Guebuem Kim

List of Publications by Year
in descending order

129 papers	4,991 citations	87843 38 h-index	110317 64 g-index
129 all docs	129 docs citations	129 times ranked	3212 citing authors

#	Article	IF	Citations
1	Global estimate of submarine groundwater discharge based on an observationally constrained radium isotope model. Geophysical Research Letters, 2014, 41, 8438-8444.	1.5	236
2	Submarine groundwater discharge (SGD) into the Yellow Sea revealed by 228Ra and 226Ra isotopes: Implications for global silicate fluxes. Earth and Planetary Science Letters, 2005, 237, 156-166.	1.8	212
3	Large submarine groundwater discharge and benthic eutrophication in Bangdu Bay on volcanic Jeju Island, Korea. Limnology and Oceanography, 2005, 50, 1393-1403.	1.6	178
4	Estimating submarine inputs of groundwater and nutrients to a coastal bay using radium isotopes. Marine Chemistry, 2005, 96, 61-71.	0.9	163
5	Submarine Groundwater Discharge: Updates on Its Measurement Techniques, Geophysical Drivers, Magnitudes, and Effects. Frontiers in Environmental Science, 2019, 7, .	1.5	158
6	Linking groundwater-borne nutrients and dinoflagellate red-tide outbreaks in the southern sea of Korea using a Ra tracer. Estuarine, Coastal and Shelf Science, 2007, 71, 309-317.	0.9	152
7	Measurement of224Ra and226Ra Activities in Natural Waters Using a Radon-in-Air Monitor. Environmental Science & Technology, 2001, 35, 4680-4683.	4.6	148
8	A simple and rapid method for analyzing radon in coastal and ground waters using a radon-in-air monitor. Journal of Environmental Radioactivity, 2006, 89, 219-228.	0.9	144
9	Large submarine groundwater discharge (SGD) from a volcanic island. Geophysical Research Letters, 2003, 30, .	1.5	133
10	Tidal pumping of groundwater into the coastal ocean revealed from submarine222Rn and CH4monitoring. Geophysical Research Letters, 2002, 29, 23-1-23-4.	1.5	132
11	Submarine groundwater discharge from oceanic islands standing in oligotrophic oceans: Implications for global biological production and organic carbon fluxes. Limnology and Oceanography, 2011, 56, 673-682.	1.6	128
12	Radium tracing nutrient inputs through submarine groundwater discharge in the global ocean. Scientific Reports, 2018, 8, 2439.	1.6	123
13	A relationship between submarine groundwater borne nutrients traced by Ra isotopes and the intensity of dinoflagellate redâ€tides occurring in the southern sea of Korea. Limnology and Oceanography, 2010, 55, 1-10.	1.6	110
14	Nutrient inputs from submarine groundwater discharge (SGD) in Masan Bay, an embayment surrounded by heavily industrialized cities, Korea. Science of the Total Environment, 2009, 407, 3181-3188.	3.9	100
15	A sudden bottom-water formation during the severe winter 2000-2001: The case of the East/Japan Sea. Geophysical Research Letters, 2002, 29, 75-1-75-4.	1.5	94
16	Submarine groundwater discharge (SGD) as a main nutrient source for benthic and water-column primary production in a large intertidal environment of the Yellow Sea. Journal of Sea Research, 2011, 65, 103-113.	0.6	84
17	Large fluxes of rare earth elements through submarine groundwater discharge (SGD) from a volcanic island, Jeju, Korea. Marine Chemistry, 2011, 127, 12-19.	0.9	74
18	The role of submarine groundwater discharge (SGD) in nutrient budgets of Gamak Bay, a shellfish farming bay, in Korea. Journal of Sea Research, 2010, 64, 224-230.	0.6	73

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19	Efficient Preconcentration and Separation of Actinide Elements from Large Soil and Sediment Samples. Analytical Chemistry, 2000, 72, 4882-4887.	3.2	68
20	Title is missing!. Journal of Atmospheric Chemistry, 2000, 36, 65-79.	1.4	62
21	Production, degradation, and flux of dissolved organic matter in the subterranean estuary of a large tidal flat. Marine Chemistry, 2012, 142-144, 1-10.	0.9	61
22	Seasonal biogeochemical fluxes of234Th and210Po in the Upper Sargasso Sea: Influence from atmospheric iron deposition. Global Biogeochemical Cycles, 2001, 15, 651-661.	1.9	60
23	A radon-thoron isotope pair as a reliable earthquake precursor. Scientific Reports, 2015, 5, 13084.	1.6	60
24	Influence of trace element fluxes from submarine groundwater discharge (SGD) on their inventories in coastal waters off volcanic island, Jeju, Korea. Applied Geochemistry, 2012, 27, 37-43.	1.4	58
25	Speciation and Sources of Brown Carbon in Precipitation at Seoul, Korea: Insights from Excitationâ€“Emission Matrix Spectroscopy and Carbon Isotopic Analysis. Environmental Science & Technology, 2017, 51, 11580-11587.	4.6	57
26	Radium tracing of submarine groundwater discharge (SGD) and associated nutrient fluxes in a highly-permeable bed coastal zone, Korea. Marine Chemistry, 2008, 109, 307-317.	0.9	56
27	Dissolved organic matter in the subterranean estuary of a volcanic island, Jeju: Importance of dissolved organic nitrogen fluxes to the ocean. Journal of Sea Research, 2013, 78, 18-24.	0.6	55
28	Large deficiency of polonium in the oligotrophic ocean's interior. Earth and Planetary Science Letters, 2001, 192, 15-21.	1.8	54
29	Atmospheric depositional fluxes of trace elements,210Pb, and7Be to the Sargasso Sea. Global Biogeochemical Cycles, 1999, 13, 1183-1192.	1.9	53
30	Dissolved organic carbon in the precipitation of Seoul, Korea: Implications for global wet depositional flux of fossil-fuel derived organic carbon. Atmospheric Environment, 2012, 59, 117-124.	1.9	52
31	Rare earth element distributions and fractionation in plankton from the northwestern Mediterranean Sea. Chemosphere, 2015, 119, 72-82.	4.2	51
32	Green tide development associated with submarine groundwater discharge in a coastal harbor, Jeju, Korea. Scientific Reports, 2017, 7, 6325.	1.6	48
33	Geochemistry of alkaline earth elements (Mg, Ca, Sr, Ba) in the surface sediments of the Yellow Sea. Chemical Geology, 1999, 153, 1-10.	1.4	46
34	An efficient and simple method for measuring 226Ra using the scintillation cell in a delayed coincidence counting system (RaDeCC). Journal of Environmental Radioactivity, 2008, 99, 1859-1862.	0.9	42
35	Submarine groundwater discharge as a main source of rare earth elements in coastal waters. Marine Chemistry, 2014, 160, 11-17.	0.9	42
36	Determining groundwater Ra endâ€member values for the estimation of the magnitude of submarine groundwater discharge using Ra isotope tracers. Geophysical Research Letters, 2016, 43, 3865-3871.	1.5	42

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37	Intercalibration studies of ²¹⁰Po and ²¹⁰Pb in dissolved and particulate seawater samples. Limnology and Oceanography: Methods, 2012, 10, 776-789.	1.0	41
38	Factors controlling excess radium in the Nakdong River estuary, Korea: submarine groundwater discharge versus desorption from riverine particles. Marine Chemistry, 2002, 78, 1-8.	0.9	40
39	Hydrographically mediated patterns of photosynthetic pigments in the East/Japan Sea: Low N:P ratios and cyanobacterial dominance. Journal of Marine Systems, 2010, 82, 72-79.	0.9	37
40	and in the South-equatorial Atlantic:. Deep-Sea Research Part II: Topical Studies in Oceanography, 1999, 46, 907-917.	0.6	34
41	The significant inputs of trace elements and rare earth elements from melting glaciers in Antarctic coastal waters. Polar Research, 2015, 34, 24289.	1.6	34
42	Inputs of humic fluorescent dissolved organic matter via submarine groundwater discharge to coastal waters off a volcanic island (Jeju, Korea). Scientific Reports, 2017, 7, 7921.	1.6	34
43	Dissolved total hydrolyzable enantiomeric amino acids in precipitation: Implications on bacterial contributions to atmospheric organic matter. Geochimica Et Cosmochimica Acta, 2015, 153, 1-14.	1.6	33
44	The fallout isotope 207Bi in a Delaware salt marsh: a comparison with 210Pb and 137Cs as a geochronological tool. Science of the Total Environment, 1997, 196, 31-41.	3.9	32
45	Tracing terrestrial versus marine sources of dissolved organic carbon in a coastal bay using stable carbon isotopes. Biogeosciences, 2020, 17, 135-144.	1.3	32
46	Importance of colored dissolved organic matter (CDOM) inputs from the deep sea to the euphotic zone: Results from the East (Japan) Sea. Marine Chemistry, 2015, 169, 33-40.	0.9	31
47	Significant anaerobic production of fluorescent dissolved organic matter in the deep East Sea (Sea of) Tj ETQq1 1 0.784314 rgBT /Ov	1.5	31
48	Excess 210Po in the coastal atmosphere. Tellus, Series B: Chemical and Physical Meteorology, 2000, 52, 74-80.	0.8	30
49	Evidence for Anthropogenic 210Po in the Urban Atmosphere of Seoul, Korea. Environmental Science & Technology, 2005, 39, 1519-1522.	4.6	30
50	Estimating submarine discharge of fresh groundwater from a volcanic island using a freshwater budget of the coastal water column. Geophysical Research Letters, 2007, 34, .	1.5	30
51	Enrichment of Excess210Po in Anoxic Ponds. Environmental Science & Technology, 2005, 39, 4894-4899.	4.6	29
52	Factors controlling the C:N:P stoichiometry of dissolved organic matter in the N-limited, cyanobacteria-dominated East/Japan Sea. Journal of Marine Systems, 2013, 115-116, 1-9.	0.9	29
53	Accumulation records of radionuclides and trace metals in two contrasting Delaware salt marshes. Marine Chemistry, 2004, 87, 87-96.	0.9	28
54	Analytical Artifacts Associated with the Chelating Resin Extraction of Dissolved Rare Earth Elements in Natural Water Samples. Aquatic Geochemistry, 2010, 16, 611-620.	1.5	27

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55	Tracing the flow rate and mixing ratio of the Changjiang diluted water in the northwestern Pacific marginal seas using radium isotopes. Geophysical Research Letters, 2014, 41, 4637-4645.	1.5	27
56	Real-time monitoring of nutrient concentrations and red-tide outbreaks in the southern sea of Korea. Geophysical Research Letters, 2006, 33, .	1.5	26
57	Distribution patterns of chalcogens (S, Se, Te, and 210Po) in various tissues of a squid, Todarodes pacificus. Science of the Total Environment, 2008, 392, 218-224.	3.9	26
58	Mass Balance of Total Mercury and Monomethylmercury in Coastal Embayments of a Volcanic Island: Significance of Submarine Groundwater Discharge. Environmental Science & Technology, 2011, 45, 9891-9900.	4.6	26
59	Distributions of transition elements in the surface sediments of the Yellow Sea. Continental Shelf Research, 1998, 18, 1531-1542.	0.9	25
60	Submarine groundwater discharge in tidal flats revealed by space-borne synthetic aperture radar. Remote Sensing of Environment, 2011, 115, 793-800.	4.6	25
61	In-situ production of humic-like fluorescent dissolved organic matter during Cochlodinium polykrikoides blooms. Estuarine, Coastal and Shelf Science, 2018, 203, 119-126.	0.9	25
62	Significant and conservative long-range transport of dissolved organic nutrients in the Changjiang diluted water. Scientific Reports, 2018, 8, 12768.	1.6	24
63	Tracing nitrogen sources fueling coastal green tides off a volcanic island using radon and nitrogen isotopic tracers. Science of the Total Environment, 2019, 665, 913-919.	3.9	24
64	Significant production of humic fluorescent dissolved organic matter in the continental shelf waters of the northwestern Pacific Ocean. Scientific Reports, 2018, 8, 4887.	1.6	23
65	Measurement of Cosmogenic35S Activity in Rainwater and Lake Water. Analytical Chemistry, 2005, 77, 3390-3393.	3.2	22
66	Important role of colloids in the cycling of 210Po and 210Pb in the ocean: Results from the East/Japan Sea. Geochimica Et Cosmochimica Acta, 2012, 95, 134-142.	1.6	22
67	Sources, fluxes, and behaviors of fluorescent dissolved organic matter (FDOM) in the Nakdong River Estuary, Korea. Biogeosciences, 2018, 15, 1115-1122.	1.3	22
68	Prevailing Subsurface Chlorophyll Maximum (SCM) Layer in the East Sea and Its Relation to the Physico-Chemical Properties of Water Masses. Ocean and Polar Research, 2012, 34, 413-430.	0.3	22
69	Groundwater flow and phosphate dynamics surrounding a high discharge wastewater disposal well in the Florida Keys. Journal of Hydrology, 2003, 284, 193-210.	2.3	21
70	Uncertainties in the preparation of 224Ra Mn fiber standards. Marine Chemistry, 2008, 109, 220-225.	0.9	21
71	Significance of submarine groundwater discharge in the coastal fluxes of mercury in Hampyeong Bay, Yellow Sea. Chemosphere, 2013, 91, 320-327.	4.2	21
72	Nutrient input from submarine groundwater discharge versus intermittent river-water discharge through an artificial dam in the Yeongsan River estuary, Korea. Ocean Science Journal, 2010, 45, 179-186.	0.6	20

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73	Strong linkages between surface and deep-water dissolved organic matter in the East/Japan Sea. Biogeosciences, 2017, 14, 2561-2570.	1.3	20
74	A practical and accurate method for the determination of 234Th simultaneously with 210Po and 210Pb in seawater. Talanta, 1999, 49, 851-858.	2.9	19
75	The release of dissolved actinium to the ocean: A global comparison of different end-members. Marine Chemistry, 2008, 109, 409-420.	0.9	19
76	Changes in seawater N : P ratios in the northwestern Pacific Ocean in response to increasing atmospheric N deposition: Results from the East (Japan) Sea. Limnology and Oceanography, 2013, 58, 1907-1914.	1.6	19
77	Wet deposition of trace elements and radon daughter systematics in the South and equatorial Atlantic atmosphere. Global Biogeochemical Cycles, 2002, 16, 19-1-19-8.	1.9	18
78	Atmospheric depositional fluxes of cosmogenic 35S and 7Be: Implications for the turnover rate of sulfur through the biosphere. Atmospheric Environment, 2011, 45, 4230-4234.	1.9	18
79	Sulfur isotope and chemical compositions of the wet precipitation in two major urban areas, Seoul and Busan, Korea. Journal of Asian Earth Sciences, 2014, 79, 415-425.	1.0	18
80	Dependence of pH in coastal waters on the adsorption of protons onto sediment minerals. Limnology and Oceanography, 2015, 60, 831-839.	1.6	18
81	Role of colloids in the discharge of trace elements and rare earth elements from coastal groundwater to the ocean. Marine Chemistry, 2015, 176, 126-132.	0.9	18
82	Stable Carbon Isotopes Suggest Large Terrestrial Carbon Inputs to the Global Ocean. Global Biogeochemical Cycles, 2021, 35, e2020GB006684.	1.9	18
83	Significant emissions of 210Po by coal burning into the urban atmosphere of Seoul, Korea. Atmospheric Environment, 2012, 54, 80-85.	1.9	17
84	How accurate are the234Th based particulate residence times in the ocean?. Geophysical Research Letters, 1999, 26, 619-622.	1.5	16
85	Dispersion and removal characteristics of tritium originated from nuclear power plants in the atmosphere. Journal of Environmental Radioactivity, 2018, 192, 524-531.	0.9	15
86	Large seasonal variations in fine aerosol precipitation rates revealed using cosmogenic 7Be as a tracer. Science of the Total Environment, 2019, 673, 1-6.	3.9	15
87	Rare earth elements in the East Sea (Japan Sea): Distributions, behaviors, and applications. Geochimica Et Cosmochimica Acta, 2020, 286, 19-28.	1.6	15
88	Significant seasonal changes in optical properties of brown carbon in the midlatitude atmosphere. Atmospheric Chemistry and Physics, 2020, 20, 2709-2718.	1.9	15
89	Submarine Groundwater Discharge (SGD) and Associated Nutrient Fluxes to the Coastal Ocean. Global Change - the IGBP Series, 2010, , 529-538.	2.1	15
90	Distribution of 90Sr in coastal seawater, sediments and organisms off two atomic power stations in Korea. Journal of Environmental Radioactivity, 2002, 59, 105-112.	0.9	14

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91	Tracing river water versus wastewater sources of trace elements using rare earth elements in the Nakdong River estuarine waters. Marine Pollution Bulletin, 2020, 160, 111589.	2.3	14
92	Conservative behavior of terrestrial trace elements associated with humic substances in the coastal ocean. Geochimica Et Cosmochimica Acta, 2021, 308, 373-383.	1.6	14
93	Dependence of coastal water pH increases on submarine groundwater discharge off a volcanic island. Estuarine, Coastal and Shelf Science, 2015, 163, 15-21.	0.9	13
94	Removal of Refractory Dissolved Organic Carbon in the Amundsen Sea, Antarctica. Scientific Reports, 2020, 10, 1213.	1.6	13
95	Identifying sharp hydrographical changes in phytoplankton community structure using HPLC pigment signatures in coastal waters along Jeju Island, Korea. Ocean Science Journal, 2009, 44, 1-10.	0.6	12
96	Seasonal and spatial variations of tritium in precipitation in Northeast Asia (Korea) over the last 20â€¯years. Journal of Hydrology, 2019, 574, 794-800.	2.3	12
97	Tracing the advection of organic carbon into the subsurface Sargasso Sea using a228Ra/226Ra tracer. Geophysical Research Letters, 2003, 30, .	1.5	11
98	228Ra flux in the northwestern Pacific marginal seas: Implications for disproportionally large submarine groundwater discharge. Ocean Science Journal, 2015, 50, 195-202.	0.6	11
99	Satellite-Observed Chlorophyll-a Concentration Variability and Its Relation to Physical Environmental Changes in the East Sea (Japan Sea) from 2003 to 2015. Estuaries and Coasts, 2020, 43, 630-645.	1.0	10
100	Factors controlling the air ventilation of a limestone cave revealed by 222Rn and 220Rn tracers. Geosciences Journal, 2011, 15, 115-119.	0.6	9
101	Large temporal changes in contributions of groundwater-borne nutrients to coastal waters off a volcanic island. Ocean Science Journal, 2017, 52, 337-344.	0.6	9
102	Radium Tracing Crossâ€Shelf Fluxes of Nutrients in the Northwest Pacific Ocean. Geophysical Research Letters, 2019, 46, 11321-11328.	1.5	9
103	Trace elements (Fe, Mn, Co, Cu, Cd, and Ni) in the East Sea (Japan Sea): Distributions, boundary inputs, and scavenging processes. Marine Chemistry, 2022, 239, 104070.	0.9	9
104	Tracing Different Freshwater Sources for Nutrients and Dissolved Organic Matter in Coastal Waters off Jeju Island Using Radon. Estuaries and Coasts, 2020, 43, 487-495.	1.0	8
105	Anthropogenic gadolinium in lakes and rivers near metrocities in Korea. Environmental Sciences: Processes and Impacts, 2020, 22, 144-151.	1.7	8
106	Active exchange of water and nutrients between seawater and shallow pore water in intertidal sandflats. Ocean Science Journal, 2008, 43, 223-232.	0.6	7
107	Measurement of temporal and horizontal variations in 222Rn activity in estuarine waters for tracing groundwater inputs. Ocean Science Journal, 2010, 45, 197-202.	0.6	7
108	Tracing the sources of nutrients fueling dinoflagellate red tides occurring along the coast of Korea using radium isotopes. Scientific Reports, 2019, 9, 15319.	1.6	7

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109	Biogeochemical alteration and fluxes of dissolved organic matter and nutrients in coastal bays. Estuarine, Coastal and Shelf Science, 2020, 245, 106992.	0.9	7
110	Rapid and precise measurements of radon in water using a pulsed ionization chamber. Limnology and Oceanography: Methods, 2021, 19, 245-252.	1.0	7
111	Rapid and Accurate Method for Determining 234Th in Seawater: Fe Co-precipitation, UTEVA Extraction, and Micro-precipitation. Ocean Science Journal, 2021, 56, 378-384.	0.6	7
112	Tidal influence on the sea-to-air transfer of CH4in the coastal ocean. Tellus, Series B: Chemical and Physical Meteorology, 2006, 58, 88-94.	0.8	6
113	Estimating benthic fluxes of trace elements to hypoxic coastal waters using 210Po. Estuarine, Coastal and Shelf Science, 2014, 151, 324-330.	0.9	6
114	Large seasonal changes in the recharge of seawater in a subterranean estuary revealed by a radon tracer. Hydrological Processes, 2016, 30, 2525-2532.	1.1	6
115	Po-210 in the Environment: Biogeochemical Cycling and Bioavailability. Advances in Isotope Geochemistry, 2012, , 271-284.	1.4	6
116	Tracing the Atmospheric Input of Seawater-Dissolvable Pb Based on the Budget of 210Pb in the East Sea (Japan Sea). Frontiers in Marine Science, 2021, 8, .	1.2	6
117	Large fluxes of continental-shelf-borne dissolved organic carbon in the East China Sea and the Yellow Sea. Marine Chemistry, 2022, 240, 104097.	0.9	6
118	Comparison of S, Se, and 210Po accumulation patterns in common squid Todarodes pacificus from the Yellow Sea and East/Japan Sea. Ocean Science Journal, 2013, 48, 215-224.	0.6	5
119	Desorption of phosphate on sandy sediments by silicate in groundwater. Geochimica Et Cosmochimica Acta, 2019, 257, 184-190.	1.6	5
120	Characterizing the origins of dissolved organic carbon in coastal seawater using stable carbon isotope and light absorption characteristics. Biogeosciences, 2021, 18, 1793-1801.	1.3	5
121	Conditions of nutrients and dissolved organic matter for the outbreaks of Paralytic Shellfish Poisoning (PSP) in Jinhae Bay, Korea. Marine Pollution Bulletin, 2020, 158, 111381.	2.3	3
122	Sediment-Derived Dissolved Organic Matter Stimulates Heterotrophic Prokaryotes Metabolic Activity in Overlying Deep Sea in the Ulleung Basin, East Sea. Frontiers in Marine Science, 2022, 9, .	1.2	3
123	Decline in the Nutrient Inventories of the Upper Subtropical Northwest Pacific Ocean. Geophysical Research Letters, 2022, 49, .	1.5	3
124	Quantitative estimation of submarine groundwater discharge using airborne thermal infrared data acquired at two different tidal heights. Hydrological Processes, 2019, 33, 1089-1100.	1.1	2
125	Fluorescent Dissolved Organic Matter (FDOM) in the East Sea (Japan Sea): Distributions, Sources, and Sinks. Ocean Science Journal, 2021, 56, 132-140.	0.6	2
126	Editorial: Physics and Biogeochemistry of the East Asian Marginal Seas. Frontiers in Marine Science, 0, 9, .	1.2	2

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127	Contrasting Behaviors of 210Pb and 210Po in the Productive Shelf Water Versus the Oligotrophic Water. Frontiers in Marine Science, 2021, 8, .	1.2	1
128	Uranium Series Radionuclides. , 2016, , 191-199.		0
129	Sources and Behavior of Particulate Organic Carbon in the Yellow Sea and the East China Sea Based on 13C, 14C, and 234Th. Frontiers in Marine Science, 2022, 9, .	1.2	0