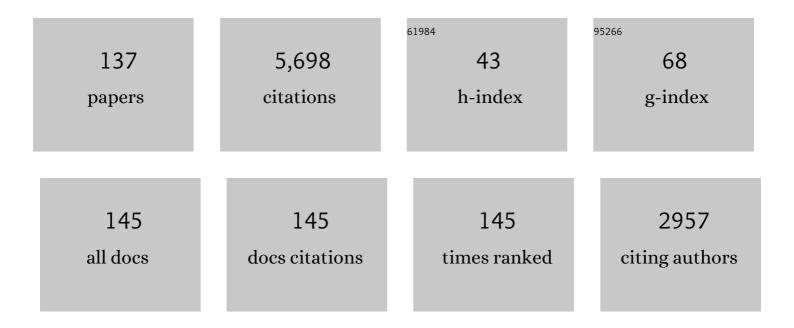
Alessandro Aiuppa

List of Publications by Year in descending order

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#	Article	IF	CITATIONS
1	Gas Leakage From Shallow Ponding Magma and Trapdoor Faulting at Sierra Negra Volcano (Isabela) Tj ETQq1	1 0.784314 2.5	rgBT /Overlo
2	A golden era for volcanic gas geochemistry?. Bulletin of Volcanology, 2022, 84, 1.	3.0	14
3	3He/4He Signature of Magmatic Fluids from Telica (Nicaragua) and Baru (Panama) Volcanoes, Central American Volcanic Arc. Applied Sciences (Switzerland), 2022, 12, 4241.	2.5	2
4	End-Triassic Extinction in a Carbonate Platform From Western Tethys: A Comparison Between Extinction Trends and Geochemical Variations. Frontiers in Earth Science, 2022, 10, .	1.8	2
5	Volcanic activity and gas emissions along the South Sandwich Arc. Bulletin of Volcanology, 2021, 83, 1.	3.0	14
6	Volcanic CO2 seep geochemistry and use in understanding ocean acidification. Biogeochemistry, 2021, 152, 93-115.	3.5	31
7	Noble gas magmatic signature of the Andean Northern Volcanic Zone from fluid inclusions in minerals. Chemical Geology, 2021, 559, 119966.	3.3	8
8	Ground deformation reveals the scale-invariant conduit dynamics driving explosive basaltic eruptions. Nature Communications, 2021, 12, 1683.	12.8	26
9	Hydrothermal pressure-temperature control on CO2 emissions and seismicity at Campi Flegrei (Italy). Journal of Volcanology and Geothermal Research, 2021, 414, 107245.	2.1	38
10	The composition of fluids stored in the central Mexican lithospheric mantle: Inferences from noble gases and CO2 in mantle xenoliths. Chemical Geology, 2021, 576, 120270.	3.3	17
11	Carbon concentration increases with depth of melting in Earth's upper mantle. Nature Geoscience, 2021, 14, 697-703.	12.9	29
12	Volcanic CO ₂ tracks the incubation period of basaltic paroxysms. Science Advances, 2021, 7, eabh0191.	10.3	25
13	Heterogeneity of volatile sources along the Halmahera arc, Indonesia. Journal of Volcanology and Geothermal Research, 2021, 418, 107342.	2.1	3
14	Recycled crustal carbon in the depleted mantle source of El Hierro volcano, Canary Islands. Lithos, 2021, 400-401, 106414.	1.4	9
15	Active Degassing of Deeply Sourced Fluids in Central Europe: New Evidences From a Geochemical Study in Serbia. Geochemistry, Geophysics, Geosystems, 2021, 22, e2021GC010017.	2.5	11
16	Gas Emissions From the Western Aleutians Volcanic Arc. Frontiers in Earth Science, 2021, 9, .	1.8	3
17	Gas emissions and crustal deformation from the KrýsuvÃk high temperature geothermal system, Iceland. Journal of Volcanology and Geothermal Research, 2020, 391, 106350.	2.1	9
18	The Brldge voLcanic LIdar—BILLI: A Review of Data Collection and Processing Techniques in the Italian Most Hazardous Volcanic Areas. Applied Sciences (Switzerland), 2020, 10, 6402.	2.5	1

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19	First gas and thermal measurements at the frequently erupting Gamalama volcano (Indonesia) reveal a hydrothermally dominated magmatic system. Journal of Volcanology and Geothermal Research, 2020, 407, 107096.	2.1	4
20	Combined ground and aerial measurements resolve vent-specific gas fluxes from a multi-vent volcano. Nature Communications, 2020, 11, 3039.	12.8	27
21	Elevated CO2 Emissions during Magmatic-Hydrothermal Degassing at Awu Volcano, Sangihe Arc, Indonesia. Geosciences (Switzerland), 2020, 10, 470.	2.2	2
22	Aerial strategies advance volcanic gas measurements at inaccessible, strongly degassing volcanoes. Science Advances, 2020, 6, .	10.3	24
23	First In-Situ Measurements of Plume Chemistry at Mount Garet Volcano, Island of Gaua (Vanuatu). Applied Sciences (Switzerland), 2020, 10, 7293.	2.5	4
24	BVLOS UAS Operations in Highly-Turbulent Volcanic Plumes. Frontiers in Robotics and AI, 2020, 7, 549716.	3.2	10
25	Ultraviolet Camera Measurements of Passive and Explosive (Strombolian) Sulphur Dioxide Emissions at Yasur Volcano, Vanuatu. Remote Sensing, 2020, 12, 2703.	4.0	5
26	Petrological and noble gas features of Lascar and Lastarria volcanoes (Chile): Inferences on plumbing systems and mantle characteristics. Lithos, 2020, 370-371, 105615.	1.4	8
27	AGU Centennial Grand Challenge: Volcanoes and Deep Carbon Global CO ₂ Emissions From Subaerial Volcanism—Recent Progress and Future Challenges. Geochemistry, Geophysics, Geosystems, 2020, 21, e2019GC008690.	2.5	36
28	First characterization of Gamkonora gas emission, North Maluku, East Indonesia. Bulletin of Volcanology, 2020, 82, 1.	3.0	6
29	Strombolian eruptions and dynamics of magma degassing at Yasur Volcano (Vanuatu). Journal of Volcanology and Geothermal Research, 2020, 398, 106869.	2.1	19
30	Escalating CO2 degassing at the Pisciarelli fumarolic system, and implications for the ongoing Campi Flegrei unrest. Journal of Volcanology and Geothermal Research, 2019, 384, 151-157.	2.1	43
31	The crater lake of llamatepec (Santa Ana) volcano, El Salvador: insights into lake gas composition and implications for monitoring. Bulletin of Volcanology, 2019, 81, 1.	3.0	4
32	Carbon Dioxide Emissions from Subaerial Volcanic Regions. , 2019, , 188-236.		53
33	Insights on Hydrothermalâ€Magmatic Interactions and Eruptive Processes at PoÃis Volcano (Costa Rica) From Highâ€Frequency Gas Monitoring and Drone Measurements. Geophysical Research Letters, 2019, 46, 1293-1302.	4.0	54
34	Changes in SO2 Flux Regime at Mt. Etna Captured by Automatically Processed Ultraviolet Camera Data. Remote Sensing, 2019, 11, 1201.	4.0	20
35	CO2 flux emissions from the Earth's most actively degassing volcanoes, 2005–2015. Scientific Reports, 2019, 9, 5442.	3.3	84
36	Understanding the SO2 Degassing Budget of Mt Etna's Paroxysms: First Clues From the December 2015 Sequence. Frontiers in Earth Science, 2019, 6, .	1.8	10

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37	Insights Into the Mechanisms of Phreatic Eruptions From Continuous High Frequency Volcanic Gas Monitoring: Rincón de la Vieja Volcano, Costa Rica. Frontiers in Earth Science, 2019, 6, .	1.8	12
38	Volcanic Gas Emissions Along the Colombian Arc Segment of the Northern Volcanic Zone (CASâ€NVZ): Implications for volcano monitoring and volatile budget of the Andean Volcanic Belt. Geochemistry, Geophysics, Geosystems, 2019, 20, 5057-5081.	2.5	5
39	The emissions of CO2 and other volatiles from the world's subaerial volcanoes. Scientific Reports, 2019, 9, 18716.	3.3	109
40	Dynamics of Outgassing and Plume Transport Revealed by Proximal Unmanned Aerial System (UAS) Measurements at VolcAjn Villarrica, Chile. Geochemistry, Geophysics, Geosystems, 2019, 20, 730-750.	2.5	41
41	Halogen (Cl, F) release during explosive, effusive, and intrusive phases of the 2011 rhyolitic eruption at Cordųn Caulle volcano (Chile). Volcanica, 2019, 2, 73-90.	1.8	15
42	Tracking Formation of a Lava Lake From Ground and Space: Masaya Volcano (Nicaragua), 2014–2017. Geochemistry, Geophysics, Geosystems, 2018, 19, 496-515.	2.5	52
43	Dukono, the predominant source of volcanic degassing in Indonesia, sustained by a depleted Indian-MORB. Bulletin of Volcanology, 2018, 80, 1.	3.0	16
44	The Magmatic Gas Signature of Pacaya Volcano, With Implications for the Volcanic CO ₂ Flux From Guatemala. Geochemistry, Geophysics, Geosystems, 2018, 19, 667-692.	2.5	26
45	Degassing vs. eruptive styles at Mt. Etna volcano (Sicily, Italy). Part I: Volatile stocking, gas fluxing, and the shift from low-energy to highly explosive basaltic eruptions. Chemical Geology, 2018, 482, 1-17.	3.3	43
46	Geochemistry and isotope composition (Sr, Pb, δ66Zn) of Vulcano fumaroles (Aeolian Islands, Italy). Chemical Geology, 2018, 493, 153-171.	3.3	8
47	The role of melt composition on aqueous fluid vs. silicate melt partitioning of bromine in magmas. Earth and Planetary Science Letters, 2018, 498, 450-463.	4.4	29
48	Ground-Based Measurements of the 2014–2015 Holuhraun Volcanic Cloud (Iceland). Geosciences (Switzerland), 2018, 8, 29.	2.2	35
49	Sulfur Degassing From Steamâ€Heated Crater Lakes: El Chichón (Chiapas, Mexico) and VÃti (Iceland). Geophysical Research Letters, 2018, 45, 7504-7513.	4.0	7
50	Unrest at the Nevados de Chillán volcanic complex: a failed or yet to unfold magmatic eruption?. Volcanica, 2018, 1, 19-32.	1.8	12
51	Shallow system rejuvenation and magma discharge trends at Piton de la Fournaise volcano (La) Tj ETQq1 1 0.784	1314.rgBT 4.4	/Oyerlock 10
52	Geochemistry and volatile content of magmas feeding explosive eruptions at Telica volcano (Nicaragua). Journal of Volcanology and Geothermal Research, 2017, 341, 131-148.	2.1	5
53	Fast tracking of wind speed with a differential absorption LiDAR system: first results of an experimental campaign at Stromboli volcano. Optical Engineering, 2017, 56, 044104.	1.0	1
54	A <scp>CO</scp> ₂ â€gas precursor to the <scp>M</scp> arch 2015 <scp>V</scp> illarrica volcano eruption. Geochemistry, Geophysics, Geosystems, 2017, 18, 2120-2132.	2.5	66

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55	Magmatic gas percolation through the old lava dome of El Misti volcano. Bulletin of Volcanology, 2017, 79, 46.	3.0	18
56	Along-arc, inter-arc and arc-to-arc variations in volcanic gas CO 2 /S T ratios reveal dual source of carbon in arc volcanism. Earth-Science Reviews, 2017, 168, 24-47.	9.1	131
57	Volatile contents of mafic-to-intermediate magmas at San Cristóbal volcano in Nicaragua. Lithos, 2017, 272-273, 147-163.	1.4	26
58	The dynamics of slug trains in volcanic conduits: Evidence for expansion driven slug coalescence. Journal of Volcanology and Geothermal Research, 2017, 348, 26-35.	2.1	11
59	Geochemical constraints on volatile sources and subsurface conditions at Mount Martin, Mount Mageik, and Trident Volcanoes, Katmai Volcanic Cluster, Alaska. Journal of Volcanology and Geothermal Research, 2017, 347, 64-81.	2.1	12
60	First study of the heat and gas budget for Sirung volcano, Indonesia. Bulletin of Volcanology, 2017, 79, 1.	3.0	15
61	A New Sulfur and Carbon Degassing Inventory for the Southern Central American Volcanic Arc: The Importance of Accurate Timeâ€Series Data Sets and Possible Tectonic Processes Responsible for Temporal Variations in Arcâ€Scale Volatile Emissions. Geochemistry, Geophysics, Geosystems, 2017, 18, 4437-4468.	2.5	56
62	Validation of a novel Multi-Gas sensor for volcanic HCl alongside H2S and SO2 at Mt. Etna. Bulletin of Volcanology, 2017, 79, 36.	3.0	16
63	Volcanic gas emissions and degassing dynamics at Ubinas and Sabancaya volcanoes; implications for the volatile budget of the central volcanic zone. Journal of Volcanology and Geothermal Research, 2017, 343, 181-191.	2.1	30
64	Exploring the explosiveâ€effusive transition using permanent ultraviolet cameras. Journal of Geophysical Research: Solid Earth, 2017, 122, 4377-4394.	3.4	22
65	First results of the Piton de la Fournaise STRAP 2015 experiment: multidisciplinary tracking of a volcanic gas and aerosol plume. Atmospheric Chemistry and Physics, 2017, 17, 5355-5378.	4.9	21
66	A Novel and Inexpensive Method for Measuring Volcanic Plume Water Fluxes at High Temporal Resolution. Remote Sensing, 2017, 9, 146.	4.0	7
67	Volcanic Plume CO2 Flux Measurements at Mount Etna by Mobile Differential Absorption Lidar. Geosciences (Switzerland), 2017, 7, 9.	2.2	9
68	Ultraviolet Imaging of Volcanic Plumes: A New Paradigm in Volcanology. Geosciences (Switzerland), 2017, 7, 68.	2.2	34
69	New Advances in Dial-Lidar-Based Remote Sensing of the Volcanic CO2 Flux. Frontiers in Earth Science, 2017, 5, .	1.8	8
70	Fumarolic tremor and geochemical signals during a volcanic unrest. Geology, 2017, 45, 1131-1134.	4.4	34
71	Gas mass derived by infrasound and UV cameras: Implications for mass flow rate. Journal of Volcanology and Geothermal Research, 2016, 325, 169-178.	2.1	32
72	Conduit dynamics and post explosion degassing on Stromboli: A combined UV camera and numerical modeling treatment. Geophysical Research Letters, 2016, 43, 5009-5016.	4.0	21

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73	Magmas near the critical degassing pressure drive volcanic unrest towards a critical state. Nature Communications, 2016, 7, 13712.	12.8	144
74	Hydrothermal fluid venting in the offshore sector of <scp>C</scp> ampi <scp>F</scp> legrei caldera: A geochemical, geophysical, and volcanological study. Geochemistry, Geophysics, Geosystems, 2016, 17, 4153-4178.	2.5	27
75	Sustaining persistent lava lakes: Observations from high-resolution gas measurements at Villarrica volcano, Chile. Earth and Planetary Science Letters, 2016, 454, 237-247.	4.4	50
76	Spatially resolved SO ₂ flux emissions from Mt Etna. Geophysical Research Letters, 2016, 43, 7511-7519.	4.0	34
77	Turmoil at Turrialba Volcano (Costa Rica): Degassing and eruptive processes inferred from highâ€frequency gas monitoring. Journal of Geophysical Research: Solid Earth, 2016, 121, 5761-5775.	3.4	105
78	Early detection of volcanic hazard by lidar measurement of carbon dioxide. Natural Hazards, 2016, 83, 21-29.	3.4	8
79	Short-period volcanic gas precursors to phreatic eruptions: Insights from PoÃis Volcano, Costa Rica. Earth and Planetary Science Letters, 2016, 442, 218-227.	4.4	105
80	Prodigious emission rates and magma degassing budget of major, trace and radioactive volatile species from Ambrym basaltic volcano, Vanuatu island Arc. Journal of Volcanology and Geothermal Research, 2016, 322, 119-143.	2.1	67
81	Reaction path models of magmatic gas scrubbing. Chemical Geology, 2016, 420, 251-269.	3.3	7
82	Magma Degassing at Piton de la Fournaise Volcano. Active Volcanoes of the World, 2016, , 203-222.	1.4	23
83	Terminal Strombolian activity at Etna's central craters during summer 2012: The most CO ₂ -rich volcanic gas ever recorded at Mount Etna. Geochemical Journal, 2016, 50, 123-138.	1.0	11
84	New ground-based lidar enables volcanic CO2 flux measurements. Scientific Reports, 2015, 5, 13614.	3.3	51
85	Volcanic-gas monitoring. , 2015, , 81-96.		20
86	Total (fumarolic + diffuse soil) CO2 output from Furnas volcano. Earth, Planets and Space, 2015, 67, 17	4.2.5	20
87	Intense magmatic degassing through the lake of Copahue volcano, 2013–2014. Journal of Geophysical Research: Solid Earth, 2015, 120, 6071-6084.	3.4	50
88	Quantification of the depletion of ozone in the plume of Mount Etna. Atmospheric Chemistry and Physics, 2015, 15, 2613-2628.	4.9	25
89	Dynamics of mild strombolian activity on Mt. Etna. Journal of Volcanology and Geothermal Research, 2015, 300, 103-111.	2.1	26

90 In situ Volcano Monitoring. , 2015, , 169-202.

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91	Degassing regime of Hekla volcano 2012–2013. Geochimica Et Cosmochimica Acta, 2015, 159, 80-99.	3.9	24
92	Volcanic CO_2 detection with a DFM/OPA-based lidar. Optics Letters, 2015, 40, 1034.	3.3	21
93	Lidar detection of carbon dioxide in volcanic plumes. , 2015, , .		2
94	First determination of magma-derived gas emissions from Bromo volcano, eastern Java (Indonesia). Journal of Volcanology and Geothermal Research, 2015, 304, 206-213.	2.1	34
95	Tunable diode laser measurements of hydrothermal/volcanic CO ₂ and implications for the global CO ₂ budget. Solid Earth, 2014, 5, 1209-1221.	2.8	9
96	Characterisation of the magmatic signature in gas emissions from Turrialba Volcano, Costa Rica. Solid Earth, 2014, 5, 1341-1350.	2.8	13
97	Steam and gas emission rate from La Soufriere volcano, Guadeloupe (Lesser Antilles): Implications for the magmatic supply during degassing unrest. Chemical Geology, 2014, 384, 76-93.	3.3	56
98	Gas emissions from five volcanoes in northern Chile and implications for the volatiles budget of the Central Volcanic Zone. Geophysical Research Letters, 2014, 41, 4961-4969.	4.0	31
99	Correlation of oscillatory behaviour in Matlab using wavelets. Computers and Geosciences, 2014, 70, 206-212.	4.2	22
100	Gas measurements from the Costa Rica–Nicaragua volcanic segment suggest possible along-arc variations in volcanic gas chemistry. Earth and Planetary Science Letters, 2014, 407, 134-147.	4.4	55
101	Volcanic CO2 flux measurement at Campi Flegrei by tunable diode laser absorption spectroscopy. Bulletin of Volcanology, 2014, 76, 1.	3.0	36
102	Measurements of volcanic SO2 and CO2 fluxes by combined DOAS, Multi-GAS and FTIR observations: a case study from Turrialba and Telica volcanoes. International Journal of Earth Sciences, 2014, 103, 2335-2347.	1.8	19
103	High time resolution fluctuations in volcanic carbon dioxide degassing from Mount Etna. Journal of Volcanology and Geothermal Research, 2014, 270, 115-121.	2.1	40
104	Rapid chemical evolution of tropospheric volcanic emissions from Redoubt Volcano, Alaska, based on observations of ozone and halogen-containing gases. Journal of Volcanology and Geothermal Research, 2013, 259, 317-333.	2.1	58
105	Insights into magma and fluid transfer at Mount Etna by a multiparametric approach: A model of the events leading to the 2011 eruptive cycle. Journal of Geophysical Research: Solid Earth, 2013, 118, 3519-3539.	3.4	108
106	First observations of the fumarolic gas output from a restless caldera: Implications for the current period of unrest (2005–2013) at Campi Flegrei. Geochemistry, Geophysics, Geosystems, 2013, 14, 4153-4169.	2.5	91
107	Lidar sounding of volcanic plumes. , 2013, , .		3
108	Periodic volcanic degassing behavior: The Mount Etna example. Geophysical Research Letters, 2013, 40, 4818-4822.	4.0	53

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109	First volatile inventory for Gorely volcano, Kamchatka. Geophysical Research Letters, 2012, 39, .	4.0	52
110	Passive vs. active degassing modes at an open-vent volcano (Stromboli, Italy). Earth and Planetary Science Letters, 2012, 359-360, 106-116.	4.4	80
111	Hydrogen in the gas plume of an open-vent volcano, Mount Etna, Italy. Journal of Geophysical Research, 2011, 116, .	3.3	70
112	UV camera measurements of fumarole field degassing (La Fossa crater, Vulcano Island). Journal of Volcanology and Geothermal Research, 2011, 199, 47-52.	2.1	41
113	First 13C/12C isotopic characterisation of volcanic plume CO2. Bulletin of Volcanology, 2011, 73, 531-542.	3.0	52
114	First-time lidar measurement of water vapor flux in a volcanic plume. Optics Communications, 2011, 284, 1295-1298.	2.1	18
115	Magma and Volatile Supply to Post-collapse Volcanism and Block Resurgence in Siwi Caldera (Tanna) Tj ETQq1 1	0.784314 2.8	rgBT /Overic
116	First observational evidence for the CO ₂ -driven origin of Stromboli's major explosions. Solid Earth, 2011, 2, 135-142.	2.8	56
117	Vulcamera: a program for measuring volcanic SO2 using UV cameras. Annals of Geophysics, 2011, 54, .	1.0	9
118	Protocols for UV camera volcanic SO2 measurements. Journal of Volcanology and Geothermal Research, 2010, 194, 55-60.	2.1	83
119	Excess volatiles supplied by mingling of mafic magma at an andesite arc volcano. Geochemistry, Geophysics, Geosystems, 2010, 11, .	2.5	86
120	Patterns in the recent 2007–2008 activity of Mount Etna volcano investigated by integrated geophysical and geochemical observations. Geochemistry, Geophysics, Geosystems, 2010, 11, .	2.5	88
121	Unusually large magmatic CO ₂ gas emissions prior to a basaltic paroxysm. Geophysical Research Letters, 2010, 37, .	4.0	95
122	A model of degassing for Stromboli volcano. Earth and Planetary Science Letters, 2010, 295, 195-204.	4.4	148
123	The 2007 eruption of Stromboli volcano: Insights from real-time measurement of the volcanic gas plume CO2/SO2 ratio. Journal of Volcanology and Geothermal Research, 2009, 182, 221-230.	2.1	155
124	Degassing of halogens from basaltic volcanism: Insights from volcanic gas observations. Chemical Geology, 2009, 263, 99-109.	3.3	101
125	Mercury gas emissions from La Soufrière Volcano, Guadeloupe Island (Lesser Antilles). Chemical Geology, 2009, 266, 267-273.	3.3	27
126	Spectroscopic capture of 1 Hz volcanic SO ₂ fluxes and integration with volcano geophysical data. Geophysical Research Letters, 2009, 36, .	4.0	26

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127	Unmanned aerial vehicle measurements of volcanic carbon dioxide fluxes. Geophysical Research Letters, 2008, 35, .	4.0	142
128	Variation of H ₂ O/CO ₂ and CO ₂ /SO ₂ ratios of volcanic gases discharged by continuous degassing of Mount Etna volcano, Italy. Journal of Geophysical Research, 2008, 113, .	3.3	74
129	Total volatile flux from Mount Etna. Geophysical Research Letters, 2008, 35, .	4.0	112
130	Forecasting Etna eruptions by real-time observation of volcanic gas composition. Geology, 2007, 35, 1115.	4.4	270
131	Reactive halogen chemistry in volcanic plumes. Journal of Geophysical Research, 2007, 112, .	3.3	144
132	Rates of carbon dioxide plume degassing from Mount Etna volcano. Journal of Geophysical Research, 2006, 111, .	3.3	86
133	BrO formation in volcanic plumes. Geochimica Et Cosmochimica Acta, 2006, 70, 2935-2941.	3.9	122
134	H2S fluxes from Mt. Etna, Stromboli, and Vulcano (Italy) and implications for the sulfur budget at volcanoes. Geochimica Et Cosmochimica Acta, 2005, 69, 1861-1871.	3.9	139
135	Chemical mapping of a fumarolic field: La Fossa Crater, Vulcano Island (Aeolian Islands, Italy). Geophysical Research Letters, 2005, 32, .	4.0	160
136	Fluid geochemistry of the San Vicente geothermal field (El Salvador). Geothermics, 1997, 26, 83-97.	3.4	16
137	Crustal controls on light noble gas isotope variability along the Andean Volcanic Arc. Geochemical Perspectives Letters, 0, 19, 45-49.	5.0	6