The World Ocean Silica Cycle

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Citation Report

ARTICLE

IF CITATIONS

Silica Mass-Balance and Retention in the Riverine and Estuarine Scheldt Tidal System (Belgium/The) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50

2	Enhanced chemical weathering as a geoengineering strategy to reduce atmospheric carbon dioxide, supply nutrients, and mitigate ocean acidification. Reviews of Geophysics, 2013, 51, 113-149.	9.0	323
3	Geoengineering impact of open ocean dissolution of olivine on atmospheric CO ₂ , surface ocean pH and marine biology. Environmental Research Letters, 2013, 8, 014009.	2.2	89
4	Riverine silicon isotope variations in glaciated basaltic terrains: Implications for the Si delivery to the ocean over glacial–interglacial intervals. Earth and Planetary Science Letters, 2013, 369-370, 211-219.	1.8	50
5	The silicon isotopic composition of the Ganges and its tributaries. Earth and Planetary Science Letters, 2013, 381, 21-30.	1.8	38
6	The riverine silicon isotope composition of the Amazon Basin. Geochimica Et Cosmochimica Acta, 2013, 121, 637-651.	1.6	60
7	Transport of Dissolved Si from Soil to River: A Conceptual Mechanistic Model. Silicon, 2013, 5, 115-133.	1.8	17
8	Special Issue IBIS 2011: The Biogeochemical Silica Cycle From Land to Ocean. Silicon, 2013, 5, 1-2.	1.8	Ο
9	Spatio-temporal variability in benthic silica cycling in two macrotidal estuaries: Causes and consequences for local to global studies. Estuarine, Coastal and Shelf Science, 2013, 119, 31-43.	0.9	19
10	Hydrodynamic interactions at low Reynolds number: an overlooked mechanism favouring diatom encounters. Journal of Plankton Research, 2013, 35, 914-918.	0.8	14
11	Direct electrolytic dissolution of silicate minerals for air CO ₂ mitigation and carbon-negative H ₂ production. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 10095-10100.	3.3	61
12	Combined oxygen and silicon isotope analysis of diatom silica from a deglacial subarctic Pacific record. Journal of Quaternary Science, 2013, 28, 571-581.	1.1	20
13	Temperatureâ€dependent remineralization in a warming ocean increases surface pCO ₂ through changes in marine ecosystem composition. Global Biogeochemical Cycles, 2013, 27, 1214-1225.	1.9	44
14	On the effects of circulation, sediment resuspension and biological incorporation by diatoms in an ocean model of aluminium*. Biogeosciences, 2014, 11, 3757-3779.	1.3	29
15	Seasonal evolution of net and regenerated silica production around a natural Fe-fertilized area in the Southern Ocean estimated with Si isotopic approaches. Biogeosciences, 2014, 11, 5827-5846.	1.3	40
16	Exploring interacting influences on the silicon isotopic composition of the surface ocean: a case study from the Kerguelen Plateau. Biogeosciences, 2014, 11, 1371-1391.	1.3	10
17	Determination of plant silicon content with near infrared reflectance spectroscopy. Frontiers in Plant Science, 2014, 5, 496.	1.7	23
18	Sponge Spicules, Silicification, and Sequence Stratigraphy. Journal of Sedimentary Research, 2014, 84, 1107-1119.	0.8	6

#	Article	IF	CITATIONS
19	DECLINE OF SILICEOUS SPONGES AND SPICULE MINIATURIZATION INDUCED BY MARINE PRODUCTIVITY COLLAPSE AND EXPANDING ANOXIA DURING THE PERMIAN-TRIASSIC CRISIS IN SOUTH CHINA. Palaios, 2014, 28, 664-679.	0.6	25
20	Responses of summer phytoplankton community to drastic environmental changes in the Changjiang (Yangtze River) estuary during the past 50 years. Water Research, 2014, 54, 1-11.	5.3	215
21	Effects of growth and dissolution on the fractionation of silicon isotopes by estuarine diatoms. Geochimica Et Cosmochimica Acta, 2014, 130, 156-166.	1.6	35
22	High temperature silicon isotope geochemistry. Lithos, 2014, 190-191, 500-519.	0.6	80
23	Silica fluxes in the inner Elbe Estuary, Germany. Biogeochemistry, 2014, 118, 389-412.	1.7	13
24	Lack of steady-state in the global biogeochemical Si cycle: emerging evidence from lake Si sequestration. Biogeochemistry, 2014, 117, 255-277.	1.7	61
25	Using silicon isotopes to understand the role of the Southern Ocean in modern and ancient biogeochemistry and climate. Quaternary Science Reviews, 2014, 89, 13-26.	1.4	61
26	Assessment of the 1% Na2CO3 technique to quantify the phytolith pool. Geoderma, 2014, 216, 30-35.	2.3	57
27	Isolated spicules of Demospongiae from Mt. Duello (Eocene, Lessini Mts., northern Italy): preservation, taxonomy, and depositional environment. Facies, 2014, 60, 883-904.	0.7	14
29	Are microcosm volume and sample pre-filtration relevant to evaluate phytoplankton growth?. Journal of Experimental Marine Biology and Ecology, 2014, 461, 323-330.	0.7	25
30	Amorphous Silica Transport in the Ganges Basin: Implications for Si Delivery to the Oceans. Procedia Earth and Planetary Science, 2014, 10, 271-274.	0.6	22
31	The Southern Ocean silica cycle. Comptes Rendus - Geoscience, 2014, 346, 279-286.	0.4	30
32	Bioinspired Insights into Silicic Acid Stabilization Mechanisms: The Dominant Role of Polyethylene Glycol-Induced Hydrogen Bonding. Journal of the American Chemical Society, 2014, 136, 4236-4244.	6.6	75
33	The molecular life of diatoms. Marine Genomics, 2014, 16, 1-3.	0.4	1
34	A sequence-stratigraphic framework for the Upper Devonian Woodford Shale, Permian Basin, west Texas. AAPG Bulletin, 2014, 98, 23-47.	0.7	42
35	Early diagenetic quartz formation at a deep iron oxidation front in the Eastern Equatorial Pacific – A modern analogue for banded iron/chert formations?. Geochimica Et Cosmochimica Acta, 2014, 137, 188-207.	1.6	20
36	Rapid fluctuations in mid-latitude siliceous plankton production during the Middle Eocene Climatic Optimum (ODP Site 1051, western North Atlantic). Marine Micropaleontology, 2014, 106, 110-129.	0.5	38
37	Using the natural spatial pattern of marine productivity in the Subarctic North Pacific to evaluate paleoproductivity proxies. Paleoceanography, 2014, 29, 438-453.	3.0	21

#	Article	IF	CITATIONS
38	Silica burial enhanced by iron limitation in oceanic upwelling margins. Nature Geoscience, 2014, 7, 541-546.	5.4	40
39	Salt marshes in the silica budget of the North Sea. Continental Shelf Research, 2014, 82, 31-36.	0.9	1
40	Large and local-scale influences on physical and chemical characteristics of coastal waters of Western Europe during winter. Journal of Marine Systems, 2014, 139, 79-90.	0.9	47
41	Deconvolving the controls on the deep ocean's silicon stable isotope distribution. Earth and Planetary Science Letters, 2014, 398, 66-76.	1.8	37
42	Biogenic silica dissolution in diatom aggregates: insights from reactive transport modelling. Marine Ecology - Progress Series, 2014, 517, 35-49.	0.9	2
43	The Southern Ocean silicon trap: Dataâ€constrained estimates of regenerated silicic acid, trapping efficiencies, and global transport paths. Journal of Geophysical Research: Oceans, 2014, 119, 313-331.	1.0	56
44	Differential remineralization of major and trace elements in sinking diatoms. Limnology and Oceanography, 2014, 59, 689-704.	1.6	84
45	Salt marsh tidal exchange increases residence time of silica in estuaries. Limnology and Oceanography, 2014, 59, 1203-1212.	1.6	21
46	Silicon pools in human impacted soils of temperate zones. Global Biogeochemical Cycles, 2015, 29, 1439-1450.	1.9	62
47	Landscape cultivation alters δ30Si signature in terrestrial ecosystems. Scientific Reports, 2015, 5, 7732.	1.6	18
48	The abundance of ²⁶ Al-rich planetary systems in the Galaxy. Astronomy and Astrophysics, 2015, 582, A26.	2.1	38
49	Controls on biogenic silica burial in the Southern Ocean. Global Biogeochemical Cycles, 2015, 29, 1599-1616.	1.9	35
50	Biogenic Si analysis in volcanically imprinted lacustrine systems: the case of Lake Rutundu (Mt. Kenya). Biogeochemistry, 2015, 125, 243-259.	1.7	3
52	Silicon isotopic chemistry in the <scp>C</scp> hangjiang <scp>E</scp> stuary and coastal regions: Impacts of physical and biogeochemical processes on the transport of riverine dissolved silica. Journal of Geophysical Research: Oceans, 2015, 120, 6943-6957.	1.0	21
53	The silicon isotope composition of <i>Ethmodiscus rex</i> laminated diatom mats from the tropical West Pacific: Implications for silicate cycling during the Last Glacial Maximum. Paleoceanography, 2015, 30, 803-823.	3.0	27
54	Seasonal variations, origin, and fate of settling diatoms in the Southern Ocean tracked by silicon isotope records in deep sediment traps. Global Biogeochemical Cycles, 2015, 29, 1495-1510.	1.9	29
55	Global biogeochemical impacts of phytoplankton: a traitâ€based perspective. Journal of Ecology, 2015, 103, 1384-1396.	1.9	149
56	Amorphous silica mobilization by interâ€rill erosion: insights from rainfall experiments. Earth Surface Processes and Landforms, 2015, 40, 1171-1181.	1.2	8

#	Article	IF	CITATIONS
57	Latitudinal and temporal distributions of diatom populations in the pelagic waters of the Subantarctic and Polar Frontal zones of the Southern Ocean and their role in the biological pump. Biogeosciences, 2015, 12, 5309-5337.	1.3	36
58	PISCES-v2: an ocean biogeochemical model for carbon and ecosystem studies. Geoscientific Model Development, 2015, 8, 2465-2513.	1.3	422
59	Technical Note: Silica stable isotopes and silicification in a carnivorous sponge <i>Asbestopluma</i> sp Biogeosciences, 2015, 12, 3489-3498.	1.3	10
60	Silicon isotope fractionation during silica precipitation from hot-spring waters: Evidence from the Geysir geothermal field, Iceland. Geochimica Et Cosmochimica Acta, 2015, 164, 403-427.	1.6	55
61	Silica cycling over geologic time. Nature Geoscience, 2015, 8, 431-432.	5.4	48
62	Dynamics of biogenic silica dissolution in Jiaozhou Bay, western Yellow Sea. Marine Chemistry, 2015, 174, 58-66.	0.9	19
63	Alkalineâ€extractable silicon from land to ocean: A challenge for biogenic silicon determination. Limnology and Oceanography: Methods, 2015, 13, 329-344.	1.0	40
64	Distal and proximal controls on the silicon stable isotope signature of North Atlantic Deep Water. Earth and Planetary Science Letters, 2015, 432, 342-353.	1.8	17
65	Rethinking the marine carbon cycle: Factoring in the multifarious lifestyles of microbes. Science, 2015, 347, 1257594.	6.0	679
66	Silica diagenesis and benthic fluxes in the Arctic Ocean. Marine Chemistry, 2015, 171, 1-9.	0.9	34
67	High concentrations of amorphous, biogenic Si (BSi) in the sediment of a small high-latitude lake: implications for biogeochemical Si cycling and for the use of BSi as a paleoproxy. Aquatic Sciences, 2015, 77, 293-305.	0.6	10
68	The Role of Vegetation in the Okavango Delta Silica Sink. Wetlands, 2015, 35, 171-181.	0.7	14
69	Diversity and distribution of unicellular opisthokonts along the <scp>E</scp> uropean coast analysed using highâ€ŧhroughput sequencing. Environmental Microbiology, 2015, 17, 3195-3207.	1.8	52
70	Seasonal dynamics of the biogenic silica cycle in surface sediments of the Helgoland Mud Area (southern North Sea). Continental Shelf Research, 2015, 107, 103-114.	0.9	18
71	Modelling the movement of biogenic silica from terrestrial vegetation to riverine systems within the continental USA. Ecological Modelling, 2015, 312, 104-113.	1.2	6
72	Weathering and vegetation controls on nickel isotope fractionation in surface ultramafic environments (Albania). Earth and Planetary Science Letters, 2015, 423, 24-35.	1.8	76
73	Dissolved silicon and its isotopes in the water column of the Bay of Bengal: Internal cycling versus lateral transport. Geochimica Et Cosmochimica Acta, 2015, 151, 172-191.	1.6	20
74	Seasonal dynamics in diatom and particulate export fluxes to the deep sea in the Australian sector of the southern Antarctic Zone. Journal of Marine Systems, 2015, 142, 62-74.	0.9	36

#	Article	IF	CITATIONS
76	Does elevated CO2 alter silica uptake in trees?. Frontiers in Plant Science, 2014, 5, 793.	1.7	20
77	Energy Landscape of Water and Ethanol on Silica Surfaces. Journal of Physical Chemistry C, 2015, 119, 15428-15433.	1.5	32
78	Late Holocene precipitation variability recorded in the sediments of ReloncavÃ-Fjord (41°S, 72°W), Chile. Quaternary Research, 2015, 84, 21-36.	1.0	13
79	Dissolved aluminium in the ocean conveyor of the West Atlantic Ocean: Effects of the biological cycle, scavenging, sediment resuspension and hydrography. Marine Chemistry, 2015, 177, 69-86.	0.9	53
80	Biogenic sediment regimes in the Neogene equatorial Pacific, IODP Site U1338: Burial, production, and diatom community. Palaeogeography, Palaeoclimatology, Palaeoecology, 2015, 433, 106-128.	1.0	41
81	Effects of submarine power transmission cables on a glass sponge reef and associated megafaunal community. Marine Environmental Research, 2015, 107, 50-60.	1.1	31
82	Silicon isotope composition of dissolved silica in surface waters of the Elbe Estuary and its tidal marshes. Biogeochemistry, 2015, 124, 61-79.	1.7	4
83	Can Organisms Regulate Global Biogeochemical Cycles?. Ecosystems, 2015, 18, 813-825.	1.6	4
84	Continental erosion and the Cenozoic rise of marine diatoms. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 4239-4244.	3.3	76
85	Astronomical forcing of a Middle Permian chert sequence in Chaohu, South China. Earth and Planetary Science Letters, 2015, 422, 206-221.	1.8	57
86	Enhanced dissolution of basaltic glass in brackish waters: Impact on biogeochemical cycles. Earth and Planetary Science Letters, 2015, 417, 1-8.	1.8	25
87	Coupling of the distribution of silicon isotopes to the meridional overturning circulation of the North Atlantic Ocean. Deep-Sea Research Part II: Topical Studies in Oceanography, 2015, 116, 79-88.	0.6	32
88	Census of seafloor sediments in the world's ocean. Geology, 2015, 43, 795-798.	2.0	110
89	Evidence of intensified biogenic silica recycling in the Black Sea afterÂ1970. Estuarine, Coastal and Shelf Science, 2015, 164, 335-339.	0.9	0
90	Climate variability drives plankton community composition changes: the 2010–2011 El Niño to La Niña transition around Australia. Journal of Plankton Research, 2015, 37, 966-984.	0.8	20
91	The Importance of Siliceous Radiolarian-Bearing Mudstones in the Formation of Sediment-Hosted Zn-Pb A± Ba Mineralization in the Selwyn Basin, Yukon, Canada. Economic Geology, 2015, 110, 2139-2146.	1.8	16
92	The influence of terrigenous particulate material dissolution on ocean chemistry and global element cycles. Chemical Geology, 2015, 395, 50-66.	1.4	170
93	Rapid transport and high accumulation of amorphous silica in the Congo deep-sea fan: A preliminary budget. Journal of Marine Systems, 2015, 141, 71-79.	0.9	14

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#	Article	IF	CITATIONS
94	Evidence for a Regulatory Role of Diatom Silicon Transporters in Cellular Silicon Responses. Eukaryotic Cell, 2015, 14, 29-40.	3.4	97
95	Controls of DSi in streams and reservoirs along the Kaveri River, South India. Science of the Total Environment, 2015, 502, 103-113.	3.9	17
96	Diatom Phenology in the Southern Ocean: Mean Patterns, Trends and the Role of Climate Oscillations. Remote Sensing, 2016, 8, 420.	1.8	35
97	Diatoms Si uptake capacity drives carbon export in coastal upwelling systems. Biogeosciences, 2016, 13, 4099-4109.	1.3	19
98	Quantifying the Cenozoic marine diatom deposition history: links to the C and Si cycles. Biogeosciences, 2016, 13, 6003-6014.	1.3	45
99	Unveiling the Si cycle using isotopes in an iron-fertilized zone of the Southern Ocean: from mixed-layer supply to export. Biogeosciences, 2016, 13, 6049-6066.	1.3	9
101	Evaluation of NorESM-OC (versionsÂ1 and 1.2), the ocean carbon-cycle stand-alone configuration of the Norwegian Earth System Model (NorESM1). Geoscientific Model Development, 2016, 9, 2589-2622.	1.3	57
102	Insights into the transfer of silicon isotopes into the sediment record. Biogeosciences, 2016, 13, 147-157.	1.3	25
103	Estimated storage of amorphous silica in soils of the circumâ€Arctic tundra region. Global Biogeochemical Cycles, 2016, 30, 479-500.	1.9	15
104	Soil processes drive the biological silicon feedback loop. Functional Ecology, 2016, 30, 1298-1310.	1.7	135
106	Seawater residence times of some elements of geochemical interest and the salinity of the oceans. Bulletin - Societie Geologique De France, 2016, 187, 245-260.	0.9	27
107	Human appropriation of biogenic silicon – the increasing role of agriculture. Functional Ecology, 2016, 30, 1331-1339.	1.7	72
108	As time goes by—Spatiotemporal changes of biogenic Si pools in initial soils of an artificial catchment in NE Germany. Applied Soil Ecology, 2016, 105, 9-16.	2.1	21
109	Silicon in aquatic vegetation. Functional Ecology, 2016, 30, 1323-1330.	1.7	35
110	Insights into global diatom distribution and diversity in the world's ocean. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E1516-25.	3.3	561
111	The continental Si cycle and its impact on the ocean Si isotope budget. Chemical Geology, 2016, 425, 12-36.	1.4	188
112	Oligotrophic lagoons of the <scp>S</scp> outh <scp>P</scp> acific Ocean are home to a surprising number of novel eukaryotic microorganisms. Environmental Microbiology, 2016, 18, 4549-4563.	1.8	23
113	Silicon consumption in two shallow-water sponges with contrasting biological features. Limnology and Oceanography, 2016, 61, 2139-2150.	1.6	16

ARTICLE IF CITATIONS # A silicon depleted North Atlantic since the Palaeogene: Evidence from sponge and radiolarian silicon 1.8 40 114 isotopes. Earth and Planetary Science Letters, 2016, 453, 67-77. Distribution and budget of dissolved and biogenic silica in the Bohai Sea and Yellow Sea. 1.7 Biogeochemistry, 2016, 130, 85-101. Stable silicon isotope signatures of marine pore waters †Biogenic opal dissolution versus authigenic 116 1.6 80 clay mineral formation. Geochimica Et Cosmochimica Acta, 2016, 191, 102-117. Transformation of silicon in a sandy beach ecosystem: Insights from stable silicon isotopes from 1.4 fresh and saline groundwaters. Chemical Geology, 2016, 440, 207-218. High export of dissolved silica from the Greenland Ice Sheet. Geophysical Research Letters, 2016, 43, 118 1.589 9173-9182. Silicon and nitrogen cycling in the upwelling area off Peru: A dual isotope approach. Limnology and Oceanography, 2016, 61, 1661-1676. 1.6 The role of oxygen conditions in the microbial dissolution of biogenic silica under brackish 121 1.7 9 conditions. Biogeochemistry, 2016, 129, 355-371. Direct evidence of the molecular basis for biological silicon transport. Nature Communications, 2016, 5.8 Cosmogenic ³²Si as a tracer of biogenic silica burial and diagenesis: Major deltaic sinks in 123 50 1.5 the silica cycle. Geophysical Research Letters, 2016, 43, 7124-7132. Changes in biological productivity along the northwest African margin over the past 20,000 years. 124 Paleoceanography, 2016, 31, 185-202. Benthic Carbon Mineralization and Nutrient Turnover in a Scottish Sea Loch: An Integrative In Situ 125 1.5 27 Study. Aquatic Geochemistry, 2016, 22, 443-467. The fate of diatom valves in the Subantarctic and Polar Frontal Zones of the Southern Ocean: Sediment trap versus surface sediment assemblages. Palaeogeography, Palaeoclimatology, 1.0 Palaeoecology, 2016, 457, 129-143. A record of astronomically forced climate change in a late Ordovician (Sandbian) deep marine 127 1.0 44 sequence, Ordos Basin, North China. Sedimentary Geology, 2016, 341, 163-174. Abiologic silicon isotope fractionation between aqueous Si and Fe(III)–Si gel in simulated Archean seawater: Implications for Si isotope records in Precambrian sedimentary rocks. Geochimica Et 1.6 59 Cosmochimica Acta, 2016, 187, 102-122. Contribution of phytoliths to total biogenic silica volumes in the tropical rivers of Malaysia and 129 associated implications for the marine biogeochemical cycle. Chinese Journal of Oceanology and 9 0.7 Limnology, 2016, 34, 1076-1084. Heavy silicon isotopic composition of silicic acid and biogenic silica in Arctic waters over the Beaufort shelf and the Canada Basin. Global Biogeochemical Cycles, 2016, 30, 804-824. A highly diverse siliceous sponge fauna (Porifera: Hexactinellida, Demospongiae) from the Eocene of 131 north-eastern Italy: systematics and palaeoecology. Journal of Systematic Palaeontology, 2016, 14, 0.6 10 949-1002. Simulating the modern $\langle i \rangle \hat{i} \langle i \rangle \langle sup \rangle 30 \langle sup \rangle Si distribution in the oceans and in marine sediments.$ Global Biogeochemical Cycles, 2016, 30, 120-133.

#	Article	IF	CITATIONS
133	Germanium–silicon fractionation in a river-influenced continental margin: The Northern Gulf of Mexico. Geochimica Et Cosmochimica Acta, 2016, 178, 124-142.	1.6	25
134	Selective silicate-directed motility in diatoms. Nature Communications, 2016, 7, 10540.	5.8	72
135	Effect of ocean warming and acidification on the Fe(II) oxidation rate in oligotrophic and eutrophic natural waters. Biogeochemistry, 2016, 128, 19-34.	1.7	18
136	Urban Dissolved Silica: Quantifying the Role of Groundwater and Runoff in Wastewater Influent. Environmental Science & Technology, 2016, 50, 54-61.	4.6	16
137	An authigenic origin for Precambrian greenalite: Implications for iron formation and the chemistry of ancient seawater. Bulletin of the Geological Society of America, 2016, 128, 511-530.	1.6	153
138	Photosystem II repair in marine diatoms with contrasting photophysiologies. Photosynthesis Research, 2016, 127, 189-199.	1.6	42
139	Particulate organic carbon export across the Antarctic Circumpolar Current at 10°E: Differences between north and south of the Antarctic Polar Front. Deep-Sea Research Part II: Topical Studies in Oceanography, 2017, 138, 86-101.	0.6	20
140	A global Ge isotope budget. Geochimica Et Cosmochimica Acta, 2017, 203, 265-283.	1.6	29
141	Are benthic fluxes important for the availability of Si in the Gulf of Finland?. Journal of Marine Systems, 2017, 171, 89-100.	0.9	13
142	South Atlantic interbasin exchanges of mass, heat, salt and anthropogenic carbon. Progress in Oceanography, 2017, 151, 62-82.	1.5	14
143	Coastal barium cycling at the West Antarctic Peninsula. Deep-Sea Research Part II: Topical Studies in Oceanography, 2017, 139, 120-131.	0.6	11
144	Silicon Isotope Geochemistry. Reviews in Mineralogy and Geochemistry, 2017, 82, 289-344.	2.2	54
145	Barium isotopes reveal role of ocean circulation on barium cycling in the Atlantic. Geochimica Et Cosmochimica Acta, 2017, 204, 286-299.	1.6	79
146	Sedimentary environment evolution and biogenic silica records over 33,000 years in the <scp>L</scp> iaohe delta, <scp>C</scp> hina. Limnology and Oceanography, 2017, 62, 474-489.	1.6	10
147	Ice sheets as a missing source of silica to the polar oceans. Nature Communications, 2017, 8, 14198.	5.8	122
148	Recent progress in diatom genomics and epigenomics. Current Opinion in Plant Biology, 2017, 36, 46-55.	3.5	33
149	Constraining modernâ€day silicon cycling in Lake Baikal. Global Biogeochemical Cycles, 2017, 31, 556-574.	1.9	19
150	The δ30Si peak value discovered in middle Proterozoic chert and its implication for environmental variations in the ancient ocean. Scientific Reports, 2017, 7, 44000.	1.6	12

#	Article	IF	CITATIONS
151	Influences of anthropogenic activities on dissolved silica migration in a granite-hosted basin, Hainan Island, China. Quaternary International, 2017, 440, 99-110.	0.7	8
152	Simulated nutrient dissolution of Asian aerosols in various atmospheric waters: Potential links to marine primary productivity. Atmospheric Environment, 2017, 164, 224-238.	1.9	8
153	Processes that control mineral and element abundances in shales. Earth-Science Reviews, 2017, 171, 383-399.	4.0	35
154	The isotope composition of inorganic germanium in seawater and deep sea sponges. Geochimica Et Cosmochimica Acta, 2017, 212, 99-118.	1.6	19
156	Winter climate change and fine root biogenic silica in sugar maple trees (Acer saccharum): Implications for silica in the Anthropocene. Journal of Geophysical Research G: Biogeosciences, 2017, 122, 708-715.	1.3	18
157	Dissolution kinetics of biogenic silica and tentative silicon balance in the Yellow Sea. Limnology and Oceanography, 2017, 62, 1512-1525.	1.6	14
158	Diatom bloomâ€derived bottom water hypoxia off the Changjiang estuary, with and without typhoon influence. Limnology and Oceanography, 2017, 62, 1552-1569.	1.6	101
159	GEOTRACES inter-calibration of the stable silicon isotope composition of dissolved silicic acid in seawater. Journal of Analytical Atomic Spectrometry, 2017, 32, 562-578.	1.6	37
160	Characterization of the synopticâ€scale diversity, biogeography, and size distribution of diatoms in the North Pacific. Limnology and Oceanography, 2017, 62, 884-897.	1.6	19
161	Depth distribution of Zr and Nb in seawater: The potential role of colloids or organic complexation to explain non-scavenging-type behavior. Marine Chemistry, 2017, 188, 18-32.	0.9	9
162	Reactive silica fractions in coastal lagoon sediments from the northern Gulf of Mexico. Continental Shelf Research, 2017, 151, 8-14.	0.9	5
163	Cenozoic global cooling and increased seawater Mg/Ca via reduced reverse weathering. Nature Communications, 2017, 8, 844.	5.8	53
164	Silicon cycle in Indian estuaries and its control by biogeochemical and anthropogenic processes. Continental Shelf Research, 2017, 148, 64-88.	0.9	22
165	The evolution of diatoms and their biogeochemical functions. Philosophical Transactions of the Royal Society B: Biological Sciences, 2017, 372, 20160397.	1.8	134
166	Non-aqueous selective synthesis of orthosilicic acid and its oligomers. Nature Communications, 2017, 8, 140.	5.8	27
167	The Missing Silica Sink: Revisiting the Marine Sedimentary Si Cycle Using Cosmogenic ³² Si. Global Biogeochemical Cycles, 2017, 31, 1559-1578.	1.9	70
168	Abyssal ocean overturning shaped by seafloor distribution. Nature, 2017, 551, 181-186.	13.7	81
169	Understanding the causes and consequences of past marine carbon cycling variability through models. Earth-Science Reviews, 2017, 171, 349-382.	4.0	55

#	Article	IF	CITATIONS
170	Silicon Isotope Fractionation in Maize and its Biogeochemical Significance. Analytical Letters, 2017, 50, 2475-2490.	1.0	8
171	Revisiting the dissolution of biogenic Si in marine sediments: a key term in the ocean Si budget. Acta Geochimica, 2017, 36, 429-432.	0.7	27
172	Astronomical pacing of the global silica cycle recorded in Mesozoic bedded cherts. Nature Communications, 2017, 8, 15532.	5.8	46
173	Silicon isotope and silicic acid uptake in surface waters of Marguerite Bay, West Antarctic Peninsula. Deep-Sea Research Part II: Topical Studies in Oceanography, 2017, 139, 143-150.	0.6	15
174	Psychrophiles as Sources for Bioinspiration in Biomineralization and Biological Materials Science. , 2017, , 1-51.		3
175	Picoplankton contribution to biogenic silica stocks and production rates in the Sargasso Sea. Global Biogeochemical Cycles, 2017, 31, 762-774.	1.9	27
176	Wholeâ€Ocean Changes in Silica and Ge/Si Ratios During the Last Deglacial Deduced From Longâ€Lived Giant Glass Sponges. Geophysical Research Letters, 2017, 44, 11,555.	1.5	19
177	8 Silicon Isotope Geochemistry. , 2017, , 289-344.		0
179	Iron Availability Influences Silicon Isotope Fractionation in Two Southern Ocean Diatoms (Proboscia) Tj ETQq0 0 Marine Science, 2017, 4, .	0 rgBT /O 1.2	verlock 10 Tf 10
180	Biosilicification Drives a Decline of Dissolved Si in the Oceans through Geologic Time. Frontiers in Marine Science, 2017, 4, .	1.2	88
181	How big is the influence of biogenic silicon pools on short-term changes in water-soluble silicon in soils? Implications from a study of a 10-year-old soil–plant system. Biogeosciences, 2017, 14, 5239-5252.	1.3	42
182	Diatoms as a paleoproductivity proxy in the NW Iberian coastal upwelling system (NE Atlantic). Biogeosciences, 2017, 14, 1165-1179.	1.3	8
183	Riverine and wet atmospheric inputs of materials to a North Africa coastal site (Annaba Bay, Algeria). Progress in Oceanography, 2018, 165, 19-34.	1.5	9
184	Radium tracing nutrient inputs through submarine groundwater discharge in the global ocean. Scientific Reports, 2018, 8, 2439.	1.6	123
185	The Messinian diatomite deposition in the Mediterranean region and its relationships to the global silica cycle. Earth-Science Reviews, 2018, 178, 154-176.	4.0	38
186	Export and dissolution of biogenic silica in the Yellow River (Huanghe) and implications for the estuarine ecosystem. Marine Chemistry, 2018, 200, 14-21.	0.9	15
187	Influence of diatom diversity on the ocean biological carbon pump. Nature Geoscience, 2018, 11, 27-37.	5.4	451
188	SURVIVING IN THE WATER COLUMN: DEFINING THE TAPHONOMICALLY ACTIVE ZONE IN PELAGIC SYSTEMS. Palaios, 2018, 33, 85-93.	0.6	15

#	Article	IF	CITATIONS
189	Hydrothermal origin of syndepositional chert bands and nodules in the Mesoproterozoic Wumishan Formation: Implications for the evolution of Mesoproterozoic cratonic basin, North China. Precambrian Research, 2018, 310, 213-228.	1.2	36
190	Processes controlling silicon isotopic fractionation in a forested tropical watershed: Mule Hole Critical Zone Observatory (Southern India). Geochimica Et Cosmochimica Acta, 2018, 228, 301-319.	1.6	22
191	Two-stage influences of hydrothermal fluids on pumice near the Iheya North hydrothermal field, Okinawa Trough. Marine Georesources and Geotechnology, 2018, 36, 393-404.	1.2	2
192	Dissolved Si export: Impact of increased water fluxes through soil. Geoderma, 2018, 312, 151-158.	2.3	1
193	Human-induced river runoff overlapping natural climate variability over the last 150 years: Palynological evidence (Bay of Brest, NW France). Global and Planetary Change, 2018, 160, 109-122.	1.6	14
194	Silicon and chromium stable isotopic systematics during basalt weathering and lateritisation: A comparison of variably weathered basalt profiles in the Deccan Traps, India. Geoderma, 2018, 314, 190-204.	2.3	31
195	The Chemistry of Eolian Quartz Dust and the Origin of Chert. Journal of Sedimentary Research, 2018, 88, 743-752.	0.8	14
196	Synthesizing the Effects of Submarine Groundwater Discharge on Marine Biota. Hydrology, 2018, 5, 60.	1.3	68
197	The Trend of the Gini Coefficient of China (1978-2010). SSRN Electronic Journal, 0, , .	0.4	0
198	Astronomical cycles recorded in the sedimentary rhythms of deep-sea bedded chert and its significance on biogeochemical cycle. Journal of the Geological Society of Japan, 2018, 124, 1033-1048.	0.2	1
199	Biogenic silica production and diatom dynamics in the Svalbard region during spring. Biogeosciences, 2018, 15, 6503-6517.	1.3	31
200	Biosilica as a source for inspiration in biological materials science. American Mineralogist, 2018, 103, 665-691.	0.9	62
202	The effect of alpha blocker for post-operative urinary retention: A systemic review and meta-analysis. European Urology Supplements, 2018, 17, e274-e275.	0.1	0
203	Silicon isotopes of deep sea sponges: new insights into biomineralisation and skeletal structure. Biogeosciences, 2018, 15, 6959-6977.	1.3	17
204	Observed sediment and solute transport from the Kangerlussuaq sector of the Greenland Ice Sheet (2006–2016). Arctic, Antarctic, and Alpine Research, 2018, 50, .	0.4	16
205	Silicon cycle in the tropical South Pacific: contribution to the global Si cycle and evidence for an active pico-sized siliceous plankton. Biogeosciences, 2018, 15, 5595-5620.	1.3	14
206	The silicon stable isotope distribution along the GEOVIDE section (GEOTRACES GA-01) of the North Atlantic Ocean. Biogeosciences, 2018, 15, 5663-5676.	1.3	10
207	Biodegradable Silica-Based Nanoparticles: Dissolution Kinetics and Selective Bond Cleavage. The Enzymes, 2018, 43, 181-214.	0.7	25

#	Article	IF	CITATIONS
208	Stable silicon isotopic compositions of the Lena River and its tributaries: Implications for silicon delivery to the Arctic Ocean. Geochimica Et Cosmochimica Acta, 2018, 241, 120-133.	1.6	21
209	A family of silicon transporter structural genes in a pennate diatom Synedra ulna subsp. danica (Kütz.) Skabitsch. PLoS ONE, 2018, 13, e0203161.	1.1	11
210	The Significance of Giant Phaeodarians (Rhizaria) to Biogenic Silica Export in the California Current Ecosystem. Global Biogeochemical Cycles, 2018, 32, 987-1004.	1.9	36
211	Distribution of biogenic silica in seafloor sediments on the East China Sea inner shelf: Seasonal variations and typhoon impact. Estuarine, Coastal and Shelf Science, 2018, 212, 353-364.	0.9	6
212	Assessing condition and ecological role of deep-water biogenic habitats: Glass sponge reefs in the Salish Sea. Marine Environmental Research, 2018, 141, 88-99.	1.1	39
213	A comparison between water circulation and terrestrially-driven dissolved silica fluxes to the Mediterranean Sea traced using radium isotopes. Geochimica Et Cosmochimica Acta, 2018, 238, 496-515.	1.6	35
214	Diatom ooze—A large marine mercury sink. Science, 2018, 361, 797-800.	6.0	53
215	A Review of the Stable Isotope Bio-geochemistry of the Global Silicon Cycle and Its Associated Trace Elements. Frontiers in Earth Science, 2018, 5, .	0.8	73
216	Competition between Silicifiers and Non-silicifiers in the Past and Present Ocean and Its Evolutionary Impacts. Frontiers in Marine Science, 2018, 5, .	1.2	29
217	First Deployment and Validation of in Situ Silicate Electrochemical Sensor in Seawater. Frontiers in Marine Science, 2018, 5, .	1.2	11
218	Transparent Exopolymeric Particles (TEP) Selectively Increase Biogenic Silica Dissolution From Fossil Diatoms as Compared to Fresh Diatoms. Frontiers in Marine Science, 2018, 5, .	1.2	5
219	Changes in the distribution and preservation of silica in the Bohai Sea due to changing terrestrial inputs. Continental Shelf Research, 2018, 166, 1-9.	0.9	6
220	The Biological Pump and Seasonal Variability of pCO ₂ in the Southern Ocean: Exploring the Role of Diatom Adaptation to Low Iron. Journal of Geophysical Research: Oceans, 2018, 123, 3204-3226.	1.0	15
221	Silicon consumption kinetics by marine sponges: An assessment of their role at the ecosystem level. Limnology and Oceanography, 2018, 63, 2508-2522.	1.6	19
222	Carbon cycle dynamics linked with Karoo-Ferrar volcanism and astronomical cycles during Pliensbachian-Toarcian (Early Jurassic). Global and Planetary Change, 2018, 170, 163-171.	1.6	39
223	Modulation of the vertical particle transfer efficiency in the oxygen minimum zone off Peru. Biogeosciences, 2018, 15, 5093-5111.	1.3	12
224	Paleoproductivity and Stratification Across the Subarctic Pacific Over Glacialâ€Interglacial Cycles. Paleoceanography and Paleoclimatology, 2018, 33, 914-933.	1.3	12
225	Reverse weathering as a long-term stabilizer of marine pH and planetary climate. Nature, 2018, 560, 471-475.	13.7	149

#	Article	IF	CITATIONS
226	The silicon cycle impacted by past ice sheets. Nature Communications, 2018, 9, 3210.	5.8	29
227	Physicochemical surface properties of different biogenic silicon structures: Results from spectroscopic and microscopic analyses of protistic and phytogenic silica. Geoderma, 2018, 330, 212-220.	2,3	35

Increase in Dissolved Silica of Rivers Due to a Volcanic Eruption in an Estuarine Bay (Sorsogon Bay,) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50

229	Temporal changes in size distributions of the Southern Ocean diatom Fragilariopsis kerguelensis through high-throughput microscopy of sediment trap samples. Diatom Research, 2019, 34, 133-147.	0.5	10
230	A First Look at Dissolved Ge Isotopes in Marine Sediments. Frontiers in Earth Science, 2019, 7, .	0.8	8
231	Silicon limitation facilitates virus infection and mortality of marine diatoms. Nature Microbiology, 2019, 4, 1790-1797.	5.9	64
232	Opaline phytoliths in Miscanthus sinensis and its cyclone ash from a biomass-combustion facility. Industrial Crops and Products, 2019, 139, 111539.	2.5	3
233	In situ determination of Si, N, and P utilization by the demosponge Tethya citrina: A benthic-chamber approach. PLoS ONE, 2019, 14, e0218787.	1.1	4
234	Plant Uptake Offsets Silica Release From a Large Arctic Tundra Wildfire. Earth's Future, 2019, 7, 1044-1057.	2.4	13
235	New Insights Into Processes Controlling the δ 30 Si of Sinking Diatoms: A Seasonally Resolved Box Model Approach. Global Biogeochemical Cycles, 2019, 33, 957-970.	1.9	2
236	Insights gained from the chemical composition of spicules in Haplosclerida (Porifera, Demospongiae). Marine Biology Research, 2019, 15, 275-281.	0.3	0
237	Lake sedimentary biogenic silica from diatoms constitutes a significant global sink for aluminium. Nature Communications, 2019, 10, 4829.	5.8	17
238	Multiâ€Resonance Induced Thermally Activated Delayed Fluorophores for Narrowband Green OLEDs. Angewandte Chemie - International Edition, 2019, 58, 16912-16917.	7.2	356
239	CO ₂ effects on diatoms: a synthesis of more than a decade of ocean acidification experiments with natural communities. Ocean Science, 2019, 15, 1159-1175.	1.3	42
240	Si cycling in transition zones: a study of Si isotopes and biogenic silica accumulation in the Chesapeake Bay through the Holocene. Biogeochemistry, 2019, 146, 145-170.	1.7	9
241	Carbon and silica megasink in deep-sea sediments of the Congo terminal lobes. Quaternary Science Reviews, 2019, 222, 105854.	1.4	20
242	Porewater-derived nutrient fluxes in a coastal aquifer (Shengsi Island, China) and its implication. Estuarine, Coastal and Shelf Science, 2019, 218, 204-211.	0.9	18
243	African dust deposition in Puerto Rico: Analysis of a 20-year rainfall chemistry record and comparison with models. Atmospheric Environment, 2019, 216, 116907.	1.9	17

#	Article	IF	CITATIONS
244	Sponge skeletons as an important sink of silicon in the global oceans. Nature Geoscience, 2019, 12, 815-822.	5.4	59
245	Experimental validation of a cohesive suspended sediment transport model for two Mexican rivers. Environmental Systems Research, 2019, 8, .	1.5	1
246	Identification of the occurrence of minor elements in the structure of diatomaceous opal using FIB and TEM-EDS. American Mineralogist, 2019, 104, 1323-1335.	0.9	11
247	Silicon isotopes in Arctic and sub-Arctic glacial meltwaters: the role of subglacial weathering in the silicon cycle. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2019, 475, 20190098.	1.0	20
249	DSi as a Tracer for Submarine Groundwater Discharge. Frontiers in Marine Science, 2019, 6, .	1.2	37
250	An Overlooked Silica Source of the Modern Oceans: Are Sandy Beaches the Key?. Frontiers in Earth Science, 2019, 7, .	0.8	15
251	Soil Warming Accelerates Biogeochemical Silica Cycling in a Temperate Forest. Frontiers in Plant Science, 2019, 10, 1097.	1.7	10
252	Hydrogeological processes and near shore spatial variability of radium and radon isotopes for the characterization of submarine groundwater discharge. Journal of Hydrology, 2019, 579, 124192.	2.3	36
253	Dissolution Dominates Silica Cycling in a Shelf Sea Autumn Bloom. Geophysical Research Letters, 2019, 46, 6765-6774.	1.5	3
254	First Estimation of the Spontaneous Mutation Rate in Diatoms. Genome Biology and Evolution, 2019, 11, 1829-1837.	1.1	54
255	Low terrestrial carbon storage at the Last Glacial Maximum: constraints from multi-proxy data. Climate of the Past, 2019, 15, 849-879.	1.3	38
256	Urban groundwater dissolved silica concentrations are elevated due to vertical composition of historic land-filling. Science of the Total Environment, 2019, 684, 89-95.	3.9	7
257	Geochemical discrimination of bulk organic matter in surface sediments of the Cross River estuary system and adjacent shelf, South East Nigeria (West Africa). Science of the Total Environment, 2019, 678, 351-368.	3.9	29
258	Products of the iron cycle on the early Earth. Free Radical Biology and Medicine, 2019, 140, 138-153.	1.3	45
259	Functional responses of smaller and larger diatoms to gradual CO2 rise. Science of the Total Environment, 2019, 680, 79-90.	3.9	15
260	Spatial patterns of benthic silica flux in the North Pacific reflect upper ocean production. Deep-Sea Research Part I: Oceanographic Research Papers, 2019, 148, 25-33.	0.6	16
261	Biotic and abiotic controls on watershed Si cycling and river Si yield in western Canada. Biogeochemistry, 2019, 143, 221-237.	1.7	4
262	Two-dimensional ammonium distribution in sediment pore waters using a new colorimetric diffusive equilibration in thin-film technique. Water Research X, 2019, 2, 100023.	2.8	9

ARTICLE IF CITATIONS Silicon isotopic systematics of deep-sea sponge grounds in the North Atlantic. Quaternary Science 263 15 1.4 Reviews, 2019, 210, 1-14. The monsoon, carbon fluxes, and the organic carbon pump in the northern Indian Ocean. Progress in 264 1.5 29 Oceanography, 2019, 175, 24-39. 265 Reverse Weathering Reactions in Marine Sediments., 2019, , 216-227. 4 Effects of Elevated CO2 on a Natural Diatom Community in the Subtropical NE Atlantic. Frontiers in 1.2 Marine Science, 2019, 6, . Constraining silicon isotope exchange kinetics and fractionation between aqueous and amorphous Si 267 1.6 14 at room temperature. Geochimica Et Cosmochimica Acta, 2019, 253, 267-289. Distribution and budget of biogenic silica in the Yangtze Estuary and its adjacent sea. Science of the Total Environment, 2019, 669, 590-599. Precambrian Si isotope mass balance, weathering, and the significance of the authigenic clay silica 269 1.0 37 sink. Sedimentary Geology, 2019, 384, 1-11. The seasonal succession of optimal diatom traits. Limnology and Oceanography, 2019, 64, 1442-1457. 270 1.6 Systematic dependence of kinetic and thermodynamic barriers to homogeneous silica nucleation on 271 1.2 13 NaCl and amino acids. Journal of Materials Research, 2019, 34, 442-455. Technical note: The silicon isotopic composition of choanoflagellates: implications for a mechanistic 1.3 understanding of isotopic fractionation during biosilicification. Biogeosciences, 2019, 16, 4805-4813. CO2 Removal With Enhanced Weathering and Ocean Alkalinity Enhancement: Potential Risks and 273 107 1.3 Co-benefits for Marine Pelagic Ecosystems. Frontiers in Climate, 2019, 1, . Exploring Silica Stoichiometry on a Large Floodplain Riverscape. Frontiers in Ecology and Evolution, 274 1.1 2019, 7, . Geochemical characteristics and geological significance of the bedded chert during the Ordovician and Silurian transition in the Shizhu area, Chongqing, South China. Canadian Journal of Earth 275 0.6 10 Sciences, 2019, 56, 419-430. Dissolved silica in the subterranean estuary and the impact of submarine groundwater discharge on 49 the global marine silica budget. Marine Chemistry, 2019, 208, 29-42. Seasonal variations in the abundance and sinking flux of biogenic silica in Daya Bay, northern South 277 1.1 4 China Sea. Oceanologia, 2019, 61, 239-251. The Global Marine Silica Budget: Sources and Sinks., 2019, , 473-483. 278 Decision-making of the benthic diatom <i>Seminavis robusta</i> searching for inorganic nutrients and 279 4.4 16 pheromones. ISME Journal, 2019, 13, 537-546. Palaeoceanographic regime during the <scp>O</scp>xfordianâ€"<scp>K</scp>immeridgian in the <scp>W</scp>estern <scp>T</scp>ethys recorded by radiolarian assemblages in the siliceous sediments of the <scp>P</scp>ieniny <scp>K</scp>lippen <scp>B</scp>elt, <scp>C</scp>arpathians. Geological Journal. 2019, 54, 3362-3375

#	Article	IF	CITATIONS
281	Biogeochemical proxies and diatoms in surface sediments across the Drake Passage reflect oceanic domains and frontal systems in the region. Progress in Oceanography, 2019, 174, 72-88.	1.5	16
282	Ocean In Situ Sensors. , 2019, , 27-80.		0
283	Soil Testate Amoebae and Diatoms as Bioindicators of an Old Heavy Metal Contaminated Floodplain in Japan. Microbial Ecology, 2020, 79, 123-133.	1.4	27
284	Dissolved aluminium cycling in the northern, equatorial and subtropical gyre region of the Indian Ocean. Geochimica Et Cosmochimica Acta, 2020, 268, 160-185.	1.6	15
285	Formation Mechanism and Numerical Model of Quartz in Fine-Grained Organic-Rich Shales: A Case Study of Wufeng and Longmaxi Formations in Western Hubei Province, South China. Journal of Earth Science (Wuhan, China), 2020, 31, 354-367.	1.1	9
286	Sediment efflux of silicon on the Greenland margin and implications for the marine silicon cycle. Earth and Planetary Science Letters, 2020, 529, 115877.	1.8	28
287	Silicon Mobilization in Soils: the Broader Impact of Land Use. Silicon, 2020, 12, 1529-1538.	1.8	9
288	Possible linkage between the long-eccentricity marine carbon cycle and the deep-Pacific circulation: Western equatorial Pacific benthic foraminifera evidences of the last 4†Ma. Marine Micropaleontology, 2020, 155, 101797.	0.5	9
289	Sponge reefs on the Northeast Pacific margin: geomorphic and biological variability. , 2020, , 319-336.		0
290	Impact of human disturbance on the biogeochemical silicon cycle in a coastal sea revealed by silicon isotopes. Limnology and Oceanography, 2020, 65, 515-528.	1.6	7
291	Evolution of the Global Carbon Cycle and Climate Regulation on Earth. Global Biogeochemical Cycles, 2020, 34, e2018GB006061.	1.9	78
292	New model of Si balance in the Late Cretaceous epicontinental European Basin. Global and Planetary Change, 2020, 186, 103108.	1.6	9
293	Weathering indices as climate proxies. A step forward based on Congo and SW African river muds. Earth-Science Reviews, 2020, 201, 103039.	4.0	71
294	Significant Release of Dissolved Inorganic Nutrients From the Shallow Submarine Volcano Tagoro (Canary Islands) Based on Seven-Year Monitoring. Frontiers in Marine Science, 2020, 6, .	1.2	27
295	Global Biogeochemical Cycle of Fluorine. Global Biogeochemical Cycles, 2020, 34, e2020GB006722.	1.9	25
296	Evolution of Late Cretaceous Si cycling reflected in the formation of siliceous nodules (flints and) Tj ETQq1 1 0.7	84314 rgE	BT [Overlock
297	Plankton Tracker: A novel integrated system to investigate the dynamic sinking behavior in phytoplankton. Ecological Informatics, 2020, 60, 101166.	2.3	1
298	Seasonal dynamics and export of biogenic silica in the upper water column of a large marginal sea, the northern South China Sea. Progress in Oceanography, 2020, 188, 102421.	1.5	11

#	Article	IF	CITATIONS
299	Latitudinal Variation in Plankton Traits and Ecosystem Function. Global Biogeochemical Cycles, 2020, 34, e2020GB006564.	1.9	11
300	Tectonic control of Guadalupian-Lopingian cherts in northwestern Sichuan Basin, South China. Palaeogeography, Palaeoclimatology, Palaeoecology, 2020, 557, 109915.	1.0	8
301	Using Stable Isotopes to Disentangle Marine Sedimentary Signals in Reactive Silicon Pools. Geophysical Research Letters, 2020, 47, e2020GL087877.	1.5	15
302	The Influence of Glacial Cover on Riverine Silicon and Iron Exports in Chilean Patagonia. Global Biogeochemical Cycles, 2020, 34, e2020GB006611.	1.9	12
303	Diatoms and Their Ecological Importance. Encyclopedia of the UN Sustainable Development Goals, 2020, , 1-9.	0.0	2
304	The Effects of Glacial Cover on Riverine Silicon Isotope Compositions in Chilean Patagonia. Frontiers in Earth Science, 2020, 8, .	0.8	3
305	The Flux and Provenance of Dust Delivered to the SW Pacific During the Last Glacial Maximum. Paleoceanography and Paleoclimatology, 2020, 35, e2020PA003869.	1.3	5
306	The Oceans. , 2020, , 361-429.		0
307	Impacts of industrial atmospheric emissions on watershed export of dissolved ions in coastal streams: a Bayesian modeling approach. Environmental Monitoring and Assessment, 2020, 192, 568.	1.3	2
308	Controls on Dissolved Silicon Isotopes Along the U.S. GEOTRACES Eastern Pacific Zonal Transect (GP16). Global Biogeochemical Cycles, 2020, 34, e2020GB006538.	1.9	5
309	Variations of diatom opal Ge/Si in Prydz Bay, East Antarctica. Marine Chemistry, 2020, 227, 103879.	0.9	0
310	Imaging and quantifying homeostatic levels of intracellular silicon in diatoms. Science Advances, 2020, 6, .	4.7	29
311	Soil age alters the global silicon cycle. Science, 2020, 369, 1161-1162.	6.0	7
312	Cardinal Buoys: An Opportunity for the Study of Air-Sea CO2 Fluxes in Coastal Ecosystems. Frontiers in Marine Science, 2020, 7, .	1.2	7
313	PDMPO: a specific silicon or silica, pH sensitive fluorescent probe?. RSC Advances, 2020, 10, 31003-31011.	1.7	5
314	Exploring Long-Term Changes in Silicon Biogeochemistry Along the River Continuum of the Rhine and Yangtze (Changjiang). Environmental Science & Technology, 2020, 54, 11940-11950.	4.6	18
315	Temperatures above thermal optimum reduce cell growth and silica production while increasing cell volume and protein content in the diatom Thalassiosira pseudonana. Hydrobiologia, 2020, 847, 4233-4248.	1.0	15
316	On the fate of sinking diatoms: the transport of active buoyancy-regulating cells in the ocean. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2020, 378, 20190529.	1.6	8

		CITATION REP	ORT	
#	Article		IF	Citations
317	Diatoms for Carbon Sequestration and Bio-Based Manufacturing. Biology, 2020, 9, 217		1.3	23
318	Ocean Biogeochemistry in GFDL's Earth System Model 4.1 and Its Response to Increasi CO ₂ . Journal of Advances in Modeling Earth Systems, 2020, 12, e2019MS	ng Atmospheric 002043.	1.3	70
319	Super typhoon induced high silica export from Arakawa River, Japan. Environmental Scie Pollution Research, 2020, 27, 36838-36844.	nce and	2.7	5
320	Tracking Improvement in Simulated Marine Biogeochemistry Between CMIP5 and CMIP Climate Change Reports, 2020, 6, 95-119.	6. Current	2.8	155
321	Sedimentary Nutrient Supply in Productive Hot Spots off the West Antarctic Peninsula Silicon Isotopes. Global Biogeochemical Cycles, 2020, 34, e2019GB006486.	Revealed by	1.9	10
322	The Horizontal Distribution of Siliceous Planktonic Radiolarian Community in the Easter Ocean. Water (Switzerland), 2020, 12, 3502.	n Indian	1.2	4
323	The relation between temperature and silica benthic exchange rates and implications fo formation of diagenetic opal. Results in Geophysical Sciences, 2020, 1-4, 100002.	r near-seabed	0.4	17
324	Deep-ocean paleo-seafloor erosion in the northwestern Pacific identified by high-resolut images. Marine Geology, 2020, 429, 106330.	ion seismic	0.9	1
325	Silicon Isotopes in an EMIC's Ocean: Sensitivity to Runoff, Iron Supply, and Climate. Pala and Paleoclimatology, 2020, 35, e2020PA003960.	eoceanography	1.3	0
326	Thermodynamic equilibrium and kinetic fundamentals of oxide dissolution in aqueous so Journal of Materials Research, 2020, 35, 898-921.	olution.	1.2	9
327	Siliceous sponge expansion and phosphogenesis in a shallow water environment in the Range (Kazakhstan) during the Precambrian-Cambrian transition. Precambrian Research 105830.	Malyi Karatau , 2020, 347,	1.2	5
328	Dynamics of phytoplankton and nutrient uptake following dust additions in the northw Science of the Total Environment, 2020, 739, 139999.	est Pacific.	3.9	17
329	Coupling of a sediment diagenesis model (MEDUSA) and an Earth system model (CESM contribution toward enhanced marine biogeochemical modelling and long-term climate Geoscientific Model Development, 2020, 13, 825-840.	1.2): a simulations.	1.3	5
330	Fresh groundwater discharge insignificant for the world's oceans but important for ecosystems. Nature Communications, 2020, 11, 1260.	coastal	5.8	168
331	Carbon-to-chlorophyll ratio and carbon content of phytoplankton community at the sur coastal waters adjacent to the Zhujiang River Estuary during summer. Acta Oceanologic 39, 123-131.	face in :a Sinica, 2020,	0.4	7
332	A coupled carbon-silicon cycle model over Earth history: Reverse weathering as a possib explanation of a warm mid-Proterozoic climate. Earth and Planetary Science Letters, 202	le 20, 537, 116181.	1.8	32
333	Constraints on Earth System Functioning at the Paleoceneâ€Eocene Thermal Maximum Silicon Cycle. Paleoceanography and Paleoclimatology, 2020, 35, e2020PA003873.	From the Marine	1.3	9
334	Phosphorites, glass ramps and carbonate factories: The evolution of an epicontinental s Palaeozoic upwelling system (Phosphoria Rock Complex). Sedimentology, 2020, 67, 30	ea and a late 03-3041.	1.6	7

#	Article	IF	CITATIONS
335	Oceanic CO ₂ outgassing and biological production hotspots induced by pre-industrial river loads of nutrients and carbon in a global modeling approach. Biogeosciences, 2020, 17, 55-88.	1.3	51
336	Early Paleogene biosiliceous sedimentation in the Atlantic Ocean: Testing the inorganic origin hypothesis for Paleocene and Eocene chert and porcellanite. Palaeogeography, Palaeoclimatology, Palaeoecology, 2020, 556, 109896.	1.0	10
337	Cooperation between passive and active silicon transporters clarifies the ecophysiology and evolution of biosilicification in sponges. Science Advances, 2020, 6, eaba9322.	4.7	22
338	Dissolution kinetics of biogenic silica and the recalculated silicon balance of the East China Sea. Science of the Total Environment, 2020, 743, 140552.	3.9	12
339	Phytoplankton Responses to Climateâ€Induced Warming and Interdecadal Oscillation in Northâ€Western Australia. Paleoceanography and Paleoclimatology, 2020, 35, no.	1.3	8
340	Dissolved iron in the North Atlantic Ocean and Labrador Sea along the GEOVIDE section (GEOTRACES) Tj ETQq1	l 0.78431	4 rgBT /Over
341	Estimating Biogenic Silica Production of Rhizaria in the Global Ocean. Global Biogeochemical Cycles, 2020, 34, e2019GB006286.	1.9	24
342	Silicon Dynamics During 2 Million Years of Soil Development in a Coastal Dune Chronosequence Under a Mediterranean Climate. Ecosystems, 2020, 23, 1614-1630.	1.6	20
343	Arctic River Dissolved and Biogenic Silicon Exports—Current Conditions and Future Changes With Warming. Global Biogeochemical Cycles, 2020, 34, no.	1.9	9
344	Full annual monitoring of Subantarctic Emiliania huxleyi populations reveals highly calcified morphotypes in high-CO2 winter conditions. Scientific Reports, 2020, 10, 2594.	1.6	18
345	Aquatic palynomorphs from modern marine sediments in a reconnaissance transect across the Northwest Passage – Baffin Bay region. Marine Micropaleontology, 2020, 156, 101825.	0.5	4
346	Dissolved silicon isotope dynamics in large river estuaries. Geochimica Et Cosmochimica Acta, 2020, 273, 367-382.	1.6	20
347	Review on protozoic silica and its role in silicon cycling. Geoderma, 2020, 365, 114224.	2.3	40
348	Metabarcoding Reveals Temporal Patterns of Community Composition and Realized Thermal Niches of Thalassiosira Spp. (Bacillariophyceae) from the Narragansett Bay Long-Term Plankton Time Series. Biology, 2020, 9, 19.	1.3	21
349	The Influence of Water Mass Mixing and Particle Dissolution on the Silicon Cycle in the Central Arctic Ocean. Frontiers in Marine Science, 2020, 7, .	1.2	11
350	The Transpolar Drift as a Source of Riverine and Shelfâ€Derived Trace Elements to the Central Arctic Ocean. Journal of Geophysical Research: Oceans, 2020, 125, e2019JC015920.	1.0	80
351	Impact of ambient conditions on the Si isotope fractionation in marine pore fluids during early diagenesis. Biogeosciences, 2020, 17, 1745-1763.	1.3	26
352	Cycling phosphorus on the Archean Earth: Part II. Phosphorus limitation on primary production in Archean ecosystems. Geochimica Et Cosmochimica Acta, 2020, 280, 360-377.	1.6	39

#	Article	IF	CITATIONS
353	Recycling resources: silica of diatom frustules as a source for spicule building in Antarctic siliceous demosponges. Zoological Journal of the Linnean Society, 2021, 192, 259-276.	1.0	2
354	Recurrent deposition of organic-rich sediments in Early Triassic pelagic Panthalassa and its relationship with global oceanic anoxia: New data from Kyoto, Southwest Japan. Global and Planetary Change, 2021, 197, 103402.	1.6	8
355	The Baltic Sea and the adjacent North Sea silicate concentrations. Estuarine, Coastal and Shelf Science, 2021, 249, 107110.	0.9	3
357	Anthropogenic Influences on Ocean chemistry. , 2021, , 278-287.		0
358	Protoplasmic streaming of chloroplasts enables rapid photoacclimation in large diatoms. Journal of Plankton Research, 2021, 43, 831-845.	0.8	6
359	Reviews and syntheses: Impacts of plant-silica–herbivore interactions on terrestrial biogeochemical cycling. Biogeosciences, 2021, 18, 1259-1268.	1.3	3
361	Reviews and syntheses: The biogeochemical cycle of silicon in the modern ocean. Biogeosciences, 2021, 18, 1269-1289.	1.3	124
362	Silicon Isotope Measurement of Giant Diatoms Using MC-ICP-MS. Journal of the Korean Earth Science Society, 2021, 42, 1-10.	0.0	0
364	Biogeochemical cycling of molybdenum and thallium during a phytoplankton summer bloom: A mesocosm study. Marine Chemistry, 2021, 229, 103910.	0.9	12
365	Recycling and Burial of Biogenic Silica in an Open Margin Oxygen Minimum Zone. Global Biogeochemical Cycles, 2021, 35, e2020GB006583.	1.9	21
366	On the matter of phytoplankton: A novel method using <scp>3D</scp> computer models to calculate biovolume of microorganisms. Limnology and Oceanography: Methods, 2021, 19, 331-339.	1.0	1
367	Submarine groundwater discharge impacts on coastal nutrient biogeochemistry. Nature Reviews Earth & Environment, 2021, 2, 307-323.	12.2	210
368	Global Ocean Sediment Composition and Burial Flux in the Deep Sea. Global Biogeochemical Cycles, 2021, 35, e2020GB006769.	1.9	46
370	Approximation of submarine groundwater discharge and allied nutrient fluxes to the Bay of Bengal, India using nutrient mass balance. Environmental Earth Sciences, 2021, 80, 1.	1.3	4
371	Modern silicon dynamics of a small high-latitude subarctic lake. Biogeosciences, 2021, 18, 2325-2345.	1.3	7
372	The Role of Marshes in Coastal Nutrient Dynamics and Loss. , 2021, , 113-154.		2
373	Shunt or shuttle. Nature Geoscience, 2021, 14, 181-183.	5.4	6
375	Bacterial biosilicification: a new insight into the global silicon cycle. Bioscience, Biotechnology and Biochemistry, 2021, 85, 1324-1331.	0.6	14

#	Article	IF	CITATIONS
376	A biomimetic peptide has no effect on the isotopic fractionation during in vitro silica precipitation. Scientific Reports, 2021, 11, 9698.	1.6	0
377	Silicate marine electrochemical sensor. Sensors and Actuators B: Chemical, 2021, 335, 129705.	4.0	7
379	A State-Of-The-Art Perspective on the Characterization of Subterranean Estuaries at the Regional Scale. Frontiers in Earth Science, 2021, 9, .	0.8	20
380	Isotopic analyses of Ordovician–Silurian siliceous skeletons indicate silicaâ€depleted Paleozoic oceans. Geobiology, 2021, 19, 460-472.	1.1	10
381	The Effect of Dust Transport on the Concentration of Chlorophyll-A in the Surface Layer of the Black Sea. Applied Sciences (Switzerland), 2021, 11, 4692.	1.3	8
382	Role of small Rhizaria and diatoms in the pelagic silica production of the Southern Ocean. Limnology and Oceanography, 2021, 66, 2187-2202.	1.6	11
383	High Productivity Makes Mangroves Potentially Important Players in the Tropical Silicon Cycle. Frontiers in Marine Science, 2021, 8, .	1.2	4
384	Characteristics of conservative and non-conservative CDOM of a tropical monsoonal estuary in relation to changing biogeochemistry. Regional Studies in Marine Science, 2021, 44, 101721.	0.4	2
385	Silicaâ€rich seawater in the early Cambrian: Sedimentological evidence from bedded cherts. Terra Nova, 2021, 33, 494-501.	0.9	7
386	Silicon Isotope Signatures of Radiolaria Reveal Taxon-Specific Differences in Isotope Fractionation. Frontiers in Marine Science, 2021, 8, .	1.2	3
387	Counteracting Contributions of the Upper and Lower Meridional Overturning Limbs to the North Atlantic Nutrient Budgets: Enhanced Imbalance in 2010. Global Biogeochemical Cycles, 2021, 35, e2020GB006898.	1.9	4
388	Revisiting the sedimentary record of the rise of diatoms. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	15
389	Silicon isotopes reveal a decline in oceanic dissolved silicon driven by biosilicification: A prerequisite for the Cambrian Explosion?. Earth and Planetary Science Letters, 2021, 566, 116959.	1.8	13
390	Decadal Dynamics of the CO2 System and Associated Ocean Acidification in Coastal Ecosystems of the North East Atlantic Ocean. Frontiers in Marine Science, 2021, 8, .	1.2	7
391	Marine Fouling Characteristics of Biocomposites in a Coral Reef Ecosystem. Advanced Sustainable Systems, 2021, 5, 2100089.	2.7	8
392	Antarctic Polar Front migrations in the Kerguelen Plateau region, Southern Ocean, over the past 360 kyrs. Clobal and Planetary Change, 2021, 202, 103526.	1.6	14
393	The evolution of stable silicon isotopes in a coastal carbonate aquifer on Rottnest Island, Western Australia. Hydrology and Earth System Sciences, 2021, 25, 3837-3853.	1.9	2
394	Temporal variability of the physical and chemical environment, chlorophyll and diatom biomass in the euphotic zone of the Beagle Channel (Argentina): Evidence of nutrient limitation. Progress in Oceanography, 2021, 195, 102576.	1.5	19

#	Article	IF	CITATIONS
395	Algal Bloom, Succession, and Drawdown of Silicate in the Chukchi Sea in Summer 2010. Ecosystems, 0, , 1.	1.6	1
396	New Constraints on the Physical and Biological Controls on the Silicon Isotopic Composition of the Arctic Ocean. Frontiers in Marine Science, 2021, 8, .	1.2	11
397	Role of nearshore benthic algae in the Lake Michigan silica cycle. PLoS ONE, 2021, 16, e0256838.	1.1	2
398	Effects of astronomical orbital cycle and volcanic activity on organic carbon accumulation during Late Ordovician–Early Silurian in the Upper Yangtze area, South China. Petroleum Exploration and Development, 2021, 48, 850-863.	3.0	15
399	Certification of a Natural Silicon Reference Material with SIâ€Traceable Isotopic Composition. Geostandards and Geoanalytical Research, 0, , .	1.7	1
400	Controls on silica enrichment of lower cambrian organic-rich shale deposits. Marine and Petroleum Geology, 2021, 130, 105126.	1.5	17
401	Southern Ocean Phytoplankton Community Structure as a Gatekeeper for Global Nutrient Biogeochemistry. Global Biogeochemical Cycles, 2021, 35, e2021GB006991.	1.9	10
402	Responses of phytoplankton community structure and association to variability in environmental drivers in a tropical coastal lagoon. Science of the Total Environment, 2021, 783, 146873.	3.9	18
403	On Using Si to Unravel Potential Sources of Dissolved Al to the Deep Arctic. Journal of Geophysical Research: Oceans, 2021, 126, e2021JC017399.	1.0	3
404	Unified modeling of contrasting basin-scale dissolved Al distributions using dissolution kinetics of diatom aggregates: Implication for upwelling intensity as a primary factor to control opal burial rate. Marine Chemistry, 2021, 235, 104009.	0.9	1
405	Evaluating the geochemistry and paired silicon and oxygen isotope record of quartz in siliceous rocks from the ~3 Ga Buhwa Greenstone Belt, Zimbabwe, a critical link to deciphering the Mesoarchean silica cycle. Chemical Geology, 2021, 577, 120300.	1.4	3
406	North Atlantic marine biogenic silica accumulation through the early to middle Paleogene: implications for ocean circulation and silicate weathering feedback. Climate of the Past, 2021, 17, 1937-1954.	1.3	6
407	Volcanism-induced late Boda warming in the Late Ordovician: Evidence from the Upper Yangtze Platform, South China. Palaeogeography, Palaeoclimatology, Palaeoecology, 2021, 578, 110579.	1.0	12
408	Winter dissolved and particulate zinc in the Indian Sector of the Southern Ocean: Distribution and relation to major nutrients (GEOTRACES Glpr07 transect). Marine Chemistry, 2021, 236, 104031.	0.9	8
409	Release from biogenic particles, benthic fluxes, and deep water circulation control Cr and δ53Cr distributions in the ocean interior. Earth and Planetary Science Letters, 2021, 574, 117163.	1.8	13
410	Depositional environments and controls on the stratigraphic architecture of the Cenomanian Buda Limestone in west Texas, U.S.A Marine and Petroleum Geology, 2021, 133, 105275.	1.5	4
411	Biodiversity of radiolarians in surface sediments from the East Indian Ocean and their implication for water masses. Deep-Sea Research Part I: Oceanographic Research Papers, 2021, 177, 103625.	0.6	2
412	Zn elemental and isotopic features in sinking particles of the South China Sea: Implications for its sources and sinks. Geochimica Et Cosmochimica Acta, 2021, 314, 68-84.	1.6	13

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<u> </u>	/		ILLI U	- C - L

#	Article	IF	CITATIONS
413	Recent sedimentary processes in the Atrato River Delta – Colombia based on physicochemical characterization of surface sediments. Catena, 2021, 207, 105547.	2.2	7
414	Facets of diatom biology and their potential applications. Biomass Conversion and Biorefinery, 0, , 1.	2.9	5
415	Summertime Biogenic Silica Production and Silicon Limitation in the Pacific Arctic Region From 2006 to 2016. Global Biogeochemical Cycles, 2021, 35, .	1.9	7
416	Photonic Microresonators Created by Slow Optical Cooking. ACS Photonics, 2021, 8, 436-442.	3.2	21
418	Ocean Biochemical Cycling and Trace Elements. Encyclopedia of Earth Sciences Series, 2017, , 1-21.	0.1	4
419	Variation of biogeochemical cycle of riverine dissolved inorganic carbon and silicon with the cascade damming. Environmental Science and Pollution Research, 2020, 27, 28840-28852.	2.7	6
420	A dual-functional peptide, Kpt from Ruegeria pomeroyi DSS-3 for protein purification and silica precipitation. Biochemical Engineering Journal, 2020, 163, 107726.	1.8	5
421	Spatial and temporal variations of dissolved silicon isotope compositions in a large dammed river system. Chemical Geology, 2020, 545, 119645.	1.4	9
422	Effect of cleaning methods on the dissolution of diatom frustules. Marine Chemistry, 2020, 224, 103826.	0.9	11
423	Calcareous nannofossil and foraminiferal trace element records in the Sorbas Basin: A new piece of the Messinian Salinity Crisis onset puzzle. Palaeogeography, Palaeoclimatology, Palaeoecology, 2020, 554, 109796.	1.0	14
425	Biogenic silica accumulation varies across tussock tundra plant functional type. Functional Ecology, 2017, 31, 2177-2187.	1.7	10
426	A carbon budget for the Amundsen Sea Polynya, Antarctica: Estimating net community production and export in a highly productive polar ecosystem. Elementa, 2016, 4, .	1.1	38
427	Successive stages of calcitization and silicification of Cenomanian spicule-bearing turbidites based on microfacies analysis, Polish Outer Carpathians. Annales Societatis Geologorum Poloniae, 2015, , 187-203.	0.1	8
428	Macro-nutrient concentrations in Antarctic pack ice: Overall patterns and overlooked processes. Elementa, 2017, 5, .	1.1	39
429	Double scavenging processes explain the vertical distribution of rare earth elements in the oceans: Importance of surface plankton as a primary scavenger and carbonate/oxide as a secondary scavenger. Geochemical Journal, 2019, 53, 119-137.	0.5	2
430	Silicon utilization by sponges: an assessment of seasonal changes. Marine Ecology - Progress Series, 2018, 605, 111-123.	0.9	7
431	Macromolecular composition, productivity and dimethylsulfoniopropionate in Antarctic pelagic and sympagic microalgal communities. Marine Ecology - Progress Series, 2020, 640, 45-61.	0.9	3
432	Spatiotemporal Dissolved Silicate Variation, Sources, and Behavior in the Eutrophic Zhanjiang Bay, China. Water (Switzerland), 2020, 12, 3586.	1.2	18

	CHANON	LPORT	
#	Article	IF	Citations
433	A dataset on trophic modes of aquatic protists. Biodiversity Data Journal, 2020, 8, e56648.	0.4	26
439	Dynamics of Nutrients and Colored Dissolved Organic Matter Absorption in a Wetland-Influenced Subarctic Coastal Region of Northeastern Japan: Contributions From Mariculture and Eelgrass Meadows. Frontiers in Marine Science, 2021, 8, .	1.2	12
440	Multivariate trait analysis reveals diatom plasticity constrained to a reduced set of biological axes. ISME Communications, 2021, 1, .	1.7	9
441	Water quality in natural protected areas in Cancun, Mexico: A historic perspective for decision makers. Regional Studies in Marine Science, 2021, , 102035.	0.4	2
442	The application of game theory-based machine learning modelling to assess climate variability effects on the sensitivity of lagoon ecosystem parameters. Ecological Informatics, 2021, 66, 101462.	2.3	4
443	Silica. , 2013, , 1-1.		0
444	Quantifying Uptake and Retention of Copper lons in Silica-Encrusted Chlamydomonas reinhardtii. Biochemistry and Analytical Biochemistry: Current Research, 2015, 04, .	0.4	0
445	Silica. , 2015, , 1-1.		0
446	Silica. Encyclopedia of Earth Sciences Series, 2016, , 792-792.	0.1	0
449	Distribution, transport and retention of silica in the main channels of the Yangtze River in exceptionally low water discharge year. Hupo Kexue/Journal of Lake Sciences, 2017, 29, 740-752.	0.3	3
450	Site U1471. Proceedings of the International Ocean Discovery Program, 0, , .	0.0	4
451	Transport and variation of reactive silica in the Changjiang River and the Yellow River. Hupo Kexue/Journal of Lake Sciences, 2018, 30, 1246-1259.	0.3	1
452	Silicon Isotopes. Encyclopedia of Earth Sciences Series, 2018, , 1337-1340.	0.1	0
453	Biological carbon pump in the ocean and phytoplankton structure. Hydrosphere Еcology (ÐкологÐ,Ñ	•Đ³Đ,Đ̂Ĩ€	оÑфеÑ
454	Status of Silicon in Ecosystem, Silicon Solubilization by Rhizospheric Microorganisms and Their Impact on Crop Productivity. Microorganisms for Sustainability, 2020, , 409-429.	0.4	0
456	The Transpolar Drift Influence on the Arctic Ocean Silicon Cycle. Journal of Geophysical Research: Oceans, 2021, 126, e2021JC017352.	1.0	4
457	Diagenese von Kieselsedimenten und Hornsteinentstehung. , 2021, , 195-281.		0
458	Coastal Nutrient Supply and Global Ocean Biogeochemistry. Encyclopedia of the UN Sustainable Development Goals, 2020, , 1-12.	0.0	0

#	Article	IF	CITATIONS
459	Geochemical characteristics of marine siliceous rocks in the western Yunnan Paleo-Tethys orogenic belt and their palaeoenvironmental implications. Geochemical Journal, 2020, 54, 29-41.	0.5	0
462	SIMS analysis of Si isotope for radiolarian test in Mesozoic bedded chert, Inuyama, central Japan. Bulletin of the Geological Survey of Japan, 2020, 71, 331-353.	0.1	3
463	Explicit silicate cycling in the Kiel Marine Biogeochemistry Model version 3 (KMBM3) embedded in the UVic ESCM version 2.9. Geoscientific Model Development, 2021, 14, 7255-7285.	1.3	4
464	Deciphering long-term seasonal and tidal water quality trends in the Mahanadi estuary. Journal of Coastal Conservation, 2021, 25, 1.	0.7	4
465	High-resolution volcanism-induced oceanic environmental change and its impact on organic matter accumulation in the Late Ordovician Upper Yangtze Sea. Marine and Petroleum Geology, 2022, 136, 105482.	1.5	6
466	Dissolution of a submarine carbonate platform by a submerged lake of acidic seawater. Biogeosciences, 2022, 19, 347-358.	1.3	1
467	Microbial Growth in Shrimp Ponds as Influenced by Monosilicic and Polysilicic Acids. Silicon, 2022, 14, 8887-8894.	1.8	0
468	Diatom biorefinery: From carbon mitigation to high-value products. , 2022, , 401-420.		1
469	Silicon balance in the South China Sea. Biogeochemistry, 2022, 157, 327-353.	1.7	4
470	Earth's sediment cycle during the Anthropocene. Nature Reviews Earth & Environment, 2022, 3, 179-196.	12.2	149
470 471	Earth's sediment cycle during the Anthropocene. Nature Reviews Earth & Environment, 2022, 3, 179-196. The carbon and nutrient dynamics in Tokyo Bay:sewage maintenance alters carbon and nutrient cycling. Oceanography in Japan, 2022, 31, 23-38.	12.2 0.5	149 0
470 471 472	 Earth's sediment cycle during the Anthropocene. Nature Reviews Earth & Environment, 2022, 3, 179-196. The carbon and nutrient dynamics in Tokyo Bay:sewage maintenance alters carbon and nutrient cycling. Oceanography in Japan, 2022, 31, 23-38. The Morphology and Chemical Composition of Siliceous Spicules of the Early Cambrian Sponge Lenica unica Gorjansky, 1977. Russian Journal of Marine Biology, 2022, 48, 33-38. 	12.2 0.5 0.2	149 0 0
470 471 472 473	Earth's sediment cycle during the Anthropocene. Nature Reviews Earth & Environment, 2022, 3, 179-196. The carbon and nutrient dynamics in Tokyo Bay:sewage maintenance alters carbon and nutrient cycling. Oceanography in Japan, 2022, 31, 23-38. The Morphology and Chemical Composition of Siliceous Spicules of the Early Cambrian Sponge Lenica unica Gorjansky, 1977. Russian Journal of Marine Biology, 2022, 48, 33-38. The role of silicon in the supply of terrestrial ecosystem services. Environmental Chemistry Letters, 2022, 20, 2109-2121.	12.2 0.5 0.2 8.3	149 0 0 9
470 471 472 473 474	Earth's sediment cycle during the Anthropocene. Nature Reviews Earth & Environment, 2022, 3, 179-196. The carbon and nutrient dynamics in Tokyo Bay:sewage maintenance alters carbon and nutrient cycling. Oceanography in Japan, 2022, 31, 23-38. The Morphology and Chemical Composition of Siliceous Spicules of the Early Cambrian Sponge Lenica unica Corjansky, 1977. Russian Journal of Marine Biology, 2022, 48, 33-38. The role of silicon in the supply of terrestrial ecosystem services. Environmental Chemistry Letters, 2022, 20, 2109-2121. Natural variations in dissolved silicon isotopes across the Arctic Ocean from the Pacific to the Atlantic. Clobal Biogeochemical Cycles, 0, .	12.2 0.5 0.2 8.3 1.9	149 0 0 9 2
470 471 472 473 473 474	 Earth's sediment cycle during the Anthropocene. Nature Reviews Earth & Environment, 2022, 3, 179-196. The carbon and nutrient dynamics in Tokyo Bay:sewage maintenance alters carbon and nutrient cycling. Oceanography in Japan, 2022, 31, 23-38. The Morphology and Chemical Composition of Siliceous Spicules of the Early Cambrian Sponge Lenica unica Gorjansky, 1977. Russian Journal of Marine Biology, 2022, 48, 33-38. The role of silicon in the supply of terrestrial ecosystem services. Environmental Chemistry Letters, 2022, 20, 2109-2121. Natural variations in dissolved silicon isotopes across the Arctic Ocean from the Pacific to the Atlantic. Global Biogeochemical Cycles, 0, . Effects of Phytoplankton on the Production and Emission of Estuarine Dimethyl Sulfide Under Different Nutrient Inputs From Changjiang River. Journal of Geophysical Research: Oceans, 2022, 127, . 	12.2 0.5 0.2 8.3 1.9	 149 0 0 9 2 2
470 471 472 473 473 474 475	 Earth's sediment cycle during the Anthropocene. Nature Reviews Earth & Environment, 2022, 3, 179-196. The carbon and nutrient dynamics in Tokyo Bay:sewage maintenance alters carbon and nutrient cycling. Oceanography in Japan, 2022, 31, 23-38. The Morphology and Chemical Composition of Siliceous Spicules of the Early Cambrian Sponge Lenica unica Corjansky, 1977. Russian Journal of Marine Biology, 2022, 48, 33-38. The role of silicon in the supply of terrestrial ecosystem services. Environmental Chemistry Letters, 2022, 20, 2109-2121. Natural variations in dissolved silicon isotopes across the Arctic Ocean from the Pacific to the Atlantic. Clobal Biogeochemical Cycles, 0, Effects of Phytoplankton on the Production and Emission of Estuarine Dimethyl Sulfide Under Different Nutrient Inputs From Changjiang River. Journal of Geophysical Research: Oceans, 2022, 127, . Fractionation of germanium and silicon during scavenging from seawater by marine Fe (oxy)hydroxides: Evidence from hydrogenetic ferromanganese crusts and nodules. Chemical Geology, 2022, 595, 120791. 	12.2 0.5 0.2 8.3 1.9 1.0 1.4	149 0 0 9 2 2 8
470 471 472 473 473 474 475 476	Earth's sediment cycle during the Anthropocene. Nature Reviews Earth & Environment, 2022, 3, 179-196. The carbon and nutrient dynamics in Tokyo Bay:sewage maintenance alters carbon and nutrient cycling. Oceanography in Japan, 2022, 31, 23-38. The Morphology and Chemical Composition of Siliceous Spicules of the Early Cambrian Sponge Lenica unica Gorjansky, 1977. Russian Journal of Marine Biology, 2022, 48, 33-38. The role of silicon in the supply of terrestrial ecosystem services. Environmental Chemistry Letters, 2022, 20, 2109-2121. Natural variations in dissolved silicon isotopes across the Arctic Ocean from the Pacific to the Atlantic. Global Biogeochemical Cycles, 0, . Effects of Phytoplankton on the Production and Emission of Estuarine Dimethyl Sulfide Under Different Nutrient Inputs From Changjiang River. Journal of Geophysical Research: Oceans, 2022, 127, . Fractionation of germanium and silicon during scavenging from seawater by marine Fe [oxy]hydroxides: Evidence from hydrogenetic ferromanganese crusts and nodules. Chemical Geology, 2022, 595, 120791. Mineral-enhanced biological pump—A strategy based on mineral-microbe interactions for increasing carbon sink in water. Chinese Science Bulletin, 2022, 67, 924-932.	12.2 0.5 0.2 8.3 1.9 1.0 1.4	 149 0 0 9 2 2 8 0

ARTICLE IF CITATIONS # Tidally driven submarine groundwater discharge to a marine aquaculture embayment: Insights from 484 2.3 0 radium and dissolved silicon. Marine Pollution Bulletin, 2022, 178, 113620. Evolution and Current Vision of Silicon-Mediated Alleviation of Cadmium Toxicity in Soil-Plant 0.4 System. SSRN Electronic Journal, 0, , . A silicon isotopic perspective on the contribution of diagenesis to the sedimentary silicon budget in 500 1.6 4 the Southern Ocean. Geochimica Et Cosmochimica Acta, 2022, 327, 298-313. Seasonal, weathering and water use controls of silicon cycling along the river flow in two 1.4 contrasting basins of South India. Chemical Geology, 2022, 604, 120883. Intracellular silicification by early-branching magnetotactic bacteria. Science Advances, 2022, 8, 502 4.7 11 eabn6045. The Sediment Greenâ€Blue Color Ratio as a Proxy for Biogenic Silica Productivity Along the Chilean Margin. Geochemistry, Geophysics, Geosystems, 2022, 23, . 1.0 Stable silicon isotopes uncover a mineralogical control on the benthic silicon cycle in the Arctic 504 1.6 12 Barents Sea. Geochimica Et Cosmochimica Acta, 2022, 329, 206-230. Benthic fluxes of dissolved silica are an important component of the marine Si cycle in the coastal zone. Estuarine, Coastal and Shelf Science, 2022, 273, 107880. Coastal Nutrient Supply and Global Ocean Biogeochemistry. Encyclopedia of the UN Sustainable 506 0.0 0 Development Goals, 2022, , 144-155. Diatoms and Their Ecological Importance. Encyclopedia of the UN Sustainable Development Goals, 2022, , 304-312. A Competitive Advantage of Middle-Sized Diatoms From Increasing Seawater CO2. Frontiers in 508 2 1.5 Microbiology, 2022, 13, . Development of a versatile smartphone-based environmental analyzer (vSEA) and its application in on-site nutrient detection. Science of the Total Environment, 2022, 838, 156197. An automated analyzer for the simultaneous determination of silicate and phosphate in seawater. 511 2.9 5 Talanta, 2022, 248, 123629. Can Ammonium Records in Antarctic Ice Cores be a Proxy for Sea Ice Fluctuations?. Journal of the Geological Society of India, 2022, 98, 760-764. Closing the Global Marine ²²⁶Ra Budget Reveals the Biological Pump as a Dominant 514 7 1.5 Removal Flux in the Upper Ocean. Geophysical Research Letters, 2022, 49, . Role of Marginal Seas in Deep Ocean Regeneration of Dissolved Silica: A Case Study in the Marginal 1.2 Seas of the Western Pacific. Frontiers in Marine Science, 0, 9, . Effects of Snow and Remineralization Processes on Nutrient Distributions in Multiâ Eyear Antarctic 516 1.0 2 Landfast Sea Ice. Journal of Geophysical Research: Oceans, 2022, 127, . Competing and accelerating effects of anthropogenic nutrient inputs on climate-driven changes in ocean carbon and oxygen cycles. Science Advances, 2022, 8, .

#	Article	IF	CITATIONS
518	An 8-year record of phytoplankton productivity and nutrient distributions from surface waters of Saanich Inlet. Scientific Data, 2022, 9, .	2.4	0
519	Active Silica Diagenesis in the Deepest Hadal Trench Sediments. Geophysical Research Letters, 2022, 49, .	1.5	8
520	Mid-Late Holocene climate variabilities in the Bransfield Strait, Antarctic Peninsula driven by insolation and ENSO activities. Palaeogeography, Palaeoclimatology, Palaeoecology, 2022, 601, 111140.	1.0	2
521	Authigenic clay mineral evidence for restricted, evaporitic conditions during the emergence of the Ediacaran Doushantuo Biota. Communications Earth & Environment, 2022, 3, .	2.6	3
522	Seamless Integration of the Coastal Ocean in Global Marine Carbon Cycle Modeling. Journal of Advances in Modeling Earth Systems, 2022, 14, .	1.3	14
523	Underestimation of biogenic silica sinking flux due to dissolution in sediment traps: A case study in the South China Sea. Frontiers in Marine Science, 0, 9, .	1.2	0
524	Primary production dynamics on the Agulhas Bank in autumn. Deep-Sea Research Part II: Topical Studies in Oceanography, 2022, 203, 105153.	0.6	1
525	Atmospheric silicon wet deposition and its influencing factors in China. Environmental Research, 2022, 214, 114084.	3.7	3
526	Tides: Lifting life in the ocean. , 2023, , 307-331.		0
527	The upper ocean silicon cycle of the subarctic Pacific during the EXPORTS field campaign. Elementa, 2022, 10, .	1.1	2
528	Cascading effects augment the direct impact of CO2 on phytoplankton growth in a biogeochemical model. Elementa, 2022, 10, .	1.1	2
529	Contrasting the Primary Production and C and Si Export in the Different Environments of the Southern Ocean. SSRN Electronic Journal, 0, , .	0.4	0
530	Core metabolism plasticity in phytoplankton: Response of <i>Dunaliella tertiolecta</i> to oil exposure. Journal of Phycology, 2022, 58, 804-814.	1.0	1
532	A 17-year time-series of diatom populationsâ€~ flux and composition in the Mauritanian coastal upwelling. Frontiers in Marine Science, 0, 9, .	1.2	0
533	Persistent late Permian to Early Triassic warmth linked to enhanced reverse weathering. Nature Geoscience, 2022, 15, 832-838.	5.4	19
534	Dynamics of Phaeocystis globosa bloom and implications for its seed sources in the Beibu Gulf, China. Journal of Oceanology and Limnology, 0, , .	0.6	0
535	The Depositional Mechanism of Hydrothermal Chert Nodules in a Lacustrine Environment: A Case Study in the Middle Permian Lucaogou Formation, Junggar Basin, Northwest China. Minerals (Basel,) Tj ETQq0 0	0 r g Ba⊺/O∖	verlock 10 Tf
	Targeting motife in fructule-associated proteins from the centric diatom Thalassiesira pseudopapa		

536	Taige and the art addate abbeen tea proteins from the centre ar
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#	Article	IF	Citations
537	Efficient gene replacement by <scp>CRISPR</scp> /Casâ€mediated homologous recombination in the model diatom <i>Thalassiosira pseudonana</i> . New Phytologist, 2023, 238, 438-452.	3.5	8
538	Mechanisms and magnitude of dissolved silica release from a New England salt marsh. Biogeochemistry, 0, , .	1.7	0
539	Design of a low-cost pH-Stat to study effects of ocean acidification on growth and nutrient consumption of diatoms. Aquacultural Engineering, 2022, 99, 102300.	1.4	0
540	Collapse of Late Permian chert factories in the equatorial Tethys and the nature of the Early Triassic chert gap. Earth and Planetary Science Letters, 2022, 600, 117861.	1.8	6
541	Atmospheric input of silicon to the China adjacent seas: Non-negligible contributions from anthropogenic sources. Science of the Total Environment, 2023, 857, 159540.	3.9	1
542	Distribution of nutrients and chlorophyll across an equatorial reef region: Insights on coastal gradients. Ocean and Coastal Research, 2023, 71, .	0.3	2
543	A regional-scale approach for modeling primary production and biogenic silica export in the Southern Ocean. Environmental Research, 2022, , 114811.	3.7	0
544	Chromium stable isotope distributions in the southwest Pacific Ocean and constraints on hydrothermal input from the Kermadec Arc. Geochimica Et Cosmochimica Acta, 2023, 342, 31-44.	1.6	5
545	Interlinking diatom frustule diversity from the abyss of the central Arabian Sea to surface processes: physical forcing and oxygen minimum zone. Environmental Monitoring and Assessment, 2023, 195, .	1.3	1
546	Whole-genome scanning reveals environmental selection mechanisms that shape diversity in populations of the epipelagic diatom Chaetoceros. PLoS Biology, 2022, 20, e3001893.	2.6	7
547	Morphological, physiological, and transcriptional responses of the freshwater diatom Fragilaria crotonensis to elevated pH conditions. Frontiers in Microbiology, 0, 13, .	1.5	2
548	On the dissolution of sponge silica: Assessing variability and biogeochemical implications. Frontiers in Marine Science, 0, 9, .	1.2	2
549	Benthic diatoms modify riverine silicon export to a marine zone in a hypertidal estuarine environment. Biogeochemistry, 0, , .	1.7	1
550	The Co-Evolution Aspects of the Biogeochemical Role of Phytoplankton in Aquatic Ecosystems: A Review. Biology, 2023, 12, 92.	1.3	6
551	Spatio-temporal variation of major ion chemistry and nutrient stoichiometry in a tropical monsoonal estuary: insight into biogeochemical processes. Environmental Earth Sciences, 2023, 82, .	1.3	1
552	The Use of Si-Based Fertilization to Improve Agricultural Performance. Journal of Soil Science and Plant Nutrition, 2023, 23, 1096-1108.	1.7	4
553	Boundary exchange completes the marine Pb cycle jigsaw. Proceedings of the National Academy of Sciences of the United States of America, 2023, 120, .	3.3	5
554	The elements of life: A biocentric tour of the periodic table. Advances in Microbial Physiology, 2023, , 1-127.	1.0	9

#	Article	IF	CITATIONS
555	Biogeochemical characteristics of brash sea ice and icebergs during summer and autumn in the Indian sector of the Southern Ocean. Progress in Oceanography, 2023, 214, 103023.	1.5	0
556	Lithium isotopic and fluid mobile trace element systematics of the Bay of Islands altered forearc upper to lower ophiolitic crust. Chemical Geology, 2023, 623, 121408.	1.4	1
557	Synergic role of frontal migration and silicic acid concentration in driving diatom productivity in the Indian sector of the Southern Ocean over the past 350Âka. Marine Micropaleontology, 2023, 181, 102245.	0.5	1
558	Riverine and submarine groundwater nutrients fuel high primary production in a tropical bay. Science of the Total Environment, 2023, 877, 162896.	3.9	2
559	Pollutant load discharge from a Southwestern Mediterranean river (Mazafran River, Algeria) and its impact on the coastal environment. Arabian Journal of Geosciences, 2023, 16, .	0.6	5
560	Nano-mineralogy and growth environment of Fe-Mn polymetallic crusts and nodules from the South China Sea. Frontiers in Marine Science, 0, 10, .	1.2	1
561	Long-term adaptation to elevated temperature but not CO2 alleviates the negative effects of ultraviolet-B radiation in a marine diatom. Marine Environmental Research, 2023, 186, 105929.	1.1	0
562	Quantitative Parameters of Pleistocene Sediments in the World Ocean. , 2023, , 201-215.		0
563	Biogenic silica cycling in the Skagerrak. Frontiers in Marine Science, 0, 10, .	1.2	2
564	Biogenic silica accumulation in picoeukaryotes: Novel players in the marine silica cycle. Environmental Microbiology Reports, 2023, 15, 282-290.	1.0	0
565	Ocean Acidification Conditions and Marine Diatoms. , 2023, , 103-111.		0
578	Tagoro Submarine Volcano as a Natural Source of Significant Dissolved Inorganic Nutrients. Active Volcanoes of the World, 2023, , 185-201.	1.0	1
590	Basic Oceanographic Parameters and Their Significance. , 2023, , 67-97.		0
594	Geochemistry of Marine Sediments. , 2023, , .		0
595	Submarine Groundwater Discharge: A Source of Nutrients, Metals, and Pollutants to the Coastal Ocean. , 2023, , .		0
606	Groundwater Quality Restoration and Coastal Ecosystem Productivity. , 2024, , 716-736.		0
608	Human Impacts. , 2023, , 373-426.		0
611	Past and present dynamics of the iron biogeochemical cycle. , 2024, , .		0

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IF CITATIONS