Stefan BÃ¼nz

List of Publications by Year
in descending order

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68	3,370	159585	149698
papers	citations	30 h-index	56 g-index

75	75	75	1901
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Ocean warming and gas hydrate stability on the mid-Norwegian margin at the Storegga Slide. Marine and Petroleum Geology, 2005, 22, 233-244.	3.3	251
2	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
3	Massive blow-out craters formed by hydrate-controlled methane expulsion from the Arctic seafloor. Science, 2017, 356, 948-953.	12.6	177
4	High-resolution 3D-seismic data indicate focussed fluid migration pathways above polygonal fault systems of the mid-Norwegian margin. Marine Geology, 2007, 245, 89-106.	2.1	163
5	Seismic character of bottom simulating reflectors: examples from the mid-Norwegian margin. Marine and Petroleum Geology, 2004, 21, 723-733.	3.3	151
6	Gas hydrate reservoir and active methane-venting province in sediments on < 20ÂMa young oceanic crust in the Fram Strait, offshore NW-Svalbard. Earth and Planetary Science Letters, 2009, 284, 12-24.	4.4	142
7	High-resolution P-Cable 3D seismic imaging of gas chimney structures in gas hydrated sediments of an Arctic sediment drift. Marine and Petroleum Geology, 2010, 27, 1981-1994.	3.3	138
8	Active gas venting through hydrate-bearing sediments on the Vestnesa Ridge, offshore W-Svalbard. Marine Geology, 2012, 332-334, 189-197.	2.1	130
9	Estimation of gas hydrate concentration from multi-component seismic data at sites on the continental margins of NW Svalbard and the Storegga region of Norway. Marine and Petroleum Geology, 2008, 25, 744-758.	3.3	114
10	Repeated fluid expulsion through sub-seabed chimneys offshore Norway in response to glacial cycles. Earth and Planetary Science Letters, 2011, 305, 297-308.	4.4	109
11	Threeâ€dimensional seismic analysis of the morphology and spatial distribution of chimneys beneath the Nyegga pockmark field, offshore midâ€Norway. Basin Research, 2010, 22, 465-480.	2.7	99
12	Role of tectonic stress in seepage evolution along the gas hydrateâ€charged Vestnesa Ridge, Fram Strait. Geophysical Research Letters, 2015, 42, 733-742.	4.0	95
13	Acoustic imaging of gas hydrate and free gas at the Storegga Slide. Journal of Geophysical Research, 2004, 109, .	3.3	85
14	Thermogenic methane injection via bubble transport into the upper Arctic Ocean from the hydrateâ€charged Vestnesa Ridge, Svalbard. Geochemistry, Geophysics, Geosystems, 2014, 15, 1945-1959.	2.5	85
15	Fluid flow impact on slope failure from 3D seismic data: a case study in the Storegga Slide. Basin Research, 2005, 17, 109-122.	2.7	80
16	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
17	An integrated view of the methane system in the pockmarks at Vestnesa Ridge, 79Â°N. Marine Geology, 2017, 390, 282-300.	2.1	74
18	Gas hydrates at the Storegga Slide: Constraints from an analysis of multicomponent, wide-angle seismic data. Geophysics, 2005, 70, B19-B34.	2.6	68

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19	A 160,000-year-old history of tectonically controlled methane seepage in the Arctic. Science Advances, 2019, 5, eaaw1450.	10.3	60
20	Fluid distributions inferred from P-wave velocity and reflection seismic amplitude anomalies beneath the Nyegga pockmark field of the mid-Norwegian margin. Marine and Petroleum Geology, 2010, 27, 46-60.	3.3	57
21	Hydrate occurrence in Europe: A review of available evidence. Marine and Petroleum Geology, 2020, 111, 735-764.	3.3	56
22	Abiotic methane from ultraslow-spreading ridges can charge Arctic gas hydrates. Geology, 2015, 43, 371-374.	4.4	52
23	Bottomâ€simulating reflector dynamics at Arctic thermogenic gas provinces: An example from Vestnesa Ridge, offshore west Svalbard. Journal of Geophysical Research: Solid Earth, 2017, 122, 4089-4105.	3.4	49
24	Enhanced CO ₂ uptake at a shallow Arctic Ocean seep field overwhelms the positive warming potential of emitted methane. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 5355-5360.	7.1	47
25	Carbon isotope (Î´¹³C) excursions suggest times of major methane release during the last 14 kyr in Fram Strait, the deep-water gateway to the Arctic. Climate of the Past, 2015, 11, 669-685.	3.4	40
26	Norwegian margin outer shelf cracking: a consequence of climate-induced gas hydrate dissociation?. International Journal of Earth Sciences, 2010, 99, 207-225.	1.8	39
27	Acoustic evidence for a gas migration and release system in Arctic glaciated continental margins offshore NW-Svalbard. Marine and Petroleum Geology, 2012, 32, 36-49.	3.3	39
28	Distribution of subsurface fluid-flow systems in the SW Barents Sea. Marine and Petroleum Geology, 2013, 43, 208-221.	3.3	39
29	Submarine gas seepage in a mixed contractional and shear deformation regime: Cases from the Hikurangi obliqueâ€subduction margin. Geochemistry, Geophysics, Geosystems, 2014, 15, 416-433.	2.5	33
30	Gas hydrate systems in petroleum provinces of the SW-Barents Sea. Marine and Petroleum Geology, 2013, 46, 92-106.	3.3	32
31	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
32	Geological Controls on Fluid Flow and Gas Hydrate Pingo Development on the Barents Sea Margin. Geochemistry, Geophysics, Geosystems, 2019, 20, 630-650.	2.5	30
33	Modelling persistent methane seepage offshore western Svalbard since early Pleistocene. Marine and Petroleum Geology, 2018, 91, 800-811.	3.3	29
34	Constraints on Gas Hydrate Distribution and Morphology in Vestnesa Ridge, Western Svalbard Margin, Using Multicomponent Oceanâ€Bottom Seismic Data. Journal of Geophysical Research: Solid Earth, 2019, 124, 4343-4364.	3.4	27
35	Potential serpentinization, degassing, and gas hydrate formation at a young (<20 Ma) sedimented ocean crust of the Arctic Ocean ridge system. Journal of Geophysical Research, 2012, 117, .	3.3	25
36	The history and future trends of ocean warmingâ€induced gas hydrate dissociation in the SW Barents Sea. Geophysical Research Letters, 2017, 44, 835-844.	4.0	25

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37	Controls on gas hydrate system evolution in a region of active fluid flow in the SW Barents Sea. Marine and Petroleum Geology, 2015, 66, 861-872.	3.3	24
38	First-Order Estimation of In-Place Gas Resources at the Nyegga Gas Hydrate Prospect, Norwegian Sea. Energies, 2010, 3, 2001-2026.	3.1	22
39	The free gas zone beneath gas hydrate bearing sediments and its link to fluid flow: 3-D seismic imaging offshore mid-Norway. Marine Geology, 2012, 291-294, 211-226.	2.1	22
40	High-resolution 3D seismic study of pockmarks and shallow fluid flow systems at the SnÃ¸hvit hydrocarbon field in the SW Barents Sea. Marine Geology, 2018, 403, 247-261.	2.1	22
41	Gas hydrate and free gas detection using seismic quality factor estimates from high-resolution P-cable 3D seismic data. Interpretation, 2016, 4, SA39-SA54.	1.1	20
42	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
43	Geological controls of giant crater development on the Arctic seafloor. Scientific Reports, 2020, 10, 8450.	3.3	20
44	3â€Ð Seismic Investigation of a Gas Hydrate and Fluid Flow System on an Active Midâ€Ocean Ridge; Svyatogor Ridge, Fram Strait. Geochemistry, Geophysics, Geosystems, 2018, 19, 2325-2341.	2.5	19
45	Variations in pockmark composition at the <scp>V</scp>estnesa <scp>R</scp>idge: Insights from marine controlled source electromagnetic and seismic data. Geochemistry, Geophysics, Geosystems, 2017, 18, 1111-1125.	2.5	18
46	In Situ Temperature Measurements at the Svalbard Continental Margin: Implications for Gas Hydrate Dynamics. Geochemistry, Geophysics, Geosystems, 2018, 19, 1165-1177.	2.5	18
47	Detection of Gas Hydrates in Faults Using Azimuthal Seismic Velocity Analysis, Vestnesa Ridge, Wâ€Svalbard Margin. Journal of Geophysical Research: Solid Earth, 2020, 125, e2019JB017949.	3.4	18
48	Variability of Acoustically Evidenced Methane Bubble Emissions Offshore Western Svalbard. Geophysical Research Letters, 2019, 46, 9072-9081.	4.0	17
49	Repeatability of high-resolution 3D seismic data. Geophysics, 2019, 84, B75-B94.	2.6	14
50	Dynamic and history of methane seepage in the SW Barents Sea: new insights from Leirdjupet Fault Complex. Scientific Reports, 2021, 11, 4373.	3.3	14
51	Multiscale characterisation of chimneys/pipes: Fluid escape structures within sedimentary basins. International Journal of Greenhouse Gas Control, 2021, 106, 103245.	4.6	13
52	Fluid migration directions inferred from gradient of time surfaces of the sub seabed. Marine and Petroleum Geology, 2010, 27, 1898-1909.	3.3	12
53	Mechanisms initiating fluid migration at SnÃ¸hvit and Albatross fields, Barents Sea. Arktos, 2016, 2, 1.	1.0	12
54	OBS Data Analysis to Quantify Gas Hydrate and Free Gas in the South Shetland Margin (Antarctica). Energies, 2018, 11, 3290.	3.1	11

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55	Crustal processes sustain Arctic abiotic gas hydrate and fluid flow systems. Scientific Reports, 2020, 10, 10679.	3.3	9
56	Interactions between deep formation fluid and gas hydrate dynamics inferred from pore fluid geochemistry at active pockmarks of the Vestnesa Ridge, west Svalbard margin. Marine and Petroleum Geology, 2021, 127, 104957.	3.3	9
57	The Plio-Pleistocene seepage history off western Svalbard inferred from 3D petroleum systems modelling. Marine and Petroleum Geology, 2021, 128, 105023.	3.3	8
58	Feasibility of using the P-Cable high-resolution 3D seismic system in detecting and monitoring CO2 leakage. International Journal of Greenhouse Gas Control, 2021, 106, 103240.	4.6	7
59	High-resolution 3D seismic exhibits new insights into the middle-late Pleistocene stratigraphic evolution and sedimentary processes of the Bear Island trough mouth fan. Marine Geology, 2018, 403, 139-149.	2.1	6
60	Introduction to special section: Exploration and characterization of gas hydrates. Interpretation, 2016, 4, SAi-SAii.	1.1	5
61	Hydrocarbon leakage driven by Quaternary glaciations in the Barents Sea based on 2D basin and petroleum system modeling. Marine and Petroleum Geology, 2022, 138, 105557.	3.3	4
62	Origin and Periodic Behavior of Short Duration Signals Recorded by Seismometers at Vestnesa Ridge, an Active Seepage Site on the West-Svalbard Continental Margin. Frontiers in Earth Science, 2022, 10, .	1.8	4
63	Iceberg ploughmarks in the SW Barents Sea imaged using high-resolution P-Cable 3D seismic data. Geological Society Memoir, 2016, 46, 281-282.	1.7	3
64	Bottom Simulating Seismic Reflectors (BSR). Encyclopedia of Earth Sciences Series, 2016, , 62-67.	0.1	3
65	Buried subglacial landforms in the SW Barents Sea imaged using high-resolution P-Cable seismic data. Geological Society Memoir, 2016, 46, 183-184.	1.7	2
66	Thermal Characterization of Pockmarks Across Vestnesa and Svyatogor Ridges, Offshore Svalbard. Journal of Geophysical Research: Solid Earth, 2020, 125, e2020JB019468.	3.4	1
67	Bottom-Simulating Seismic Reflectors (BSRs). , 2014, , 1-9.		1
68	Gas Hydrate Related Bottom-Simulating Reflections Along the West-Svalbard Margin, Fram Strait. , 2022, , 225-235.		1