

Nozomu Takeuchi

List of Publications by Year in descending order

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139
papers

4,393
citations

87843

38
h-index

138417

58
g-index

152
all docs

152
docs citations

152
times ranked

3480
citing authors

#	ARTICLE	IF	CITATIONS
1	Cryoconite “ From minerals and organic matter to bioengineered sediments on glacier's surfaces. <i>Science of the Total Environment</i> , 2022, 807, 150874.	3.9	29
2	Global Simulation of Snow Algal Blooming by Coupling a Land Surface and Newly Developed Snow Algae Models. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2022, 127, .	1.3	8
3	Spatial Distribution of Unique Biological Communities and Their Control Over Surface Reflectivity of the Stanley Glacier, Uganda. <i>Frontiers in Earth Science</i> , 2022, 10, .	0.8	2
4	Metagenomics reveals global-scale contrasts in nitrogen cycling and cyanobacterial light-harvesting mechanisms in glacier cryoconite. <i>Microbiome</i> , 2022, 10, 50.	4.9	10
5	Characteristics of Chemical Solutes and Mineral Dust in Ice of the Ablation Area of a Glacier in Tien Shan Mountains, Central Asia. <i>Frontiers in Earth Science</i> , 2022, 10, .	0.8	1
6	A hole in the nematosphere: tardigrades and rotifers dominate the cryoconite hole environment, whereas nematodes are missing. <i>Journal of Zoology</i> , 2021, 313, 18-36.	0.8	36
7	Bio-albedo effect on melting of glaciers and the ice sheet in the Arctic region and its modeling. <i>Journal of the Japanese Society of Snow and Ice</i> , 2021, 83, 51-66.	0.0	0
8	Studies on Atmosphere, Snow/Ice, and Glacial Microbes on Greenland Ice Sheet by SIGMA and relevant projects. <i>Journal of the Japanese Society of Snow and Ice</i> , 2021, 83, 169-191.	0.0	0
9	Review of the current polar ice sheet surface mass balance and its modelling: the 2020 summer edition. <i>Journal of the Japanese Society of Snow and Ice</i> , 2021, 83, 27-50.	0.0	0
10	Snow algae blooms are beneficial for microinvertebrates assemblages (Tardigrada and Rotifera) on seasonal snow patches in Japan. <i>Scientific Reports</i> , 2021, 11, 5973.	1.6	11
11	Spatial and Temporal Variations in Pigment and Species Compositions of Snow Algae on Mt. Tateyama in Toyama Prefecture, Japan. <i>Frontiers in Plant Science</i> , 2021, 12, 689119.	1.7	12
12	Physically Based Summer Temperature Reconstruction From Melt Layers in Ice Cores. <i>Earth and Space Science</i> , 2021, 8, e2020EA001590.	1.1	4
13	Unmasking photogranulation in decreasing glacial albedo and net autotrophic wastewater treatment. <i>Environmental Microbiology</i> , 2021, 23, 6391-6404.	1.8	10
14	Biological albedo reduction on ice sheets, glaciers, and snowfields. <i>Earth-Science Reviews</i> , 2021, 220, 103728.	4.0	30
15	Morphological and spectroscopic analysis of snow and glacier algae and their parasitic fungi on different glaciers of Svalbard. <i>Scientific Reports</i> , 2021, 11, 21785.	1.6	10
16	Redox stratification within cryoconite granules influences the nitrogen cycle on glaciers. <i>FEMS Microbiology Ecology</i> , 2020, 96, .	1.3	19
17	Influence of a Subducted Oceanic Ridge on the Distribution of Shallow VLFs in the Nankai Trough as Revealed by Moment Tensor Inversion and Cluster Analysis. <i>Geophysical Research Letters</i> , 2020, 47, e2020GL087244.	1.5	11
18	Glacio-environmental aspects recorded in two shallow ice cores drilled in 1980 at accumulation area of Khumbu Glacier of Mt. Everest in Nepal Himalayas. <i>Arctic, Antarctic, and Alpine Research</i> , 2020, 52, 605-616.	0.4	3

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19	Contrasting Patterns of Microbial Communities in Glacier Cryoconite of Nepali Himalaya and Greenland, Arctic. <i>Sustainability</i> , 2020, 12, 6477.	1.6	2
20	Morphological and physicochemical diversity of snow algae from Alaska. <i>Scientific Reports</i> , 2020, 10, 19167.	1.6	4
21	Variation in Albedo and Its Relationship With Surface Dust at Urumqi Glacier No. 1 in Tien Shan, China. <i>Frontiers in Earth Science</i> , 2020, 8, .	0.8	17
22	Inversion of Longer-Period OBS Waveforms for P Structures in the Oceanic Lithosphere and Asthenosphere. <i>Journal of Geophysical Research: Solid Earth</i> , 2020, 125, e2019JB018810.	1.4	6
23	Artificial and natural radionuclides in cryoconite as tracers of supraglacial dynamics: Insights from the Morteratsch glacier (Swiss Alps). <i>Catena</i> , 2020, 191, 104577.	2.2	18
24	Physically based model of the contribution of red snow algal cells to temporal changes in albedo in northwest Greenland. <i>Cryosphere</i> , 2020, 14, 2087-2101.	1.5	16
25	Melting at the Edge of a Slab in the Deepest Mantle. <i>Geophysical Research Letters</i> , 2019, 46, 8000-8008.	1.5	13
26	Annual layer counting using pollen grains of the Grigoriev ice core from the Tien Shan Mountains, central Asia. <i>Arctic, Antarctic, and Alpine Research</i> , 2019, 51, 299-312.	0.4	9
27	Numerical data of probabilistic 3D lithological map of Japanese crust. <i>Data in Brief</i> , 2019, 26, 104497.	0.5	1
28	Sharpness of the hemispherical boundary in the inner core beneath the northern Pacific. <i>Earth and Planetary Science Letters</i> , 2019, 527, 115796.	1.8	5
29	Taxonomic re-examination of <i>Chloromonas nivalis</i> (Volvocales, Chlorophyceae) zygotes from Japan and description of <i>C. muramotoi</i> sp. nov.. <i>PLoS ONE</i> , 2019, 14, e0210986.	1.1	49
30	Bacterial community changes with granule size in cryoconite and their susceptibility to exogenous nutrients on NW Greenland glaciers. <i>FEMS Microbiology Ecology</i> , 2019, 95, .	1.3	17
31	Topography of the western Pacific LLSVP constrained by S-wave multipathing. <i>Geophysical Journal International</i> , 2019, 218, 190-199.	1.0	6
32	Variations in Phototroph Communities on the Ablating Bare-Ice Surface of Glaciers on Br�ggerhalv�ya, Svalbard. <i>Frontiers in Earth Science</i> , 2019, 7, .	0.8	10
33	Stochastic modeling of 3-D compositional distribution in the crust with Bayesian inference and application to geoneutrino observation in Japan. <i>Physics of the Earth and Planetary Interiors</i> , 2019, 288, 37-57.	0.7	13
34	Spatial and seasonal changes in soluble ions and chlorophyll a concentration on the surface of snow pack in Mt. Tateyama, Japan. <i>Journal of the Japanese Society of Snow and Ice</i> , 2019, 81, 231-247.	0.0	1
35	A Sharp Structural Boundary in Lowermost Mantle Beneath Alaska Detected by Core Phase Differential Travel Times for the Anomalous South Sandwich Islands to Alaska Path. <i>Geophysical Research Letters</i> , 2018, 45, 176-184.	1.5	7
36	Demographic analysis of cyanobacteria based on the mutation rates estimated from an ancient ice core. <i>Heredity</i> , 2018, 120, 562-573.	1.2	19

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37	High Mitochondrial Diversity in a New Water Bear Species (Tardigrada: Eutardigrada) from Mountain Glaciers in Central Asia, with the Erection of a New Genus <i>Cryoconicus</i> . <i>Annales Zoologici</i> , 2018, 68, 179-201.	0.1	51
38	Influence of Seasonal Pumping on Groundwater Sources and Flow System, Nagaoka Plain, Japan. <i>Ground Water</i> , 2018, 56, 470-481.	0.7	1
39	Temporal variations of cryoconite holes and cryoconite coverage on the ablation ice surface of Qaanaaq Glacier in northwest Greenland. <i>Annals of Glaciology</i> , 2018, 59, 21-30.	2.8	40
40	Spatial variations of Sr ⁸⁷ /Nd isotopic ratios, mineralogical and elemental compositions of cryoconite in an Alaskan glacier. <i>Annals of Glaciology</i> , 2018, 59, 147-158.	2.8	0
41	Metagenomic analyses highlight the symbiotic association between the glacier stonefly <i>Andiperla willinki</i> and its bacterial gut community. <i>Environmental Microbiology</i> , 2018, 20, 4170-4183.	1.8	25
42	Bipolar dispersal of red-snow algae. <i>Nature Communications</i> , 2018, 9, 3094.	5.8	75
43	Observations and modelling of algal growth on a snowpack in north-western Greenland. <i>Cryosphere</i> , 2018, 12, 2147-2158.	1.5	23
44	Surface mass balance on Glacier No. 31 in the Suntar-Khayata Range, eastern Siberia, from 1951 to 2014. <i>Journal of Mountain Science</i> , 2017, 14, 501-512.	0.8	4
45	Biogeography of cryoconite forming cyanobacteria on polar and Asian glaciers. <i>Journal of Biogeography</i> , 2017, 44, 2849-2861.	1.4	46
46	A fluid-rich layer along the Nankai trough megathrust fault off the Kii Peninsula inferred from receiver function inversion. <i>Journal of Geophysical Research: Solid Earth</i> , 2017, 122, 6524-6537.	1.4	13
47	Heavy metal-polluted aerosols collected at a rural site, Northwest China. <i>Journal of Earth Science (Wuhan, China)</i> , 2017, 28, 535-544.	1.1	12
48	Determination of intrinsic attenuation in the oceanic lithosphere-asthenosphere system. <i>Science</i> , 2017, 358, 1593-1596.	6.0	24
49	A Firn Densification Process in the High Accumulation Dome of Southeastern Greenland. <i>Arctic, Antarctic, and Alpine Research</i> , 2017, 49, 13-27.	0.4	17
50	Bacterial Microbiota Associated with the Glacier Ice Worm Is Dominated by Both Worm-Specific and Glacier-Derived Facultative Lineages. <i>Microbes and Environments</i> , 2017, 32, 32-39.	0.7	12
51	Meteorological and glaciological observations at Suntar-Khayata Glacier No. 31, east Siberia, from 2012-2014. <i>Bulletin of Glaciological Research</i> , 2016, 34, 33-40.	0.5	9
52	Inter-Annual and Geographical Variations in the Extent of Bare Ice and Dark Ice on the Greenland Ice Sheet Derived from MODIS Satellite Images. <i>Frontiers in Earth Science</i> , 2016, 4, .	0.8	45
53	Variations in Sr and Nd Isotopic Ratios of Mineral Particles in Cryoconite in Western Greenland. <i>Frontiers in Earth Science</i> , 2016, 4, .	0.8	17
54	Taxon interactions control the distributions of cryoconite bacteria colonizing a High Arctic ice cap. <i>Molecular Ecology</i> , 2016, 25, 3752-3767.	2.0	67

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55	Abrupt and moderate climate changes in the mid-latitudes of Asia during the Holocene. <i>Journal of Glaciology</i> , 2016, 62, 411-439.	1.1	37
56	Non-linear waveform analysis for water-layer response and its application to high-frequency receiver function analysis using OBS array. <i>Geophysical Journal International</i> , 2016, 206, 1914-1920.	1.0	12
57	Differential Monte Carlo method for computing seismogram envelopes and their partial derivatives. <i>Journal of Geophysical Research: Solid Earth</i> , 2016, 121, 3428-3444.	1.4	13
58	Estimating high frequency energy radiation of large earthquakes by image deconvolution back-projection. <i>Earth and Planetary Science Letters</i> , 2016, 449, 155-163.	1.8	23
59	Chemistry of Supraglacial Ponds in the Debris-Covered Area of Lirung Glacier in Central Nepal Himalayas. <i>Aquatic Geochemistry</i> , 2016, 22, 35-64.	1.5	6
60	Snow algal communities on glaciers in the Suntar-Khayata Mountain Range in eastern Siberia, Russia. <i>Polar Science</i> , 2016, 10, 227-238.	0.5	22
61	Microbial community variation in cryoconite granules on Qaanaaq Glacier, NW Greenland. <i>FEMS Microbiology Ecology</i> , 2016, 92, fiw127.	1.3	58
62	Cryoconite. <i>Progress in Physical Geography</i> , 2016, 40, 66-111.	1.4	160
63	Temporal changes in snow algal abundance on surface snow in Tohkamachi, Japan. <i>Bulletin of Glaciological Research</i> , 2016, 34, 21-31.	0.5	13
64	Experimental evidence that microbial activity lowers the albedo of glaciers. <i>Geochemical Perspectives Letters</i> , 2016, , 106-116.	1.0	43
65	Twentieth century dust lows and the weakening of the westerly winds over the Tibetan Plateau. <i>Geophysical Research Letters</i> , 2015, 42, 2434-2441.	1.5	39
66	The Effect of Impurities on the Surface Melt of a Glacier in the Suntar-Khayata Mountain Range, Russian Siberia. <i>Frontiers in Earth Science</i> , 2015, 3, .	0.8	32
67	Validations and descriptions of European syntaxa of vegetation dominated by lichens, bryophytes and algae. <i>Lazaroa</i> , 2015, 36, .	0.8	7
68	Census of bacterial microbiota associated with the glacier ice worm <i>Mesenchytraeus solifugus</i> . <i>FEMS Microbiology Ecology</i> , 2015, 91, .	1.3	35
69	What animals can live in cryoconite holes? A faunal review. <i>Journal of Zoology</i> , 2015, 295, 159-169.	0.8	75
70	Mineralogical composition of cryoconite on glaciers in northwest Greenland. <i>Bulletin of Glaciological Research</i> , 2014, 32, 107-114.	0.5	19
71	Spatial variations in impurities (cryoconite) on glaciers in northwest Greenland. <i>Bulletin of Glaciological Research</i> , 2014, 32, 85-94.	0.5	43
72	Intricate heterogeneous structures of the top 300 km of the Earth's inner core inferred from global array data: II. Frequency dependence of inner core attenuation and its implication. <i>Earth and Planetary Science Letters</i> , 2014, 405, 231-243.	1.8	12

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73	The disappearance of glaciers in the Tien Shan Mountains in Central Asia at the end of Pleistocene. <i>Quaternary Science Reviews</i> , 2014, 103, 26-33.	1.4	35
74	Intricate heterogeneous structures of the top 300km of the Earth's inner core inferred from global array data: I. Regional 1D attenuation and velocity profiles. <i>Physics of the Earth and Planetary Interiors</i> , 2014, 230, 15-27.	0.7	26
75	Geographical variations in Sr and Nd isotopic ratios of cryoconite on Asian glaciers. <i>Environmental Research Letters</i> , 2014, 9, 045007.	2.2	24
76	The nitrogen cycle in cryoconites: naturally occurring nitrification and denitrification granules on a glacier. <i>Environmental Microbiology</i> , 2014, 16, 3250-3262.	1.8	72
77	Upper mantle tomography in the northwestern Pacific region using triplicated <i>P</i> waves. <i>Journal of Geophysical Research: Solid Earth</i> , 2014, 119, 7667-7685.	1.4	33
78	Field activities of the "Snow Impurity and Glacial Microbe effects on abrupt warming in the Arctic" (SIGMA) Project in Greenland in 2011-2013. <i>Bulletin of Glaciological Research</i> , 2014, 32, 3-20.	0.5	41
79	On the possibility of lunar core phase detection using new seismometers for soft-landers in future lunar missions. <i>Planetary and Space Science</i> , 2013, 81, 18-31.	0.9	11
80	Distribution of antibiotic resistance genes in glacier environments. <i>Environmental Microbiology Reports</i> , 2013, 5, 127-134.	1.0	161
81	Seasonal and altitudinal variations in snow algal communities on an Alaskan glacier (Gulkana glacier) Tj ETQq1 1 0.784314 rgBT /Over	2.2	57
82	DNA analysis for section identification of individual <i>Pinus</i> pollen grains from Belukha glacier, Altai Mountains, Russia. <i>Environmental Research Letters</i> , 2013, 8, 014032.	2.2	11
83	High-velocity anomaly adjacent to the western edge of the Pacific low-velocity province. <i>Geophysical Journal International</i> , 2013, 192, 1-6.	1.0	11
84	Can a sheet-like low-velocity region form an elongated Large Igneous Province?. <i>Geochemistry, Geophysics, Geosystems</i> , 2013, 14, 3053-3066.	1.0	2
85	Detection of ridge-like structures in the Pacific Large Low-Shear-Velocity Province. <i>Earth and Planetary Science Letters</i> , 2012, 319-320, 55-64.	1.8	14
86	Reevaluation of the reconstruction of summer temperatures from melt features in Belukha ice cores, Siberian Altai. <i>Journal of Geophysical Research</i> , 2011, 116, .	3.3	13
87	Evidence for propagation of cold-adapted yeast in an ice core from a Siberian Altai glacier. <i>Journal of Geophysical Research</i> , 2011, 116, .	3.3	13
88	Microscopic analyses of insoluble particles in an ice core of ÅcerÅ¼mqi Glacier No. 1: Quantification of mineral and organic particles. <i>Journal of Earth Science (Wuhan, China)</i> , 2011, 22, 431-440.	1.1	6
89	Establishing the Timing of Chemical Deposition Events on Belukha Glacier, Altai Mountains, Russia, Using Pollen Analysis. <i>Arctic, Antarctic, and Alpine Research</i> , 2011, 43, 66-72.	0.4	13
90	Favorable climatic regime for maintaining the present-day geometry of the Gregoriev Glacier, Inner Tien Shan. <i>Cryosphere</i> , 2011, 5, 539-549.	1.5	48

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109	Estimation of net accumulation rate at a Patagonian glacier by ice core analyses using snow algae. <i>Global and Planetary Change</i> , 2007, 59, 236-244.	1.6	20
110	Possible evidence for a double crossing phase transition in D ϵ^3 beneath Central America from inversion of seismic waveforms. <i>Geophysical Research Letters</i> , 2007, 34, .	1.5	35
111	Chemical characteristics of pond waters within the debris area of Lirung Glacier in Nepal Himalaya. <i>Journal of Limnology</i> , 2007, 66, 71.	0.3	16
112	Whole mantle SH velocity model constrained by waveform inversion based on three-dimensional Born kernels. <i>Geophysical Journal International</i> , 2007, 169, 1153-1163.	1.0	55
113	Thirty-year history of glacier melting in the Nepal Himalayas. <i>Journal of Geophysical Research</i> , 2006, 111, .	3.3	23
114	A snow algal community on Akkem glacier in the Russian Altai mountains. <i>Annals of Glaciology</i> , 2006, 43, 378-384.	2.8	50
115	Snow algae in a Himalayan ice core: new environmental markers for ice-core analyses and their correlation with summer mass balance. <i>Annals of Glaciology</i> , 2006, 43, 148-153.	2.8	16
116	Complete synthetic seismograms up to 2 Hz for transversely isotropic spherically symmetric media. <i>Geophysical Journal International</i> , 2006, 164, 411-424.	1.0	100
117	Concentrations and source variations of n-alkanes in a 21 m ice core and snow samples at Belukha glacier, Russian Altai mountains. <i>Annals of Glaciology</i> , 2006, 43, 142-147.	2.8	16
118	Climatic and atmospheric circulation pattern variability from ice-core isotope/geochemistry records (Altai, Tien Shan and Tibet). <i>Annals of Glaciology</i> , 2006, 43, 49-60.	2.8	130
119	Spatial distribution and abundance of red snow algae on the Harding Icefield, Alaska derived from a satellite image. <i>Geophysical Research Letters</i> , 2006, 33, .	1.5	77
120	Stable-isotope time series and precipitation origin from firn-core and snow samples, Altai glaciers, Siberia. <i>Journal of Glaciology</i> , 2005, 51, 637-654.	1.1	47
121	Finite boundary perturbation theory for the elastic equation of motion. <i>Geophysical Journal International</i> , 2005, 160, 1044-1058.	1.0	10
122	Dating of seasonal snow/firn accumulation layers using pollen analysis. <i>Journal of Glaciology</i> , 2005, 51, 483-490.	1.1	39
123	An Observation of PKJKP: Inferences on Inner Core Shear Properties. <i>Science</i> , 2005, 308, 1453-1455.	6.0	58
124	3D effects of sharp boundaries at the borders of the African and Pacific Superplumes: Observation and modeling. <i>Earth and Planetary Science Letters</i> , 2005, 233, 137-153.	1.8	116
125	A Snow Algal Community on Tyndall Glacier in the Southern Patagonia Icefield, Chile. <i>Arctic, Antarctic, and Alpine Research</i> , 2004, 36, 92-99.	0.4	60
126	Improvement of seismological earth models by using data weighting in waveform inversion. <i>Geophysical Journal International</i> , 2004, 158, 681-694.	1.0	4

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127	Accurate numerical methods for solving the elastic equation of motion for arbitrary source locations. <i>Geophysical Journal International</i> , 2003, 154, 852-866.	1.0	11
128	Application of Distributed Object Technology to Seismic Waveform Distribution. <i>Seismological Research Letters</i> , 2002, 73, 166-172.	0.8	2
129	Optical characteristics of cryoconite (surface dust) on glaciers: the relationship between light absorbency and the property of organic matter contained in the cryoconite. <i>Annals of Glaciology</i> , 2002, 34, 409-414.	2.8	112
130	Glacier Ecosystem and Biological ICE-Core Analysis. Series of the Centro De Estudios Científicos De Santiago, 2002, , 1-8.	0.2	5
131	Structure, Formation, and Darkening Process of Albedo-reducing Material (Cryoconite) on a Himalayan Glacier: A Granular Algal Mat Growing on the Glacier. <i>Arctic, Antarctic, and Alpine Research</i> , 2001, 33, 115-122.	0.4	192
132	The altitudinal distribution of snow algae on an Alaska glacier (Gulkana Glacier in the Alaska Range). <i>Hydrological Processes</i> , 2001, 15, 3447-3459.	1.1	91
133	Structure, Formation, and Darkening Process of Albedo-Reducing Material (Cryoconite) on a Himalayan Glacier: A Granular Algal Mat Growing on the Glacier. <i>Arctic, Antarctic, and Alpine Research</i> , 2001, 33, 115.	0.4	136
134	Himalayan ice-core dating with snow algae. <i>Journal of Glaciology</i> , 2000, 46, 335-340.	1.1	49
135	The COSY Project: verification of global seismic modeling algorithms. <i>Physics of the Earth and Planetary Interiors</i> , 2000, 119, 3-23.	0.7	38
136	Complete synthetic seismograms for 3-D heterogeneous Earth models computed using modified DSM operators and their applicability to inversion for Earth structure. <i>Physics of the Earth and Planetary Interiors</i> , 2000, 119, 25-36.	0.7	48
137	Comparison of Accuracy and Efficiency of Time-domain Schemes for Calculating Synthetic Seismograms. <i>Physics of the Earth and Planetary Interiors</i> , 2000, 119, 75-97.	0.7	27
138	Optimally accurate second order time-domain finite difference scheme for computing synthetic seismograms in 2-D and 3-D media. <i>Physics of the Earth and Planetary Interiors</i> , 2000, 119, 99-131.	0.7	90
139	DSM complete synthetic seismograms: P-SV, spherically symmetric, case. <i>Geophysical Research Letters</i> , 1994, 21, 1663-1666.	1.5	38