

Stefan BÃ¼nz

List of Publications by Year in descending order

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68
papers

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citations

159585

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149698

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docs citations

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times ranked

1901
citing authors

#	ARTICLE	IF	CITATIONS
1	Gas Hydrate Related Bottom-Simulating Reflections Along the West-Svalbard Margin, Fram Strait. , 2022, , 225-235.		1
2	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
3	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
4	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
5	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
6	Multiscale characterisation of chimneys/pipes: Fluid escape structures within sedimentary basins. International Journal of Greenhouse Gas Control, 2021, 106, 103245.	4.6	13
7	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
8	The Plio-Pleistocene seepage history off western Svalbard inferred from 3D petroleum systems modelling. Marine and Petroleum Geology, 2021, 128, 105023.	3.3	8
9	Hydrate occurrence in Europe: A review of available evidence. Marine and Petroleum Geology, 2020, 111, 735-764.	3.3	56
10	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
11	Geological controls of giant crater development on the Arctic seafloor. Scientific Reports, 2020, 10, 8450.	3.3	20
12	Thermal Characterization of Pockmarks Across Vestnesa and Svyatogor Ridges, Offshore Svalbard. Journal of Geophysical Research: Solid Earth, 2020, 125, e2020JB019468.	3.4	1
13	Crustal processes sustain Arctic abiotic gas hydrate and fluid flow systems. Scientific Reports, 2020, 10, 10679.	3.3	9
14	Detection of Gas Hydrates in Faults Using Azimuthal Seismic Velocity Analysis, Vestnesa Ridge, West-Svalbard Margin. Journal of Geophysical Research: Solid Earth, 2020, 125, e2019JB017949.	3.4	18
15	Variability of Acoustically Evidenced Methane Bubble Emissions Offshore Western Svalbard. Geophysical Research Letters, 2019, 46, 9072-9081.	4.0	17
16	A 160,000-year-old history of tectonically controlled methane seepage in the Arctic. Science Advances, 2019, 5, eaaw1450.	10.3	60
17	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
18	Constraints on Gas Hydrate Distribution and Morphology in Vestnesa Ridge, Western Svalbard Margin, Using Multicomponent Ocean Bottom Seismic Data. Journal of Geophysical Research: Solid Earth, 2019, 124, 4343-4364.	3.4	27

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19	Repeatability of high-resolution 3D seismic data. <i>Geophysics</i> , 2019, 84, B75-B94.	2.6	14
20	In Situ Temperature Measurements at the Svalbard Continental Margin: Implications for Gas Hydrate Dynamics. <i>Geochemistry, Geophysics, Geosystems</i> , 2018, 19, 1165-1177.	2.5	18
21	Modelling persistent methane seepage offshore western Svalbard since early Pleistocene. <i>Marine and Petroleum Geology</i> , 2018, 91, 800-811.	3.3	29
22	OBS Data Analysis to Quantify Gas Hydrate and Free Gas in the South Shetland Margin (Antarctica). <i>Energies</i> , 2018, 11, 3290.	3.1	11
23	3D Seismic Investigation of a Gas Hydrate and Fluid Flow System on an Active Mid-Ocean Ridge; Svyatogor Ridge, Fram Strait. <i>Geochemistry, Geophysics, Geosystems</i> , 2018, 19, 2325-2341.	2.5	19
24	High-resolution 3D seismic study of pockmarks and shallow fluid flow systems at the Snøhvit hydrocarbon field in the SW Barents Sea. <i>Marine Geology</i> , 2018, 403, 247-261.	2.1	22
25	High-resolution 3D seismic exhibits new insights into the middle-late Pleistocene stratigraphic evolution and sedimentary processes of the Bear Island trough mouth fan. <i>Marine Geology</i> , 2018, 403, 139-149.	2.1	6
26	The history and future trends of ocean warming-induced gas hydrate dissociation in the SW Barents Sea. <i>Geophysical Research Letters</i> , 2017, 44, 835-844.	4.0	25
27	Enhanced CO ₂ uptake at a shallow Arctic Ocean seep field overwhelms the positive warming potential of emitted methane. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, 5355-5360.	7.1	47
28	Bottom-simulating reflector dynamics at Arctic thermogenic gas provinces: An example from Vestnesa Ridge, offshore west Svalbard. <i>Journal of Geophysical Research: Solid Earth</i> , 2017, 122, 4089-4105.	3.4	49
29	Massive blow-out craters formed by hydrate-controlled methane expulsion from the Arctic seafloor. <i>Science</i> , 2017, 356, 948-953.	12.6	177
30	An integrated view of the methane system in the pockmarks at Vestnesa Ridge, 79°N. <i>Marine Geology</i> , 2017, 390, 282-300.	2.1	74
31	Variations in pockmark composition at the Vestnesa Ridge: Insights from marine controlled source electromagnetic and seismic data. <i>Geochemistry, Geophysics, Geosystems</i> , 2017, 18, 1111-1125.	2.5	18
32	Buried subglacial landforms in the SW Barents Sea imaged using high-resolution P-Cable seismic data. <i>Geological Society Memoir</i> , 2016, 46, 183-184.	1.7	2
33	Iceberg ploughmarks in the SW Barents Sea imaged using high-resolution P-Cable 3D seismic data. <i>Geological Society Memoir</i> , 2016, 46, 281-282.	1.7	3
34	Introduction to special section: Exploration and characterization of gas hydrates. <i>Interpretation</i> , 2016, 4, SAi-SAii.	1.1	5
35	Mechanisms initiating fluid migration at Snøhvit and Albatross fields, Barents Sea. <i>Arktos</i> , 2016, 2, 1.	1.0	12
36	Gas hydrate and free gas detection using seismic quality factor estimates from high-resolution P-cable 3D seismic data. <i>Interpretation</i> , 2016, 4, SA39-SA54.	1.1	20

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37	Bottom Simulating Seismic Reflectors (BSR). Encyclopedia of Earth Sciences Series, 2016, , 62-67.	0.1	3
38	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
39	Role of tectonic stress in seepage evolution along the gas hydrate-charged Vestnesa Ridge, Fram Strait. Geophysical Research Letters, 2015, 42, 733-742.	4.0	95
40	Carbon isotope ($\delta^{13}C$) 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
41	Abiotic methane from ultraslow-spreading ridges can charge Arctic gas hydrates. Geology, 2015, 43, 371-374.	4.4	52
42	Thermogenic methane injection via bubble transport into the upper Arctic Ocean from the hydrate-charged Vestnesa Ridge, Svalbard. Geochemistry, Geophysics, Geosystems, 2014, 15, 1945-1959.	2.5	85
43	Submarine gas seepage in a mixed contractional and shear deformation regime: Cases from the Hikurangi oblique-subduction margin. Geochemistry, Geophysics, Geosystems, 2014, 15, 416-433.	2.5	33
44	Bottom-Simulating Seismic Reflectors (BSRs). , 2014, , 1-9.		1
45	Gas hydrate systems in petroleum provinces of the SW-Barents Sea. Marine and Petroleum Geology, 2013, 46, 92-106.	3.3	32
46	Distribution of subsurface fluid-flow systems in the SW Barents Sea. Marine and Petroleum Geology, 2013, 43, 208-221.	3.3	39
47	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
48	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
49	Active gas venting through hydrate-bearing sediments on the Vestnesa Ridge, offshore W-Svalbard. Marine Geology, 2012, 332-334, 189-197.	2.1	130
50	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
51	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
52	Three-dimensional seismic analysis of the morphology and spatial distribution of chimneys beneath the Nyegga pockmark field, offshore mid-Norway. Basin Research, 2010, 22, 465-480.	2.7	99
53	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
54	First-Order Estimation of In-Place Gas Resources at the Nyegga Gas Hydrate Prospect, Norwegian Sea. Energies, 2010, 3, 2001-2026.	3.1	22

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55	Fluid distributions inferred from P-wave velocity and reflection seismic amplitude anomalies beneath the Nyegga pockmark field of the mid-Norwegian margin. <i>Marine and Petroleum Geology</i> , 2010, 27, 46-60.	3.3	57
56	High-resolution P-Cable 3D seismic imaging of gas chimney structures in gas hydrated sediments of an Arctic sediment drift. <i>Marine and Petroleum Geology</i> , 2010, 27, 1981-1994.	3.3	138
57	Fluid migration directions inferred from gradient of time surfaces of the sub seabed. <i>Marine and Petroleum Geology</i> , 2010, 27, 1898-1909.	3.3	12
58	Gas hydrate reservoir and active methane-venting province in sediments on < 20ÂMa young oceanic crust in the Fram Strait, offshore NW-Svalbard. <i>Earth and Planetary Science Letters</i> , 2009, 284, 12-24.	4.4	142
59	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. <i>Marine and Petroleum Geology</i> , 2008, 25, 744-758.	3.3	114
60	High-resolution 3D-seismic data indicate focussed fluid migration pathways above polygonal fault systems of the mid-Norwegian margin. <i>Marine Geology</i> , 2007, 245, 89-106.	2.1	163
61	Fluid flow impact on slope failure from 3D seismic data: a case study in the Storegga Slide. <i>Basin Research</i> , 2005, 17, 109-122.	2.7	80
62	Gas hydrates at the Storegga Slide: Constraints from an analysis of multicomponent, wide-angle seismic data. <i>Geophysics</i> , 2005, 70, B19-B34.	2.6	68
63	Ocean warming and gas hydrate stability on the mid-Norwegian margin at the Storegga Slide. <i>Marine and Petroleum Geology</i> , 2005, 22, 233-244.	3.3	251
64	Ocean bottom seismometer investigations in the Ormen Lange area offshore mid-Norway provide evidence for shallow gas layers in subsurface sediments. <i>Marine and Petroleum Geology</i> , 2005, 22, 287-297.	3.3	30
65	Acoustic imaging of gas hydrate and free gas at the Storegga Slide. <i>Journal of Geophysical Research</i> , 2004, 109, .	3.3	85
66	Seismic character of bottom simulating reflectors: examples from the mid-Norwegian margin. <i>Marine and Petroleum Geology</i> , 2004, 21, 723-733.	3.3	151
67	Geological controls on the Storegga gas-hydrate system of the mid-Norwegian continental margin. <i>Earth and Planetary Science Letters</i> , 2003, 209, 291-307.	4.4	236
68	Polygonal fault systems on the mid-Norwegian margin: a long-term source for fluid flow. <i>Geological Society Special Publication</i> , 2003, 216, 283-290.	1.3	78