Kai Bischof

List of Publications by Year
in descending order

118	6,167	94433 37	85541 71
papers	citations	h-index	g-index

125	125	125	4269
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	The physical environment of Kongsfjorden?Krossfjorden, an Arctic fjord system in Svalbard. Polar Research, 2002, 21, 133-166.	1.6	625
2	The marine ecosystem of Kongsfjorden, Svalbard. Polar Research, 2002, 21, 167-208.	1.6	526
3	The genusLaminaria sensu lato: recent insights and developments. European Journal of Phycology, 2008, 43, 1-86.	2.0	379
4	Ultraviolet radiation shapes seaweed communities. Reviews in Environmental Science and Biotechnology, 2006, 5, 141-166.	8.1	193
5	Impact of UV-radiation on viability, photosynthetic characteristics and DNA of brown algal zoospores:implications for depth zonation. Marine Ecology - Progress Series, 2000, 197, 217-229.	1.9	175
6	Effects of ultraviolet radiation on photosynthesis and related enzyme reactions of marine macroalgae. Planta, 2000, 211, 555-562.	3.2	166
7	Acclimation of brown algal photosynthesis to ultraviolet radiation in Arctic coastal waters (Spitsbergen, Norway). Polar Biology, 1998, 20, 388-395.	1.2	137
8	Life strategy, ecophysiology and ecology of seaweeds in polar waters. Reviews in Environmental Science and Biotechnology, 2007, 6, 95-126.	8.1	128
9	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 Ulva lactuca L.. Planta, 2002, 215, 502-509.	3.2	127
10	The effect of ultraviolet radiation on photosynthesis and ultravioletâ€absorbing substances in the endemic Arctic macroalgaDevaleraea ramentacea(Rhodophyta). Physiologia Plantarum, 1999, 105, 58-66.	5.2	118
11	Susceptibility of zoospores to UV radiation determines upper depth distribution limit of Arctic kelps: evidence through field experiments. Journal of Ecology, 2006, 94, 455-463.	4.0	118
12	The physical environment of Kongsfjordenâ€“Krossfjorden, an Arctic fjord system in Svalbard. Polar Research, 2002, 21, 133-166.	1.6	105
13	Interactive effects of radiation, temperature and salinity on different life history stages of the Arctic kelp Alaria esculenta (Phaeophyceae). Oecologia, 2009, 160, 483-492.	2.0	99
14	Physiological responses of the calcifying rhodophyte, Corallina officinalis (L.), to future CO2 levels. Marine Biology, 2012, 159, 783-792.	1.5	91
15	Ocean acidification effects on calcifying macroalgae. Aquatic Biology, 2014, 22, 261-279.	1.4	86
16	Acclimation of Maximal Quantum Yield of Photosynthesis in the Brown Alga Alaria esculenta under High Light and UV Radiation. Plant Biology, 1999, 1, 435-444.	3.8	84
17	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
18	Sensitivity of the Early Life Stages of Macroalgae from the Northern Hemisphere to Ultraviolet Radiationâ€. Photochemistry and Photobiology, 2007, 83, 851-862.	2.5	81

#	Article	IF	Citations
19	Decreased depth distribution ofFucus vesiculosus(Phaeophyceae) in the Western Baltic: effects of light deficiency and epibionts on growth and photosynthesis. European Journal of Phycology, 2008, 43, 143-150.	2.0	76
20	Interactive effects of UV radiation and temperature on microstages of Laminariales (Phaeophyceae) from the Arctic and North Sea. Climate Research, 2008, 37, 203-213.	1.1	74
21	Elevated CO2 levels affect the activity of nitrate reductase and carbonic anhydrase in the calcifying rhodophyte Corallina officinalis. Journal of Experimental Botany, 2013, 64, 899-908.	4.8	73
22	Effects of solar UV-B radiation on canopy structure of Ulva communities from southern Spain. Journal of Experimental Botany, 2002, 53, 2411-2421.	4.8	69
23	Photosynthetic performance of Arctic macroalgae after transplantation from deep to shallow waters. Oecologia, 2001, 127, 11-20.	2.0	67
24	Feeding sustains photosynthetic quantum yield of a scleractinian coral during thermal stress. Oecologia, 2008, 157, 593-601.	2.0	66
25	Competition between calcifying and noncalcifying temperate marine macroalgae under elevated CO2 levels. Marine Ecology - Progress Series, 2012, 464, 89-105.	1.9	63
26	Imprint of Climate Change on Pan-Arctic Marine Vegetation. Frontiers in Marine Science, 2020, 7, .	2.5	63
27	Wavelength-dependent induction of UV-absorbing mycosporine-like amino acids in the red alga Chondrus crispus under natural solar radiation. Journal of Experimental Marine Biology and Ecology, 2002, 268, 69-82.	1.5	62
28	Impact of temperature on UV-susceptibility of two Ulva (Chlorophyta) species from Antarctic and Subantarctic regions. Polar Biology, 2006, 29, 988-996.	1.2	55
29	Short-term effects of increasing CO2, nitrate and temperature on three Mediterranean macroalgae: biochemical composition. Aquatic Biology, 2014, 22, 177-193.	1.4	53
30	Two Southern Ocean diatoms are more sensitive to ocean acidification and changes in irradiance than the prymnesiophyte Phaeocystis antarctica. Physiologia Plantarum, 2017, 160, 155-170.	5.2	51
31	Physiological acclimation to gradients of solar irradiance within mats of the filamentous green macroalga Chaetomorpha linum from southern Spain. Marine Ecology - Progress Series, 2006, 306, 165-175.	1.9	50
32	Seaweed Responses to Environmental Stress: Reactive Oxygen and Antioxidative Strategies. Ecological Studies, 2012, , 109-132.	1.2	47
33	The marine ecosystem of Kongsfjorden, Svalbard. Polar Research, 2002, 21, 167-208.	1.6	46
34	Photosynthesis and lipid composition of the Antarctic endemic rhodophyte Palmaria decipiens: effects of changing light and temperature levels. Polar Biology, 2010, 33, 945-955.	1.2	42
35	Short-term effects of CO2, nutrients and temperature on three marine macroalgae under solar radiation. Aquatic Biology, 2014, 22, 159-176.	1.4	41
36	Photosynthetic characteristics and mycosporine-like amino acids under UV radiation: a competitive advantage of Mastocarpus stellatus over Chondrus crispus at the Helgoland shoreline?. Helgoland Marine Research, 2000, 54, 47-52.	1.3	40

#	Article	IF	Citations
37	Effects of ultraviolet radiation and temperature on the ultrastructure of zoospores of the brown macroalga Laminaria hyperborea. Plant Biology, 2008, 10, 388-397.	3.8	39
38	Succession patterns in algal turf vegetation on a Caribbean coral reef. Botanica Marina, 2011, 54, .	1.2	39
39	Dynamic Regulation of Photoprotection Determines Thermal Tolerance of Two Phylotypes of Symbiodinium Clade A at Two Photon Fluence Rates. Photochemistry and Photobiology, 2012, 88, 398-413.	2.5	38
40	Increased physiological performance of the calcifying green macroalga Halimeda opuntia in response to experimental nutrient enrichment on a Caribbean coral reef. Aquatic Botany, 2013, 104, 25-33.	1.6	38
41	Nutrient availability affects the response of the calcifying chlorophyte Halimeda opuntia (L.) J.V. Lamouroux to low pH. Planta, 2014, 239, 231-242.	3.2	37
42	Oxidative stress and enzymatic scavenging of superoxide radicals induced by solar UV-B radiation in <i>Ulva</i> canopies from southern Spain. Scientia Marina, 2003, 67, 353-359.	0.6	34
43	Responses of the kelp Saccharina latissima (Phaeophyceae) to the warming Arctic: from physiology to transcriptomics. Physiologia Plantarum, 2020, 168, 5-26.	5.2	33
44	Heat stress responses and population genetics of the kelp Laminaria digitata (Phaeophyceae) across latitudes reveal differentiation among North Atlantic populations. Ecology and Evolution, 2020, 10, 9144-9177.	1.9	32
45	Light Intensity Modulates the Response of Two Antarctic Diatom Species to Ocean Acidification. Frontiers in Marine Science, 2016, 3, .	2.5	31
46	Shortâ€•and longâ€•term acclimation patterns of the giant kelp Macrocystis pyrifera (Laminariales,) Tj ETQq0 0 0 rgBT /Overlock 1	2.3	31
47	Iron and manganese co-limit growth of the Southern Ocean diatom Chaetoceros debilis. PLoS ONE, 2019, 14, e0221959.	2.5	31
48	Seagrass biofilm communities at a naturally <scp><scp>CO₂</scp></scp>â€•rich vent. Environmental Microbiology Reports, 2015, 7, 516-525.	2.4	30
49	Impacts of combined temperature and salinity stress on the endemic Arctic brown seaweed Laminaria solidungula J. Agardh. Polar Biology, 2020, 43, 647-656.	1.2	29
50	Depth-related variation in epiphytic communities growing on the brown alga Lobophora variegata in a Caribbean coral reef. Coral Reefs, 2011, 30, 967-973.	2.2	28
51	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
52	Acclimation to UV radiation and antioxidative defence in the endemic Antarctic brown macroalga Desmarestia anceps along a depth gradient. Polar Biology, 2013, 36, 1779-1789.	1.2	27
53	UVâ€•radiation and elevated temperatures induce formation of reactive oxygen species in gametophytes of coldâ€•temperate/Arctic kelps (Laminariales, Phaeophyceae). Phycological Research, 2012, 60, 27-36.	1.6	26
54	Susceptibility of Two Southern Ocean Phytoplankton Key Species to Iron Limitation and High Light. Frontiers in Marine Science, 2019, 6, .	2.5	26

#	Article	IF	Citations
55	Salinity and temperature tolerance of the invasive alga Undaria pinnatifida and native New Zealand kelps: Implications for competition. Marine Biology, 2016, 163, 1.	1.5	25
56	Lipid content and fatty acid consumption in zoospores/developing gametophytes of Saccharina latissima (Laminariales, Phaeophyceae) as potential precursors for secondary metabolites as phlorotannins. Polar Biology, 2011, 34, 1011-1018.	1.2	24
57	Freezing tolerance and photosynthetic performance of polar seaweeds at low temperatures. Botanica Marina, 2009, 52, 609-616.	1.2	21
58	SCREENING OF ULTRAVIOLETâ€A AND ULTRAVIOLETâ€B RADIATION IN MARINE GREEN MACROALGAE (CHLOROPHYTA)¹. Journal of Phycology, 2010, 46, 444-455.	2.3	20
59	Xanthophyll Cycle Pool Size and Composition in Several Cosmarium Strains (Zygnematophyceae,) Tj ETQq1 1 0.784314 rgBT /Overlock	1.5	20
60	Photosynthesis of two Arctic macroalgae under different ambient radiation levels and their sensitivity to enhanced UV radiation. Polar Biology, 2000, 23, 257-264.	1.2	19
61	Species separation within the Lessonia nigrescens complex (Phaeophyceae, Laminariales) is mirrored by ecophysiological traits. Botanica Marina, 2015, 58, 81-92.	1.2	19
62	CO2 and inorganic nutrient enrichment affect the performance of a calcifying green alga and its noncalcifying epiphyte. Oecologia, 2015, 177, 1157-1169.	2.0	19
63	Arctic kelp eco-physiology during the polar night in the face of global warming: a crucial role for laminarin. Marine Ecology - Progress Series, 2019, 611, 59-74.	1.9	19
64	PSII activity and pigment dynamics of Symbiodinium in two Indo-Pacific corals exposed to short-term high-light stress. Marine Biology, 2013, 160, 563-577.	1.5	18
65	Photosynthetic performance and pigment composition of Macrocystis pyrifera (Laminariales,) Tj ETQq1 1 0.784314 rgBT /Overlock 10 T of Applied Phycology, 2017, 29, 2575-2585.	2.8	18
66	Habitat related variation in UV tolerance of tropical marine red macrophytes is not temperature dependent. Physiologia Plantarum, 2003, 118, 74-83.	5.2	17
67	The biology of an Antarctic rhodophyte,Palmaria decipiens: recent advances. Antarctic Science, 2011, 23, 419-430.	0.9	17
68	Ultraviolet radiation modulates the physiological responses of the calcified rhodophyte Corallina officinalis to elevated CO₂. Botanica Marina, 2013, 56, 161-168.	1.2	17
69	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. Limnology and Oceanography, 2019, 64, 1716-1736.	3.1	17
70	Temperature Modulates Sex-Biased Gene Expression in the Gametophytes of the Kelp Saccharina latissima. Frontiers in Marine Science, 2019, 6, .	2.5	16
71	Modulation of physiological performance by temperature and salinity in the sugar kelp Saccharina latissima. Phycological Research, 2021, 69, 48-57.	1.6	16
72	Effects of water temperatures, UV radiation and low vs high PAR on phlorotannin content and germination in zoospores of Saccorhiza dermatodea (Tilopteridales, Phaeophyceae). Phycologia, 2011, 50, 256-263.	1.4	15

#	Article	IF	Citations
73	Kongsfjorden as Harbinger of the Future Arctic: Knowns, Unknowns and Research Priorities. Advances in Polar Ecology, 2019, , 537-562.	1.3	15
74	Site specific differences in morphometry and photophysiology in intertidal Zostera muelleri meadows. Aquatic Botany, 2014, 116, 104-109.	1.6	14
75	Genetic analysis of a recently establishedUndaria pinnatifida(Laminariales: Alariaceae) population in the northern Wadden Sea reveals close proximity between drifting thalli and the attached population. European Journal of Phycology, 2019, 54, 154-161.	2.0	14
76	Is geographical variation driving the transcriptomic responses to multiple stressors in the kelp Saccharina latissima?. BMC Plant Biology, 2019, 19, 513.	3.6	14
77	Ultraviolet radiation shapes seaweed communities. , 2006, , 187-212.		14
78	Summer Heatwave Impacts on the European Kelp Saccharina latissima Across Its Latitudinal Distribution Gradient. Frontiers in Marine Science, 2021, 8, .	2.5	14
79	Photosynthetic responses to UV-radiation of intertidal macroalgae from the Strait of Magellan (Chile). Revista Chilena De Historia Natural, 2009, 82, .	1.2	13
80	Effects of depth and ultraviolet radiation on coral reef turf algae. Journal of Experimental Marine Biology and Ecology, 2014, 461, 73-84.	1.5	13
81	Light penetration in a temperate meso-tidal lagoon: Implications for seagrass growth and dredging in Tauranga Harbour, New Zealand. Ocean and Coastal Management, 2019, 174, 25-37.	4.4	13
82	Impacts of Ozone Stratospheric Depletion and Solar UVB Radiation on Seaweeds. Ecological Studies, 2012, , 433-448.	1.2	12
83	Seasonal variations of the photosynthetic activity and pigment concentrations in different reproductive phases of Gigartina skottsbergii (Rhodophyta, Gigartinales) in the Magellan region, sub-Antarctic Chile. Journal of Applied Phycology, 2017, 29, 721-729.	2.8	12
84	The role of artificial material for benthic communities â€“ Establishing different concrete materials as hard bottom environments. Marine Environmental Research, 2020, 161, 105081.	2.5	12
85	Phlorotannin Production and Lipid Oxidation as a Potential Protective Function Against High Photosynthetically Active and UV Radiation in Gametophytes of Alaria esculenta (Alariales,) Tj ETQq1 1 0.784314 rgBT /Overlock	2.5	12
86	The quest for sea-floor integrity. Nature Geoscience, 2015, 8, 163-164.	12.9	11
87	Hyposaline conditions affect UV susceptibility in the Arctic kelpAlaria esculenta(Phaeophyceae). Phycologia, 2017, 56, 675-685.	1.4	11
88	Effects of kelp canopy on underwater light climate and viability of brown algal spores in Kongsfjorden (Spitsbergen). Polar Biology, 2019, 42, 1511-1527.	1.2	11
89	Kelps and Environmental Changes in Kongsfjorden: Stress Perception and Responses. Advances in Polar Ecology, 2019, , 373-422.	1.3	11
90	Future range dynamics of the red alga Capreolia implexa in native and invaded regions: contrasting predictions from species distribution models versus physiological knowledge. Biological Invasions, 2020, 22, 1339-1352.	2.4	11

#	Article	IF	Citations
91	Desiccation tolerance of different life stages of the invasive marine kelp Undaria pinnatifida: Potential for overland transport as invasion vector. Journal of Experimental Marine Biology and Ecology, 2017, 496, 1-8.	1.5	10
92	Heading northward to Scandinavia: Undaria pinnatifida in the northern Wadden Sea. Botanica Marina, 2018, 61, 365-371.	1.2	10
93	Research note: Irradiance of photosynthetically active radiation determines ultraviolet-susceptibility of photosynthesis in Ulva lactuca L.(Chlorophyta). Phycological Research, 2007, 55, 295-301.	1.6	9
94	Algebraic equilibrium solution of tissue nitrogen quota in algae and the discrepancy between calibrated parameters and physiological properties. Ecological Modelling, 2015, 312, 281-291.	2.5	9
95	Ocean acidification stimulates particulate organic carbon accumulation in two Antarctic diatom species under moderate and high natural solar radiation. Journal of Phycology, 2018, 54, 505-517.	2.3	9
96	Nutrients. , 2014, , 238-293.		8
97	Spectral differences in the underwater light regime caused by sediment types in New Zealand estuaries: implications for seagrass photosynthesis. Geo-Marine Letters, 2020, 40, 217-225.	1.1	8
98	Under high light stress two Indo-Pacific coral species display differential photodamage and photorepair dynamics. Marine Biology, 2016, 163, 1.	1.5	7
99	The effect of ultraviolet radiation on cellular ultrastructure and photosystem II quantum yield of Alaria esculenta (L.) Greville from Spitsbergen (Norway). Polar Biology, 2016, 39, 1957-1966.	1.2	7
100	Ocean acidification and high irradiance stimulate the photo-physiological fitness, growth and carbon production of the Antarctic cryptophyte <i>Geminigera cryophila</i>. Biogeosciences, 2019, 16, 2997-3008.	3.3	7
101	Geographic Variation of UV Stress Tolerance in Red Seaweeds Does Not Scale with Latitude Along the SE Pacific Coast. Journal of Phycology, 2020, 56, 1090-1102.	2.3	7
102	Increased Heat Resilience of Intraspecific Outbred Compared to Inbred Lineages in the Kelp Laminaria digitata: Physiology and Transcriptomics. Frontiers in Marine Science, 2022, 9, .	2.5	7
103	Differences by origin in methylome suggest ecoâ€phenotypes in the kelp Saccharina latissima. Evolutionary Applications, 2023, 16, 262-278.	3.1	7
104	Microsensor studies on Padina from a natural <scp>CO</scp>₂ seep: implications of morphology on acclimation to low pH. Journal of Phycology, 2015, 51, 1106-1115.	2.3	6
105	Adjustment of pigment composition in Desmarestia (Desmarestiaceae) species along a sub-Antarctic to Antarctic latitudinal gradient. Polar Research, 2016, 35, 29383.	1.6	6
106	Coping with a changing Arctic: mechanisms of acclimation in the brown seaweed Saccharina latissima from Spitsbergen. Marine Ecology - Progress Series, 2021, 657, 43-57.	1.9	6
107	Small-scale distribution modeling of benthic species in a protected natural hard ground area in the German North Sea (HelgolÃnder Steingrund). Geo-Marine Letters, 2020, 40, 167-181.	1.1	5
108	Transcriptomic Responses to Darkness and the Survival Strategy of the Kelp Saccharina latissima in the Early Polar Night. Frontiers in Marine Science, 2020, 7, .	2.5	5

#	Article	IF	Citations
109	Differential acclimation responses to irradiance and temperature in two co-occurring seaweed species in Arctic fjords. Polar Research, 0, 40, .	1.6	5
110	Fatty acid compositions associated with high-light tolerance in the intertidal rhodophytes Mastocarpus stellatus and Chondrus crispus. Helgoland Marine Research, 2017, 71, .	1.3	4
111	In contrast to diatoms, cryptophytes are susceptible to iron limitation, but not to ocean acidification. Physiologia Plantarum, 2022, 174, e13614.	5.2	3
112	Responses of a Natural Phytoplankton Community From the Drake Passage to Two Predicted Climate Change Scenarios. Frontiers in Marine Science, 2022, 9, .	2.5	3
113	Neosiphonia howei (Ceramiales: Rhodomelaceae)â€"a common epiphyte of the spreading coral reef alga Lobophora variegata (Dictyotales: Dictyotaceae). Marine Biodiversity Records, 2013, 6, .	1.2	2
114	Dynamic summer solar radiation in Antarctic coastal ecosystems and its effects on photosyn thesis of the endemic Antarctic brown macroalga Desmarestia menziesii (Phaeophyceae). Algological Studies (Stuttgart, Germany: 2007), 2016, 151-152, 123-150.	0.4	2
115	The Chlorophytes of CuraÃ§ao (Caribbean): a revised checklist for the south-west coast. Botanica Marina, 2018, 61, 33-46.	1.2	2
116	Hyposalinity affects diurnal photoacclimation patterns in the rhodophyte Palmaria palmata under mimicked Arctic summer conditions. Journal of Photochemistry and Photobiology, 2022, 11, 100124.	2.5	2
117	Benthic community establishment on different concrete mixtures introduced to a German deep-water port. Helgoland Marine Research, 2021, 75, .	1.3	0
118	WÃlder unter Wasser â€“ GroÃŸalgengemeinschaften. , 2017, , 281-290.		0