Toru Hirawake

List of Publications by Year
in descending order

84	1,731	304743	345221
papers	citations	22 h-index	36 g-index

86	86	86	2182
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	A Consumer's Guide to Satellite Remote Sensing of Multiple Phytoplankton Groups in the Global Ocean. Frontiers in Marine Science, 2017, 4, .	2.5	115
2	An assessment of phytoplankton primary productivity in the Arctic Ocean from satellite ocean color/in situ chlorophyllâ€a based models. Journal of Geophysical Research: Oceans, 2015, 120, 6508-6541.	2.6	90
3	Some operational uses of satellite remote sensing and marine GIS for sustainable fisheries and aquaculture. ICES Journal of Marine Science, 2011, 68, 687-695.	2.5	73
4	Enhancement/reduction of biological pump depends on ocean circulation in the sea-ice reduction regions of the Arctic Ocean. Journal of Oceanography, 2011, 67, 305-314.	1.7	73
5	Year-to-year changes of the mesozooplankton community in the Chukchi Sea during summers of 1991, 1992 and 2007, 2008. Polar Biology, 2011, 34, 1349-1360.	1.2	67
6	A phytoplankton absorption-based primary productivity model for remote sensing in the Southern Ocean. Polar Biology, 2011, 34, 291-302.	1.2	54
7	Satellite-measured temporal and spatial variability of the Tokachi River plume. Estuarine, Coastal and Shelf Science, 2008, 78, 237-249.	2.1	52
8	Water mass characteristics and their temporal changes in a biological hotspot in the southern Chukchi Sea. Biogeosciences, 2016, 13, 2563-2578.	3.3	52
9	Nutrient supply and biological response to windâ€induced mixing, inertial motion, internal waves, and currents in the northern <scp>C</scp>hukchi <scp>S</scp>ea. Journal of Geophysical Research: Oceans, 2015, 120, 1975-1992.	2.6	50
10	Interannual variability of dimethylsulfide in air and seawater and its atmospheric oxidation by-products (methanesulfonate and sulfate) at Dumont d'Urville, coastal Antarctica (1999â€“2003). Journal of Geophysical Research, 2007, 112, .	3.3	45
11	Inter-comparison of phytoplankton functional type phenology metrics derived from ocean color algorithms and Earth System Models. Remote Sensing of Environment, 2017, 190, 162-177.	11.0	45
12	Distribution shifts of marine taxa in the Pacific Arctic under contemporary climate changes. Diversity and Distributions, 2018, 24, 1583-1597.	4.1	41
13	Estimating the biodiversity of the East Antarctic shelf and oceanic zone for ecoregionalisation: Example of the ichthyofauna of the CEAMARC (Collaborative East Antarctic Marine Census) CAML surveys. Polar Science, 2010, 4, 115-133.	1.2	39
14	Effects of El NiÃ±oâ€“Southern Oscillation events on catches of Bigeye Tuna (Thunnus obesus) in the eastern Indian Ocean off Java. Fishery Bulletin, 2013, 111, 175-188.	0.2	36
15	Strategies of phytoplankton to perform effective photosynthesis in the North Water. Deep-Sea Research Part II: Topical Studies in Oceanography, 2002, 49, 5049-5061.	1.4	34
16	Satellite remote sensing of primary productivity in the Bering and Chukchi Seas using an absorption-based approach. ICES Journal of Marine Science, 2012, 69, 1194-1204.	2.5	34
17	Possible spreading of toxic Alexandrium tamarense blooms on the Chukchi Sea shelf with the inflow of Pacific summer water due to climatic warming. Harmful Algae, 2017, 61, 80-86.	4.8	31
18	Temporal and spatial patterns in the surface-water biomass of phytoplankton in the North Water. Deep-Sea Research Part II: Topical Studies in Oceanography, 2002, 49, 4947-4958.	1.4	28

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19	Changes in phytoplankton community structure during wind-induced fall bloom on the central Chukchi shelf. Polar Biology, 2018, 41, 1279-1295.	1.2	28
20	Hyperspectral optical discrimination of phytoplankton community structure in Funka Bay and its implications for ocean color remote sensing of diatoms. Remote Sensing of Environment, 2015, 159, 134-151.	11.0	26
21	The conservative behavior of dissolved organic carbon in surface waters of the southern Chukchi Sea, Arctic Ocean, during early summer. Scientific Reports, 2016, 6, 34123.	3.3	25
22	Improvement of an aquaculture site-selection model for Japanese kelp (Saccharinajaponica) in southern Hokkaido, Japan: an application for the impacts of climate events. ICES Journal of Marine Science, 2013, 70, 1460-1470.	2.5	23
23	Spatiotemporal variations in suitable areas for Japanese scallop aquaculture in the Dalian coastal area from 2003 to 2012. Aquaculture, 2014, 422-423, 172-183.	3.5	23
24	Predicting potential fishing zones of Japanese common squid (Todarodes pacificus) using remotely sensed images in coastal waters of south-western Hokkaido, Japan. International Journal of Remote Sensing, 2017, 38, 6129-6146.	2.9	23
25	Eddies revealed by SeaWiFS ocean color images in the Antarctic Divergence zone near 140Â°E. Geophysical Research Letters, 2003, 30, .	4.0	22
26	Size fraction and class composition of phytoplankton in the Antarctic marginal ice zone along the 140Â°E meridian during Februaryâ€“March 2003. Polar Science, 2008, 2, 109-120.	1.2	22
27	Interannual variability in the magnitude and timing of the spring bloom in the Oyashio region. Deep-Sea Research Part II: Topical Studies in Oceanography, 2010, 57, 1608-1617.	1.4	22
28	Predicting potential fishing zones for Pacific saury (Cololabis saira) with maximum entropy models and remotely sensed data. Fishery Bulletin, 2016, 114, 330-342.	0.2	21
29	Possible future scenarios in the gateways to the Arctic for Subarctic and Arctic marine systems: II. prey resources, food webs, fish, and fisheries. ICES Journal of Marine Science, 2021, 78, 3017-3045.	2.5	19
30	Seasonal Habitat Patterns of Japanese Common Squid (Todarodes Pacificus) Inferred from Satellite-Based Species Distribution Models. Remote Sensing, 2016, 8, 921.	4.0	18
31	Elucidating the potential squid habitat responses in the central North Pacific to the recent ENSO flavors. Hydrobiologia, 2016, 772, 215-227.	2.0	18
32	Multiple facets of marine biodiversity in the Pacific Arctic under future climate. Science of the Total Environment, 2020, 744, 140913.	8.0	18
33	A series of cyclonic eddies in the Antarctic Divergence off AdÃ©lie Coast. Journal of Geophysical Research, 2007, 112, .	3.3	17
34	The regional impacts of climate change on coastal environments and the aquaculture of Japanese scallops in northeast Asia: case studies from Dalian, China, and Funka Bay, Japan. International Journal of Remote Sensing, 2014, 35, 4422-4440.	2.9	17
35	Remote estimation of phytoplankton size fractions using the spectral shape of light absorption. Optics Express, 2015, 23, 10301.	3.4	17
36	Interannual variation of bigeye tuna (Thunnus obesus) hotspots in the eastern Indian Ocean off Java. International Journal of Remote Sensing, 2016, 37, 2087-2100.	2.9	17

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37	Characterization of the Water Masses in the Shelf Region of the Bering and Chukchi Seas With Fluorescent Organic Matter. Journal of Geophysical Research: Oceans, 2019, 124, 7545-7556.	2.6	17
38	Impact of spatiotemporal variability in phytoplankton size structure on benthic macrofaunal distribution in the Pacific Arctic. Deep-Sea Research Part II: Topical Studies in Oceanography, 2019, 162, 114-126.	1.4	17
39	Widespread distribution of allochthonous fluorescent dissolved organic matter in the intermediate water of the North Pacific. Progress in Oceanography, 2021, 191, 102510.	3.2	17
40	Recent change in benthic macrofaunal community composition in relation to physical forcing in the Pacific Arctic. Polar Biology, 2020, 43, 285-294.	1.2	16
41	Detection of Squid and Pacific Saury fishing vessels around Japan using VIIRS Day/Night Band image. Proceedings of the Asia-Pacific Advanced Network, 2015, 39, 28.	0.3	15
42	Changing Occurrences of Fall Blooms Associated With Variations in Phytoplankton Size Structure in the Pacific Arctic. Frontiers in Marine Science, 2020, 7, .	2.5	15
43	Spatial and geographical changes in the mesozooplankton community in the Bering and Chukchi Seas during the summers of 2007 and 2008. Polar Science, 2016, 10, 335-345.	1.2	13
44	GCOM-C Data Validation Plan for Land, Atmosphere, Ocean, and Cryosphere. Transactions of the Japan Society for Aeronautical and Space Sciences Aerospace Technology Japan, 2018, 16, 218-223.	0.2	13
45	A review: iron and nutrient supply in the subarctic Pacific and its impact on phytoplankton production. Journal of Oceanography, 2021, 77, 561-587.	1.7	13
46	Long-term variation of surface phytoplankton chlorophyllain the Southern Ocean during 1965â€“2002. Geophysical Research Letters, 2005, 32, .	4.0	11
47	Phytoplankton community composition and photosynthetic physiology in the Australian sector of the Southern Ocean during the austral summer of 2010/2011. Polar Biology, 2014, 37, 1563-1578.	1.2	11
48	Reproductive success of Pacific copepods in the Arctic Ocean and the possibility of changes in the Arctic ecosystem. Polar Biology, 2015, 38, 1075-1079.	1.2	11
49	Abundance, development stage, and size of decapod larvae through the Bering and Chukchi Seas during summer. Polar Biology, 2017, 40, 1805-1819.	1.2	11
50	Sediment-Associated Phytoplankton Release From the Seafloor in Response to Wind-Induced Barotropic Currents in the Bering Strait. Frontiers in Marine Science, 2019, 6, .	2.5	10
51	Seasonal phenology of four dominant copepods in the Pacific sector of the Arctic Ocean: Insights from statistical analyses of sediment trap data. Polar Science, 2019, 19, 94-111.	1.2	10
52	Distinctive spring phytoplankton bloom in the Bering Strait in 2018: A year of historically minimum sea ice extent. Deep-Sea Research Part II: Topical Studies in Oceanography, 2020, 181-182, 104905.	1.4	10
53	Title is missing!. Journal of Oceanography, 2000, 56, 245-260.	1.7	9
54	Implications of marine environment change on Japanese scallop (Mizuhopecten yessoensis) aquaculture suitability: a comparative study in FunkaÂand Mutsu Bays, Japan. Aquaculture Research, 2016, 47, 2164-2182.	1.8	9

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55	Differences in Rate and Direction of Shifts between Phytoplankton Size Structure and Sea Surface Temperature. Remote Sensing, 2017, 9, 222.	4.0	9
56	Water mass distribution in the northern Bering and southern Chukchi seas using light absorption of chromophoric dissolved organic matter. Progress in Oceanography, 2021, 197, 102641.	3.2	9
57	Iron and nutrient dynamics along the East Kamchatka Current, western Bering Sea Basin and Gulf of Anadyr. Progress in Oceanography, 2021, 198, 102662.	3.2	9
58	Light acclimation states of phytoplankton in the Southern Ocean, determined using photosynthetic pigment distribution. Marine Biology, 2010, 157, 2263-2278.	1.5	8
59	An attempt of dissemination of potential fishing zones prediction map of Japanese common squid in the coastal water, southwestern Hokkaido, Japan. Proceedings of the Asia-Pacific Advanced Network, 2013, 36, 132.	0.3	8
60	Impact of Oceanographic Environmental Shifts and Atmospheric Events on the Sustainable Development of Coastal Aquaculture: A Case Study of Kelp and Scallops in Southern Hokkaido, Japan. Sustainability, 2015, 7, 1263-1279.	3.2	8
61	Influence of hydrography on the spatiotemporal variability of phytoplankton assemblages and primary productivity in Funka Bay and the Tsugaru Strait. Estuarine, Coastal and Shelf Science, 2017, 188, 199-211.	2.1	8
62	Evidence of increased toxic Alexandrium tamarense dinoflagellate blooms in the eastern Bering Sea in the summers of 2004 and 2005. PLoS ONE, 2017, 12, e0188565.	2.5	8
63	Impacts of Mesoscale Eddies on Phytoplankton Size Structure. Geophysical Research Letters, 2019, 46, 13191-13198.	4.0	8
64	Effects of phytoplankton community composition and productivity on sea surface pCO2 variations in the Southern Ocean. Deep-Sea Research Part I: Oceanographic Research Papers, 2020, 160, 103263.	1.4	8
65	Response of Arctic biodiversity and ecosystem to environmental changes: Findings from the ArCS project. Polar Science, 2021, 27, 100533.	1.2	8
66	Development of a three-dimensional growth prediction model for the Japanese scallop in Funka Bay, Japan, using OGCM and MODIS. ICES Journal of Marine Science, 2015, 72, 2684-2699.	2.5	7
67	Detection of potential fishing zone for Pacific saury (Cololabis saira) using generalized additive model and remotely sensed data. IOP Conference Series: Earth and Environmental Science, 2017, 54, 012074.	0.3	7
68	Stratification in the northern Bering Sea in early summer of 2017 and 2018. Deep-Sea Research Part II: Topical Studies in Oceanography, 2020, 181-182, 104820.	1.4	7
69	Marine biodiversity refugia in a climateâ€sensitive subarctic shelf. Global Change Biology, 2021, 27, 3299-3311.	9.5	7
70	Observations of anticyclonic eddies in the western subarctic North Pacific. Journal of Oceanography, 2021, 77, 229-242.	1.7	7
71	Saroma-ko Lagoon Observations for sea ice Physico-chemistry and Ecosystems 2019 (SLOPE2019). Bulletin of Glaciological Research, 2020, 38, 1-12.	1.0	7
72	Seasonal pathways of the Tsugaru Warm Current revealed by high-frequency ocean radars. Journal of Oceanography, 2022, 78, 103-119.	1.7	5

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73	Variability in spring phytoplankton blooms associated with ice retreat timing in the Pacific Arctic from 2003â€“2019. PLoS ONE, 2021, 16, e0261418.	2.5	5
74	Using under-ice hyperspectral transmittance to determine land-fast sea-ice algal biomass in Saroma-ko Lagoon, Hokkaido, Japan. Annals of Glaciology, 2020, 61, 454-463.	1.4	4
75	East-west differences in population structure and vertical distribution of copepods along 47^|^deg;N in the subarctic Pacific in June 2009. Plankton and Benthos Research, 2013, 8, 116-123.	0.6	4
76	Diatoms contributing to new production in surface waters of the northern Bering and Chukchi Seas during summer with reference to water column stratification. Progress in Oceanography, 2021, 199, 102692.	3.2	3
77	Between-year comparison of interactions between environmental parameters and various plankton stocks in the northern Bering Sea during the summers of 2017 and 2018. Polar Science, 2021, 27, 100555.	1.2	2
78	Salinity regime of the northwestern Bering Sea shelf. Progress in Oceanography, 2021, 198, 102675.	3.2	2
79	A Protocol for Measuring the Absorption Coefficient of Phytoplankton using QFT (Quantitative Filter) Tj ETQq1 1 0.784314 rgBT /Ove	0.5	2
80	Performance of primary production algorithm using absorption coefficient of phytoplankton in the Pacific Arctic. Journal of Oceanography, 2022, 78, 311-335.	1.7	1
81	<title>In-water algorithms for estimation of chlorophyll a and primary production in the Arabian Sea and the eastern Indian Ocean</title>. , 1997, , .		0
82	Estimation of ocean primary production from satellite remote sensing. Oceanography in Japan, 2017, 26, 65-77.	0.5	0
83	Influences of size structure and post-bloom supply of phytoplankton on body size variations in a common Pacific Arctic bivalve (Macoma calcarea). Polar Science, 2021, 27, 100554.	1.2	0
84	Measurement of the Absorption Coefficient of Seawater. Review.. Oceanography in Japan, 2001, 10, 537-559.	0.5	0