Kentaro Nakamura

List of Publications by Year
in descending order

98	4,024	109264 35	123376 61
papers	citations	h-index	g-index

100	100	100	3327
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Cell proliferation at 122Â°C and isotopically heavy CH ₄ production by a hyperthermophilic methanogen under high-pressure cultivation. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 10949-10954.	3.3	679
2	Deep-sea mud in the Pacific Ocean as a potential resource for rare-earth elements. Nature Geoscience, 2011, 4, 535-539.	5.4	434
3	The tremendous potential of deep-sea mud as a source of rare-earth elements. Scientific Reports, 2018, 8, 5763.	1.6	157
4	Geological background of the Kairei and Edmond hydrothermal fields along the Central Indian Ridge: Implications of their vent fluidsâ€™ distinct chemistry. Geofluids, 2008, 8, 239-251.	0.3	112
5	Origin and global tectonic significance of Early Archean cherts from the Marble Bar greenstone belt, Pilbara Craton, Western Australia. Precambrian Research, 2003, 125, 191-243.	1.2	106
6	Carbonatization of oceanic crust by the seafloor hydrothermal activity and its significance as a CO2 sink in the Early Archean. Geochimica Et Cosmochimica Acta, 2004, 68, 4595-4618.	1.6	103
7	Highly alkaline, high-temperature hydrothermal fluids in the early Archean ocean. Precambrian Research, 2010, 182, 230-238.	1.2	88
8	Geochemistry and mineralogy of REY-rich mud in the eastern Indian Ocean. Journal of Asian Earth Sciences, 2014, 93, 25-36.	1.0	87
9	Serpentinized troctolites exposed near the Kairei Hydrothermal Field, Central Indian Ridge: Insights into the origin of the Kairei hydrothermal fluid supporting a unique microbial ecosystem. Earth and Planetary Science Letters, 2009, 280, 128-136.	1.8	86
10	Discovery of New Hydrothermal Activity and Chemosynthetic Fauna on the Central Indian Ridge at 18Â°â€“20Â°S. PLoS ONE, 2012, 7, e32965.	1.1	83
11	Archaeal diversity and community development in deep-sea hydrothermal vents. Current Opinion in Microbiology, 2011, 14, 282-291.	2.3	76
12	Ultramafics-Hydrothermalism-Hydrogenesis-HyperSLiME (UltraH³) linkage: a key insight into early microbial ecosystem in the Archean deep-sea hydrothermal systems. Paleontological Research, 2006, 10, 269-282.	0.5	73
13	Igneous, Alteration and Exhumation Processes Recorded in Abyssal Peridotites and Related Fault Rocks from an Oceanic Core Complex along the Central Indian Ridge. Journal of Petrology, 2009, 50, 1299-1325.	1.1	69
14	Theoretical constraints of physical and chemical properties of hydrothermal fluids on variations in chemolithotrophic microbial communities in seafloor hydrothermal systems. Progress in Earth and Planetary Science, 2014, 1, 5.	1.1	69
15	Discovery of extremely REY-rich mud in the western North Pacific Ocean. Geochemical Journal, 2016, 50, 557-573.	0.5	68
16	Water column imaging with multibeam echo-sounding in the mid-Okinawa Trough: Implications for distribution of deep-sea hydrothermal vent sites and the cause of acoustic water column anomaly. Geochemical Journal, 2015, 49, 579-596.	0.5	67
17	Discovery of a new hydrothermal vent based on an underwater, high-resolution geophysical survey. Deep-Sea Research Part I: Oceanographic Research Papers, 2013, 74, 1-10.	0.6	63
18	Synchrotron X-ray spectroscopic perspective on the formation mechanism of REY-rich muds in the Pacific Ocean. Geochimica Et Cosmochimica Acta, 2018, 240, 274-292.	1.6	60

#	Article	IF	Citations
19	Tracking the spatiotemporal variations of statistically independent components involving enrichment of rare-earth elements in deep-sea sediments. Scientific Reports, 2016, 6, 29603.	1.6	57
20	Rare-earth, major, and trace element geochemistry of deep-sea sediments in the Indian Ocean: Implications for the potential distribution of REY-rich mud in the Indian Ocean. Geochemical Journal, 2015, 49, 621-635.	0.5	51
21	Geology and geochemistry of ferromanganese nodules in the Japanese Exclusive Economic Zone around Minamitorishima Island. Geochemical Journal, 2016, 50, 539-555.	0.5	50
22	Statistic and Isotopic Characterization of Deepâ€Sea Sediments in the Western North Pacific Ocean: Implications for Genesis of the Sediment Extremely Enriched in Rare Earth Elements. Geochemistry, Geophysics, Geosystems, 2019, 20, 3402-3430.	1.0	49
23	Deepest and hottest hydrothermal activity in the Okinawa Trough: the Yokosuka site at Yaeyama Knoll. Royal Society Open Science, 2017, 4, 171570.	1.1	48
24	Chemostratigraphy of deep-sea sediments in the western North Pacific Ocean: Implications for genesis of mud highly enriched in rare-earth elements and yttrium. Ore Geology Reviews, 2020, 119, 103392.	1.1	48
25	High Connectivity of Animal Populations in Deep-Sea Hydrothermal Vent Fields in the Central Indian Ridge Relevant to Its Geological Setting. PLoS ONE, 2013, 8, e81570.	1.1	48
26	Hematite formation by oxygenated groundwater more than 2.76Âbillion years ago. Earth and Planetary Science Letters, 2009, 278, 40-49.	1.8	47
27	Geochemistry of hydrothermally altered basaltic rocks from the Southwest Indian Ridge near the Rodriguez Triple Junction. Marine Geology, 2007, 239, 125-141.	0.9	46
28	Variability in Microbial Communities in Black Smoker Chimneys at the NW Caldera Vent Field, Brothers Volcano, Kermadec Arc. Geomicrobiology Journal, 2009, 26, 552-569.	1.0	46
29	Geological factors responsible for REY-rich mud in the western North Pacific Ocean: Implications from mineralogy and grain size distributions. Geochemical Journal, 2016, 50, 591-603.	0.5	46
30	Hydrogen-rich hydrothermal environments in the Hadean ocean inferred from serpentinization of komatiites at 300ÂÂ°C and 500Âbar. Progress in Earth and Planetary Science, 2015, 2, .	1.1	45
31	Geochemistry of REY-rich mud in the Japanese Exclusive Economic Zone around Minamitorishima Island. Geochemical Journal, 2016, 50, 575-590.	0.5	42
32	A new and prospective resource for scandium: Evidence from the geochemistry of deep-sea sediment in the western North Pacific Ocean. Ore Geology Reviews, 2018, 102, 260-267.	1.1	41
33	Precise Determination of Ultra-Low (sub-ng g-1) Level Rare Earth Elements in Ultramafic Rocks by Quadrupole ICP-MS. Geostandards and Geoanalytical Research, 2007, 31, 185-197.	2.0	37
34	Rare Earth, Major and Trace Elements in the Kunimiyama Ferromanganese Deposit in the Northern Chichibu Belt, Central Shikoku, Japan. Resource Geology, 2005, 55, 291-300.	0.3	36
35	Compositional, Physiological and Metabolic Variability in Microbial Communities Associated with Geochemically Diverse, Deep-Sea Hydrothermal Vent Fluids. , 2010, , 251-283.		36
36	Hybrid troctolites from mid-ocean ridges: inherited mantle in the lower crust. Lithos, 2015, 232, 124-130.	0.6	35

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37	Geochemical features of Fe-Mn micronodules in deep-sea sediments of the western North Pacific Ocean: Potential for co-product metal extraction from REY-rich mud. Ore Geology Reviews, 2020, 127, 103805.	1.1	31
38	H2 generation by experimental hydrothermal alteration of komatiitic glass at 300Â°C and 500 bars: A preliminary result from on-going experiment. Geochemical Journal, 2009, 43, e17-e22.	0.5	30
39	Fluid chemistry in the Solitaire and Dodo hydrothermal fields of the Central Indian Ridge. Geofluids, 2016, 16, 988-1005.	0.3	29
40	Fish proliferation and rare-earth deposition by topographically induced upwelling at the late Eocene cooling event. Scientific Reports, 2020, 10, 9896.	1.6	29
41	Trial exploration for hydrothermal activity using acoustic measurements at the North Iheya Knoll. Geochemical Journal, 2015, 49, 597-602.	0.5	29
42	Acoustic characterization of pelagic sediments using sub-bottom profiler data: Implications for the distribution of REY-rich mud in the Minamitorishima EEZ, western Pacific. Geochemical Journal, 2016, 50, 605-619.	0.5	28
43	A Simple Method for Precise Determination of 23 Trace Elements in Granitic Rocks by ICP-MS after Lithium Tetraborate Fusion. Resource Geology, 2006, 56, 471-478.	0.3	26
44	Iron-Based Microbial Ecosystem on and Below the Seafloor: A Case Study of Hydrothermal Fields of the Southern Mariana Trough. Frontiers in Microbiology, 2012, 3, 89.	1.5	26
45	Comparative Analysis of Microbial Communities in Iron-Dominated Flocculent Mats in Deep-Sea Hydrothermal Environments. Applied and Environmental Microbiology, 2016, 82, 5741-5755.	1.4	26
46	Whole-rock Geochemistry of Basic Schists from the Besshi Area, Central Shikoku: Implications for the Tectonic Setting of the Besshi Sulfide Deposit. Resource Geology, 2006, 56, 423-432.	0.3	25
47	Significant impacts of pelagic clay on average chemical composition of subducting sediments: New insights from discovery of extremely rare-earth elements and yttrium-rich mud at Ocean Drilling Program Site 1149 in the western North Pacific Ocean. Journal of Asian Earth Sciences, 2019, 186, 104059.	1.0	24
48	Geochemical Features and Tectonic Setting of Greenstones from Kunimiyama, Northern Chichibu Belt, Central Shikoku, Japan. Resource Geology, 2005, 55, 301-310.	0.3	23
49	Chemostratigraphic Correlations of Deep-Sea Sediments in the Western North Pacific Ocean: A New Constraint on the Distribution of Mud Highly Enriched in Rare-Earth Elements. Minerals (Basel,) Tj ETQq1 1 0.784314 rgBT /Overlock 10	0.4	23
50	Discovery of lanthanide tetrad effect in an oceanic plagiogranite from an Ocean Core Complex at the Central Indian Ridge 25.DEG.S. Geochemical Journal, 2007, 41, 135-140.	0.5	20
51	Geological features and resource potential of deep-sea mud highly enriched in rare-earth elements in the Central Pacific Basin and the Penrhyn Basin. Ore Geology Reviews, 2021, 139, 104440.	1.1	19
52	REY-Rich Mud. Fundamental Theories of Physics, 2015, , 79-127.	0.1	17
53	Origin of magnetic highs at ultramafic hosted hydrothermal systems: Insights from the Yokoniwa site of Central Indian Ridge. Earth and Planetary Science Letters, 2016, 441, 26-37.	1.8	16
54	Dual energy metabolism of the Campylobacterota endosymbiont in the chemosynthetic snail Alviniconcha marisindica. ISME Journal, 2020, 14, 1273-1289.	4.4	16

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55	Palagonitization of Basalt Glass in the Flanks of Mid-Ocean Ridges: Implications for the Bioenergetics of Oceanic Intracrustal Ecosystems. Astrobiology, 2015, 15, 793-803.	1.5	15
56	Visualisation method for the broad distribution of seafloor ferromanganese deposits. Marine Georesources and Geotechnology, 2021, 39, 267-279.	1.2	15
57	Chemical leaching of rare earth elements from highly REY-rich mud. Geochemical Journal, 2015, 49, 637-652.	0.5	15
58	A Study on the Recovery Method of Rare-Earth Elements from REY-Rich Mud toward the Development and the Utilization of REY-Rich Mud. Journal of MMIJ, 2014, 130, 104-114.	0.4	15
59	Origin of felsic volcanism in the Izu arc intra-arc rift. Contributions To Mineralogy and Petrology, 2017, 172, 1.	1.2	13
60	A new geochemical approach for constraining a marine redox condition of Early Archean. Earth and Planetary Science Letters, 2007, 261, 296-302.	1.8	12
61	Tectonic Background of Four Hydrothermal Fields Along the Central Indian Ridge. , 2015, , 133-146.		12
62	Variation in magnetic properties of serpentinized peridotites exposed on the <scp>Y</scp>okoniwa <scp>R</scp>ise, <scp>C</scp>entral <scp>I</scp>ndian <scp>R</scp>idge: <scp>I</scp>nsights into the role of magnetite in serpentinization. Geochemistry, Geophysics, Geosystems, 2016, 17, 5024-5035.	1.0	12
63	Fluxâ€Free Fusion of Silicate Rock Preceding Acid Digestion for ICPâ€MS Bulk Analysis. Geostandards and Geoanalytical Research, 2011, 35, 45-55.	1.7	11
64	Geochemical Features of Redox-Sensitive Trace Metals in Sediments under Oxygen-Depleted Marine Environments. Minerals (Basel, Switzerland), 2020, 10, 1021.	0.8	11
65	Fineâ€scale chemostratigraphy of crossâ€sectioned hydrogenous ferromanganese nodules from the western North Pacific. Island Arc, 2021, 30, e12395.	0.5	11
66	Stratigraphic Variations of Feâ€“Mn Micronodules and Implications for the Formation of Extremely REY-Rich Mud in the Western North Pacific Ocean. Minerals (Basel, Switzerland), 2021, 11, 270.	0.8	11
67	Auriferous pyrite formed by episodic fluid inputs in the Akeshi and Kasuga high-sulfidation deposits, Southern Kyushu, Japan. Mineralium Deposita, 2022, 57, 129-145.	1.7	11
68	Geochemical Constraints on Potential Biomass Sustained by Subseafloor Waterâ€“Rock Interactions. , 2015, , 11-30.		10
69	Rapid coupling between solid earth and ice volume during the Quaternary. Scientific Reports, 2021, 11, 5695.	1.6	9
70	Carbonate Minerals in the Warrawoona Group, Pilbara Craton: Implications for Continental Crust, Life, and Global Carbon Cycle in the Early Archean. Resource Geology, 2002, 52, 91-100.	0.3	8
71	Dissolution of altered tuffaceous rocks under conditions relevant for CO2 storage. Applied Geochemistry, 2015, 58, 78-87.	1.4	8
72	Earth system feedback statistically extracted from the Indian Ocean deep-sea sediments recording Eocene hyperthermals. Scientific Reports, 2017, 7, 11304.	1.6	8

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73	Secular Variations in Provenance of Sedimentary Components in the Western North Pacific Ocean Constrained by Sr Isotopic Features of Deepâ€Sea Sediments. Geochemistry, Geophysics, Geosystems, 2022, 23, .	1.0	8
74	Geological, geochemical and social-scientific assessment of basaltic aquifers as potential storage sites for CO2. Geochemical Journal, 2013, 47, 385-396.	0.5	7
75	Three-Dimensional Structural Analysis of Ferromanganese Nodules from the Western North Pacific Ocean Using X-ray Computed Tomography. Minerals (Basel, Switzerland), 2021, 11, 1100.	0.8	7
76	Indian Ocean Hydrothermal Systems: Seafloor Hydrothermal Activities, Physical and Chemical Characteristics of Hydrothermal Fluids, and Vent-Associated Biological Communities. , 2015, , 147-161.		6
77	Impact of Lateral SnO₂ Nanofilm Channel Geometry on a 1024 Crossbar Chemical Sensor Array. ACS Sensors, 2022, 7, 460-468.	4.0	6
78	Physical and Chemical Diversity of Seafloor Hydrothermal Systems and Presentation of Associated Chemolithoautotrophic Ecosystem. Journal of Geography (Chigaku Zasshi), 2009, 118, 1083-1130.	0.1	5
79	Longâ€Term Reaction Characteristics of CO₂â€“Waterâ€“Rock Interaction: Insight into the Potential Groundwater Contamination Risk from Underground CO₂ Storage. Resource Geology, 2018, 68, 93-100.	0.3	5
80	Relocation of dehydroquinate dehydratase to the periplasmic space improves dehydroshikimate production with Gluconobacter oxydans strain NBRC3244. Applied Microbiology and Biotechnology, 2021, 105, 5883-5894.	1.7	5
81	Chemical and Isotopic Compositions of Hydrothermal Fluids at Snail, Archaean, Pika, and Urashima Sites in the Southern Mariana Trough. , 2015, , 587-602.		5
82	Umber as a lithified REY-rich mud in Japanese accretionary complexes and its implications for the osmium isotopic composition of Middle Cretaceous seawater. Ore Geology Reviews, 2022, 142, 104683.	1.1	5
83	Petrology of Peridotites and Related Gabbroic Rocks Around the Kairei Hydrothermal Field in the Central Indian Ridge. , 2015, , 177-193.		4
84	Elemental dissolution of basalts with ultra-pure water at 340Â°C and 40 Mpa in a newly developed flow-type hydrothermal apparatus. Geochemical Journal, 2013, 47, 89-92.	0.5	3
85	Methanogens in H 2 -rich hydrothermal fluids resulting from phase separation in a sediment-starved, basalt-hosted hydrothermal system. Chemical Geology, 2016, 447, 208-218.	1.4	3
86	Rare earth element geochemistry of in-situ basalts from the Upper Cretaceous Shimanto Belt and its implication for their origin.. Ganseki Kobutsu Kagaku, 2000, 29, 175-190.	0.1	3
87	Petrology and Geochemistry of Mid-Ocean Ridge Basalts from the Southern Central Indian Ridge. , 2015, , 163-175.		3
88	Intermittent Beginning to the Formation of Hydrogenous Ferromanganese Nodules in the Vast Field: Insights from Multi-Element Chemostratigraphy Using Microfocus X-ray Fluorescence. Minerals (Basel, Switzerland), 2021, 11, 1246.	0.8	3
89	Surface Dissociation Effect on Phosphonic Acid Self-Assembled Monolayer Formation on ZnO Nanowires. ACS Omega, 2022, 7, 1462-1467.	1.6	3
90	Life at Subseafloor Extremes. Developments in Marine Geology, 2014, 7, 149-174.	0.4	2

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91	Development of Hydrothermal and Frictional Experimental Systems to Simulate Sub-seafloor Waterâ€“Rockâ€“Microbe Interactions. , 2015, , 71-85.		2
92	Reâ€“Os geochemistry of hydrothermally altered dacitic rock in a submarine volcano at Site U1527, IODP Expedition 376: Implications for the Re cycle in intraoceanic arcs. Deep-Sea Research Part I: Oceanographic Research Papers, 2022, 180, 103687.	0.6	2
93	Experimental Approach to Obtain a Comprehensive Understanding of the Biogeochemistry of a Seafloor Hydrothermal System. Journal of Geography (Chigaku Zasshi), 2009, 118, 1131-1159.	0.1	1
94	Geochemical Trapping of CO2 in Basaltic Aquifers: Implications from CO2-Water-Rock Interaction Experiments. Journal of MMIJ, 2010, 126, 131-137.	0.4	1
95	Petrography and Geochemistry of Basement Rocks Drilled from Snail, Yamanaka, Archaean, and Pika Hydrothermal Vent Sites at the Southern Mariana Trough by Benthic Multi-Coring System (BMS). , 2015, , 507-533.		1
96	New geochemical data for back-arc basin basalts from DSDP Leg 58 Sites 442-444 and the ODP Leg 131 Site 808, Shikoku Basin. Journal of the Geological Society of Japan, 2018, 124, 935-940.	0.2	0
97	Exploration and Development of â€œREY-Rich Mudâ€• A New Deep-Sea Mineral Resource. Journal of MMIJ, 2015, 131, 648-655.	0.4	0
98	Editorial for Special Issue â€œDeep-Sea Ferromanganese Nodules and Related Mineral Resources: Genesis, Exploration, and Miningâ€• Minerals (Basel, Switzerland), 2022, 12, 686.	0.8	0