i>Photosynthetica</i> , 2009, 47, 199-205.	0.9	16
33	Photoinhibition of photosynthesis in Antarctic lichen <i>Usnea antarctica</i> . I. Light intensity- and light duration-dependent changes in functioning of photosystem II. <i>Czech Polar Reports</i> , 2012, 2, 42-51.	0.2	16
34	Sensitivity of Antarctic freshwater algae to salt stress assessed by fast chlorophyll fluorescence transient. <i>Czech Polar Reports</i> , 2013, 3, 163-172.	0.2	16
35	Photosynthesis of lichen symbiotic alga <i>Trebouxia erici</i> as affected by irradiance and osmotic stress. <i>Biologia Plantarum</i> , 2006, 50, 257-264.	1.9	15
36	<i>Mucilaginibacter terrae</i> sp. nov., isolated from Antarctic soil. <i>International Journal of Systematic and Evolutionary Microbiology</i> , 2017, 67, 4002-4007.	0.8	13

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37	Interspecific differences in photosynthetic efficiency and spectral reflectance in two <i>Umbilicaria</i> species from Svalbard during controlled desiccation. <i>Czech Polar Reports</i> , 2012, 2, 31-41.	0.2	13
38	Photosynthetic performance of Antarctic lichen <i>Dermatocarpon polyphyllizum</i> when affected by desiccation and low temperatures. <i>Photosynthesis Research</i> , 2020, 145, 159-177.	1.6	12
39	Duration of irradiation rather than quantity and frequency of high irradiance inhibits photosynthetic processes in the lichen <i>Lasallia pustulata</i> . <i>Photosynthetica</i> , 2008, 46, .	0.9	11
40	The contents and distributions of cadmium, mercury, and lead in <i>Usnea antarctica</i> lichens from Solorina Valley, James Ross Island (Antarctica). <i>Environmental Monitoring and Assessment</i> , 2018, 190, 13.	1.3	11
41	Special issue in honour of Prof. Reto J. Strasser - Analysis of K- and L-band appearance in OJIPs in Antarctic lichens in low and high temperature. <i>Photosynthetica</i> , 2020, 58, 646-656.	0.9	11
42	Temperature-dependent growth rate and photosynthetic performance of Antarctic symbiotic alga <i>Trebouxia</i> sp. cultivated in a bioreactor. <i>Czech Polar Reports</i> , 2013, 3, 19-27.	0.2	11
43	Identification of some lichenised fungi from James Ross Island (Antarctic Peninsula) using nrITS markers. <i>New Zealand Journal of Botany</i> , 2018, 56, 276-290.	0.8	10
44	Comparative analysis of heterogeneity of primary photosynthetic processes within fruticose lichen thalli: Preliminary study of interspecific differences (Short Communication). <i>Czech Polar Reports</i> , 2014, 4, 149-157.	0.2	10
45	Dehydration-induced responses of primary photosynthetic processes and spectral reflectance indices in Antarctic <i>Nostoc commune</i> . <i>Czech Polar Reports</i> , 2016, 6, 87-95.	0.2	10
46	Desiccation-induced changes in photochemical processes of photosynthesis and spectral reflectance in <i>Nostoc commune</i> (<i>Cyanobacteria</i> , <i>Nostocales</i>) colonies from polar regions. <i>Phycological Research</i> , 2017, 65, 44-50.	0.8	9
47	Inhibition of Primary Photosynthesis in Desiccating Antarctic Lichens Differing in Their Photobionts, Thallus Morphology, and Spectral Properties. <i>Microorganisms</i> , 2021, 9, 818.	1.6	9
48	Effects of short-term low temperature stress on chlorophyll fluorescence transients in Antarctic lichen species. <i>Czech Polar Reports</i> , 2016, 6, 54-65.	0.2	9
49	The susceptibility of PS II of <i>Lolium perenne</i> to a sudden fall in air temperature – response of plants grown in elevated CO ₂ and/or increased air temperature. <i>Environmental and Experimental Botany</i> , 1998, 39, 85-95.	2.0	8
50	Lichen Photosynthesis. Scaling from the Cellular to the Organism Level. <i>Advances in Photosynthesis and Respiration</i> , 2014, , 379-400.	1.0	8
51	Long-term fluorometric measurements of photosynthetic processes in Antarctic moss <i>Bryum</i> sp. during austral summer season. <i>Czech Polar Reports</i> , 2014, 4, 63-72.	0.2	8
52	Short-term responses of primary processes in PS II to low temperature are sensitively indicated by fast chlorophyll fluorescence kinetics in Antarctic lichen <i>Dermatocarpon polyphyllizum</i> . <i>Czech Polar Reports</i> , 2017, 7, 74-82.	0.2	8
53	A correlative approach, combining chlorophyll a fluorescence, reflectance, and Raman spectroscopy, for monitoring hydration induced changes in Antarctic lichen <i>Dermatocarpon polyphyllizum</i> . <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2019, 208, 13-23.	2.0	7
54	Chlorophyll a fluorescence and Raman spectroscopy can monitor activation/deactivation of photosynthesis and carotenoids in Antarctic lichens. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2020, 239, 118458.	2.0	7

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55	Responses of thallus anatomy and chlorophyll fluorescence-based photosynthetic characteristics of two Antarctic species of genus <i>Usnea</i> to low temperature. <i>Photosynthetica</i> , 2021, 59, 95-105.	0.9	6
56	Changes in spectral reflectance of selected Antarctic and South American lichens caused by dehydration and artificially-induced absence of secondary compounds. <i>Czech Polar Reports</i> , 2016, 6, 221-230.	0.2	6
57	Spectral reflectance indices sense desiccation induced changes in the thalli of Antarctic lichen <i>Dermatocarpon polyphyllum</i> . <i>Czech Polar Reports</i> , 2018, 8, 249-259.	0.2	6
58	Open top chamber microclimate may limit photosynthetic processes in Antarctic lichen: Case study from King George Island, Antarctica. <i>Czech Polar Reports</i> , 2019, 9, 61-77.	0.2	6
59	Effect of UV-B radiation on the content of UV-absorbing compounds and photosynthetic parameters in <i>Parmotrema austrosinense</i> from two contrasting habitats. <i>Plant Biology</i> , 2018, 20, 808-816.	1.8	5
60	Chilling effects on primary photosynthetic processes in <i>Medicago sativa</i> : Acclimatory changes after short- and long-term exposure to low temperatures. <i>Biologia (Poland)</i> , 2020, 75, 1105-1114.	0.8	5
61	Photoinhibition of photosynthesis in Antarctic lichen <i>Usnea antarctica</i> . II. Analysis of non-photochemical quenching mechanisms activated by low to medium light doses. <i>Czech Polar Reports</i> , 2014, 4, 90-99.	0.2	5
62	Effect of temperature and increased concentration of CO ₂ on growth and photosynthetic activity of polar alga <i>Trebouxia</i> sp.. <i>Czech Polar Reports</i> , 2014, 4, 47-56.	0.2	5
63	Diurnal changes in photosynthetic activity of the biological soil crust and lichen: Effects of abiotic factors (Petuniabukta, Svalbard). <i>Czech Polar Reports</i> , 2014, 4, 158-167.	0.2	5
64	Gradient of algal and cyanobacterial assemblages in a temporary lake with melting water at Solorina Valley, James Ross Island, Antarctica. <i>Czech Polar Reports</i> , 2014, 4, 185-192.	0.2	5
65	Post rapid freezing growth of Antarctic strain of <i>Heterococcus</i> sp. monitored by cell viability and chlorophyll fluorescence. <i>Cryobiology</i> , 2018, 85, 39-46.	0.3	4
66	Resistance of Antarctic moss <i>Sanionia uncinata</i> to photoinhibition: chlorophyll fluorescence analysis of samples from the western and eastern coasts of the Antarctic Peninsula. <i>Plant Biology</i> , 2021, 23, 653-663.	1.8	4
67	Extreme environments on Earth as analogues for life on other planets: astrobiology.., 2012, , 522-536.		3
68	Species-specific responses of spectral reflectance and the photosynthetic characteristics in two selected Antarctic mosses to thallus desiccation. <i>Acta Physiologiae Plantarum</i> , 2022, 44, 1.	1.0	3
69	The Effects of Foliar Application of Phenoxy and Imidazoline Family Herbicides on the Limitation of Primary Photosynthetic Processes in <i>Galega orientalis</i> L.. <i>Agronomy</i> , 2022, 12, 96.	1.3	3
70	Effects of controlled oxidative stress and uncouplers on primary photosynthetic processes in vegetative cells of Antarctic alga <i>Zygnema</i> sp.. <i>Czech Polar Reports</i> , 2016, 6, 96-107.	0.2	2
71	Limitation of photosynthetic processes in photosystem II in alpine mosses exposed to low temperatures: Response of chlorophyll fluorescence parameters. <i>Czech Polar Reports</i> , 2018, 8, 218-229.	0.2	2