Alain Bonneville

List of Publications by Year in Descending Order

79 papers	1,569 citations	25 h-index	36 g-index
81 ext. papers	1,734 ext. citations	3.6 avg, IF	4.2 L-index

#	Paper	IF	Citations
79	Sensitivity of geophysical techniques for monitoring secondary CO2 storage plumes. *International Journal of Greenhouse Gas Control*, **2022**, 114, 103585	4.2	1
78	Monitoring Carbon Storage Sites With Time-Lapse Gravity Surveys. *Geophysical Monograph Series*, **2022**, 211-232	1.1	
77	Evaluation of a Greener Fracturing Fluid for Geothermal Energy Recovery: An Experimental and Simulation Study. *Geothermics*, **2021**, 97, 102266	4.3	0
76	Time-lapse borehole gravity imaging of CO2 injection and withdrawal in a closed carbonate reef. *Geophysics*, **2021**, 86, G113-G132	3.1	3
75	Time-lapse gravity monitoring of CO2 migration based on numerical modeling of a faulted storage complex. *International Journal of Greenhouse Gas Control*, **2020**, 95, 102956	4.2	11
74	Insights into a Greener Stimuli-Responsive Fracturing Fluid for Geothermal Energy Recovery. *ACS Sustainable Chemistry and Engineering*, **2019**, 7, 19660-19668	8.3	5
73	Borehole muography of subsurface reservoirs. *Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences*, **2018**, 377,	3	6
72	Experimental study of drying effects during supercritical CO2 displacement in a pore network. *Microfluidics and Nanofluidics*, **2018**, 22, 1	2.8	3
71	Muon Borehole Detector Design for Use in 4-D Density Overburden Monitoring. *IEEE Transactions on Nuclear Science*, **2018**, 65, 2724-2731	1.7	5
70	A novel muon detector for borehole density tomography. *Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment*, **2017**, 851, 108-117	1.2	9
69	Novel highly dispersible, thermally stable core/shell proppants for geothermal applications. *Geothermics*, **2017**, 70, 98-109	4.3	6
68	3D Cosmic Ray Muon Tomography from an Underground Tunnel. *Pure and Applied Geophysics*, **2017**, 174, 2133-2141	2.2	29
67	An overview of the monitoring program design for the FutureGen 2.0 CO2 storage site. *International Journal of Greenhouse Gas Control*, **2016**, 51, 193-206	4.2	12
66	Thermal impact of CO2 injection on geomechanical response at the FutureGen 2.0 Site: A three-dimensional thermo-geomechanical approach. *International Journal of Greenhouse Gas Control*, **2016**, 54, 29-49	4.2	6
65	Characterization and design of the FutureGen 2.0 carbon storage site. *International Journal of Greenhouse Gas Control*, **2016**, 53, 1-10	4.2	10
64	Geophysical Monitoring of Ground Surface Deformation Associated with a Confined Aquifer Storage and Recovery Operation. *Water Resources Management*, **2015**, 29, 4667-4682	3.7	6
63	Environmentally friendly, rheoreversible, hydraulic-fracturing fluids for enhanced geothermal systems. *Geothermics*, **2015**, 58, 22-31	4.3	19

62	Wellbore cement fracture evolution at the cement□basalt caprock interface during geologic carbon sequestration. *Applied Geochemistry*, **2014**, 47, 1-16	3.5	43
61	Geomechanical Evaluation of Thermal Impact of Injected CO2 Temperature on a Geological Reservoir: Application to the FutureGen 2.0 Site. *Energy Procedia*, **2014**, 63, 3298-3304	2.3	7
60	Application of three-component VSP technology at seismically difficult sites: An example from the FutureGen 2.0 site, Morgan County, Illinois, USA. *Energy Procedia*, **2014**, 63, 5051-5062	2.3	2
59	Local Sensitivity of Predicted CO2 Injectivity and Plume Extent to Model Inputs for the FutureGen 2.0 site. *Energy Procedia*, **2014**, 63, 3805-3814	2.3	4
58	Overview of the CO2 Geological Storage Site for the FutureGen Project in Morgan County Illinois, USA. *Energy Procedia*, **2014**, 63, 6361-6367	2.3	7
57	FutureGen 2.0 Monitoring Program: An Overview of the Monitoring Approach and Technologies Selected for Implementation. *Energy Procedia*, **2014**, 63, 4062-4070	2.3	2
56	Geophysical Monitoring Methods Evaluation for the FutureGen 2.0 Project. *Energy Procedia*, **2014**, 63, 4394-4403	2.3	7
55	Development of a coupled thermo-hydro-mechanical model in discontinuous media for carbon sequestration. *International Journal of Rock Mechanics and Minings Sciences*, **2013**, 62, 138-147	6	18
54	Evaluating the Suitability for CO2 Storage at the FutureGen 2.0 Site, Morgan County, Illinois, USA. *Energy Procedia*, **2013**, 37, 6125-6132	2.3	19
53	Implementations of a Flexible Framework for Managing Geologic Sequestration Modeling Projects. *Energy Procedia*, **2013**, 37, 3971-3979	2.3	
52	Experimental study of crossover from capillary to viscous fingering for supercritical CO2-water displacement in a homogeneous pore network. *Environmental Science & Technology*, **2013**, 47, 212-8	10.3	97
51	A fluid pressure and deformation analysis for geological sequestration of carbon dioxide. *Computers and Geosciences*, **2012**, 46, 31-37	4.5	18
50	Geologic Sequestration Software Suite (GS3): A collaborative approach to the management of geological GHG storage projects. *Energy Procedia*, **2011**, 4, 3825-3832	2.3	1
49	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, n/a-n/a	3.6	67
48	Exploring Structural Controls on Sumatran Earthquakes. *Eos*, **2010**, 91, 405	1.5	5
47	Heat-flow and hydrothermal circulation at the ocean□continent transition of the eastern gulf of Aden. *Earth and Planetary Science Letters*, **2010**, 295, 554-570	5.3	28
46	Post-rift volcanism and high heat-flow at the ocean-continent transition of the eastern Gulf of Aden. *Terra Nova*, **2009**, 21, 285-292	3	42
45	Hydrothermal convection in and around mineralized fault zones: insights from two- and three-dimensional numerical modeling applied to the Ashanti belt, Ghana. *Geofluids*, **2009**, 9, 116-137	1.5	27

44	Noble gases as tools for subsurface monitoring of CO2 leakage. *Energy Procedia*, **2009**, 1, 2185-2192	2.3	15
43	METSTOR: A GIS to look for potential CO2 storage zones in France. *Energy Procedia*, **2009**, 1, 2809-2816	2.3	9
42	Persistent thermal activity at the Eastern Gulf of Aden after continental break-up. *Nature Geoscience*, **2008**, 1, 854-858	18.3	54
41	Surface heat flow and the mantle contribution on the margins of Australia. *Geochemistry, Geophysics, Geosystems*, **2008**, 9, n/a-n/a	3.6	13
40	No thinning of the lithosphere beneath northern part of the Cook-Austral volcanic chains. *Journal of Geophysical Research*, **2008**, 113,		7
39	The thermal regime of South African continental margins. *Earth and Planetary Science Letters*, **2008**, 267, 256-265	5.3	15
38	Comparison of several BHT correction methods: a case study on an Australian data set. *Geophysical Journal International*, **2007**, 170, 913-922	2.6	38
37	Geological and thermal conditions before the major Palaeoproterozoic gold-mineralization event at Ashanti, Ghana, as inferred from improved thermal modelling. *Precambrian Research*, **2007**, 154, 71-87	3.9	10
36	Detection and phylogenetic identification of labeled prokaryotic cells on mineral surfaces using Scanning X-ray Microscopy. *Chemical Geology*, **2007**, 240, 182-192	4.2	9
35	Offshore evidence for a huge landslide of the northern flank of Tahiti-Nui (French Polynesia). *Geochemistry, Geophysics, Geosystems*, **2006**, 7, n/a-n/a	3.6	33
34	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). *Geochemistry, Geophysics, Geosystems*, **2006**, 7, n/a-n/a	3.6	14
33	Temporal evolution and geochemical variability of the South Pacific superplume activity. *Earth and Planetary Science Letters*, **2006**, 244, 251-269	5.3	53
32	Using neural networks to predict thermal conductivity from geophysical well logs. *Geophysical Journal International*, **2006**, 166, 115-125	2.6	39
31	MiFil: A method to characterize seafloor swells with application to the south central Pacific. *Geochemistry, Geophysics, Geosystems*, **2005**, 6, n/a-n/a	3.6	27
30	Extent of the South Pacific Superswell. *Journal of Geophysical Research*, **2005**, 110,		34
29	Ages of seamounts, islands, and plateaus on the Pacific plate **2005**,		40
28	Pre-mineralization thermal evolution of the Palaeoproterozoic gold-rich Ashanti belt, Ghana. *Geological Society Special Publication*, **2005**, 248, 103-118	1.7	1
27	The Tarava Seamounts: a newly characterized hotspot chain on the South Pacific Superswell. *Earth and Planetary Science Letters*, **2003**, 207, 117-130	5.3	18

26	Arago Seamount: The missing hotspot found in the Austral Islands. *Geology*, **2002**, 30, 1023	5	47
25	How many Pacific hotspots are fed by deep-mantle plumes?. *Geology*, **2001**, 29, 695	5	77
24	A giant landslide on the southern flank of Tahiti Island, French Polynesia. *Geophysical Research Letters*, **2001**, 28, 2253-2256	4.9	41
23	A fuzzy-possibilistic scheme of study for objects with indeterminate boundaries: application to French Polynesian reefscapes. *IEEE Transactions on Geoscience and Remote Sensing*, **2000**, 38, 257-270	8.1	31
22	A shallow, chemical origin for the Marquesas Swell. *Geochemistry, Geophysics, Geosystems*, **2000**, 1, n/a-n/a	3.6	43
21	Size and depth of ancient magma reservoirs under atolls and islands of French Polynesia using gravity data. *Journal of Geophysical Research*, **2000**, 105, 8173-8191		11
20	THERMIC: a 2-D finite-element tool to solve conductive and advective heat transfer problems in Earth Sciences. *Computers and Geosciences*, **1999**, 25, 1137-1148	4.5	12
19	Crucial measurement issues discussed at Geodynamics Meeting. *Eos*, **1998**, 79, 633-633	1.5	
18	The seafloor swells and Superswell in French Polynesia. *Journal of Geophysical Research*, **1998**, 103, 27123-27132		24
17	Heat flow over Reunion hot spot track: Additional evidence for thermal rejuvenation of oceanic lithosphere. *Journal of Geophysical Research*, **1997**, 102, 22731-22747		26
16	Modal depths from shipboard bathymetry: There is a south pacific superswell. *Geophysical Research Letters*, **1996**, 23, 3397-3400	4.9	15
15	Mapping the seafloor from space. *Endeavour*, **1996**, 20, 157-161	0.5	1
14	Reply to the Comments made by Archambault and Tanguy on Thermal survey of Mount Etna Volcano from space *Geophysical Research Letters*, **1993**, 20, 1001-1001	4.9	
13	Thermal Modelling of Fluid Flow Effects In Thin-Dipping Aquifers. *Geophysical Journal International*, **1993**, 112, 276-289	2.6	12
12	Shear strength of the Great Pacific Fracture Zones. *Geophysical Research Letters*, **1992**, 19, 2023-2026	4.9	10
11	Flow duration of a dike constrained by palaeomagnetic data. *Geophysical Journal International*, **1991**, 106, 621-634	2.6	6
10	Numerical modelling of caldera dynamical behaviour. *Geophysical Journal International*, **1991**, 105, 365-378	2.6	23
9	Complete gravity study of Piton de la Fournaise volcano, Reunion Island. *Journal of Volcanology and Geothermal Research*, **1989**, 36, 37-52	2.8	47

8	The December 4, 1983 to February 18, 1984 eruption of Piton de la Fournaise (La Reunion, Indian Ocean): Description and interpretation. *Journal of Volcanology and Geothermal Research*, **1989**, 36, 87-112	2.8	35
7	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	2.8	41
6	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		51
5	A thermal forerunner of the 28th March 1983 Mt. Etna eruption from satellite thermal infrared data. *Journal of Geodynamics*, **1987**, 7, 1-31	2.2	22
4	Detailed gravity study of the offshore structure of Piton de la Fournaise volcano, Reunion Island. *Bulletin of Volcanology*, **1987**, 49, 713-722	2.4	14
3	Satellite thermal infrared observations of Mt. Etna after the 17th March 1981 eruption. *Journal of Volcanology and Geothermal Research*, **1985**, 24, 293-313	2.8	25
2	The Newberry Deep Drilling Project (NDDP) workshop. *Scientific Drilling*,24, 79-86		1
1	A Hydro-Mechanical Model and Analytical Solutions for Geomechanical Modeling of Carbon Dioxide Geological Sequestration47-53		