Andri Stefansson

List of Publications by Year
in descending order

73 papers	3,699 citations	136950 32 h-index	128289 60 g-index
73 all docs	73 docs citations	73 times ranked	3648 citing authors

#	Article	IF	Citations
1	Iron(III) Hydrolysis and Solubility at 25 Â°C. Environmental Science & Technology, 2007, 41, 6117-6123.	10.0	363
2	Mineral sequestration of carbon dioxide in basalt: A pre-injection overview of the CarbFix project. International Journal of Greenhouse Gas Control, 2010, 4, 537-545.	4.6	294
3	Magmatic vapor contraction and the transport of gold from the porphyry environment to epithermal ore deposits. Geology, 2004, 32, 761.	4.4	275
4	Gold(I) complexing in aqueous sulphide solutions to 500Â°C at 500 bar. Geochimica Et Cosmochimica Acta, 2004, 68, 4121-4143.	3.9	267
5	Dissolution of primary minerals of basalt in natural waters. Chemical Geology, 2001, 172, 225-250.	3.3	119
6	CO2-waterâ€“basalt interaction. Low temperature experiments and implications for CO2 sequestration into basalts. Geochimica Et Cosmochimica Acta, 2012, 81, 129-152.	3.9	118
7	The chemistry of trace elements in surface geothermal waters and steam, Iceland. Chemical Geology, 2012, 330-331, 60-85.	3.3	117
8	Feldspar saturation state in natural waters. Geochimica Et Cosmochimica Acta, 2000, 64, 2567-2584.	3.9	97
9	CO2â€“waterâ€“basalt interaction. Numerical simulation of low temperature CO2 sequestration into basalts. Geochimica Et Cosmochimica Acta, 2011, 75, 4728-4751.	3.9	97
10	New methods for the direct determination of dissolved inorganic, organic and total carbon in natural waters by Reagent-Freeâ„¢ Ion Chromatography and inductively coupled plasma atomic emission spectrometry. Analytica Chimica Acta, 2007, 582, 69-74.	5.4	95
11	Dissolution of primary minerals in natural waters. Chemical Geology, 2001, 172, 251-276.	3.3	83
12	Redox reactions and potentials in natural waters at disequilibrium. Chemical Geology, 2005, 221, 289-311.	3.3	79
13	An oligarchic microbial assemblage in the anoxic bottom waters of a volcanic subglacial lake. ISME Journal, 2009, 3, 486-497.	9.8	79
14	Mineralogical aspects of CO2 sequestration during hydrothermal basalt alteration â€” An experimental study at 75 to 250Â°C and elevated pCO2. Chemical Geology, 2012, 306-307, 146-159.	3.3	79
15	Gas pressures and redox reactions in geothermal fluids in Iceland. Chemical Geology, 2002, 190, 251-271.	3.3	76
16	Experiments and geochemical modeling of CO2 sequestration during hydrothermal basalt alteration. Chemical Geology, 2012, 306-307, 10-28.	3.3	68
17	Inâ€‰situ grown silica sinters in Icelandic geothermal areas. Geobiology, 2008, 6, 481-502.	2.4	65
18	Major element chemistry of surface- and ground waters in basaltic terrain, N-Iceland.. Geochimica Et Cosmochimica Acta, 2002, 66, 4015-4046.	3.9	64

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19	Microbial communities in the subglacial waters of the VatnajÃ¶kull ice cap, Iceland. ISME Journal, 2013, 7, 427-437.	9.8	60
20	Carbonic acid ionization and the stability of sodium bicarbonate and carbonate ion pairs to 200Â°C â€“ A potentiometric and spectrophotometric study. Geochimica Et Cosmochimica Acta, 2013, 120, 600-611.	3.9	59
21	The geochemistry of trace elements in geothermal fluids, Iceland. Applied Geochemistry, 2015, 62, 207-223.	3.0	57
22	Silicon isotope fractionation during silica precipitation from hot-spring waters: Evidence from the Geysir geothermal field, Iceland. Geochimica Et Cosmochimica Acta, 2015, 164, 403-427.	3.9	55
23	Sulfur speciation in natural hydrothermal waters, Iceland. Geochimica Et Cosmochimica Acta, 2011, 75, 2777-2791.	3.9	50
24	Isotope systematics of Icelandic thermal fluids. Journal of Volcanology and Geothermal Research, 2017, 337, 146-164.	2.1	47
25	Geothermal surface alteration of basalts, KrÃ½suvÃk Icelandâ€"Alteration mineralogy, water chemistry and the effects of acid supply on the alteration process. Journal of Volcanology and Geothermal Research, 2011, 206, 46-59.	2.1	44
26	Chemical weathering of volcanic rocks at the island of Pantelleria, Italy: Information from soil profile and soil solution investigations. Chemical Geology, 2007, 246, 1-18.	3.3	40
27	Arsenic speciation in natural sulfidic geothermal waters. Geochimica Et Cosmochimica Acta, 2014, 142, 15-26.	3.9	40
28	The geochemistry and sequestration of H2S into the geothermal system at Hellisheidi, Iceland. Journal of Volcanology and Geothermal Research, 2011, 202, 179-188.	2.1	39
29	Potentiometric and spectrophotometric study of the stability of magnesium carbonate and bicarbonate ion pairs to 150Â°C and aqueous inorganic carbon speciation and magnesite solubility. Geochimica Et Cosmochimica Acta, 2014, 138, 21-31.	3.9	39
30	A spectrophotometric study of iron(III) hydrolysis in aqueous solutions to 200ÂÂ°C. Chemical Geology, 2008, 249, 227-235.	3.3	35
31	Ground-Based Measurements of the 2014â€"2015 Holuhraun Volcanic Cloud (Iceland). Geosciences (Switzerland), 2018, 8, 29.	2.2	35
32	Gas chemistry, boiling and phase segregation in a geothermal system, Hellisheidi, Iceland. Geochimica Et Cosmochimica Acta, 2014, 124, 170-189.	3.9	32
33	Multiple sulfur isotope systematics of Icelandic geothermal fluids and the source and reactions of sulfur in volcanic geothermal systems at divergent plate boundaries. Geochimica Et Cosmochimica Acta, 2015, 165, 307-323.	3.9	32
34	Subducted lithosphere controls halogen enrichments in the Iceland mantle plume source. Geology, 2016, 44, 679-682.	4.4	32
35	Determination of arsenic speciation in sulfidic waters by Ion Chromatography Hydride-Generation Atomic Fluorescence Spectrometry (IC-HG-AFS). Talanta, 2014, 128, 466-472.	5.5	31
36	Isotope (Î´D, Î´18O, 3H, Î´13C, 14C) and chemical (B, Cl) Constrains on water origin, mixing, water-rock interaction and age of low-temperature geothermal water. Applied Geochemistry, 2019, 108, 104380.	3.0	30

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37	Mineral dissolution in porous media: An experimental and modeling study on kinetics, porosity and surface area evolution. Applied Geochemistry, 2017, 87, 57-70.	3.0	27
38	Mantle CO2 degassing through the Icelandic crust: Evidence from carbon isotopes in groundwater. Geochimica Et Cosmochimica Acta, 2016, 191, 300-319.	3.9	25
39	Major impact of volcanic gases on the chemical composition of precipitation in Iceland during the 2014â€“2015 Holuhraun eruption. Journal of Geophysical Research D: Atmospheres, 2017, 122, 1971-1982.	3.3	24
40	Sulfur isotopes in Icelandic thermal fluids. Journal of Volcanology and Geothermal Research, 2017, 346, 161-179.	2.1	23
41	Relative Abundance of Thiolated Species of As, Mo, W, and Sb in Hot Springs of Yellowstone National Park and Iceland. Environmental Science & Technology, 2020, 54, 4295-4304.	10.0	23
42	Gas chemistry of Icelandic thermal fluids. Journal of Volcanology and Geothermal Research, 2017, 346, 81-94.	2.1	21
43	Circulation and thermodynamics in a subglacial geothermal lake under the Western SkaftÃ¡ cauldron of the VatnajÃ¶kull ice cap, Iceland. Geophysical Research Letters, 2007, 34, .	4.0	20
44	Chlorine isotope geochemistry of Icelandic thermal fluids: Implications for geothermal system behavior at divergent plate boundaries. Earth and Planetary Science Letters, 2016, 449, 69-78.	4.4	20
45	Supercritical fluids around magmatic intrusions: IDDP-1 at Krafla, Iceland. Geothermics, 2019, 78, 101-110.	3.4	20
46	Fluids in Geothermal Systems. Elements, 2020, 16, 407-411.	0.5	20
47	Magnesium bicarbonate and carbonate interactions in aqueous solutions: An infrared spectroscopic and quantum chemical study. Geochimica Et Cosmochimica Acta, 2017, 198, 271-284.	3.9	19
48	Determination of Fe(II), Fe(III) and Fe_{total} in thermal water by ion chromatography spectrophotometry (IC-Vis). International Journal of Environmental Analytical Chemistry, 2016, 96, 1074-1090.	3.3	18
49	Towards â€˜greenâ€™ geothermal energy: Co-mineralization of carbon and sulfur in geothermal reservoirs. International Journal of Greenhouse Gas Control, 2018, 77, 96-105.	4.6	17
50	High temperature generation and equilibration of methane in terrestrial geothermal systems: Evidence from clumped isotopologues. Geochimica Et Cosmochimica Acta, 2021, 309, 209-234.	3.9	17
51	Chemical analysis of sulfur species in geothermal waters. Talanta, 2011, 85, 1897-1903.	5.5	16
52	Chromium geochemistry and speciation in natural waters, Iceland. Applied Geochemistry, 2015, 62, 200-206.	3.0	16
53	Volcanic and Geothermal Redox Engines. Elements, 2020, 16, 179-184.	0.5	16
54	Geochemical constraints on supercritical fluids in geothermal systems. Journal of Volcanology and Geothermal Research, 2020, 394, 106824.	2.1	14

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55	H2S sequestration process and sustainability in geothermal systems. Geothermics, 2018, 71, 156-166.	3.4	13
56	Iron(III) chloride complexation in hydrothermal solutions: A combined spectrophotometric and density functional theory study. Chemical Geology, 2019, 524, 77-87.	3.3	13
57	Surface water chemistry at TorfajÃ¶kull, Icelandâ€"Quantification of boiling, mixing, oxidation and waterâ€"rock interaction and reconstruction of reservoir fluid composition. Geothermics, 2015, 58, 75-86.	3.4	12
58	Quantifying mixing, boiling, degassing, oxidation and reactivity of thermal waters at Vonarskard, Iceland. Journal of Volcanology and Geothermal Research, 2016, 309, 53-62.	2.1	12
59	Corrosion testing of materials in simulated superheated geothermal environment. Corrosion Science, 2020, 168, 108584.	6.6	12
60	Equilibrium and kinetic controls on molecular hydrogen abundance and hydrogen isotope fractionation in hydrothermal fluids. Earth and Planetary Science Letters, 2022, 579, 117338.	4.4	12
61	The Surtsey volcano geothermal system: An analogue for seawater-oceanic crust interaction with implications for the elemental budget of the oceanic crust. Chemical Geology, 2020, 550, 119702.	3.3	11
62	A pre-injection assessment of CO2 and H2S mineralization reactions at the Nesjavellir (Iceland) geothermal storage site. International Journal of Greenhouse Gas Control, 2022, 115, 103610.	4.6	11
63	Tracing olivine carbonation and serpentinization in CO2-rich fluids via magnesium exchange and isotopic fractionation. Geochimica Et Cosmochimica Acta, 2018, 243, 133-148.	3.9	9
64	Sulfate (re-)cycling in the oceanic crust: Effects of seawater-rock interaction, sulfur reduction and temperature on the abundance and isotope composition of anhydrite. Geochimica Et Cosmochimica Acta, 2022, 317, 65-90.	3.9	9
65	A simple sampler for subglacial water bodies. Journal of Glaciology, 2007, 53, 157-158.	2.2	7
66	Assessing the sources of inorganic carbon in surface-, soil- and non-thermal groundwater in Iceland by Î´13C and 14C. Geochimica Et Cosmochimica Acta, 2020, 279, 165-188.	3.9	7
67	Source controls on sulfur abundance and isotope fractionation in hydrothermal fluids in the Olkaria geothermal field, Kenya. Chemical Geology, 2021, 582, 120446.	3.3	7
68	Pollution from the 2014â€"15 BÃ¡rÃ°arbunga eruption monitored by snow cores from the VatnajÃ¶kull glacier, Iceland. Journal of Volcanology and Geothermal Research, 2017, 347, 371-396.	2.1	6
69	Supercritical Fluid Geochemistry in Geothermal Systems. Geofluids, 2019, 2019, 1-14.	0.7	6
70	Geochemistry and speciation of Fe(II) and Fe(III) in natural geothermal water, Iceland. Applied Geochemistry, 2017, 87, 146-157.	3.0	4
71	CO2 mineralization by olivine at hydrothermal conditions. Mineralogical Magazine, 2014, 78, 1473-1477.	1.4	0
72	O, H and C isotopic systematics of Icelandic groundwater. E3S Web of Conferences, 2019, 98, 07031.	0.5	0

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73	H2S sequestration traced by sulfur isotopes at HellisheiÃ°i geothermal system, Iceland. Geothermics, 2020, 83, 101730.	3.4	0