

# Kai Bischof

## List of Publications by Year in descending order

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118  
papers

6,167  
citations

94433

37  
h-index

85541

71  
g-index

125  
all docs

125  
docs citations

125  
times ranked

4269  
citing authors

#	ARTICLE	IF	CITATIONS
1	Differences by origin in methylome suggest eco-phenotypes in the kelp <i>Saccharina latissima</i> . <i>Evolutionary Applications</i> , 2023, 16, 262-278.	3.1	7
2	In contrast to diatoms, cryptophytes are susceptible to iron limitation, but not to ocean acidification. <i>Physiologia Plantarum</i> , 2022, 174, e13614.	5.2	3
3	Responses of a Natural Phytoplankton Community From the Drake Passage to Two Predicted Climate Change Scenarios. <i>Frontiers in Marine Science</i> , 2022, 9, .	2.5	3
4	Increased Heat Resilience of Intraspecific Outbred Compared to Inbred Lineages in the Kelp <i>Laminaria digitata</i> : Physiology and Transcriptomics. <i>Frontiers in Marine Science</i> , 2022, 9, .	2.5	7
5	Hyposalinity affects diurnal photoacclimation patterns in the rhodophyte <i>Palmaria palmata</i> under mimicked Arctic summer conditions. <i>Journal of Photochemistry and Photobiology</i> , 2022, 11, 100124.	2.5	2
6	Modulation of physiological performance by temperature and salinity in the sugar kelp <i>Saccharina latissima</i> . <i>Phycological Research</i> , 2021, 69, 48-57.	1.6	16
7	Benthic community establishment on different concrete mixtures introduced to a German deep-water port. <i>Helgoland Marine Research</i> , 2021, 75, .	1.3	0
8	Coping with a changing Arctic: mechanisms of acclimation in the brown seaweed <i>Saccharina latissima</i> from Spitsbergen. <i>Marine Ecology - Progress Series</i> , 2021, 657, 43-57.	1.9	6
9	Summer Heatwave Impacts on the European Kelp <i>Saccharina latissima</i> Across Its Latitudinal Distribution Gradient. <i>Frontiers in Marine Science</i> , 2021, 8, .	2.5	14
10	Responses of the kelp <i>Saccharina latissima</i> (Phaeophyceae) to the warming Arctic: from physiology to transcriptomics. <i>Physiologia Plantarum</i> , 2020, 168, 5-26.	5.2	33
11	Small-scale distribution modeling of benthic species in a protected natural hard ground area in the German North Sea (Helgol�nder Steingrund). <i>Geo-Marine Letters</i> , 2020, 40, 167-181.	1.1	5
12	Future range dynamics of the red alga <i>Capreolia implexa</i> in native and invaded regions: contrasting predictions from species distribution models versus physiological knowledge. <i>Biological Invasions</i> , 2020, 22, 1339-1352.	2.4	11
13	The role of artificial material for benthic communities – Establishing different concrete materials as hard bottom environments. <i>Marine Environmental Research</i> , 2020, 161, 105081.	2.5	12
14	Heat stress responses and population genetics of the kelp <i>Laminaria digitata</i> (Phaeophyceae) across latitudes reveal differentiation among North Atlantic populations. <i>Ecology and Evolution</i> , 2020, 10, 9144-9177.	1.9	32
15	Imprint of Climate Change on Pan-Arctic Marine Vegetation. <i>Frontiers in Marine Science</i> , 2020, 7, .	2.5	63
16	Transcriptomic Responses to Darkness and the Survival Strategy of the Kelp <i>Saccharina latissima</i> in the Early Polar Night. <i>Frontiers in Marine Science</i> , 2020, 7, .	2.5	5
17	Impacts of combined temperature and salinity stress on the endemic Arctic brown seaweed <i>Laminaria solidungula</i> J. Agardh. <i>Polar Biology</i> , 2020, 43, 647-656.	1.2	29
18	Spectral differences in the underwater light regime caused by sediment types in New Zealand estuaries: implications for seagrass photosynthesis. <i>Geo-Marine Letters</i> , 2020, 40, 217-225.	1.1	8

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19	Geographic Variation of UV Stress Tolerance in Red Seaweeds Does Not Scale with Latitude Along the SE Pacific Coast. <i>Journal of Phycology</i> , 2020, 56, 1090-1102.	2.3	7
20	Effects of kelp canopy on underwater light climate and viability of brown algal spores in Kongsfjorden (Spitsbergen). <i>Polar Biology</i> , 2019, 42, 1511-1527.	1.2	11
21	Susceptibility of Two Southern Ocean Phytoplankton Key Species to Iron Limitation and High Light. <i>Frontiers in Marine Science</i> , 2019, 6, .	2.5	26
22	Iron and manganese co-limit growth of the Southern Ocean diatom <i>Chaetoceros debilis</i> . <i>PLoS ONE</i> , 2019, 14, e0221959.	2.5	31
23	Kongsfjorden as Harbinger of the Future Arctic: Knowns, Unknowns and Research Priorities. <i>Advances in Polar Ecology</i> , 2019, , 537-562.	1.3	15
24	Kelps and Environmental Changes in Kongsfjorden: Stress Perception and Responses. <i>Advances in Polar Ecology</i> , 2019, , 373-422.	1.3	11
25	Light penetration in a temperate meso-tidal lagoon: Implications for seagrass growth and dredging in Tauranga Harbour, New Zealand. <i>Ocean and Coastal Management</i> , 2019, 174, 25-37.	4.4	13
26	Impact of ocean acidification and high solar radiation on productivity and species composition of a late summer phytoplankton community of the coastal Western Antarctic Peninsula. <i>Limnology and Oceanography</i> , 2019, 64, 1716-1736.	3.1	17
27	Genetic analysis of a recently established <i>Undaria pinnatifida</i> (Laminariales: Alariaceae) population in the northern Wadden Sea reveals close proximity between drifting thalli and the attached population. <i>European Journal of Phycology</i> , 2019, 54, 154-161.	2.0	14
28	Ocean acidification and high irradiance stimulate the photo-physiological fitness, growth and carbon production of the Antarctic cryptophyte <i>Geminigera cryophila</i> . <i>Biogeosciences</i> , 2019, 16, 2997-3008.	3.3	7
29	Is geographical variation driving the transcriptomic responses to multiple stressors in the kelp <i>Saccharina latissima</i> ?. <i>BMC Plant Biology</i> , 2019, 19, 513.	3.6	14
30	Temperature Modulates Sex-Biased Gene Expression in the Gametophytes of the Kelp <i>Saccharina latissima</i> . <i>Frontiers in Marine Science</i> , 2019, 6, .	2.5	16
31	Arctic kelp eco-physiology during the polar night in the face of global warming: a crucial role for laminarin. <i>Marine Ecology - Progress Series</i> , 2019, 611, 59-74.	1.9	19
32	The Chlorophytes of Curaçao (Caribbean): a revised checklist for the south-west coast. <i>Botanica Marina</i> , 2018, 61, 33-46.	1.2	2
33	Ocean acidification stimulates particulate organic carbon accumulation in two Antarctic diatom species under moderate and high natural solar radiation. <i>Journal of Phycology</i> , 2018, 54, 505-517.	2.3	9
34	Heading northward to Scandinavia: <i>Undaria pinnatifida</i> in the northern Wadden Sea. <i>Botanica Marina</i> , 2018, 61, 365-371.	1.2	10
35	Photosynthetic performance and pigment composition of <i>Macrocystis pyrifera</i> (Laminariales). <i>Journal of Applied Phycology</i> , 2017, 29, 2575-2585.	2.8	18
36	Two Southern Ocean diatoms are more sensitive to ocean acidification and changes in irradiance than the prymnesiophyte <i>Phaeocystis antarctica</i> . <i>Physiologia Plantarum</i> , 2017, 160, 155-170.	5.2	51

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37	Hyposaline conditions affect UV susceptibility in the Arctic kelp <i>Alaria esculenta</i> (Phaeophyceae). <i>Phycologia</i> , 2017, 56, 675-685.	1.4	11
38	Desiccation tolerance of different life stages of the invasive marine kelp <i>Undaria pinnatifida</i> : Potential for overland transport as invasion vector. <i>Journal of Experimental Marine Biology and Ecology</i> , 2017, 496, 1-8.	1.5	10
39	Seasonal variations of the photosynthetic activity and pigment concentrations in different reproductive phases of <i>Gigartina skottsbergii</i> (Rhodophyta, Gigartinales) in the Magellan region, sub-Antarctic Chile. <i>Journal of Applied Phycology</i> , 2017, 29, 721-729.	2.8	12
40	Fatty acid compositions associated with high-light tolerance in the intertidal rhodophytes <i>Mastocarpus stellatus</i> and <i>Chondrus crispus</i> . <i>Helgoland Marine Research</i> , 2017, 71, .	1.3	4
41	WÄlder unter Wasser â€“ GroÃƒalgengemeinschaften. , 2017, , 281-290.		0
42	Light Intensity Modulates the Response of Two Antarctic Diatom Species to Ocean Acidification. <i>Frontiers in Marine Science</i> , 2016, 3, .	2.5	31
43	Short- and long-term acclimation patterns of the giant kelp <i>Macrocystis pyrifera</i> (Laminariales). <i>Journal of Experimental Marine Biology and Ecology</i> , 2016, 531, 1-14.	2.3	31
44	Adjustment of pigment composition in <i>Desmarestia</i> (Desmarestiaceae) species along a sub-Antarctic to Antarctic latitudinal gradient. <i>Polar Research</i> , 2016, 35, 29383.	1.6	6
45	Dynamic summer solar radiation in Antarctic coastal ecosystems and its effects on photosynthesis of the endemic Antarctic brown macroalga <i>Desmarestia menziesii</i> (Phaeophyceae). <i>Algal Research</i> (Stuttgart, Germany: 2007), 2016, 151-152, 123-150.	0.4	2
46	Salinity and temperature tolerance of the invasive alga <i>Undaria pinnatifida</i> and native New Zealand kelps: Implications for competition. <i>Marine Biology</i> , 2016, 163, 1.	1.5	25
47	Under high light stress two Indo-Pacific coral species display differential photodamage and photorepair dynamics. <i>Marine Biology</i> , 2016, 163, 1.	1.5	7
48	The effect of ultraviolet radiation on cellular ultrastructure and photosystem II quantum yield of <i>Alaria esculenta</i> (L.) Greville from Spitsbergen (Norway). <i>Polar Biology</i> , 2016, 39, 1957-1966.	1.2	7
49	Microsensor studies on <i>Padina</i> from a natural $\text{CO}_2$ seep: implications of morphology on acclimation to low pH. <i>Journal of Phycology</i> , 2015, 51, 1106-1115.	2.3	6
50	Species separation within the <i>Lessonia nigrescens</i> complex (Phaeophyceae, Laminariales) is mirrored by ecophysiological traits. <i>Botanica Marina</i> , 2015, 58, 81-92.	1.2	19
51	The quest for sea-floor integrity. <i>Nature Geoscience</i> , 2015, 8, 163-164.	12.9	11
52	CO <sub>2</sub> and inorganic nutrient enrichment affect the performance of a calcifying green alga and its noncalcifying epiphyte. <i>Oecologia</i> , 2015, 177, 1157-1169.	2.0	19
53	Seagrass biofilm communities at a naturally $\text{CO}_2$ -enriched vent. <i>Environmental Microbiology Reports</i> , 2015, 7, 516-525.	2.4	30
54	Algebraic equilibrium solution of tissue nitrogen quota in algae and the discrepancy between calibrated parameters and physiological properties. <i>Ecological Modelling</i> , 2015, 312, 281-291.	2.5	9

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55	Short-term effects of CO <sub>2</sub> , nutrients and temperature on three marine macroalgae under solar radiation. <i>Aquatic Biology</i> , 2014, 22, 159-176.	1.4	41
56	Site specific differences in morphometry and photophysiology in intertidal <i>Zostera muelleri</i> meadows. <i>Aquatic Botany</i> , 2014, 116, 104-109.	1.6	14
57	Nutrient availability affects the response of the calcifying chlorophyte <i>Halimeda opuntia</i> (L.) J.V. Lamouroux to low pH. <i>Planta</i> , 2014, 239, 231-242.	3.2	37
58	Xanthophyll Cycle Pool Size and Composition in Several <i>Cosmarium</i> Strains (Zygnematophyceae.) <i>Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50</i>	1.5	20
59	Effects of depth and ultraviolet radiation on coral reef turf algae. <i>Journal of Experimental Marine Biology and Ecology</i> , 2014, 461, 73-84.	1.5	13
60	Nutrients. , 2014, , 238-293.		8
61	Ocean acidification effects on calcifying macroalgae. <i>Aquatic Biology</i> , 2014, 22, 261-279.	1.4	86
62	Short-term effects of increasing CO <sub>2</sub> , nitrate and temperature on three Mediterranean macroalgae: biochemical composition. <i>Aquatic Biology</i> , 2014, 22, 177-193.	1.4	53
63	PSII activity and pigment dynamics of <i>Symbiodinium</i> in two Indo-Pacific corals exposed to short-term high-light stress. <i>Marine Biology</i> , 2013, 160, 563-577.	1.5	18
64	Acclimation to UV radiation and antioxidative defence in the endemic Antarctic brown macroalga <i>Desmarestia anceps</i> along a depth gradient. <i>Polar Biology</i> , 2013, 36, 1779-1789.	1.2	27
65	Increased physiological performance of the calcifying green macroalga <i>Halimeda opuntia</i> in response to experimental nutrient enrichment on a Caribbean coral reef. <i>Aquatic Botany</i> , 2013, 104, 25-33.	1.6	38
66	Ultraviolet radiation modulates the physiological responses of the calcified rhodophyte <i>Corallina officinalis</i> to elevated CO <sub>2</sub> . <i>Botanica Marina</i> , 2013, 56, 161-168.	1.2	17
67	<i>Neosiphonia howei</i> (Ceramiaceae: Rhodomelaceae) – a common epiphyte of the spreading coral reef alga <i>Lobophora variegata</i> (Dictyotales: Dictyotaceae). <i>Marine Biodiversity Records</i> , 2013, 6, .	1.2	2
68	Elevated CO <sub>2</sub> levels affect the activity of nitrate reductase and carbonic anhydrase in the calcifying rhodophyte <i>Corallina officinalis</i> . <i>Journal of Experimental Botany</i> , 2013, 64, 899-908.	4.8	73
69	Seaweed Responses to Environmental Stress: Reactive Oxygen and Antioxidative Strategies. <i>Ecological Studies</i> , 2012, , 109-132.	1.2	47
70	Impacts of Ozone Stratospheric Depletion and Solar UVB Radiation on Seaweeds. <i>Ecological Studies</i> , 2012, , 433-448.	1.2	12
71	Competition between calcifying and noncalcifying temperate marine macroalgae under elevated CO <sub>2</sub> levels. <i>Marine Ecology - Progress Series</i> , 2012, 464, 89-105.	1.9	63
72	Physiological responses of the calcifying rhodophyte, <i>Corallina officinalis</i> (L.), to future CO <sub>2</sub> levels. <i>Marine Biology</i> , 2012, 159, 783-792.	1.5	91

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73	Phlorotannin Production and Lipid Oxidation as a Potential Protective Function Against High Photosynthetically Active and UV Radiation in Gametophytes of <i>Alaria esculenta</i> (Alariales, Tj ETQq1 1 0.784314 rgBTU/Overlook	1.4	14
74	Dynamic Regulation of Photoprotection Determines Thermal Tolerance of Two Phylotypes of <i>Symbiodinium</i> Clade A at Two Photon Fluence Rates. Photochemistry and Photobiology, 2012, 88, 398-413.	2.5	38
75	UV-radiation and elevated temperatures induce formation of reactive oxygen species in gametophytes of cold-temperate/Arctic kelps (Laminariales, Phaeophyceae). Phycological Research, 2012, 60, 27-36.	1.6	26
76	Effects of water temperatures, UV radiation and low vs high PAR on phlorotannin content and germination in zoospores of <i>Saccorhiza dermatodea</i> (Tilopteridales, Phaeophyceae). Phycologia, 2011, 50, 256-263.	1.4	15
77	Succession patterns in algal turf vegetation on a Caribbean coral reef. Botanica Marina, 2011, 54, .	1.2	39
78	The biology of an Antarctic rhodophyte, <i>Palmaria decipiens</i> : recent advances. Antarctic Science, 2011, 23, 419-430.	0.9	17
79	Lipid content and fatty acid consumption in zoospores/developing gametophytes of <i>Saccharina latissima</i> (Laminariales, Phaeophyceae) as potential precursors for secondary metabolites as phlorotannins. Polar Biology, 2011, 34, 1011-1018.	1.2	24
80	Depth-related variation in epiphytic communities growing on the brown alga <i>Lobophora variegata</i> in a Caribbean coral reef. Coral Reefs, 2011, 30, 967-973.	2.2	28
81	Photosynthesis and lipid composition of the Antarctic endemic rhodophyte <i>Palmaria decipiens</i> : effects of changing light and temperature levels. Polar Biology, 2010, 33, 945-955.	1.2	42
82	SCREENING OF ULTRAVIOLET-A AND ULTRAVIOLET-B RADIATION IN MARINE GREEN MACROALGAE (CHLOROPHYTA). Journal of Phycology, 2010, 46, 444-455.	2.3	20
83	Interactive effects of radiation, temperature and salinity on different life history stages of the Arctic kelp <i>Alaria esculenta</i> (Phaeophyceae). Oecologia, 2009, 160, 483-492.	2.0	99
84	Zoospores of Three Arctic Laminariales Under Different UV Radiation and Temperature Conditions: Exceptional Spectral Absorbance Properties and Lack of Phlorotannin Induction. Photochemistry and Photobiology, 2009, 85, 970-977.	2.5	27
85	Freezing tolerance and photosynthetic performance of polar seaweeds at low temperatures. Botanica Marina, 2009, 52, 609-616.	1.2	21
86	Photosynthetic responses to UV-radiation of intertidal macroalgae from the Strait of Magellan (Chile). Revista Chilena De Historia Natural, 2009, 82, .	1.2	13
87	Feeding sustains photosynthetic quantum yield of a scleractinian coral during thermal stress. Oecologia, 2008, 157, 593-601.	2.0	66
88	Effects of ultraviolet radiation and temperature on the ultrastructure of zoospores of the brown macroalga <i>Laminaria hyperborea</i> . Plant Biology, 2008, 10, 388-397.	3.8	39
89	The effect of heterotrophy on photosynthesis and tissue composition of two scleractinian corals under elevated temperature. Journal of Experimental Marine Biology and Ecology, 2008, 364, 116-123.	1.5	82
90	The genus <i>Laminaria sensu lato</i> : recent insights and developments. European Journal of Phycology, 2008, 43, 1-86.	2.0	379

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91	Decreased depth distribution of <i>Fucus vesiculosus</i> (Phaeophyceae) in the Western Baltic: effects of light deficiency and epibionts on growth and photosynthesis. <i>European Journal of Phycology</i> , 2008, 43, 143-150.	2.0	76
92	Interactive effects of UV radiation and temperature on microstages of Laminariales (Phaeophyceae) from the Arctic and North Sea. <i>Climate Research</i> , 2008, 37, 203-213.	1.1	74
93	Research note: Irradiance of photosynthetically active radiation determines ultraviolet-susceptibility of photosynthesis in <i>Ulva lactuca</i> L. (Chlorophyta). <i>Phycological Research</i> , 2007, 55, 295-301.	1.6	9
94	Sensitivity of the Early Life Stages of Macroalgae from the Northern Hemisphere to Ultraviolet Radiation. <i>Photochemistry and Photobiology</i> , 2007, 83, 851-862.	2.5	81
95	Life strategy, ecophysiology and ecology of seaweeds in polar waters. <i>Reviews in Environmental Science and Biotechnology</i> , 2007, 6, 95-126.	8.1	128
96	Physiological acclimation to gradients of solar irradiance within mats of the filamentous green macroalga <i>Chaetomorpha linum</i> from southern Spain. <i>Marine Ecology - Progress Series</i> , 2006, 306, 165-175.	1.9	50
97	Susceptibility of zoospores to UV radiation determines upper depth distribution limit of Arctic kelps: evidence through field experiments. <i>Journal of Ecology</i> , 2006, 94, 455-463.	4.0	118
98	Ultraviolet radiation shapes seaweed communities. <i>Reviews in Environmental Science and Biotechnology</i> , 2006, 5, 141-166.	8.1	193
99	Impact of temperature on UV-susceptibility of two <i>Ulva</i> (Chlorophyta) species from Antarctic and Subantarctic regions. <i>Polar Biology</i> , 2006, 29, 988-996.	1.2	55
100	Ultraviolet radiation shapes seaweed communities. , 2006, , 187-212.		14
101	Habitat related variation in UV tolerance of tropical marine red macrophytes is not temperature dependent. <i>Physiologia Plantarum</i> , 2003, 118, 74-83.	5.2	17
102	Oxidative stress and enzymatic scavenging of superoxide radicals induced by solar UV-B radiation in <i>Ulva</i> canopies from southern Spain. <i>Scientia Marina</i> , 2003, 67, 353-359.	0.6	34
103	Effects of solar UV-B radiation on canopy structure of <i>Ulva</i> communities from southern Spain. <i>Journal of Experimental Botany</i> , 2002, 53, 2411-2421.	4.8	69
104	The physical environment of Kongsfjorden – Krossfjorden, an Arctic fjord system in Svalbard. <i>Polar Research</i> , 2002, 21, 133-166.	1.6	105
105	The marine ecosystem of Kongsfjorden, Svalbard. <i>Polar Research</i> , 2002, 21, 167-208.	1.6	46
106	Wavelength-dependent induction of UV-absorbing mycosporine-like amino acids in the red alga <i>Chondrus crispus</i> under natural solar radiation. <i>Journal of Experimental Marine Biology and Ecology</i> , 2002, 268, 69-82.	1.5	62
107	Solar ultraviolet radiation affects the activity of ribulose-1,5-bisphosphate carboxylase-oxygenase and the composition of photosynthetic and xanthophyll cycle pigments in the intertidal green alga <i>Ulva lactuca</i> L.. <i>Planta</i> , 2002, 215, 502-509.	3.2	127
108	The physical environment of Kongsfjorden? Krossfjorden, an Arctic fjord system in Svalbard. <i>Polar Research</i> , 2002, 21, 133-166.	1.6	625

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109	The marine ecosystem of Kongsfjorden, Svalbard. <i>Polar Research</i> , 2002, 21, 167-208.	1.6	526
110	Photosynthetic performance of Arctic macroalgae after transplantation from deep to shallow waters. <i>Oecologia</i> , 2001, 127, 11-20.	2.0	67
111	Impact of UV-radiation on viability, photosynthetic characteristics and DNA of brown algal zoospores: implications for depth zonation. <i>Marine Ecology - Progress Series</i> , 2000, 197, 217-229.	1.9	175
112	Photosynthesis of two Arctic macroalgae under different ambient radiation levels and their sensitivity to enhanced UV radiation. <i>Polar Biology</i> , 2000, 23, 257-264.	1.2	19
113	Photosynthetic characteristics and mycosporine-like amino acids under UV radiation: a competitive advantage of <i>Mastocarpus stellatus</i> over <i>Chondrus crispus</i> at the Helgoland shoreline?. <i>Helgoland Marine Research</i> , 2000, 54, 47-52.	1.3	40
114	Effects of ultraviolet radiation on photosynthesis and related enzyme reactions of marine macroalgae. <i>Planta</i> , 2000, 211, 555-562.	3.2	166
115	The effect of ultraviolet radiation on photosynthesis and ultraviolet-absorbing substances in the endemic Arctic macroalga <i>Devaleraea ramentacea</i> (Rhodophyta). <i>Physiologia Plantarum</i> , 1999, 105, 58-66.	5.2	118
116	Acclimation of Maximal Quantum Yield of Photosynthesis in the Brown Alga <i>Alaria esculenta</i> under High Light and UV Radiation. <i>Plant Biology</i> , 1999, 1, 435-444.	3.8	84
117	Acclimation of brown algal photosynthesis to ultraviolet radiation in Arctic coastal waters (Spitsbergen, Norway). <i>Polar Biology</i> , 1998, 20, 388-395.	1.2	137
118	Differential acclimation responses to irradiance and temperature in two co-occurring seaweed species in Arctic fjords. <i>Polar Research</i> , 0, 40, .	1.6	5