Rolf R Gradinger

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/495400/publications.pdf

Version: 2024-02-01

99 papers	5,651 citations	66343 42 h-index	91884 69 g-index
110 all docs	110 docs citations	110 times ranked	3853 citing authors

#	Article	IF	Citations
1	Arctic spring awakening â€“ Steering principles behind the phenology of vernal ice algal blooms. Progress in Oceanography, 2015, 139, 151-170.	3.2	274
2	REGIONAL VARIABILITY IN FOOD AVAILABILITY FOR ARCTIC MARINE MAMMALS. , 2008, 18, S77-S96.		265
3	Sea-ice algae: Major contributors to primary production and algal biomass in the Chukchi and Beaufort Seas during May/June 2002. Deep-Sea Research Part II: Topical Studies in Oceanography, 2009, 56, 1201-1212.	1.4	249
4	The pan-Arctic biodiversity of marine pelagic and sea-ice unicellular eukaryotes: a first-attempt assessment. Marine Biodiversity, 2011, 41, 13-28.	1.0	229
5	Ecosystem characteristics and processes facilitating persistent macrobenthic biomass hotspots and associated benthivory in the Pacific Arctic. Progress in Oceanography, 2015, 136, 92-114.	3.2	222
6	Implications of brine channel geometry and surface area for the interaction of sympagic organisms in Arctic sea ice. Journal of Experimental Marine Biology and Ecology, 2000, 243, 55-80.	1.5	144
7	Biological Response to Recent Pacific Arctic Sea Ice Retreats. Eos, 2010, 91, 161-162.	0.1	143
8	Food web structure in the high Arctic Canada Basin: evidence from ?13C and ?15N analysis. Polar Biology, 2005, 28, 238-249.	1.2	137
9	In-situ observations on the distribution and behavior of amphipods and Arctic cod (Boreogadus saida) under the sea ice of the High Arctic Canada Basin. Polar Biology, 2004, 27, 595.	1.2	131
10	Chytrids dominate arctic marine fungal communities. Environmental Microbiology, 2016, 18, 2001-2009.	3.8	128
11	Sediment transport by sea ice in the Chukchi and Beaufort Seas: Increasing importance due to changing ice conditions?. Deep-Sea Research Part II: Topical Studies in Oceanography, 2005, 52, 3281-3302.	1.4	123
12	Overview of the MOSAiC expedition: Atmosphere. Elementa, 2022, 10, .	3.2	121
13	Organism incorporation into newly forming Arctic sea ice in the Greenland Sea. Journal of Plankton Research, 1998, 20, 871-886.	1.8	119
14	Standing stocks, production, and respiration of phytoplankton and heterotrophic bacteria in the western Arctic Ocean. Deep-Sea Research Part II: Topical Studies in Oceanography, 2009, 56, 1237-1248.	1.4	117
15	Vertical fine structure of the biomass and composition of algal communities in Arctic pack ice. Marine Biology, 1999, 133, 745-754.	1.5	110
16	Sea ice: A cast technique to examine and analyze brine pockets and channel structure. Limnology and Oceanography, 1992, 37, 179-183.	3.1	109
17	Determination of Arctic ice algal production with a new in situ incubation technique. Marine Ecology - Progress Series, 1999, 177, 15-26.	1.9	100
18	Abundance, biomass and composition of the sea ice biota of the Greenland Sea pack ice. Deep-Sea Research Part II: Topical Studies in Oceanography, 1999, 46, 1457-1472.	1.4	97

#	Article	IF	Citations
19	Overview of the MOSAiC expedition: Snow and sea ice. Elementa, 2022, 10, .	3.2	91
20	Occurrence of an algal bloom under Arctic pack ice. Marine Ecology - Progress Series, 1996, 131, 301-305.	1.9	88
21	Arctic Marine Biodiversity: An Update of Species Richness and Examples of Biodiversity Change. Oceanography, 2011, 24, 232-248.	1.0	83
22	Seasonal succession of net primary productivity, particulate organic carbon export, and autotrophic community composition in the eastern Bering Sea. Deep-Sea Research Part II: Topical Studies in Oceanography, 2012, 65-70, 84-97.	1.4	78
23	Vertical distribution of exopolymer particles in sea ice of the Fram Strait (Arctic) during autumn. Marine Ecology - Progress Series, 2003, 248, 1-13.	1.9	76
24	Flagellates and heliozoans in the Greenland Sea ice studied alive using light microscopy. Polar Biology, 1997, 17, 473-481.	1.2	71
25	Integrated abundance and biomass of sympagic meiofauna in Arctic and Antarctic pack ice. Polar Biology, 1999, 22, 169-177.	1.2	70
26	Distribution of phytoplankton communities in relation to the large-scale hydrographical regime in the Fram Strait. Marine Biology, 1991, 111, 311-321.	1.5	69
27	Arctic marine fungi: biomass, functional genes, and putative ecological roles. ISME Journal, 2019, 13, 1484-1496.	9.8	69
28	Controls of the landfast iceâ€“ocean ecosystem offshore Barrow, Alaska. Annals of Glaciology, 2006, 44, 63-72.	1.4	67
29	Spatial distribution of aquatic marine fungi across the western Arctic and subâ€arctic. Environmental Microbiology, 2017, 19, 475-484.	3.8	67
30	Holes in Progressively Thinning Arctic Sea Ice Lead to New Ice Algae Habitat. Oceanography, 2011, 24, 302-308.	1.0	66
31	Exopolymer particles: microbial hotspots of enhanced bacterial activity in Arctic fast ice (Chukchi) Tj ETQq1 1 0.784314 rgBT /Overloc	1.8	64
32	Using stable isotopes to assess carbon and nitrogen turnover in the Arctic sympagic amphipod Onisimus litoralis. Oecologia, 2008, 158, 11-22.	2.0	63
33	Arctic sea-ice ridgesâ€”Safe heavens for sea-ice fauna during periods of extreme ice melt?. Deep-Sea Research Part II: Topical Studies in Oceanography, 2010, 57, 86-95.	1.4	60
34	Importance of sympagic production to Bering Sea zooplankton as revealed from fatty acid-carbon stable isotope analyses. Marine Ecology - Progress Series, 2015, 518, 31-50.	1.9	59
35	Fatty acid and stable isotope characteristics of sea ice and pelagic particulate organic matter in the Bering Sea: tools for estimating sea ice algal contribution to Arctic food web production. Oecologia, 2014, 174, 699-712.	2.0	56
36	Life cycle strategy of the Antarctic calanoid copepod Stephos longipes. Progress in Oceanography, 1995, 36, 45-75.	3.2	54

#	Article	IF	Citations
37	Overview of the MOSAiC expedition: Physical oceanography. Elementa, 2022, 10, .	3.2	54
38	Development of Arctic sea-ice organisms under graded snow cover. Polar Research, 1991, 10, 295-308.	1.6	53
39	Rapid physically driven inversion of the airâ€“sea ice CO2 flux in the seasonal landfast ice off Barrow, Alaska after onset of surface melt. Continental Shelf Research, 2010, 30, 1998-2004.	1.8	52
40	Vertical distribution of bacteria in Arctic sea ice from the Barents and Laptev Seas. Polar Biology, 1997, 17, 448-454.	1.2	50
41	Abundance and composition of the sea-ice meiofauna in off-shore pack ice of the Beaufort Gyre in summer 2002 and 2003. Polar Biology, 2005, 28, 171-181.	1.2	49
42	Ice-associated phytoplankton blooms in the southeastern Bering Sea. Geophysical Research Letters, 2007, 34, .	4.0	47
43	Climate change and biological oceanography of the Arctic Ocean. Philosophical Transactions of the Royal Society: Physical and Engineering Sciences, 1995, 352, 277-286.	1.0	46
44	A mesocosm study of physical-biological interactions in artificial sea ice: effects of brine channel surface evolution and brine movement on algal biomass. Polar Biology, 2001, 24, 356-364.	1.2	45
45	Pivotal role of sea ice sediments in the seasonal development of near-shore Arctic fast ice biota. Marine Ecology - Progress Series, 2009, 394, 49-63.	1.9	45
46	What Feeds the Benthos in the Arctic Basins? Assembling a Carbon Budget for the Deep Arctic Ocean. Frontiers in Marine Science, 2020, 7, .	2.5	42
47	Changes in photosynthetic carbon allocation in algal assemblages of Arctic sea ice with decreasing nutrient concentrations and irradiance. Marine Ecology - Progress Series, 2000, 202, 1-11.	1.9	42
48	Regional relationships between biological and hydrographical properties in the Weddell Gyre in late austral winter 1989. Marine Chemistry, 1991, 35, 325-336.	2.3	39
49	Linkages between sea-ice coverage, pelagicâ€“benthic coupling, and the distribution of spectacled eiders: Observations in March 2008, 2009 and 2010, northern Bering Sea. Deep-Sea Research Part II: Topical Studies in Oceanography, 2013, 94, 31-43.	1.4	39
50	Changes in Sea-Ice Protist Diversity With Declining Sea Ice in the Arctic Ocean From the 1980s to 2010s. Frontiers in Marine Science, 2020, 7, .	2.5	39
51	Meiofauna in sea ice of the Weddell Sea (Antarctica). Polar Biology, 2001, 24, 724-728.	1.2	38
52	The life cycle of Stephos longipes - an example for cryopelagic coupling in the Weddell Sea (Antarctica). Marine Ecology - Progress Series, 1993, 98, 255-262.	1.9	37
53	Small scale vertical gradients of Arctic ice algal photophysiological properties. Photosynthesis Research, 2009, 102, 53-66.	2.9	36
54	Sea ice meiofauna distribution on local to panâ€Arctic scales. Ecology and Evolution, 2018, 8, 2350-2364.	1.9	36

#	Article	IF	Citations
55	Elevated 15N/14N in particulate organic matter, zooplankton, and diatom frustule-bound nitrogen in the ice-covered water column of the Bering Sea eastern shelf. Deep-Sea Research Part II: Topical Studies in Oceanography, 2014, 109, 100-111.	1.4	33
56	The diversity, abundance and fate of ice algae and phytoplankton in the Bering Sea. Polar Biology, 2016, 39, 309-325.	1.2	33
57	Biodiversity and Biogeography of the Lower Trophic Taxa of the Pacific Arctic Region: Sensitivities to Climate Change. , 2014, , 269-336.		32
58	Picocyanobacteria in the high Arctic. Marine Ecology - Progress Series, 1989, 52, 99-101.	1.9	31
59	Under-ice amphipods in the Greenland Sea and Fram Strait (Arctic): environmental controls and seasonal patterns below the pack ice. Marine Biology, 2002, 140, 317-326.	1.5	29
60	Editorial - Arctic Ocean Diversity: synthesis. Marine Biodiversity, 2011, 41, 1-4.	1.0	27
61	How are Antarctic planktonic microbial food webs and algal blooms affected by melting of sea ice? Microcosm simulations. Aquatic Microbial Ecology, 1999, 20, 183-201.	1.8	27
62	Terrestrial Inputs Shape Coastal Bacterial and Archaeal Communities in a High Arctic Fjord (Isfjorden,) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	3.5	25
63	Carbon and nitrogen assimilation in the Bering Sea clams Nuculana radiata and Macoma moesta. Journal of Experimental Marine Biology and Ecology, 2012, 430-431, 32-42.	1.5	24
64	Sensitivity of the light field under sea ice to spatially inhomogeneous optical properties and incident light assessed with three-dimensional Monte Carlo radiative transfer simulations. Cold Regions Science and Technology, 2012, 73, 1-11.	3.5	21
65	Significance of Picocyanobacteria in the Red Sea and the Gulf of Aden. Botanica Marina, 1992, 35, .	1.2	19
66	Sympagohydra tuuli gen. nov. and sp. nov. (Cnidaria: Hydrozoa) a cool hydroid from the Arctic sea ice. Journal of the Marine Biological Association of the United Kingdom, 2008, 88, 1637-1641.	0.8	19
67	First of an Arctic sea ice meiofauna food web analysis based on abundance, biomass and stable isotope ratios. Marine Ecology - Progress Series, 2020, 634, 29-43.	1.9	18
68	Adaptation of Arctic and Antarctic ice metazoa to their habitat. Zoology, 2001, 104, 339-345.	1.2	17
69	Timing of Ice Algal Grazing by the Arctic Nearshore Benthic Amphipod <i>Onisimus litoralis</i>. Arctic, 2010, 63, .	0.4	17
70	Concentration of live pico- and nanoplankton by means of tangential flow filtration. Journal of Plankton Research, 1989, 11, 1213-1221.	1.8	16
71	Potential effect of ice formation on Antarctic pelagic copepods: salinity induced mortality of Calanus propinquus and Metridia gerlachei in comparison to sympagic acoel turbellarians. Polar Biology, 1998, 20, 139-142.	1.2	16
72	Pelagic occurrences of the ice amphipod Apherusa glacialis throughout the Arctic. Journal of Plankton Research, 2020, 42, 73-86.	1.8	16

#	Article	IF	Citations
73	Sources of uncertainties in cod distribution models. Nature Climate Change, 2015, 5, 788-789.	18.8	15
74	Marine Micro- and Macroalgae in the Polar Night. Advances in Polar Ecology, 2020, , 67-112.	1.3	15
75	Turbellaria (Archoophora: Acoela) from Antarctic sea ice endofauna - examination of their micromorphology. Polar Biology, 1999, 21, 410-416.	1.2	13
76	First record of sympagic hydroids (Hydrozoa, Cnidaria) in Arctic coastal fast ice. Polar Biology, 2007, 30, 1557-1563.	1.2	13
77	Two New Species of Marine Saprotrophic Sphaeroformids in the Mesomycetozoea Isolated From the Sub-Arctic Bering Sea. Protist, 2015, 166, 310-322.	1.5	13
78	Seasonal Variability in the Zooplankton Community Structure in a Sub-Arctic Fjord as Revealed by Morphological and Molecular Approaches. Frontiers in Marine Science, 2021, 8, .	2.5	13
79	Development of Arctic sea-ice organisms under graded snow cover. Polar Research, 1991, 10, 295-308.	1.6	12
80	Growth rates of arctic juvenile Scolelepis squamata (Polychaeta: Spionidae) isolated from Chukchi Sea fast ice. Polar Biology, 2012, 35, 1487-1494.	1.2	11
81	Biogenic Particle Sources and Vertical Flux Patterns in the Seasonally Ice-Covered Greenland Sea. , 2001, , 69-79.		11
82	Ice-Associated Amphipods in a Pan-Arctic Scenario of Declining Sea Ice. Frontiers in Marine Science, 2021, 8, .	2.5	11
83	Arctic Ocean Exploration 2002. Polar Biology, 2005, 28, 169-170.	1.2	10
84	New Species of Saprobic Labyrinthulea (=Labyrinthulomycota) and the Erection of a gen. nov. to Resolve Molecular Polyphyly within the Aplanochytrids. Journal of Eukaryotic Microbiology, 2018, 65, 475-483.	1.7	10
85	Early spring subglacial discharge plumes fuel under-ice primary production at a Svalbard tidewater glacier. Cryosphere, 2021, 15, 2083-2107.	3.9	9
86	Arctic Sea Ice Ecology. Springer Polar Sciences, 2020, , .	0.1	8
87	Dense mesopelagic sound scattering layer and vertical segregation of pelagic organisms at the Arctic-Atlantic gateway during the midnight sun. Progress in Oceanography, 2021, 196, 102611.	3.2	8
88	A new perspective on changing Arctic marine ecosystems: panarchy adaptive cycles in pan-Arctic spatial and temporal scales. , 2015, , 109-126.		5
89	Crude oil exposure reduces ice algal growth in a sea-ice mesocosm experiment. Polar Biology, 2021, 44, 525-537.	1.2	3
90	Coupled ecosystems in the ice-covered Arctic ocean. Elsevier Oceanography Series, 1997, 62, 385-391.	0.1	2

#	Article	IF	Citations
91	Modeling silicateâ€“nitrateâ€“ammonium co-limitation of algal growth and the importance of bacterial remineralization based on an experimental Arctic coastal spring bloom culture study. Biogeosciences, 2021, 18, 1719-1747.	3.3	2
92	Spring, Summer and Melting Sea Ice. Springer Polar Sciences, 2020, , 61-101.	0.1	2
93	Connections to the Deep: Deep Vertical Migrations, an Important Part of the Life Cycle of Apherusa glacialis, an Arctic Ice-Associated Amphipod. Frontiers in Marine Science, 2021, 8, .	2.5	2
94	Methods and Techniques in Sea Ice Ecology. Springer Polar Sciences, 2020, , 131-169.	0.1	1
95	Eukaryotic microbial richness increases with latitude and decreasing temperature in the Pacific Subarctic domain in late winter. Polar Biology, 2017, 40, 2161-2169.	1.2	0
96	Life in Arctic Sea Ice. , 2020, , 507-514.		0
97	Meiofauna in sea ice of the Weddell Sea (Antarctica). , 2002, , 180-184.		0
98	Das Leben im Eispalast: Flora und Fauna des arktischen Meereises. , 2017, , 51-62.		0
99	The Book, and Ecology of Sea Ice. Springer Polar Sciences, 2020, , 1-12.	0.1	0