Yasuhiro Kato

List of Publications by Year
in descending order

118 papers	3,810 citations	117571 34 h-index	138417 58 g-index
120 all docs	120 docs citations	120 times ranked	2626 citing authors

#	Article	IF	Citations
1	Deep-sea mud in the Pacific Ocean as a potential resource for rare-earth elements. Nature Geoscience, 2011, 4, 535-539.	5.4	434
2	Geochemistry of Late Permian to Early Triassic pelagic cherts from southwest Japan: implications for an oceanic redox change. Chemical Geology, 2002, 182, 15-34.	1.4	212
3	The tremendous potential of deep-sea mud as a source of rare-earth elements. Scientific Reports, 2018, 8, 5763.	1.6	157
4	Geochemistry of a long in-situ section of intrusive slow-spread oceanic lithosphere: Results from IODP Site U1309 (Atlantis Massif, 30Â°N Mid-Atlantic-Ridge). Earth and Planetary Science Letters, 2009, 279, 110-122.	1.8	144
5	Rare earth element variations in mid-Archean banded iron formations: implications for the chemistry of ocean and continent and plate tectonics. Geochimica Et Cosmochimica Acta, 1998, 62, 3475-3497.	1.6	142
6	Field occurrence, geochemistry and petrogenesis of the Archean Mid-Oceanic Ridge Basalts (AMORBs) of the Cleaverville area, Pilbara Craton, Western Australia. Lithos, 1996, 37, 199-221.	0.6	140
7	Major and trace element geochemistry and Os isotopic composition of metalliferous umbers from the Late Cretaceous Japanese accretionary complex. Geochemistry, Geophysics, Geosystems, 2005, 6, n/a-n/a.	1.0	110
8	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
9	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
10	High-Mg Adakite and Low-Ca Boninite from a Bonin Fore-arc Seamount: Implications for the Reaction between Slab Melts and Depleted Mantle. Journal of Petrology, 2013, 54, 1149-1175.	1.1	91
11	Geochemistry and mineralogy of REY-rich mud in the eastern Indian Ocean. Journal of Asian Earth Sciences, 2014, 93, 25-36.	1.0	87
12	Discovery of extremely REY-rich mud in the western North Pacific Ocean. Geochemical Journal, 2016, 50, 557-573.	0.5	68
13	SIMS zircon Uâ€“Pb and mica Kâ€“Ar geochronology, and Srâ€“Nd isotope geochemistry of Neoproterozoic granitoids and their bearing on the evolution of the north Eastern Desert, Egypt. Gondwana Research, 2014, 25, 1570-1598.	3.0	66
14	Sclerite formation in the hydrothermal-vent â€œscaly-footâ€•gastropodâ€”possible control of iron sulfide biomineralization by the animal. Earth and Planetary Science Letters, 2006, 242, 39-50.	1.8	60
15	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
16	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
17	Postâ€drilling changes in fluid discharge pattern, mineral deposition, and fluid chemistry in the Iheya North hydrothermal field, Okinawa Trough. Geochemistry, Geophysics, Geosystems, 2013, 14, 4774-4790.	1.0	52
18	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

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19	Geology and geochemistry of ferromanganese nodules in the Japanese Exclusive Economic Zone around Minamitorishima Island. Geochemical Journal, 2016, 50, 539-555.	0.5	50
20	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
21	Petrology and geochemistry of crossâ€chains in the Izuâ€Bonin back arc: Three mantle components with contributions of hydrous liquids from a deeply subducted slab. Geochemistry, Geophysics, Geosystems, 2008, 9, .	1.0	48
22	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
23	Hematite formation by oxygenated groundwater more than 2.76Âbillion years ago. Earth and Planetary Science Letters, 2009, 278, 40-49.	1.8	47
24	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
25	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
26	Rapid growth of mineral deposits at artificial seafloor hydrothermal vents. Scientific Reports, 2016, 6, 22163.	1.6	44
27	Determination of Host Phase of Lanthanum in Deep-sea REY-rich Mud by XAFS and Âµ-XRF Using High-energy Synchrotron Radiation. Chemistry Letters, 2014, 43, 199-200.	0.7	43
28	Geochemistry of REY-rich mud in the Japanese Exclusive Economic Zone around Minamitorishima Island. Geochemical Journal, 2016, 50, 575-590.	0.5	42
29	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
30	Rare-earth element geochemistry of banded iron formations and associated amphibolite from the Sargur belts, south India. Journal of Southeast Asian Earth Sciences, 1996, 14, 161-164.	0.2	40
31	Reâ€“Os geochronology of the Iimori Besshi-type massive sulfide deposit in the Sanbagawa metamorphic belt, Japan. Geochimica Et Cosmochimica Acta, 2010, 74, 4322-4331.	1.6	40
32	Bolide impact triggered the Late Triassic extinction event in equatorial Panthalassa. Scientific Reports, 2016, 6, 29609.	1.6	39
33	Late Jurassic ocean anoxic event: evidence from voluminous sulphide deposition and preservation in the Panthalassa. Scientific Reports, 2013, 3, 1889.	1.6	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	Petit-spot geology reveals melts in upper-most asthenosphere dragged by lithosphere. Earth and Planetary Science Letters, 2015, 426, 267-279.	1.8	35
36	Negative Ce Anomaly in the Indian Banded Iron Formations: Evidence for the Emergence of Oxygenated Deepâ€Sea at 2.9â€2.7 Ga. Resource Geology, 2002, 52, 101-110.	0.3	34

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37	Rare earth elements in Precambrian banded iron formations: Secular changes of Ce and Eu anomalies and evolution of atmospheric oxygen. , 2006, , .		34
38	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
39	Fish proliferation and rare-earth deposition by topographically induced upwelling at the late Eocene cooling event. Scientific Reports, 2020, 10, 9896.	1.6	29
40	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
41	An Archaean tectonic model of the Dharwar craton, southern India: the origin of the Holenarasipur greenstone belt (Hussan district, Karnataka) and reinterpretation of the Sargur-Dharwar relationship. Journal of Southeast Asian Earth Sciences, 1996, 14, 149-160.	0.2	26
42	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
43	Rare earth elements and yttrium (REY) variability with water depth in hydrogenetic ferromanganese crusts. Chemical Geology, 2018, 493, 224-233.	1.4	26
44	Major and trace element compositions and resource potential of ferromanganese crust at Takuyo Daigo Seamount, northwestern Pacific Ocean. Geochemical Journal, 2016, 50, 527-537.	0.5	26
45	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
46	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
47	Geochemical Features and Tectonic Setting of Greenstones from Kunimiyama, Northern Chichibu Belt, Central Shikoku, Japan. Resource Geology, 2005, 55, 301-310.	0.3	23
48	Geochemistry and Origin of Ananai Stratiform Manganese Deposit in the Northern Chichibu Belt, Central Shikoku, Japan. Resource Geology, 2006, 56, 399-414.	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	1.8	23
50	Reâ€“Os isotope geochemistry in the surface layers of ferromanganese crusts from the Takuyo Daigo Seamount, northwestern Pacific Ocean. Geochemical Journal, 2015, 49, 233-241.	0.5	23
51	Chemical Speciation of Arsenic-Accumulating Mineral in a Sedimentary Iron Deposit by Synchrotron Radiation Multiple X-ray Analytical Techniques. Environmental Science & Technology, 2008, 42, 7152-7158.	4.6	21
52	Rare Earth Elements as an Indicator to Origins of Skarn Deposits: Examples of the Kamioka Znâ€Pb and Yoshiwaraâ€Sannotake Cu(â€“Fe) Deposits in Japan. Resource Geology, 1999, 49, 183-198.	0.3	20
53	Chemical and biological evolution of early Earth: Constraints from banded iron formations. , 2006, , .		20
54	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

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55	Marine Os isotopic fluctuations in the early Eocene greenhouse interval as recorded by metalliferous umbers from a Tertiary ophiolite in Japan. Gondwana Research, 2011, 20, 594-607.	3.0	18
56	Re-Os Geochronology of the Hitachi Volcanogenic Massive Sulfide Deposit: The Oldest Ore Deposit in Japan. Economic Geology, 2014, 109, 2023-2034.	1.8	18
57	Influence of contamination on banded iron formations in the Isua supracrustal belt, West Greenland: Reevaluation of the Eoarchean seawater compositions. Geoscience Frontiers, 2018, 9, 1049-1072.	4.3	18
58	Radiolarian Age of Red Chert from the Kunimiyama Ferromanganese Deposit in the Northern Chichibu Belt, Central Shikoku, Japan. Resource Geology, 2005, 55, 353-356.	0.3	17
59	REY-Rich Mud. Fundamental Theories of Physics, 2015, , 79-127.	0.1	17
60	Direct ascent to the surface of asthenospheric magma in a region of convex lithospheric flexure. International Geology Review, 2018, 60, 1231-1243.	1.1	16
61	A Miocene impact ejecta layer in the pelagic Pacific Ocean. Scientific Reports, 2019, 9, 16111.	1.6	15
62	Visualisation method for the broad distribution of seafloor ferromanganese deposits. Marine Georesources and Geotechnology, 2021, 39, 267-279.	1.2	15
63	A Paleogene magmatic overprint on Cretaceous seamounts of the western Pacific. Island Arc, 2021, 30, e12386.	0.5	15
64	Chemical leaching of rare earth elements from highly REY-rich mud. Geochemical Journal, 2015, 49, 637-652.	0.5	15
65	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
66	Zircon Uâ€“Pb dating from the mafic enclaves in the Tanzawa Tonalitic Pluton, Japan: Implications for arc history and formation age of the lower-crust. Lithos, 2014, 196-197, 301-320.	0.6	14
67	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
68	The early Miocene (~25ÂMa) volcanism in the northern Kyushu-Palau Ridge, enriched mantle source injection during rifting prior to the Shikoku backarc basin opening. Contributions To Mineralogy and Petrology, 2012, 163, 483-504.	1.2	12
69	Fluid-rock interaction recorded in black fault rocks in the Kodiak accretionary complex, Alaska. Earth, Planets and Space, 2014, 66, .	0.9	11
70	Geochemical Features of Redox-Sensitive Trace Metals in Sediments under Oxygen-Depleted Marine Environments. Minerals (Basel, Switzerland), 2020, 10, 1021.	0.8	11
71	Fineâ€scale chemostratigraphy of crossâ€sectioned hydrogenous ferromanganese nodules from the western North Pacific. Island Arc, 2021, 30, e12395.	0.5	11
72	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

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73	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
74	Radiolarian Age of Manganese Ore and Red Chert from the Ananai Stratiform Manganese Deposit in the Northern Chichibu Belt, Central Shikoku, Japan. Resource Geology, 2006, 56, 415-421.	0.3	10
75	Comment on â€œEvaluation of palaeo-oxygenation of the ocean bottom cross the Permianâ€“Triassic boundaryâ€•by Kakuwa (2008): Was the Late Permian deep-superocean really oxic?. Global and Planetary Change, 2009, 69, 79-81.	1.6	10
76	Study on the Synthesis of Hydroxyapatite under Highly Alkaline Conditions. Industrial & Engineering Chemistry Research, 2021, 60, 4385-4396.	1.8	10
77	Rapid coupling between solid earth and ice volume during the Quaternary. Scientific Reports, 2021, 11, 5695.	1.6	9
78	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
79	Dissolution of altered tuffaceous rocks under conditions relevant for CO2 storage. Applied Geochemistry, 2015, 58, 78-87.	1.4	8
80	Earth system feedback statistically extracted from the Indian Ocean deep-sea sediments recording Eocene hyperthermals. Scientific Reports, 2017, 7, 11304.	1.6	8
81	Tokoro Belt (NE Hokkaido): an exhumed, Jurassic â€“ Early Cretaceous seamount in the Late Cretaceous accretionary prism of northern Japan. Geological Magazine, 2021, 158, 72-83.	0.9	8
82	Biotic and environmental changes in the Panthalassa Ocean across the Norian (Late Triassic) impact event. Progress in Earth and Planetary Science, 2020, 7, .	1.1	8
83	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
84	Geological, geochemical and social-scientific assessment of basaltic aquifers as potential storage sites for CO2. Geochemical Journal, 2013, 47, 385-396.	0.5	7
85	Triassic marine Os isotope record from a pelagic chert succession, Sakahogi section, Mino Belt, southwest Japan. Journal of Asian Earth Sciences: X, 2019, 1, 100004.	0.6	7
86	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
87	A precise and accurate analytical method for determination of osmium isotope ratios at the 1â€“15 pg level by using a MC-ICP-MS equipped with sparging introduction and high-sensitivity discrete dynode-type ion-counting detectors. Journal of Analytical Atomic Spectrometry, 2022, 37, 1600-1610.	1.6	7
88	Depositional Age of a Fossil Whale Bone from SÃ£o Paulo Ridge, South Atlantic Ocean, Based on Os Isotope Stratigraphy of a Ferromanganese Crust. Resource Geology, 2017, 67, 442-450.	0.3	6
89	Enhanced continental chemical weathering during the multiple early Eocene hyperthermals: New constraints from the southern Indian Ocean. Geochimica Et Cosmochimica Acta, 2022, 331, 192-211.	1.6	6
90	CHEMICAL SPECIATION OF TRACE TITANIUM IN HAMERSLEY BANDED IRON FORMATIONS BY X-RAY FLUORESCENCE IMAGING AND XANES ANALYSIS. Instrumentation Science and Technology, 2001, 19, 509-519.	0.8	5

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91	Flexible Intracortical Neural Probe with Biodegradable Polymer for Delivering Bioactive Components. , 2006, , .		5
92	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
93	Ore deposit formed on a paleo-seafloor in the Japanese accretionary complex. Journal of the Geological Society of Japan, 2018, 124, 995-1020.	0.2	5
94	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
95	Genesis of the Kamioka Skarn Deposits: An Important Role of Clinopyroxene Skarn and Graphiteâ€bearing Limestone in Precipitating Sulfide Ore. Resource Geology, 1999, 49, 213-222.	0.3	4
96	Characterization of Banded Iron Formations by Twoâ€Ðimensional XRF Imaging and XANES Analyses. Resource Geology, 2000, 50, 75-81.	0.3	4
97	Unique Geochemistry of Sedimentary Iron Deposit Formed by Biologically Induced Mineralization. Resource Geology, 2002, 52, 123-134.	0.3	4
98	Preface: Front edge of submarine mineral resources research in Japan. Geochemical Journal, 2015, 49, 575-577.	0.5	4
99	Unique Environmental Conditions Required for Dawsonite Formation: Implications from Dawsonite Synthesis Experiments under Alkaline Conditions. ACS Earth and Space Chemistry, 2019, 3, 285-294.	1.2	3
100	Experiments on Rare-Earth Element Extractions from Umber Ores for Optimizing the Grinding Process. Minerals (Basel, Switzerland), 2019, 9, 239.	0.8	3
101	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
102	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
103	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
104	Post-drilling changes in fluid discharge pattern, mineral deposition, and fluid chemistry in the Iheya North hydrothermal field, Okinawa Trough. Geochemistry, Geophysics, Geosystems, 2013, 14, n/a-n/a.	1.0	1
105	Preliminary Study of Multichannel Flexible Neural Probes Coated with Hybrid Biodegradable Polymer. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2006, , .	0.5	1
106	Geochemical Trapping of CO2 in Basaltic Aquifers: Implications from CO2-Water-Rock Interaction Experiments. Journal of MMIJ, 2010, 126, 131-137.	0.4	1
107	Quantitative examination of the cause of the Paleocene-Eocene thermal maximum using an atmosphere-ocean box model. Journal of the Geological Society of Japan, 2011, 117, 217-237.	0.2	1
108	A Special Issue Devoted to 50th Anniversary Symposium: Mineral Resources, Earth's Environments and Life. Resource Geology, 2002, 52, 81-82.	0.3	0

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109	A Special Issue: Seafloor Processes and Related Mineralization in the Panthalassa: The Phanerozoic Records from the Japanese Accretionary Complexes - Part I. Resource Geology, 2005, 55, 289-290.	0.3	0
110	A Special Issue: Seafloor Processes and Related Mineralization in the Panthalassa: The Phanerozoic Records from the Japanese Accretionary Complexes - Part II. Resource Geology, 2006, 56, 397-398.	0.3	0
111	IMA Kobe 2006 Special Issue: Seaâ€floor Hydrothermal Deposits of Arcâ€"Backâ€arc Systems in Western Pacific. Resource Geology, 2008, 58, 205-205.	0.3	0
112	Japanese Growth Strategy through Development of Rare-earth Elements and Yttrium (REY)-rich Mud Deposits around the Minamitorishima Island. Journal of the Japan Institute of Marine Engineering, 2015, 50, 615-619.	0.0	0
113	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
114	JapanÊ¼s Deep-sea Mineral Resources: Challenges and Prospects for Their Development. Journal of the Japan Institute of Marine Engineering, 2021, 56, 215-221.	0.0	0
115	Petrology, geochemistry, and geochronology of plutonic rocks from the present Southwest Indian Ridge: Implications for dropstone distribution in the Indian Ocean. Polar Science, 2021, 29, 100725.	0.5	0
116	Simplified Prediction of the Proceeding of Mineral Trapping of CO2 Based on Experimental Study. Journal of MMIJ, 2012, 128, 94-102.	0.4	0
117	Exploration and Development of â€œREY-Rich Mudâ€: A New Deep-Sea Mineral Resource. Journal of MMIJ, 2015, 131, 648-655.	0.4	0
118	Preface: Front edge of submarine mineral resources research in Japan (Part 2). Geochemical Journal, 2016, 50, 449-452.	0.5	0