Christian Berndt

List of Publications by Year in descending order

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130 4,663 papers citations

35 62 h-index g-index

164 164 all docs citations

164 times ranked 3610 citing authors

#	Article	IF	CITATIONS
1	Escape of methane gas from the seabed along the West Spitsbergen continental margin. Geophysical Research Letters, 2009, 36, .	4.0	406
2	Geological controls on focused fluid flow associated with seafloor seeps in the Lower Congo Basin. Marine Geology, 2007, 244, 68-92.	2.1	242
3	Geological controls on the Storegga gas-hydrate system of the mid-Norwegian continental margin. Earth and Planetary Science Letters, 2003, 209, 291-307.	4.4	236
4	Temporal Constraints on Hydrate-Controlled Methane Seepage off Svalbard. Science, 2014, 343, 284-287.	12.6	219
5	Focused fluid flow in passive continental margins. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2005, 363, 2855-2871.	3.4	167
6	Seismic character of bottom simulating reflectors: examples from the mid-Norwegian margin. Marine and Petroleum Geology, 2004, 21, 723-733.	3.3	151
7	Seismic volcanostratigraphy of the Norwegian Margin: constraints on tectonomagmatic break-up processes. Journal of the Geological Society, 2001, 158, 413-426.	2.1	119
8	Gas hydrate dissociation off Svalbard induced by isostatic rebound rather than global warming. Nature Communications, 2018, 9, 83.	12.8	97
9	Water column methanotrophy controlled by a rapid oceanographic switch. Nature Geoscience, 2015, 8, 378-382.	12.9	89
10	Seismic chimneys in the Southern Viking Graben $\hat{a}\in$ Implications for palaeo fluid migration and overpressure evolution. Earth and Planetary Science Letters, 2015, 412, 88-100.	4.4	85
11	Polygonal fault systems on the mid-Norwegian margin: a long-term source for fluid flow. Geological Society Special Publication, 2003, 216, 283-290.	1.3	78
12	Combinations of volcanic-flank and seafloor-sediment failure offshore Montserrat, and their implications for tsunami generation. Earth and Planetary Science Letters, 2012, 319-320, 228-240.	4.4	77
13	Submarine slope failures due to pipe structure formation. Nature Communications, 2018, 9, 715.	12.8	77
14	Cessation/reactivation of polygonal faulting and effects on fluid flow in the VÃ, ring Basin, Norwegian Margin. Journal of the Geological Society, 2007, 164, 129-141.	2.1	70
15	Widespread and progressive seafloor-sediment failure following volcanic debris avalanche emplacement: Landslide dynamics and timing offshore Montserrat, Lesser Antilles. Marine Geology, 2012, 323-325, 69-94.	2.1	67
16	Repeated slope failure linked to fluid migration: The Ana submarine landslide complex, Eivissa Channel, Western Mediterranean Sea. Earth and Planetary Science Letters, 2012, 319-320, 65-74.	4.4	61
17	Rifting under steam—How rift magmatism triggers methane venting from sedimentary basins. Geology, 2016, 44, 767-770.	4.4	59
18	On the origin of multiple BSRs in the Danube deep-sea fan, Black Sea. Earth and Planetary Science Letters, 2017, 462, 15-25.	4.4	59

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19	Multiple widespread landslides during the longâ€term evolution of a volcanic island: Insights from highâ€resolution seismic data, Montserrat, Lesser Antilles. Geochemistry, Geophysics, Geosystems, 2011, 12, .	2,5	57
20	Gas-controlled seafloor doming. Geology, 2015, 43, 571-574.	4.4	56
21	Reduced methane seepage from Arctic sediments during cold bottom-water conditions. Nature Geoscience, 2020, 13, 144-148.	12.9	53
22	Title is missing!. Marine Geophysical Researches, 2001, 22, 133-152.	1.2	51
23	Anatomy of a fluid pipe in the Norway Basin: Initiation, propagation and 3D shape. Marine Geology, 2012, 332-334, 75-88.	2.1	51
24	Igneous seismic geomorphology of buried lava fields and coastal escarpments on the $V\tilde{A}_{s}$, ring volcanic rifted margin. Interpretation, 2017, 5, SK161-SK177.	1.1	51
25	Morphology and mechanics of submarine spreading: A case study from the Storegga Slide. Journal of Geophysical Research, 2007, 112, .	3.3	50
26	Seismic evidence for shallow gasâ€escape features associated with a retreating gas hydrate zone offshore west Svalbard. Journal of Geophysical Research, 2012, 117, .	3.3	47
27	A technique for the morphological characterization of submarine landscapes as exemplified by debris flows of the Storegga Slide. Journal of Geophysical Research, 2007, 112, .	3. 3	45
28	P-Cable High-Resolution Seismic. Oceanography, 2009, 22, 85-85.	1.0	45
29	Development and mass movement processes of the north-eastern Storegga Slide. Quaternary Science Reviews, 2009, 28, 433-448.	3.0	44
30	From gradual spreading to catastrophic collapse $\hat{a} \in ``Reconstruction of the 1888 Ritter Island volcanic sector collapse from high-resolution 3D seismic data. Earth and Planetary Science Letters, 2019, 517, 1-13.$	4.4	44
31	The impact of fluid advection on gas hydrate stability: Investigations at sites of methane seepage offshore Costa Rica. Earth and Planetary Science Letters, 2014, 401, 95-109.	4.4	42
32	Earlyâ€stage rifting of the northern Tyrrhenian Sea Basin: Results from a combined wideâ€angle and multichannel seismic study. Geochemistry, Geophysics, Geosystems, 2013, 14, 3032-3052.	2.5	41
33	Insights into the emplacement dynamics of volcanic landslides from high-resolution 3D seismic data acquired offshore Montserrat, Lesser Antilles. Marine Geology, 2013, 335, 1-15.	2.1	39
34	Towards improved monitoring of offshore carbon storage: A real-world field experiment detecting a controlled sub-seafloor CO2 release. International Journal of Greenhouse Gas Control, 2021, 106, 103237.	4.6	39
35	Scale invariant characteristics of the Storegga Slide and implications for large-scale submarine mass movements. Marine Geology, 2008, 247, 46-60.	2.1	38
36	The HÃ¥kon Mosby mud volcano: 330 000Âyears of focused fluid flow activity at the SW Barents Sea slope. Marine Geology, 2009, 262, 105-115.	2.1	38

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37	Characterization of a stratigraphically constrained gas hydrate system along the western continental margin of Svalbard from ocean bottom seismometer data. Journal of Geophysical Research, 2011, 116, .	3.3	38
38	Fluid evolution and authigenic mineral paragenesis related to salt diapirism – The Mercator mud volcano in the Gulf of Cadiz. Geochimica Et Cosmochimica Acta, 2013, 106, 261-286.	3.9	37
39	Greenhouse gas emissions from marine decommissioned hydrocarbon wells: leakage detection, monitoring and mitigation strategies. International Journal of Greenhouse Gas Control, 2020, 100, 103119.	4.6	36
40	Drivers of focused fluid flow and methane seepage at south Hydrate Ridge, offshore Oregon, USA. Geology, 2013, 41, 551-554.	4.4	35
41	Glacigenic sedimentation pulses triggered post-glacial gas hydrate dissociation. Nature Communications, 2018, 9, 635.	12.8	35
42	Pockmarks in the Witch Ground Basin, Central North Sea. Geochemistry, Geophysics, Geosystems, 2019, 20, 1698-1719.	2.5	35
43	The SW African volcanic rifted margin and the initiation of the Walvis Ridge, South Atlantic. Marine Geophysical Researches, 2009, 30, 207-214.	1.2	34
44	Switching of a paleo-ice stream in northwest Svalbard. Quaternary Science Reviews, 2011, 30, 1710-1725.	3.0	34
45	The FuglÃy Reef at 70°N; acoustic signature, geologic, geomorphologic and oceanographic setting. International Journal of Earth Sciences, 2007, 96, 201-213.	1.8	33
46	Detecting hydrate and fluid flow from bottom simulating reflector depth anomalies. Geology, 2012, 40, 227-230.	4.4	33
47	Controlled-source electromagnetic and seismic delineation of subseafloor fluid flow structures in a gas hydrate province, offshore Norway. Geophysical Journal International, 2016, 206, 1093-1110.	2.4	32
48	From catastrophic collapse to multi-phase deposition: Flow transformation, seafloor interaction and triggered eruption following a volcanic-island landslide. Earth and Planetary Science Letters, 2019, 517, 135-147.	4.4	32
49	Offshore Freshened Groundwater in Continental Margins. Reviews of Geophysics, 2021, 59, e2020RG000706.	23.0	31
50	Ocean bottom seismometer investigations in the Ormen Lange area offshore mid-Norway provide evidence for shallow gas layers in subsurface sediments. Marine and Petroleum Geology, 2005, 22, 287-297.	3.3	30
51	Tectonic Controls on Gas Hydrate Distribution Off SW Taiwan. Journal of Geophysical Research: Solid Earth, 2019, 124, 1164-1184.	3.4	30
52	Ocean mixing in deep-sea trenches: New insights from the Challenger Deep, Mariana Trench. Deep-Sea Research Part I: Oceanographic Research Papers, 2017, 129, 1-9.	1.4	28
53	High-resolution resistivity imaging of marine gas hydrate structures by combined inversion of CSEM towed and ocean-bottom receiver data. Geophysical Journal International, 2018, 214, 1701-1714.	2.4	28
54	Tsunami modeling of a submarine landslide in the Fram Strait. Geochemistry, Geophysics, Geosystems, 2009, 10, .	2.5	27

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55	Fluid venting and seepage at accretionary ridges: the Four Way Closure Ridge offshore SW Taiwan. Geo-Marine Letters, 2016, 36, 165-174.	1.1	27
56	Fluid flow systems of the Malta Plateau, Central Mediterranean Sea. Marine Geology, 2011, 284, 74-85.	2.1	26
57	Gas hydrate distribution and hydrocarbon maturation north of the Knipovich Ridge, western Svalbard margin. Journal of Geophysical Research: Solid Earth, 2016, 121, 1405-1424.	3.4	26
58	Methane in shallow subsurface sediments at the landward limit of the gas hydrate stability zone offshore western Svalbard. Geochimica Et Cosmochimica Acta, 2017, 198, 419-438.	3.9	26
59	Morphology, age and sediment dynamics of the upper headwall of the Sahara Slide Complex, Northwest Africa: Evidence for a large Late Holocene failure. Marine Geology, 2017, 393, 109-123.	2.1	26
60	Potential impacts of gas hydrate exploitation on slope stability in the Danube deep-sea fan, Black Sea. Marine and Petroleum Geology, 2018, 92, 1056-1068.	3.3	26
61	Kilometre-scale polygonal seabed depressions in the Hatton Basin, NE Atlantic Ocean: Constraints on the origin of polygonal faulting. Marine Geology, 2012, 332-334, 126-133.	2.1	25
62	On the formation of hydrothermal vents and cold seeps in the Guaymas Basin, Gulf of California. Biogeosciences, 2018, 15, 5715-5731.	3.3	25
63	Toward one-meter resolution in 3D seismic. The Leading Edge, 2018, 37, 818-828.	0.7	24
64	Redox conditions and authigenic mineralization related to cold seeps in central Guaymas Basin, Gulf of California. Marine and Petroleum Geology, 2018, 95, 1-15.	3.3	22
65	Linked halokinesis and mud volcanism at the Mercator mud volcano, Gulf of Cadiz. Journal of Geophysical Research, $2011,116,$	3.3	21
66	Late Eocene onset of the Proto-Antarctic Circumpolar Current. Scientific Reports, 2019, 9, 10125.	3.3	21
67	Geophysical and geochemical evidence of large scale fluid flow within shallow sediments in the eastern Gulf of Mexico, offshore Louisiana. Geofluids, 2011, 11, 34-47.	0.7	19
68	Emplacement of pyroclastic deposits offshore Montserrat: Insights from 3D seismic data. Journal of Volcanology and Geothermal Research, 2013, 257, 1-11.	2.1	19
69	Crustal thinning in the northern Tyrrhenian Rift: Insights from multichannel and wideâ€angle seismic data across the basin. Journal of Geophysical Research: Solid Earth, 2014, 119, 1655-1677.	3.4	19
70	Insights into active deformation in the Gulf of Cadiz from new 3-D seismic and high-resolution bathymetry data. Geochemistry, Geophysics, Geosystems, 2011, 12, n/a-n/a.	2.5	18
71	High-resolution architecture of a polygonal fault interval inferred from geomodel applied to 3D seismic data from the Gjallar Ridge, VA¸ring Basin, Offshore Norway. Marine Geology, 2012, 332-334, 134-151.	2.1	18
72	Gas migration through Opouawe Bank at the Hikurangi margin offshore New Zealand. Geo-Marine Letters, 2016, 36, 187-196.	1.1	18

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73	In Situ Temperature Measurements at the Svalbard Continental Margin: Implications for Gas Hydrate Dynamics. Geochemistry, Geophysics, Geosystems, 2018, 19, 1165-1177.	2.5	18
74	Polyphase Magmatism During the Formation of the Northern East Greenland Continental Margin. Tectonics, 2019, 38, 2961-2982.	2.8	17
75	Seismic chimney characterisation in the North Sea $\hat{a} \in \mathbb{C}$ Implications for pockmark formation and shallow gas migration. Marine and Petroleum Geology, 2021, 133, 105301.	3.3	17
76	Seal bypass at the Giant Gjallar Vent (Norwegian Sea): Indications for a new phase of fluid venting at a 56-Ma-old fluid migration system. Marine Geology, 2014, 351, 38-52.	2.1	16
77	Focused fluid flow and the sub-seabed storage of CO2: Evaluating the leakage potential of seismic chimney structures for the Sleipner CO2 storage operation. Marine and Petroleum Geology, 2017, 88, 81-93.	3.3	16
78	3-D magnetotelluric image of offshore magmatism at the Walvis Ridge and rift basin. Tectonophysics, 2016, 683, 98-108.	2.2	15
79	Widespread hydrothermal vents and associated volcanism record prolonged Cenozoic magmatism in the South China Sea. Bulletin of the Geological Society of America, 2021, 133, 2645-2660.	3.3	15
80	On the origin of large shelf embayments on glaciated margins—effects of lateral ice flux variations and glacio-dynamics west of Svalbard. Quaternary Science Reviews, 2007, 26, 2406-2419.	3.0	14
81	Polyphase tectonic inversion and its role in controlling hydrocarbon prospectivity in the Greater East Shetland Platform and Mid North Sea High, UK. Geological Society Special Publication, 2019, 471, 177-235.	1.3	14
82	Geomechanical behaviour of gassy soils and implications for submarine slope stability: a literature analysis. Geological Society Special Publication, 2020, 500, 277-288.	1.3	14
83	<p>Munidopsis lauensis Baba & de Saint Laurent, 1992 (Decapoda, Anomura, Munidopsidae), a newly recorded squat lobster from a cold seep in Taiwan</p> . Zootaxa, 2013, 3737, 92.	0.5	13
84	Sidescan backscatter variations of cold seeps on the Hikurangi Margin (New Zealand): indications for different stages in seep development. Geo-Marine Letters, 2014, 34, 169-184.	1.1	13
85	Giant depressions on the Chatham Rise offshore New Zealand – Morphology, structure and possible relation to fluid expulsion and bottom currents. Marine Geology, 2018, 399, 158-169.	2.1	13
86	New insights into geology and geochemistry of the Kerch seep area in the Black Sea. Marine and Petroleum Geology, 2020, 113, 104162.	3.3	13
87	A Shallow Seabed Dynamic Gas Hydrate System off SW Taiwan: Results From 3â€D Seismic, Thermal, and Fluid Migration Analyses. Journal of Geophysical Research: Solid Earth, 2020, 125, e2019JB019245-T.	3.4	13
88	Multiscale characterisation of chimneys/pipes: Fluid escape structures within sedimentary basins. International Journal of Greenhouse Gas Control, 2021, 106, 103245.	4.6	13
89	Electrical Resistivity Anomalies Offshore a Carbonate Coastline: Evidence for Freshened Groundwater?. Geophysical Research Letters, 2021, 48, e2020GL091909.	4.0	13
90	Seismic analysis of the gas hydrate system at Pointer Ridge offshore SW Taiwan. Marine and Petroleum Geology, 2019, 105, 158-167.	3.3	12

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91	Seabed characterization through a range of high-resolution acoustic systems – a case study offshore Oman. Marine Geophysical Researches, 2006, 27, 167-180.	1.2	11
92	Seismic reflection imaging of mixing processes in Fram Strait. Journal of Geophysical Research: Oceans, 2015, 120, 6884-6896.	2.6	11
93	Characterizing ancient and modern hydrothermal venting systems. Marine Geology, 2022, 447, 106781.	2.1	11
94	Correlation of core and downhole seismic velocities in high-pressure metamorphic rocks: aÂcase study for the COSC-1 borehole, Sweden. Solid Earth, 2020, 11, 607-626.	2.8	10
95	The Fram Slide off Svalbard: a submarine landslide on a low-sedimentation-rate glacial continental margin. Journal of the Geological Society, 2015, 172, 153-156.	2.1	9
96	Chronology of the Fram Slide Complex offshore NW Svalbard and its implications for local and regional slope stability. Marine Geology, 2017, 393, 141-155.	2.1	9
97	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
98	Combining 3D seismics, eyewitness accounts and numerical simulations to reconstruct the 1888 Ritter Island sector collapse and tsunami. International Journal of Earth Sciences, 2020, 109, 2659-2677.	1.8	9
99	Biogeochemical Consequences of Nonvertical Methane Transport in Sediment Offshore Northwestern Svalbard. Journal of Geophysical Research G: Biogeosciences, 2020, 125, e2019JG005371.	3.0	9
100	Porosity and free gas estimates from controlled source electromagnetic data at the Scanner Pockmark in the North Sea. International Journal of Greenhouse Gas Control, 2021, 109, 103343.	4.6	8
101	Seismic reconstruction of seafloor sediment deformation during volcanic debris avalanche emplacement offshore Sakar, Papua New Guinea. Marine Geology, 2021, 439, 106563.	2.1	8
102	Volcanic-Island Lateral Collapses and Their Submarine Deposits. Advances in Volcanology, 2021, , 255-279.	1.1	8
103	Geological controls on the gas hydrate system of Formosa Ridge, South China Sea. , 2014, , .		7
104	Prediction of seismic P-wave velocity using machine learning. Solid Earth, 2019, 10, 1989-2000.	2.8	7
105	Crossâ€Scale Seismic Anisotropy Analysis in Metamorphic Rocks From the COSCâ€1 Borehole in the Scandinavian Caledonides. Journal of Geophysical Research: Solid Earth, 2021, 126, e2020JB021154.	3.4	7
106	Coreâ€Logâ€Seismic Integration in Metamorphic Rocks and Its Implication for the Regional Geology: A Case Study for the ICDP Drilling Project COSCâ€1, Sweden. Geochemistry, Geophysics, Geosystems, 2021, 22, e2020GC009376.	2.5	6
107	Northeast Atlantic breakup volcanism and consequences for Paleogene climate change – MagellanPlus Workshop report. Scientific Drilling, 0, 26, 69-85.	0.6	6
108	ESONET: An European Sea Observatory Initiative. , 2008, , .		5

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109	Submarine spreading in the Storegga Slide, Norwegian Sea. Geological Society Memoir, 2016, 46, 411-412.	1.7	5
110	Deep-seated focused fluid migration as indicator for hydrocarbon leads in the East Shetland Platform, North Sea Province. Geological Society Special Publication, 2019, , SP494-2019-26.	1.3	5
111	Does Retrogression Always Account for the Large Volume of Submarine Megaslides? Evidence to the Contrary From the Tampen Slide, Offshore Norway. Journal of Geophysical Research: Solid Earth, 2021, 126, e2020JB020655.	3.4	5
112	Focused methane migration formed pipe structures in permeable sandstones: Insights from uncrewed aerial vehicleâ€based digital outcrop analysis in Varna, Bulgaria. Sedimentology, 2021, 68, 2765-2782.	3.1	5
113	Comparison of Different Coupling Methods for Joint Inversion of Geophysical Data: A Case Study for the Namibian Continental Margin. Journal of Geophysical Research: Solid Earth, 2021, 126, e2021JB022092.	3.4	5
114	Seismic imaging of an active fluid conduit below Scanner Pockmark, Central North Sea. Marine and Petroleum Geology, 2021, 133, 105302.	3.3	4
115	Formation of the Figge Maar Seafloor Crater During the 1964 B1 Blowout in the German North Sea. Earth Science, Systems and Society, 0, 2, .	0.0	4
116	Electromagnetic and seismic investigation of methane hydrates offshore Taiwan $\$\#x2014;$ The Taiflux experiment. , 2014, , .		3
117	Imaging zero-offset 3-D P-cable data with CRS method. Geophysical Journal International, 2019, 219, 1876-1884.	2.4	3
118	A Rapid Numerical Method to Constrain 2D Focused Fluid Flow Rates Along Convergent Margins Using Dense BSRâ€Based Temperature Field Data. Journal of Geophysical Research: Solid Earth, 2021, 126, e2021JB021668.	3.4	3
119	Potential Impacts of Gas Hydrate Exploitation on Slope Stability - A Study from the Danube Fan, Black Sea. , 2016, , .		2
120	Challenges in Velocity-Model Building With 3D P-Cable Data., 2019,,.		2
121	Ocean bottom seismometer investigations in the Ormen Lange area offshore mid-Norway provide evidence for shallow gas layers in subsurface sediments. , 2005, , 287-297.		2
122	Recognition and threeâ€dimensional characteristics of ancient supercritical flow bedforms on a submarine slope: An example from the South China Sea. Sedimentology, 2022, 69, 2564-2584.	3.1	2
123	Anisotropic velocity models for (3-D) seismic imaging of the Lower Seve Nappe in JA r itland, Sweden. Geophysical Journal International, 2021, 228, 66-77.	2.4	1
124	High-Resolution 3D Site Characterization. , 2018, , .		1
125	Shallow 3D Reflection Seismics. , 2016, , 1-9.		1
126	Processes affecting the depth of the gas hydrate stability zone in the accretionary prism offshore Taiwan. , 2014, , .		0

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127	A gas hydrate site with bi-verging folding in the outer wedge offshore SW Taiwan: Results from kinematic structural modeling and finite strain analysis. Tectonophysics, 2020, 790, 228540.	2.2	0
128	A Hybrid Listerâ€Outrigger Probe for Rapid Marine Geothermal Gradient Measurement. Earth and Space Science, 2021, 8, e2020EA001327.	2.6	0
129	An 1888 Volcanic Collapse Becomes a Benchmark for Tsunami Models. Eos, 2017, , .	0.1	O
130	Reply to comment on "Greenhouse gas emissions from marine decommissioned hydrocarbon wells: Leakage detection, monitoring and mitigation strategies― International Journal of Greenhouse Gas Control, 2022, 113, 103518.	4.6	0