Michael Riedel

List of Publications by Year in descending order

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70 papers

2,427 citations

236925 25 h-index 214800 47 g-index

83 all docs 83 docs citations

83 times ranked 1705 citing authors

#	Article	IF	CITATIONS
1	Three-dimensional distribution of gas hydrate beneath southern Hydrate Ridge: constraints from ODP Leg 204. Earth and Planetary Science Letters, 2004, 222, 845-862.	4.4	278
2	Methane hydrate formation in turbidite sediments of northern Cascadia, IODP Expedition 311. Earth and Planetary Science Letters, 2008, 271, 170-180.	4.4	161
3	Scientific results of the Second Gas Hydrate Drilling Expedition in the Ulleung Basin (UBGH2). Marine and Petroleum Geology, 2013, 47, 1-20.	3.3	158
4	Geologic implications of gas hydrates in the offshore of India: Results of the National Gas Hydrate Program Expedition 01. Marine and Petroleum Geology, 2014, 58, 3-28.	3.3	152
5	Seismic investigations of a vent field associated with gas hydrates, offshore Vancouver Island. Journal of Geophysical Research, 2002, 107, EPM 5-1-EPM 5-16.	3.3	119
6	Geologic implications of gas hydrates in the offshore of India: Krishna–Godavari Basin, Mahanadi Basin, Andaman Sea, Kerala–Konkan Basin. Marine and Petroleum Geology, 2014, 58, 29-98.	3.3	98
7	Gas hydrate dissociation off Svalbard induced by isostatic rebound rather than global warming. Nature Communications, 2018, 9, 83.	12.8	97
8	Gas hydrates in the western deep-water Ulleung Basin, East Sea of Korea. Marine and Petroleum Geology, 2009, 26, 1483-1498.	3.3	81
9	Occurrence and seismic characteristics of gas hydrate in the Ulleung Basin, East Sea. Marine and Petroleum Geology, 2013, 47, 236-247.	3.3	76
10	Gas hydrate occurrences and their relation to host sediment properties: Results from Second Ulleung Basin Gas Hydrate Drilling Expedition, East Sea. Marine and Petroleum Geology, 2013, 47, 21-29.	3.3	74
11	Tidally controlled gas bubble emissions: A comprehensive study using long-term monitoring data from the NEPTUNE cabled observatory offshore Vancouver Island. Geochemistry, Geophysics, Geosystems, 2016, 17, 3797-3814.	2.5	69
12	Occurrence and exploration of gas hydrate in the marginal seas and continental margin of the Asia and Oceania region. Marine and Petroleum Geology, 2011, 28, 1751-1767.	3.3	61
13	Methane-derived authigenic carbonates from modern and paleoseeps on the Cascadia margin: Mechanisms of formation and diagenetic signals. Palaeogeography, Palaeoclimatology, Palaeoecology, 2013, 390, 52-67.	2.3	60
14	Active mud volcanoes on the continental slope of the <scp>C</scp> anadian <scp>B</scp> eaufort <scp>S</scp> ea. Geochemistry, Geophysics, Geosystems, 2015, 16, 3160-3181.	2.5	55
15	Distributed natural gas venting offshore along the Cascadia margin. Nature Communications, 2018, 9, 3264.	12.8	55
16	Anaerobic methane oxidation in low-organic content methane seep sediments. Geochimica Et Cosmochimica Acta, 2013, 108, 184-201.	3.9	44
17	Fracture orientation and induced anisotropy of gas hydrate-bearing sediments in seismic chimney-like-structures of the Ulleung Basin, East Sea. Marine and Petroleum Geology, 2013, 47, 182-194.	3.3	43
18	Using the 87Sr/86Sr of modern and paleoseep carbonates from northern Cascadia to link modern fluid flow to the past. Chemical Geology, 2012, 334, 122-130.	3.3	37

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19	Defining megathrust tsunami source scenarios for northernmost Cascadia. Natural Hazards, 2018, 94, 445-469.	3.4	34
20	Thermal Condition of the 27 October 2012 Mw 7.8 Haida Gwaii Subduction Earthquake at the Obliquely Convergent Queen Charlotte Margin. Bulletin of the Seismological Society of America, 2015, 105, 1290-1300.	2.3	32
21	Role of gas hydrates in slope failure on frontal ridge of northern Cascadia margin. Geophysical Journal International, 2014, 199, 441-458.	2.4	29
22	Seafloor geomorphic manifestations of gas venting and shallow subbottom gas hydrate occurrences. , 2015, 11, 491-513.		28
23	Temporal variability of <i>in situ</i> methane concentrations in gas hydrateâ€bearing sediments near Bullseye Vent, Northern Cascadia Margin. Geochemistry, Geophysics, Geosystems, 2013, 14, 2445-2459.	2.5	27
24	Field Studies Target 2012 Haida Gwaii Earthquake. Eos, 2013, 94, 197-198.	0.1	27
25	Expedition 311 Synthesis: scientific findings. Proceedings of the Integrated Ocean Drilling Program Integrated Ocean Drilling Program, 0, , .	1.0	27
26	Characterizing the thermal regime of cold vents at the northern Cascadia margin from bottom-simulating reflector distributions, heat-probe measurements and borehole temperature data. Marine Geophysical Researches, 2010, 31, 1-16.	1.2	26
27	Fluid flow and origin of a carbonate mound offshore Vancouver Island: Seismic and heat flow constraints. Marine Geology, 2007, 239, 83-98.	2.1	25
28	Physical properties and core-log seismic integration from drilling at the Danube deep-sea fan, Black Sea. Marine and Petroleum Geology, 2020, 114, 104192.	3.3	25
29	Earthquake Activity in Northern Cascadia Subduction Zone Off Vancouver Island Revealed by Oceanâ€Bottom Seismograph Observations. Bulletin of the Seismological Society of America, 2015, 105, 489-495.	2.3	23
30	Evidence for gas hydrate occurrences in the Canadian Arctic Beaufort Sea within permafrost-associated shelf and deep-water marine environments. Marine and Petroleum Geology, 2017, 81, 66-78.	3.3	23
31	Compressional and shear-wave velocities from gas hydrate bearing sediments: Examples from the India and Cascadia margins as well as Arctic permafrost regions. Marine and Petroleum Geology, 2014, 58, 292-320.	3.3	22
32	Origin and Transformation of Light Hydrocarbons Ascending at an Active Pockmark on Vestnesa Ridge, Arctic Ocean. Journal of Geophysical Research: Solid Earth, 2020, 125, e2018JB016679.	3.4	20
33	In Situ Temperature Measurements at the Svalbard Continental Margin: Implications for Gas Hydrate Dynamics. Geochemistry, Geophysics, Geosystems, 2018, 19, 1165-1177.	2.5	18
34	Slipstream: an early Holocene slump and turbidite record from the frontal ridge of the Cascadia accretionary wedge off western Canada and paleoseismic implications. Canadian Journal of Earth Sciences, 2015, 52, 405-430.	1.3	17
35	Submarine landslides offshore Vancouver Island along the northern Cascadia margin, British Columbia: why preconditioning is likely required to trigger slope failure. Geo-Marine Letters, 2016, 36, 323-337.	1.1	16
36	Quantification of gas hydrate saturation and morphology based on a generalized effective medium model. Marine and Petroleum Geology, 2020, 113, 104166.	3.3	16

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37	Seafloor seismometers monitor northern Cascadia earthquakes. Eos, 2011, 92, 421-422.	0.1	15
38	Freshwater Seepage Into Sediments of the Shelf, Shelf Edge, and Continental Slope of the Canadian Beaufort Sea. Geochemistry, Geophysics, Geosystems, 2018, 19, 3039-3055.	2.5	15
39	A case study on pseudo 3-D Chirp sub-bottom profiler (SBP) survey for the detection of a fault trace in shallow sedimentary layers at gas hydrate site in the Ulleung Basin, East Sea. Journal of Applied Geophysics, 2016, 133, 98-115.	2.1	14
40	Observed correlation between the depth to base and top of gas hydrate occurrence from review of global drilling data. Geochemistry, Geophysics, Geosystems, 2017, 18, 2543-2561.	2.5	14
41	Formation pathways of light hydrocarbons in deep sediments of the Danube deep-sea fan, Western Black Sea. Marine and Petroleum Geology, 2020, 122, 104627.	3.3	14
42	Initiation of Strikeâ€Slip Faults, Serpentinization, and Methane: The Nootka Fault Zone, the Juan de Fucaâ€Explorer Plate Boundary. Geochemistry, Geophysics, Geosystems, 2018, 19, 4290-4312.	2.5	13
43	In-situ borehole temperature measurements confirm dynamics of the gas hydrate stability zone at the upper Danube deep sea fan, Black Sea. Earth and Planetary Science Letters, 2021, 563, 116869.	4.4	12
44	Slope failures along the deformation front of the Cascadia margin: linking slide morphology to subduction zone parameters. Geological Society Special Publication, 2019, 477, 47-67.	1.3	11
45	Observing methane hydrate dissolution rates under sediment cover. Marine Chemistry, 2015, 172, 12-22.	2.3	9
46	Elongate fluid flow structures: Stress control on gas migration at Opouawe Bank, New Zealand. Marine and Petroleum Geology, 2018, 92, 913-931.	3.3	9
47	Ocean Observatories as a Tool to Advance Gas Hydrate Research. Earth and Space Science, 2019, 6, 2644-2652.	2.6	9
48	Heat Flow Measurements at the Danube Deep-Sea Fan, Western Black Sea. Geosciences (Switzerland), 2021, 11, 240.	2.2	9
49	Controls on Gas Emission Distribution on the Continental Slope of the Western Black Sea. Frontiers in Earth Science, 2021, 8, .	1.8	8
50	Data report: seismic structure beneath the north Cascadia drilling transect of IODP Expedition 311., 0,		8
51	Dual-vergence structure from multiple migration of widely spaced OBSs. Tectonophysics, 2017, 718, 45-60.	2.2	7
52	14. Infrared Imaging of Gas-Hydrate-Bearing Cores: State of the Art and Future Prospects. , 2010, , 217-232.		7
53	Horizontal compressive stress regime on the northern Cascadia margin inferred from borehole breakouts. Geochemistry, Geophysics, Geosystems, 2016, 17, 3529-3545.	2.5	6
54	Data report: a downhole electrical resistivity study of northern Cascadia marine gas hydrate. Proceedings of the Integrated Ocean Drilling Program Integrated Ocean Drilling Program, 0, , .	1.0	6

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55	Fracture Alignments in Marine Sediments Off Vancouver Island fromPsSplitting Analysis. Bulletin of the Seismological Society of America, 2017, 107, 387-402.	2.3	5
56	Significant geometric variation of the subducted plate beneath the northernmost Cascadia subduction zone and its tectonic implications as revealed by the 2014 M 6.4 earthquake sequence. Earth and Planetary Science Letters, 2020, 551, 116569.	4.4	5
57	Application of pseudo-3D Chirp sub-bottom profiler survey: a case study of ancient wooden shipwreck site, west coast of Korea. Exploration Geophysics, 2021, 52, 109-121.	1.1	5
58	A case study on swell correction of Chirp sub-bottom profiler (SBP) data using multi-beam echo sounder (MBES) data. Journal of Applied Geophysics, 2017, 145, 100-110.	2.1	4
59	Crustal Structure of the Niuafo'ou Microplate and Fonualei Rift and Spreading Center in the Northeastern Lau Basin, Southwestern Pacific. Journal of Geophysical Research: Solid Earth, 2020, 125, e2019JB019184.	3.4	4
60	Gas hydrate occurrences along the Haida Gwaii marginâ€"Constraints on the geothermal regime and implications for fluid flow. , 2020, 16, 1-12.		4
61	Imaging the Pâ€Wave Velocity Structure of Arctic Subsea Permafrost Using Laplaceâ€Domain Fullâ€Waveform Inversion. Journal of Geophysical Research F: Earth Surface, 2021, 126, e2020JF005941.	2.8	4
62	Megathrust reflectivity reveals the updip limit of the 2014 Iquique earthquake rupture. Nature Communications, 2022, 13 , .	12.8	4
63	A chronology of post-glacial mass-transport deposits on the Canadian Beaufort Slope. Marine Geology, 2021, 433, 106407.	2.1	3
64	Focused Fluid Flow Along the Nootka Fault Zone and Continental Slope, Explorerâ€Juan de Fuca Plate Boundary. Geochemistry, Geophysics, Geosystems, 2020, 21, e2020GC009095.	2.5	2
65	Megaâ€scale glacial lineations formed by ice shelf grounding in the Canadian Beaufort Sea during multiple glaciations. Earth Surface Processes and Landforms, 2021, 46, 1568-1585.	2.5	2
66	On the consolidation state of sediments from the accretionary prism offshore Vancouver Island, North Cascadia Margin. Marine Geophysical Researches, 2022, 43, .	1.2	2
67	Thermal Characterization of Pockmarks Across Vestnesa and Svyatogor Ridges, Offshore Svalbard. Journal of Geophysical Research: Solid Earth, 2020, 125, e2020JB019468.	3.4	1
68	Seismic velocity structure of the Queen Charlotte terrace off western Canada in the region of the 2012 Haida Gwaii Mw 7.8 thrust earthquake., 2021, 17, 23-38.		1
69	Variability of Marine Methane Bubble Emissions on the Clayoquot Slope, Offshore Vancouver Island, Between 2017 and 2021. Frontiers in Earth Science, 2022, 10, .	1.8	1
70	Barkley Canyon Gas Hydrates: A Synthesis Based on Two Decades of Seafloor Observation and Remote Sensing. Frontiers in Earth Science, 2022, 10, .	1.8	0