

Alain Bonneville

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/7912076/publications.pdf>

Version: 2024-02-01

79
papers

1,926
citations

218381

26
h-index

288905

40
g-index

81
all docs

81
docs citations

81
times ranked

1945
citing authors

#	ARTICLE	IF	CITATIONS
1	Experimental Study of Crossover from Capillary to Viscous Fingering for Supercritical CO ₂ Water Displacement in a Homogeneous Pore Network. Environmental Science & Technology, 2013, 47, 212-218.	4.6	133
2	How many Pacific hotspots are fed by deep-mantle plumes?. Geology, 2001, 29, 695.	2.0	103
3	Ages of seamounts, islands, and plateaus on the Pacific plate. , 2005, , .		75
4	Contrasted styles of rifting in the eastern Gulf of Aden: A combined wide-angle, multichannel seismic, and heat flow survey. Geochemistry, Geophysics, Geosystems, 2010, 11, .	1.0	75
5	Temporal evolution and geochemical variability of the South Pacific superplume activity. Earth and Planetary Science Letters, 2006, 244, 251-269.	1.8	58
6	Persistent thermal activity at the Eastern Gulf of Aden after continental break-up. Nature Geoscience, 2008, 1, 854-858.	5.4	57
7	Arago Seamount: The missing hotspot found in the Austral Islands. Geology, 2002, 30, 1023.	2.0	55
8	A shallow, chemical origin for the Marquesas Swell. Geochemistry, Geophysics, Geosystems, 2000, 1, n/a-n/a.	1.0	54
9	Evidence from geoid data of a hotspot origin for the southern Mascarene Plateau and Mascarene Islands (Indian Ocean). Journal of Geophysical Research, 1988, 93, 4199-4212.	3.3	53
10	Complete gravity study of Piton de la Fournaise volcano, Reunion Island. Journal of Volcanology and Geothermal Research, 1989, 36, 37-52.	0.8	51
11	Extent of the South Pacific Superswell. Journal of Geophysical Research, 2005, 110, .	3.3	50
12	Wellbore cement fracture evolution at the cement-basalt caprock interface during geologic carbon sequestration. Applied Geochemistry, 2014, 47, 1-16.	1.4	50
13	Post-rift volcanism and high heat flow at the ocean-continent transition of the eastern Gulf of Aden. Terra Nova, 2009, 21, 285-292.	0.9	47
14	Using neural networks to predict thermal conductivity from geophysical well logs. Geophysical Journal International, 2006, 166, 115-125.	1.0	46
15	A giant landslide on the southern flank of Tahiti Island, French Polynesia. Geophysical Research Letters, 2001, 28, 2253-2256.	1.5	45
16	The beginning of the 1985-1987 eruptive cycle at Piton de la Fournaise (La Reunion); new insights in the magmatic and volcano-tectonic systems. Journal of Volcanology and Geothermal Research, 1989, 36, 209-232.	0.8	44
17	Offshore evidence for a huge landslide of the northern flank of Tahiti-Nui (French Polynesia). Geochemistry, Geophysics, Geosystems, 2006, 7, n/a-n/a.	1.0	44
18	Comparison of several BHT correction methods: a case study on an Australian data set. Geophysical Journal International, 2007, 170, 913-922.	1.0	44

#	ARTICLE	IF	CITATIONS
19	3D Cosmic Ray Muon Tomography from an Underground Tunnel. <i>Pure and Applied Geophysics</i> , 2017, 174, 2133-2141.	0.8	41
20	The December 4, 1983 to February 18, 1984 eruption of Piton de la Fournaise (La Reunion, Indian Ocean): Description and interpretation. <i>Journal of Volcanology and Geothermal Research</i> , 1989, 36, 87-112.	0.8	36
21	A fuzzy-possibilistic scheme of study for objects with indeterminate boundaries: application to French Polynesian reefs. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2000, 38, 257-270.	2.7	36
22	Hydrothermal convection in and around mineralized fault zones: insights from two- and three-dimensional numerical modeling applied to the Ashanti belt, Ghana. <i>Geofluids</i> , 2009, 9, 116-137.	0.3	34
23	Heat flow over Reunion hot spot track: Additional evidence for thermal rejuvenation of oceanic lithosphere. <i>Journal of Geophysical Research</i> , 1997, 102, 22731-22747.	3.3	33
24	MiFil: A method to characterize seafloor swells with application to the south central Pacific. <i>Geochemistry, Geophysics, Geosystems</i> , 2005, 6, n/a-n/a.	1.0	33
25	Heat-flow and hydrothermal circulation at the ocean-continent transition of the eastern gulf of Aden. <i>Earth and Planetary Science Letters</i> , 2010, 295, 554-570.	1.8	31
26	The seafloor swells and Superswell in French Polynesia. <i>Journal of Geophysical Research</i> , 1998, 103, 27123-27133.	3.3	29
27	Satellite thermal infrared observations of Mt. Etna after the 17th March 1981 eruption. <i>Journal of Volcanology and Geothermal Research</i> , 1985, 24, 293-313.	0.8	28
28	Environmentally friendly, rheoreversible, hydraulic-fracturing fluids for enhanced geothermal systems. <i>Geothermics</i> , 2015, 58, 22-31.	1.5	26
29	Numerical modelling of caldera dynamical behaviour. <i>Geophysical Journal International</i> , 1991, 105, 365-379.	1.0	25
30	A thermal forerunner of the 28th March 1983 Mt. Etna eruption from satellite thermal infrared data. <i>Journal of Geodynamics</i> , 1987, 7, 1-31.	0.7	24
31	Evaluating the Suitability for CO2 Storage at the FutureGen 2.0 Site, Morgan County, Illinois, USA. <i>Energy Procedia</i> , 2013, 37, 6125-6132.	1.8	24
32	Development of a coupled thermo-hydro-mechanical model in discontinuous media for carbon sequestration. <i>International Journal of Rock Mechanics and Minings Sciences</i> , 2013, 62, 138-147.	2.6	22
33	Modal depths from shipboard bathymetry: There is a south pacific superswell. <i>Geophysical Research Letters</i> , 1996, 23, 3397-3400.	1.5	21
34	The Tarava Seamounts: a newly characterized hotspot chain on the South Pacific Superswell. <i>Earth and Planetary Science Letters</i> , 2003, 207, 117-130.	1.8	21
35	The thermal regime of South African continental margins. <i>Earth and Planetary Science Letters</i> , 2008, 267, 256-265.	1.8	21
36	A fluid pressure and deformation analysis for geological sequestration of carbon dioxide. <i>Computers and Geosciences</i> , 2012, 46, 31-37.	2.0	19

#	ARTICLE	IF	CITATIONS
37	Time-lapse gravity monitoring of CO ₂ migration based on numerical modeling of a faulted storage complex. <i>International Journal of Greenhouse Gas Control</i> , 2020, 95, 102956.	2.3	18
38	An overview of the monitoring program design for the FutureGen 2.0 CO ₂ storage site. <i>International Journal of Greenhouse Gas Control</i> , 2016, 51, 193-206.	2.3	17
39	Surface heat flow and the mantle contribution on the margins of Australia. <i>Geochemistry, Geophysics, Geosystems</i> , 2008, 9, .	1.0	16
40	Noble gases as tools for subsurface monitoring of CO ₂ leakage. <i>Energy Procedia</i> , 2009, 1, 2185-2192.	1.8	16
41	Sensitivity of geophysical techniques for monitoring secondary CO ₂ storage plumes. <i>International Journal of Greenhouse Gas Control</i> , 2022, 114, 103585.	2.3	16
42	Heat flow variations on a slowly accreting ridge: Constraints on the hydrothermal and conductive cooling for the Lucky Strike segment (Mid-Atlantic Ridge, 37°N). <i>Geochemistry, Geophysics, Geosystems</i> , 2006, 7, n/a-n/a.	1.0	15
43	Detailed gravity study of the offshore structure of Piton de la Fournaise volcano, Reunion Island. <i>Bulletin of Volcanology</i> , 1987, 49, 713-722.	1.1	14
44	Thermal Modelling of Fluid Flow Effects In Thin-Dipping Aquifers. <i>Geophysical Journal International</i> , 1993, 112, 276-289.	1.0	14
45	Size and depth of ancient magma reservoirs under atolls and islands of French Polynesia using gravity data. <i>Journal of Geophysical Research</i> , 2000, 105, 8173-8191.	3.3	14
46	THERMIC: a 2-D finite-element tool to solve conductive and advective heat transfer problems in Earth Sciences. <i>Computers and Geosciences</i> , 1999, 25, 1137-1148.	2.0	13
47	Characterization and design of the FutureGen 2.0 carbon storage site. <i>International Journal of Greenhouse Gas Control</i> , 2016, 53, 1-10.	2.3	13
48	Shear strength of the Great Pacific Fracture Zones. <i>Geophysical Research Letters</i> , 1992, 19, 2023-2026.	1.5	12
49	A novel muon detector for borehole density tomography. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2017, 851, 108-117.	0.7	11
50	Geological and thermal conditions before the major Palaeoproterozoic gold-mineralization event at Ashanti, Ghana, as inferred from improved thermal modelling. <i>Precambrian Research</i> , 2007, 154, 71-87.	1.2	10
51	Detection and phylogenetic identification of labeled prokaryotic cells on mineral surfaces using Scanning X-ray Microscopy. <i>Chemical Geology</i> , 2007, 240, 182-192.	1.4	9
52	METSTOR: A GIS to look for potential CO ₂ storage zones in France. <i>Energy Procedia</i> , 2009, 1, 2809-2816.	1.8	9
53	Geophysical Monitoring of Ground Surface Deformation Associated with a Confined Aquifer Storage and Recovery Operation. <i>Water Resources Management</i> , 2015, 29, 4667-4682.	1.9	9
54	No thinning of the lithosphere beneath northern part of the Cookâ€™Austral volcanic chains. <i>Journal of Geophysical Research</i> , 2008, 113, .	3.3	8

#	ARTICLE	IF	CITATIONS
55	Exploring Structural Controls on Sumatran Earthquakes. <i>Eos</i> , 2010, 91, 405-406.	0.1	8
56	Overview of the CO ₂ Geological Storage Site for the FutureGen Project in Morgan County Illinois, USA. <i>Energy Procedia</i> , 2014, 63, 6361-6367.	1.8	8
57	Borehole muography of subsurface reservoirs. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2019, 377, 20180060.	1.6	8
58	Geophysical Monitoring Methods Evaluation for the FutureGen 2.0 Project. <i>Energy Procedia</i> , 2014, 63, 4394-4403.	1.8	7
59	Geomechanical Evaluation of Thermal Impact of Injected CO ₂ Temperature on a Geological Reservoir: Application to the FutureGen 2.0 Site. <i>Energy Procedia</i> , 2014, 63, 3298-3304.	1.8	7
60	Novel highly dispersible, thermally stable core/shell proppants for geothermal applications. <i>Geothermics</i> , 2017, 70, 98-109.	1.5	7
61	Muon Borehole Detector Design for Use in 4-D Density Overburden Monitoring. <i>IEEE Transactions on Nuclear Science</i> , 2018, 65, 2724-2731.	1.2	7
62	Insights into a Greener Stimuli-Responsive Fracturing Fluid for Geothermal Energy Recovery. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 19660-19668.	3.2	7
63	Time-lapse borehole gravity imaging of CO ₂ injection and withdrawal in a closed carbonate reef. <i>Geophysics</i> , 2021, 86, G113-G132.	1.4	7
64	Flow duration of a dike constrained by palaeomagnetic data. <i>Geophysical Journal International</i> , 1991, 106, 621-634.	1.0	6
65	Thermal impact of CO ₂ injection on geomechanical response at the FutureGen 2.0 Site: A three-dimensional thermo-geomechanical approach. <i>International Journal of Greenhouse Gas Control</i> , 2016, 54, 29-49.	2.3	6
66	Mapping the seafloor from space. <i>Endeavour</i> , 1996, 20, 157-161.	0.1	4
67	Local Sensitivity of Predicted CO ₂ Injectivity and Plume Extent to Model Inputs for the FutureGen 2.0 site. <i>Energy Procedia</i> , 2014, 63, 3805-3814.	1.8	4
68	Experimental study of drying effects during supercritical CO ₂ displacement in a pore network. <i>Microfluidics and Nanofluidics</i> , 2018, 22, 1.	1.0	4
69	Application of three-component VSP technology at seismically difficult sites: An example from the FutureGen 2.0 site, Morgan County, Illinois, USA. <i>Energy Procedia</i> , 2014, 63, 5051-5062.	1.8	3
70	Pre-mineralization thermal evolution of the Palaeoproterozoic gold-rich Ashanti belt, Ghana. <i>Geological Society Special Publication</i> , 2005, 248, 103-118.	0.8	2
71	FutureGen 2.0 Monitoring Program: An Overview of the Monitoring Approach and Technologies Selected for Implementation. <i>Energy Procedia</i> , 2014, 63, 4062-4070.	1.8	2
72	The Newberry Deep Drilling Project (NDDP) workshop. <i>Scientific Drilling</i> , 0, 24, 79-86.	1.0	2

#	ARTICLE	IF	CITATIONS
73	Evaluation of a Greener Fracturing Fluid for Geothermal Energy Recovery: An Experimental and Simulation Study. <i>Geothermics</i> , 2021, 97, 102266.	1.5	2
74	Crucial measurement issues discussed at geodynamics meeting. <i>Eos</i> , 1998, 79, 633-633.	0.1	1
75	Geologic Sequestration Software Suite (GS3): A collaborative approach to the management of geological GHG storage projects. <i>Energy Procedia</i> , 2011, 4, 3825-3832.	1.8	1
76	Reply to the Comments made by Archambault and Tanguy on "Thermal survey of Mount Etna Volcano from space". <i>Geophysical Research Letters</i> , 1993, 20, 1001-1001.	1.5	0
77	Implementations of a Flexible Framework for Managing Geologic Sequestration Modeling Projects. <i>Energy Procedia</i> , 2013, 37, 3971-3979.	1.8	0
78	Introduction to special section: CO2 storage and utilization. <i>Interpretation</i> , 2015, 3, SMi-SMi.	0.5	0
79	Joint muon and seismic imaging of the subsurface. , 2016, , .		0