

# John Stix

## List of Publications by Year in descending order

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96  
papers

4,327  
citations

81434

41  
h-index

129628

63  
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98  
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98  
docs citations

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times ranked

3655  
citing authors

#	ARTICLE	IF	CITATIONS
1	A new Multi-GAS system for continuous monitoring of CO <sub>2</sub> / CH <sub>4</sub> ratios at active volcanoes. Journal of Volcanology and Geothermal Research, 2022, 426, 107533.	0.8	5
2	H <sub>2</sub> O and CO <sub>2</sub> evolution in the Bandelier Tuff sequence reveals multiple and discrete magma replenishments. Contributions To Mineralogy and Petrology, 2022, 177, 1.	1.2	5
3	Phreatic and Hydrothermal Eruptions: From Overlooked to Looking Over. Bulletin of Volcanology, 2022, 84, .	1.1	11
4	Communication when it is needed most—the past, present and future of volcano geoheritage. Bulletin of Volcanology, 2022, 84, .	1.1	2
5	Plutonic record of a caldera-forming silicic eruption: The shatter zone of the Cadillac Mountain granite, coastal Maine. , 2021, 17, 1-22.		5
6	Halogen activation in the plume of Masaya volcano: field observations and box model investigations. Atmospheric Chemistry and Physics, 2021, 21, 3371-3393.	1.9	10
7	Hydrothermal alteration and sealing at Turrialba volcano, Costa Rica, as a mechanism for phreatic eruption triggering. Journal of Volcanology and Geothermal Research, 2021, 416, 107297.	0.8	11
8	Emplacement of unusual rhyolitic to basaltic ignimbrites during collapse of a basalt-dominated caldera: The Halarauður eruption, Krafla (Iceland). Bulletin of the Geological Society of America, 2020, 132, 1881-1902.	1.6	10
9	The effect of fluorine on clinopyroxene/melt trace-element partitioning. Contributions To Mineralogy and Petrology, 2020, 175, 1.	1.2	9
10	Carbon and sulfur isotopes in tree rings as a proxy for volcanic degassing. Geology, 2019, 47, 825-828.	2.0	7
11	Insights on Hydrothermal–Magmatic Interactions and Eruptive Processes at Poás Volcano (Costa Rica) From High-Frequency Gas Monitoring and Drone Measurements. Geophysical Research Letters, 2019, 46, 1293-1302.	1.5	54
12	Clinopyroxene/Melt Trace Element Partitioning in Sodic Alkaline Magmas. Journal of Petrology, 2019, 60, 1797-1823.	1.1	41
13	Magma plumbing beneath collapse caldera volcanic systems. Earth-Science Reviews, 2018, 177, 404-424.	4.0	62
14	Monitoring and forecasting fault development at actively forming calderas: An experimental study. Geology, 2018, 46, 23-26.	2.0	3
15	Understanding and forecasting phreatic eruptions driven by magmatic degassing. Earth, Planets and Space, 2018, 70, 83.	0.9	102
16	Volcanic and Igneous Plumbing Systems of Caldera Volcanoes. , 2018, , 259-284.		5
17	Understanding Fast and Slow Unrest at Volcanoes and Implications for Eruption Forecasting. Frontiers in Earth Science, 2018, 6, .	0.8	11
18	Using Drones and Miniaturized Instrumentation to Study Degassing at Turrialba and Masaya Volcanoes, Central America. Journal of Geophysical Research: Solid Earth, 2018, 123, 6501-6520.	1.4	38

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19	Mantle to surface degassing of carbon- and sulphur-rich alkaline magma at El Hierro, Canary Islands. <i>Earth and Planetary Science Letters</i> , 2017, 460, 268-280.	1.8	67
20	Near real-time field measurements of $\delta^{13}\text{C}$ in $\text{CO}_2$ from volcanoes. <i>Bulletin of Volcanology</i> , 2017, 79, 1.	1.1	2
21	Carbon isotope systematics of $\text{CO}_2$ from a volcano, Costa Rica, using a portable cavity ring-down spectrometer. <i>Geochemistry, Geophysics, Geosystems</i> , 2017, 18, 2769-2784.	1.0	11
22	Caldera collapse at near-ridge seamounts: an experimental investigation. <i>Bulletin of Volcanology</i> , 2016, 78, 1.	1.1	9
23	Melt-rock interaction near the Moho: Evidence from crystal cargo in lavas from near-ridge seamounts. <i>Geochimica Et Cosmochimica Acta</i> , 2016, 191, 139-164.	1.6	29
24	Water-rich and volatile-undersaturated magmas at Hekla volcano, Iceland. <i>Geochemistry, Geophysics, Geosystems</i> , 2016, 17, 3111-3130.	1.0	11
25	Links between arc volcanoes and porphyry-epithermal ore deposits. <i>Geology</i> , 2016, 44, 11-14.	2.0	32
26	Magma storage, differentiation, and interaction at Lake City caldera, Colorado, USA. <i>Bulletin of the Geological Society of America</i> , 2016, 128, 764-776.	1.6	13
27	Structural controls on the emission of magmatic carbon dioxide gas, Long Valley Caldera, USA. <i>Journal of Geophysical Research: Solid Earth</i> , 2015, 120, 2262-2278.	1.4	21
28	$\text{H}_2\text{S}$ interference on $\text{CO}_2$ isotopic measurements using a Picarro G1101-i cavity ring-down spectrometer. <i>Atmospheric Measurement Techniques</i> , 2015, 8, 4075-4082.	1.2	32
29	The Magmatic Architecture of Taney Seamount-A, NE Pacific Ocean. <i>Journal of Petrology</i> , 2015, 56, 1037-1067.	1.1	14
30	Deep intrusions, lateral magma transport and related uplift at ocean island volcanoes. <i>Earth and Planetary Science Letters</i> , 2015, 431, 140-149.	1.8	91
31	Mixing in mantle magma reservoirs prior to and during the 2011-2012 eruption at El Hierro, Canary Islands. <i>Geology</i> , 2014, 42, 315-318.	2.0	95
32	Magmatic Processes and Associated Timescales Leading to the January 1835 Eruption of Cosigüina Volcano, Nicaragua. <i>Journal of Petrology</i> , 2014, 55, 1173-1201.	1.1	23
33	Sulfur budget and global climate impact of the A.D. 1835 eruption of Cosigüina volcano, Nicaragua. <i>Geophysical Research Letters</i> , 2014, 41, 6667-6675.	1.5	15
34	The degassing character of a young volcanic center: Cerro Negro, Nicaragua. <i>Bulletin of Volcanology</i> , 2014, 76, 1.	1.1	8
35	Phenocryst-hosted melt inclusions record stalling of magma during ascent in the conduit and upper magma reservoir prior to vulcanian explosions, Soufrière Hills volcano, Montserrat, West Indies. <i>Bulletin of Volcanology</i> , 2013, 75, 1.	1.1	22
36	The behavior of Cu, Zn and Pb during magmatic-hydrothermal activity at Merapi volcano, Indonesia. <i>Chemical Geology</i> , 2013, 342, 167-179.	1.4	34

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37	High and highly variable cooling rates during pyroclastic eruptions on Axial Seamount, Juan de Fuca Ridge. <i>Journal of Volcanology and Geothermal Research</i> , 2013, 253, 54-64.	0.8	26
38	Magmatic-hydrothermal evolution and devolatilization beneath Merapi volcano, Indonesia. <i>Journal of Volcanology and Geothermal Research</i> , 2013, 261, 50-68.	0.8	29
39	Magmatic Recharge during the Formation and Resurgence of the Valles Caldera, New Mexico, USA: Evidence from Quartz Compositional Zoning and Geothermometry. <i>Journal of Petrology</i> , 2013, 54, 635-664.	1.1	38
40	Caldera resurgence during magma replenishment and rejuvenation at Valles and Lake City calderas. <i>Bulletin of Volcanology</i> , 2012, 74, 1833-1847.	1.1	75
41	An analog investigation of magma fragmentation and degassing: Effects of pressure, volatile content, and decompression rate. <i>Journal of Volcanology and Geothermal Research</i> , 2012, 211-212, 12-23.	0.8	11
42	A tale of two magmas, Fuego, Guatemala. <i>Bulletin of Volcanology</i> , 2012, 74, 377-390.	1.1	31
43	Explosive eruptions at mid-ocean ridges driven by CO <sub>2</sub> -rich magmas. <i>Nature Geoscience</i> , 2011, 4, 260-263.	5.4	157
44	Rapid extraction of discrete magma batches from a large differentiating magma chamber: the Central Plateau Member rhyolites, Yellowstone Caldera, Wyoming. <i>Contributions To Mineralogy and Petrology</i> , 2010, 160, 441-465.	1.2	50
45	Sulphide magma as a source of metals in arc-related magmatic hydrothermal ore fluids. <i>Nature Geoscience</i> , 2010, 3, 501-505.	5.4	171
46	Thermal History of the Bandelier Magmatic System: Evidence for Magmatic Injection and Recharge at 1.61 Ma as Revealed by Cathodoluminescence and Titanium Geothermometry. <i>Journal of Geology</i> , 2009, 117, 469-485.	0.7	22
47	Magma Recharge and Crystal Mush Rejuvenation Associated with Early Post-collapse Upper Basin Member Rhyolites, Yellowstone Caldera, Wyoming. <i>Journal of Petrology</i> , 2009, 50, 2095-2125.	1.1	49
48	Subaqueous calderas in the Archean Abitibi greenstone belt: An overview and new ideas. <i>Ore Geology Reviews</i> , 2009, 35, 4-46.	1.1	42
49	Coupled caldera subsidence and stirring inferred from analogue models. <i>Nature Geoscience</i> , 2008, 1, 385-389.	5.4	45
50	Magma dynamics and collapse mechanisms during four historic caldera-forming events. <i>Journal of Geophysical Research</i> , 2008, 113, .	3.3	51
51	Magmatic processes associated with caldera collapse at Ossipee ring dyke, New Hampshire. <i>Bulletin of the Geological Society of America</i> , 2007, 119, 3-17.	1.6	43
52	Stability and instability of quiescently active volcanoes: The case of Masaya, Nicaragua. <i>Geology</i> , 2007, 35, 535.	2.0	42
53	Multi-university Internet video-conferencing course provides novel approach to student-directed learning. <i>The Leading Edge</i> , 2007, 26, 1320-1321.	0.4	2
54	The November 2002 eruption at Piton de la Fournaise volcano, La Réunion Island: ground deformation, seismicity, and pit crater collapse. <i>Bulletin of Volcanology</i> , 2007, 69, 511-525.	1.1	30

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55	Controls on caldera structure: Results from analogue sandbox modeling. Bulletin of the Geological Society of America, 2004, 116, 515.	1.6	77
56	Volatile degassing, petrology, and magma dynamics of the Villarrica Lava Lake, Southern Chile. Journal of Volcanology and Geothermal Research, 2004, 134, 303-337.	0.8	122
57	Caldera subsidence in areas of variable topographic relief: results from analogue modeling. Journal of Volcanology and Geothermal Research, 2004, 129, 219-236.	0.8	52
58	Partitioning of boron among melt, brine and vapor in the system haplogranite-H <sub>2</sub> O-NaCl at 800 °C and 100 MPa. Chemical Geology, 2004, 210, 135-147.	1.4	42
59	Caldera-forming processes and the origin of submarine volcanogenic massive sulfide deposits. Geology, 2003, 31, 375.	2.0	65
60	Mechanisms of degassing at Nevado del Ruiz volcano, Colombia. Journal of the Geological Society, 2003, 160, 507-521.	0.9	29
61	Early-Middle Miocene paleodrainage and tectonics in the Pakistan Himalaya. Bulletin of the Geological Society of America, 2003, 115, 1265.	1.6	63
62	Origin of the Mount Pinatubo climactic eruption cloud: Implications for volcanic hazards and atmospheric impacts. Geology, 2002, 30, 663.	2.0	47
63	MULTIFRACTAL CHARACTERIZATION OF REMOTELY SENSED VOLCANIC FEATURES: A CASE STUDY FROM KILAUEA VOLCANO, HAWAII. Fractals, 2002, 10, 265-274.	1.8	13
64	Atmospheric dispersion, environmental effects and potential health hazard associated with the low-altitude gas plume of Masaya volcano, Nicaragua. Bulletin of Volcanology, 2002, 64, 423-434.	1.1	163
65	Flow Evolution of Experimental Gravity Currents: Implications for Pyroclastic Flows at Volcanoes. Journal of Geology, 2001, 109, 381-398.	0.7	20
66	A model of degassing and seismicity at Arenal Volcano, Costa Rica. Journal of Volcanology and Geothermal Research, 2001, 108, 121-139.	0.8	42
67	Dry deposition and heavy acid loading in the vicinity of Masaya Volcano, a major sulfur and chlorine source in Nicaragua. Environmental Science & Technology, 2001, 35, 1289-93.	4.6	6
68	Geochemistry and origins of Ueno and On-take basaltic to andesitic rocks (<3 Ma) produced by distinct contributions of subduction components, central Japan. Journal of Volcanology and Geothermal Research, 2000, 95, 49-64.	0.8	12
69	The relationship between degassing and ground deformation at Soufriere Hills Volcano, Montserrat. Journal of Volcanology and Geothermal Research, 2000, 98, 117-126.	0.8	80
70	A model of diffuse degassing at three subduction-related volcanoes. Bulletin of Volcanology, 2000, 62, 130-142.	1.1	41
71	Pit crater structure and processes governing persistent activity at Masaya Volcano, Nicaragua. Bulletin of Volcanology, 1998, 59, 345-355.	1.1	135
72	Monitoring SO <sub>2</sub> emission at the Soufriere Hills Volcano: Implications for changes in eruptive conditions. Geophysical Research Letters, 1998, 25, 3681-3684.	1.5	55

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73	Depletion rates of sulfur dioxide in tropospheric volcanic plumes. <i>Geophysical Research Letters</i> , 1998, 25, 2671-2674.	1.5	98
74	Galeras volcano, Colombia Interdisciplinary study of a Decade Volcano. <i>Journal of Volcanology and Geothermal Research</i> , 1997, 77, 1-4.	0.8	15
75	â€˜Tornilloâ€™-type seismic signals at Galeras volcano, Colombia, 1992â€“1993. <i>Journal of Volcanology and Geothermal Research</i> , 1997, 77, 159-171.	0.8	36
76	SO2 fluxes from Galeras Volcano, Colombia, 1989â€“1995: Progressive degassing and conduit obstruction of a Decade Volcano. <i>Journal of Volcanology and Geothermal Research</i> , 1997, 77, 195-208.	0.8	53
77	The chemical and isotopic composition of fumarolic gases and spring discharges from Galeras Volcano, Colombia. <i>Journal of Volcanology and Geothermal Research</i> , 1997, 77, 229-253.	0.8	81
78	Distal degassing of radon and carbon dioxide on Galeras volcano, Colombia. <i>Journal of Volcanology and Geothermal Research</i> , 1997, 77, 267-283.	0.8	52
79	A model of vulcanian eruptions at Galeras volcano, Colombia. <i>Journal of Volcanology and Geothermal Research</i> , 1997, 77, 285-303.	0.8	112
80	A scaling growth model for bubbles in basaltic lava flows. <i>Earth and Planetary Science Letters</i> , 1996, 139, 395-409.	1.8	76
81	Gas saturation and evolution of volatile and light lithophile elements in the Bandelier magma chamber between two caldera-forming eruptions. <i>Journal of Geophysical Research</i> , 1996, 101, 25181-25196.	3.3	60
82	Scaling effects on vesicle shape, size and heterogeneity of lavas from Mount Etna. <i>Journal of Volcanology and Geothermal Research</i> , 1996, 74, 131-153.	0.8	65
83	Infrared Remote Sensing of CO and COS Gas Emitted by the Galeras Volcano, Colombia, January 8â€“10, 1993. <i>Canadian Journal of Remote Sensing</i> , 1996, 22, 297-304.	1.1	10
84	The behavior of light lithophile and halogen elements in felsic magma: geochemistry of the post-caldera Valles Rhyolites, Jemez Mountains Volcanic Field, New Mexico. <i>Journal of Volcanology and Geothermal Research</i> , 1995, 67, 61-77.	0.8	6
85	Correlations between SO2 flux and long-period seismicity at Galeras volcano. <i>Nature</i> , 1994, 368, 135-137.	13.7	98
86	Replenishment and crystallization in epicontinental silicic magma chambers: evidence from the Bandelier magmatic system. <i>Journal of Volcanology and Geothermal Research</i> , 1993, 55, 201-215.	0.8	14
87	A model of degassing at Galeras Volcano, Colombia, 1988-1993. <i>Geology</i> , 1993, 21, 963.	2.0	70
88	Scale invariance of basaltic lava flows and their fractal dimensions. <i>Geophysical Research Letters</i> , 1992, 19, 785-788.	1.5	22
89	Subaqueous, intermediate to silicic-composition explosive volcanism: a review. <i>Earth-Science Reviews</i> , 1991, 31, 21-53.	4.0	51
90	Changes in Silicic Melt Structure Between the Two Bandelier Caldera-Forming Eruptions, New Mexico, USA: Evidence from Zirconium and Light Rare Earth Elements. <i>Journal of Petrology</i> , 1990, 31, 1261-1283.	1.1	33

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91	Variations in trace element partition coefficients in sanidine in the Cerro Toledo Rhyolite, Jemez Mountains, New Mexico: Effects of composition, temperature, and volatiles. <i>Geochimica Et Cosmochimica Acta</i> , 1990, 54, 2697-2708.	1.6	72
92	Restoration of compositional zonation in the Bandelier silicic magma chamber between two caldera-forming eruptions: Geochemistry and origin of the Cerro Toledo Rhyolite, Jemez Mountains, New Mexico. <i>Journal of Geophysical Research</i> , 1988, 93, 6129-6147.	3.3	49
93	Intracaldera volcanic activity, Toledo Caldera and Embayment, Jemez Mountains, New Mexico. <i>Journal of Geophysical Research</i> , 1986, 91, 1799-1815.	3.3	52
94	Paleomagnetic Chronology, Fluvial Processes, and Tectonic Implications of the Siwalik Deposits near Chinji Village, Pakistan. <i>Journal of Geology</i> , 1985, 93, 27-40.	0.7	294
95	NATIONAL PARKS AND INUIT RIGHTS IN NORTHERN LABRADOR. <i>Canadian Geographer / Geographie Canadien</i> , 1982, 26, 349-354.	1.0	5
96	Efficient release of bromine by super-eruptions. <i>Geology</i> , 0, , .	2.0	5