

Rolf R Grading

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	Overview of the MOSAiC expedition: Physical oceanography. <i>Elementa</i> , 2022, 10, .	3.2	54
2	Overview of the MOSAiC expedition: Atmosphere. <i>Elementa</i> , 2022, 10, .	3.2	121
3	Overview of the MOSAiC expedition: Snow and sea ice. <i>Elementa</i> , 2022, 10, .	3.2	91
4	Crude oil exposure reduces ice algal growth in a sea-ice mesocosm experiment. <i>Polar Biology</i> , 2021, 44, 525-537.	1.2	3
5	Terrestrial Inputs Shape Coastal Bacterial and Archaeal Communities in a High Arctic Fjord (Isfjorden,) Tj ETQq1 1 0,784314 rgBT /Ovele	3.5	25
6	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. <i>Biogeosciences</i> , 2021, 18, 1719-1747.	3.3	2
7	Early spring subglacial discharge plumes fuel under-ice primary production at a Svalbard tidewater glacier. <i>Cryosphere</i> , 2021, 15, 2083-2107.	3.9	9
8	Seasonal Variability in the Zooplankton Community Structure in a Sub-Arctic Fjord as Revealed by Morphological and Molecular Approaches. <i>Frontiers in Marine Science</i> , 2021, 8, .	2.5	13
9	Dense mesopelagic sound scattering layer and vertical segregation of pelagic organisms at the Arctic-Atlantic gateway during the midnight sun. <i>Progress in Oceanography</i> , 2021, 196, 102611.	3.2	8
10	Ice-Associated Amphipods in a Pan-Arctic Scenario of Declining Sea Ice. <i>Frontiers in Marine Science</i> , 2021, 8, .	2.5	11
11	Connections to the Deep: Deep Vertical Migrations, an Important Part of the Life Cycle of <i>Apherusa glacialis</i> , an Arctic Ice-Associated Amphipod. <i>Frontiers in Marine Science</i> , 2021, 8, .	2.5	2
12	Arctic Sea Ice Ecology. Springer Polar Sciences, 2020, , .	0.1	8
13	Pelagic occurrences of the ice amphipod <i>Apherusa glacialis</i> throughout the Arctic. <i>Journal of Plankton Research</i> , 2020, 42, 73-86.	1.8	16
14	Changes in Sea-Ice Protist Diversity With Declining Sea Ice in the Arctic Ocean From the 1980s to 2010s. <i>Frontiers in Marine Science</i> , 2020, 7, .	2.5	39
15	Life in Arctic Sea Ice. , 2020, , 507-514.		0
16	What Feeds the Benthos in the Arctic Basins? Assembling a Carbon Budget for the Deep Arctic Ocean. <i>Frontiers in Marine Science</i> , 2020, 7, .	2.5	42
17	Marine Micro- and Macroalgae in the Polar Night. <i>Advances in Polar Ecology</i> , 2020, , 67-112.	1.3	15
18	First of an Arctic sea ice meiofauna food web analysis based on abundance, biomass and stable isotope ratios. <i>Marine Ecology - Progress Series</i> , 2020, 634, 29-43.	1.9	18

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19	The Book, and Ecology of Sea Ice. Springer Polar Sciences, 2020, , 1-12.	0.1	0
20	Methods and Techniques in Sea Ice Ecology. Springer Polar Sciences, 2020, , 131-169.	0.1	1
21	Spring, Summer and Melting Sea Ice. Springer Polar Sciences, 2020, , 61-101.	0.1	2
22	Arctic marine fungi: biomass, functional genes, and putative ecological roles. ISME Journal, 2019, 13, 1484-1496.	9.8	69
23	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
24	Sea ice meiofauna distribution on local to pan-Arctic scales. Ecology and Evolution, 2018, 8, 2350-2364.	1.9	36
25	Spatial distribution of aquatic marine fungi across the western Arctic and sub-Arctic. Environmental Microbiology, 2017, 19, 475-484.	3.8	67
26	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
27	Das Leben im Eispalast: Flora und Fauna des arktischen Meereises. , 2017, , 51-62.		0
28	Chytrids dominate arctic marine fungal communities. Environmental Microbiology, 2016, 18, 2001-2009.	3.8	128
29	The diversity, abundance and fate of ice algae and phytoplankton in the Bering Sea. Polar Biology, 2016, 39, 309-325.	1.2	33
30	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
31	A new perspective on changing Arctic marine ecosystems: panarchy adaptive cycles in pan-Arctic spatial and temporal scales. , 2015, , 109-126.		5
32	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
33	Arctic spring awakening – Steering principles behind the phenology of vernal ice algal blooms. Progress in Oceanography, 2015, 139, 151-170.	3.2	274
34	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
35	Sources of uncertainties in cod distribution models. Nature Climate Change, 2015, 5, 788-789.	18.8	15
36	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

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37	Biodiversity and Biogeography of the Lower Trophic Taxa of the Pacific Arctic Region: Sensitivities to Climate Change. , 2014, , 269-336.		32
38	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
39	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
40	Carbon and nitrogen assimilation in the Bering Sea clams <i>Nuculana radiata</i> and <i>Macoma moesta</i> . Journal of Experimental Marine Biology and Ecology, 2012, 430-431, 32-42.	1.5	24
41	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
42	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
43	Growth rates of arctic juvenile <i>Scolecopsis squamata</i> (Polychaeta: Spionidae) isolated from Chukchi Sea fast ice. Polar Biology, 2012, 35, 1487-1494.	1.2	11
44	Holes in Progressively Thinning Arctic Sea Ice Lead to New Ice Algae Habitat. Oceanography, 2011, 24, 302-308.	1.0	66
45	Arctic Marine Biodiversity: An Update of Species Richness and Examples of Biodiversity Change. Oceanography, 2011, 24, 232-248.	1.0	83
46	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
47	Editorial - Arctic Ocean Diversity: synthesis. Marine Biodiversity, 2011, 41, 1-4.	1.0	27
48	Biological Response to Recent Pacific Arctic Sea Ice Retreats. Eos, 2010, 91, 161-162.	0.1	143
49	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
50	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
51	Timing of Ice Algal Grazing by the Arctic Nearshore Benthic Amphipod <i>Onisimus litoralis</i> . Arctic, 2010, 63, .	0.4	17
52	Small scale vertical gradients of Arctic ice algal photophysiological properties. Photosynthesis Research, 2009, 102, 53-66.	2.9	36
53	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
54	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

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55	Pivotal role of sea ice sediments in the seasonal development of near-shore Arctic fast ice biota. <i>Marine Ecology - Progress Series</i> , 2009, 394, 49-63.	1.9	45
56	Using stable isotopes to assess carbon and nitrogen turnover in the Arctic sympagic amphipod <i>Onisimus litoralis</i> . <i>Oecologia</i> , 2008, 158, 11-22.	2.0	63
57	<i>Sympagohydra tuuli</i> gen. nov. and sp. nov. (Cnidaria: Hydrozoa) a cool hydroid from the Arctic sea ice. <i>Journal of the Marine Biological Association of the United Kingdom</i> , 2008, 88, 1637-1641.	0.8	19
58	REGIONAL VARIABILITY IN FOOD AVAILABILITY FOR ARCTIC MARINE MAMMALS. , 2008, 18, S77-S96.		265
59	Exopolymer particles: microbial hotspots of enhanced bacterial activity in Arctic fast ice (Chukchi) Tj ETQq1 1 0.784314 rgBT /Overload	1.8	64
60	Ice-associated phytoplankton blooms in the southeastern Bering Sea. <i>Geophysical Research Letters</i> , 2007, 34, .	4.0	47
61	First record of sympagic hydroids (Hydrozoa, Cnidaria) in Arctic coastal fast ice. <i>Polar Biology</i> , 2007, 30, 1557-1563.	1.2	13
62	Controls of the landfast iceâ€œocean ecosystem offshore Barrow, Alaska. <i>Annals of Glaciology</i> , 2006, 44, 63-72.	1.4	67
63	Food web structure in the high Arctic Canada Basin: evidence from $\delta^{13}C$ and $\delta^{15}N$ analysis. <i>Polar Biology</i> , 2005, 28, 238-249.	1.2	137
64	Abundance and composition of the sea-ice meiofauna in off-shore pack ice of the Beaufort Gyre in summer 2002 and 2003. <i>Polar Biology</i> , 2005, 28, 171-181.	1.2	49
65	Arctic Ocean Exploration 2002. <i>Polar Biology</i> , 2005, 28, 169-170.	1.2	10
66	Sediment transport by sea ice in the Chukchi and Beaufort Seas: Increasing importance due to changing ice conditions?. <i>Deep-Sea Research Part II: Topical Studies in Oceanography</i> , 2005, 52, 3281-3302.	1.4	123
67	In-situ observations on the distribution and behavior of amphipods and Arctic cod (<i>Boreogadus saida</i>) under the sea ice of the High Arctic Canada Basin. <i>Polar Biology</i> , 2004, 27, 595.	1.2	131
68	Vertical distribution of exopolymer particles in sea ice of the Fram Strait (Arctic) during autumn. <i>Marine Ecology - Progress Series</i> , 2003, 248, 1-13.	1.9	76
69	Under-ice amphipods in the Greenland Sea and Fram Strait (Arctic): environmental controls and seasonal patterns below the pack ice. <i>Marine Biology</i> , 2002, 140, 317-326.	1.5	29
70	Meiofauna in sea ice of the Weddell Sea (Antarctica). , 2002, , 180-184.		0
71	A mesocosm study of physical-biological interactions in artificial sea ice: effects of brine channel surface evolution and brine movement on algal biomass. <i>Polar Biology</i> , 2001, 24, 356-364.	1.2	45
72	Meiofauna in sea ice of the Weddell Sea (Antarctica). <i>Polar Biology</i> , 2001, 24, 724-728.	1.2	38

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73	Adaptation of Arctic and Antarctic ice metazoa to their habitat. <i>Zoology</i> , 2001, 104, 339-345.	1.2	17
74	Biogenic Particle Sources and Vertical Flux Patterns in the Seasonally Ice-Covered Greenland Sea. , 2001, , 69-79.		11
75	Implications of brine channel geometry and surface area for the interaction of sympagic organisms in Arctic sea ice. <i>Journal of Experimental Marine Biology and Ecology</i> , 2000, 243, 55-80.	1.5	144
76	Changes in photosynthetic carbon allocation in algal assemblages of Arctic sea ice with decreasing nutrient concentrations and irradiance. <i>Marine Ecology - Progress Series</i> , 2000, 202, 1-11.	1.9	42
77	Turbellaria (Archoophora: Acoela) from Antarctic sea ice endofauna - examination of their micromorphology. <i>Polar Biology</i> , 1999, 21, 410-416.	1.2	13
78	Integrated abundance and biomass of sympagic meiofauna in Arctic and Antarctic pack ice. <i>Polar Biology</i> , 1999, 22, 169-177.	1.2	70
79	Abundance, biomass and composition of the sea ice biota of the Greenland Sea pack ice. <i>Deep-Sea Research Part II: Topical Studies in Oceanography</i> , 1999, 46, 1457-1472.	1.4	97
80	Vertical fine structure of the biomass and composition of algal communities in Arctic pack ice. <i>Marine Biology</i> , 1999, 133, 745-754.	1.5	110
81	How are Antarctic planktonic microbial food webs and algal blooms affected by melting of sea ice? Microcosm simulations. <i>Aquatic Microbial Ecology</i> , 1999, 20, 183-201.	1.8	27
82	Determination of Arctic ice algal production with a new in situ incubation technique. <i>Marine Ecology - Progress Series</i> , 1999, 177, 15-26.	1.9	100
83	Potential effect of ice formation on Antarctic pelagic copepods: salinity induced mortality of <i>Calanus propinquus</i> and <i>Metridia gerlachei</i> in comparison to sympagic acoel turbellarians. <i>Polar Biology</i> , 1998, 20, 139-142.	1.2	16
84	Organism incorporation into newly forming Arctic sea ice in the Greenland Sea. <i>Journal of Plankton Research</i> , 1998, 20, 871-886.	1.8	119
85	Coupled ecosystems in the ice-covered Arctic ocean. <i>Elsevier Oceanography Series</i> , 1997, 62, 385-391.	0.1	2
86	Vertical distribution of bacteria in Arctic sea ice from the Barents and Laptev Seas. <i>Polar Biology</i> , 1997, 17, 448-454.	1.2	50
87	Flagellates and heliozoans in the Greenland Sea ice studied alive using light microscopy. <i>Polar Biology</i> , 1997, 17, 473-481.	1.2	71
88	Occurrence of an algal bloom under Arctic pack ice. <i>Marine Ecology - Progress Series</i> , 1996, 131, 301-305.	1.9	88
89	Life cycle strategy of the Antarctic calanoid copepod <i>Stephos longipes</i> . <i>Progress in Oceanography</i> , 1995, 36, 45-75.	3.2	54
90	Climate change and biological oceanography of the Arctic Ocean. <i>Philosophical Transactions of the Royal Society: Physical and Engineering Sciences</i> , 1995, 352, 277-286.	1.0	46

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91	The life cycle of <i>Stephos longipes</i> - an example for cryopelagic coupling in the Weddell Sea (Antarctica). <i>Marine Ecology - Progress Series</i> , 1993, 98, 255-262.	1.9	37
92	Significance of Picocyanobacteria in the Red Sea and the Gulf of Aden. <i>Botanica Marina</i> , 1992, 35, .	1.2	19
93	Sea ice: A cast technique to examine and analyze brine pockets and channel structure. <i>Limnology and Oceanography</i> , 1992, 37, 179-183.	3.1	109
94	Development of Arctic sea-ice organisms under graded snow cover. <i>Polar Research</i> , 1991, 10, 295-308.	1.6	53
95	Distribution of phytoplankton communities in relation to the large-scale hydrographical regime in the Fram Strait. <i>Marine Biology</i> , 1991, 111, 311-321.	1.5	69
96	Regional relationships between biological and hydrographical properties in the Weddell Gyre in late austral winter 1989. <i>Marine Chemistry</i> , 1991, 35, 325-336.	2.3	39
97	Development of Arctic sea-ice organisms under graded snow cover. <i>Polar Research</i> , 1991, 10, 295-308.	1.6	12
98	Concentration of live pico- and nanoplankton by means of tangential flow filtration. <i>Journal of Plankton Research</i> , 1989, 11, 1213-1221.	1.8	16
99	Picocyanobacteria in the high Arctic. <i>Marine Ecology - Progress Series</i> , 1989, 52, 99-101.	1.9	31