Diana C Roman

List of Publications by Year
in descending order

55 papers	1,577 citations	304743 22 h-index	330143 37 g-index
60 all docs	60 docs citations	60 times ranked	1414 citing authors

#	Article	IF	Citations
1	The origin of volcano-tectonic earthquake swarms. Geology, 2006, 34, 457.	4.4	168
2	Failed magmatic eruptions: late-stage cessation of magma ascent. Bulletin of Volcanology, 2011, 73, 115-122.	3.0	132
3	Geological and palaeontological context of a Pliocene juvenile hominin at Dikika, Ethiopia. Nature, 2006, 443, 332-336.	27.8	109
4	Temporal and Spatial Variation of Local Stress Fields before and after the 1992 Eruptions of Crater Peak Vent, Mount Spurr Volcano, Alaska. Bulletin of the Seismological Society of America, 2004, 94, 2366-2379.	2.3	74
5	The Pleistocene fauna (other than Primates) from Asbole, lower Awash Valley, Ethiopia, and its environmental and biochronological implications. Geobios, 2004, 37, 697-718.	1.4	68
6	Assessing the likelihood of volcanic eruption through analysis of volcanotectonic earthquake faultâ€“plane solutions. Earth and Planetary Science Letters, 2006, 248, 244-252.	4.4	68
7	Volcanic Seismicity. , 2015, , 1011-1034.		64
8	Evidence for dike emplacement beneath Iliamna Volcano, Alaska in 1996. Journal of Volcanology and Geothermal Research, 2004, 130, 265-284.	2.1	61
9	Storage and interaction of compositionally heterogeneous magmas from the 1986 eruption of Augustine Volcano, Alaska. Bulletin of Volcanology, 2006, 68, 240-254.	3.0	60
10	Numerical models of volcanotectonic earthquake triggering on non-ideally oriented faults. Geophysical Research Letters, 2005, 32, .	4.0	51
11	When does eruption run-up begin? Multidisciplinary insight from the 1999 eruption of Shishaldin volcano. Earth and Planetary Science Letters, 2018, 486, 1-14.	4.4	45
12	Topâ€“Down Precursory Volcanic Seismicity: Implications for â€˜Stealthâ€™ Magma Ascent and Long-Term Eruption Forecasting. Frontiers in Earth Science, 2018, 6, .	1.8	41
13	Patterns of volcanotectonic seismicity and stress during the ongoing eruption of the SoufriÃ¨re Hills Volcano, Montserrat (1995â€“2007). Journal of Volcanology and Geothermal Research, 2008, 173, 230-244.	2.1	37
14	Alaska Volcano Observatory Alert and Forecasting Timeliness: 1989â€“2017. Frontiers in Earth Science, 2018, 6, .	1.8	35
15	Stable and unstable phases of elevated seismic activity at the persistently restless Telica Volcano, Nicaragua. Journal of Volcanology and Geothermal Research, 2015, 290, 63-74.	2.1	32
16	Seismicity accompanying the 1999 eruptive episode at Telica Volcano, Nicaragua. Journal of Volcanology and Geothermal Research, 2013, 265, 39-51.	2.1	31
17	Magmatic water content controls the pre-eruptive depth of arc magmas. Science, 2022, 375, 1169-1172.	12.6	31
18	Analysis and forward modeling of seismic anisotropy during the ongoing eruption of the SoufriÃ¨re Hills Volcano, Montserrat, 1996â€“2007. Journal of Geophysical Research, 2011, 116, .	3.3	27

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19	Effect of regional tectonic setting on local fault response to episodes of volcanic activity. Geophysical Research Letters, 2007, 34, .	4.0	26
20	Multidisciplinary observations of the 2011 explosive eruption of Telica volcano, Nicaragua: Implications for the dynamics of low-explosivity ash eruptions. Journal of Volcanology and Geothermal Research, 2014, 271, 55-69.	2.1	25
21	Assessing the likelihood and magnitude of volcanic explosions based on seismic quiescence. Earth and Planetary Science Letters, 2016, 450, 20-28.	4.4	24
22	Temporal changes in stress preceding the 2004â€“2008 eruption of Mount St. Helens, Washington. Journal of Volcanology and Geothermal Research, 2010, 198, 129-142.	2.1	23
23	An examination of the continuous wavelet transform for volcano-seismic spectral analysis. Journal of Volcanology and Geothermal Research, 2020, 389, 106728.	2.1	22
24	Mechanism of the 1996â€“97 non-eruptive volcano-tectonic earthquake swarm at Iliamna Volcano, Alaska. Bulletin of Volcanology, 2011, 73, 143-153.	3.0	21
25	Fossils from Mille-Logya, Afar, Ethiopia, elucidate the link between Pliocene environmental changes and Homo origins. Nature Communications, 2020, 11, 2480.	12.8	20
26	Joint analysis of geodetic and earthquake fault-plane solution data to constrain magmatic sources: A case study from KÄ«lauea Volcano. Earth and Planetary Science Letters, 2016, 455, 38-48.	4.4	17
27	Moderateâ€magnitude earthquakes induced by magma reservoir inflation at KÄ«lauea Volcano, Hawaiâ€˜i. Geophysical Research Letters, 2013, 40, 5366-5370.	4.0	16
28	Linking Subsurface to Surface Using Gas Emission and Melt Inclusion Data at Mount Cleveland Volcano, Alaska. Geochemistry, Geophysics, Geosystems, 2020, 21, e2019GC008882.	2.5	16
29	Stratigraphy, depositional environments, and basin structure of the Hadar and Busidima Formations at Dikika, Ethiopia. , 2008, , .		15
30	Seismological evidence for long-term and rapidly accelerating magma pressurization preceding the 2009 eruption of Redoubt Volcano, Alaska. Earth and Planetary Science Letters, 2013, 371-372, 226-234.	4.4	15
31	Automated detection and characterization of harmonic tremor in continuous seismic data. Geophysical Research Letters, 2017, 44, 6065-6073.	4.0	15
32	Mechanisms of Unrest and Eruption at Persistently Restless Volcanoes: Insights From the 2015 Eruption of Telica Volcano, Nicaragua. Geochemistry, Geophysics, Geosystems, 2019, 20, 4162-4183.	2.5	15
33	Aseismic mid-crustal magma reservoir at Cleveland Volcano imaged through novel receiver function analyses. Scientific Reports, 2020, 10, 1780.	3.3	15
34	Earthquakes indicated magma viscosity during KÄ«laueaâ€™s 2018 eruption. Nature, 2021, 592, 237-241.	27.8	15
35	Volcanic tremors and magma wagging: gas flux interactions and forcing mechanism. Geophysical Journal International, 2013, 195, 1001-1022.	2.4	13
36	Multiple causes for non-eruptive seismic swarms at Mt. Martin, Katmai Volcanic Cluster, Alaska (2004â€“2008). Journal of Volcanology and Geothermal Research, 2012, 229-230, 13-22.	2.1	11

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37	Peakmatch: A Java Program for Multiplet Analysis of Large Seismic Datasets. Seismological Research Letters, 2015, 86, 1208-1218.	1.9	10
38	Modulation of seismic activity in KÄ«laueaâ€™s upper East Rift Zone (HawaiÊ»i) by summit pressurization. Geology, 2019, 47, 820-824.	4.4	10
39	Evaluating the state-of-the-art in remote volcanic eruption characterization Part II: Ulawun volcano, Papua New Guinea. Journal of Volcanology and Geothermal Research, 2021, 420, 107381.	2.1	10
40	Complex magmatic-tectonic interactions during the 2020 Makushin Volcano, Alaska, earthquake swarm. Earth and Planetary Science Letters, 2022, 587, 117538.	4.4	10
41	Using repeating volcano-tectonic earthquakes to track post-eruptive activity in the conduit system at Redoubt Volcano, Alaska. Geology, 2013, 41, 511-514.	4.4	9
42	High Rates of Inflation During a Noneruptive Episode of Seismic Unrest at Semisopochnoi Volcano, Alaska in 2014â€“2015. Geochemistry, Geophysics, Geosystems, 2019, 20, 6163-6186.	2.5	9
43	Understanding the timing of eruption end using a machine learning approach to classification of seismic time series. Journal of Volcanology and Geothermal Research, 2020, 401, 106917.	2.1	7
44	Special issue â€œTowards forecasting phreatic eruptions: examples from Hakone volcano and some global equivalentsâ€• Earth, Planets and Space, 2019, 71, .	2.5	7
45	Ongoing (2015â€) Magma Surge in the Upper Mantle Beneath the Island of HawaiÊ»i. Geophysical Research Letters, 2021, 48, e2020GL091096.	4.0	6
46	Machine learning approaches to identifying changes in eruptive state using multiâ€parameter datasets from the 2006 eruption of Augustine Volcano, Alaska. Journal of Geophysical Research: Solid Earth, 0, , e2021JB022323.	3.4	6
47	Source mechanisms of persistent shallow earthquakes during eruptive and non-eruptive periods between 1981 and 2011 at Mount St. Helens, Washington. Journal of Volcanology and Geothermal Research, 2013, 256, 1-15.	2.1	5
48	Modeling deformation, seismicity, and thermal anomalies driven by degassing during the 2005-2006 pre-eruptive unrest of Augustine Volcano, Alaska. Earth and Planetary Science Letters, 2022, 585, 117524.	4.4	5
49	The MwÂ4.2 Delaware Earthquake of 30 November 2017. Seismological Research Letters, 2018, 89, 2447-2460.	1.9	4
50	Earthquakes Indicated Stress Field Change During the 2006 Unrest of Augustine Volcano, Alaska. Geophysical Research Letters, 2022, 49, .	4.0	4
51	Psâ€P Tomography of a Midcrustal Magma Reservoir Beneath Cleveland Volcano, Alaska. Geophysical Research Letters, 2020, 47, e2020GL090406.	4.0	3
52	Seismic and geodetic investigation of the 1996-1998 earthquake swarm at Strandline Lake, Alaska. Geophysical Journal International, 2011, 186, 1365-1379.	2.4	2
53	Volcanology, Geochemistry, and Petrology Perspectives on Integrated, Coordinated, Open, Networked (ICON) Science. Earth and Space Science, 2022, 9, .	2.6	2
54	Digitization of the Carnegie Analog Broadband Instruments Tape Records (1965â€“1996). Seismological Research Letters, 2020, 91, 1441-1451.	1.9	1

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55	Quantifying Eruptive and Background Seismicity, Deformation, Degassing, and Thermal Emissions at Volcanoes in the United States During 1978â€“2020. Journal of Geophysical Research: Solid Earth, 2021, 126, e2021JB021684.	3.4	1