

# Patricia A Mothes

## List of Publications by Year in descending order

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Version: 2024-02-01

61  
papers

1,800  
citations

218677

26  
h-index

289244

40  
g-index

66  
all docs

66  
docs citations

66  
times ranked

1594  
citing authors

#	ARTICLE	IF	CITATIONS
1	Tungurahua Volcano, Ecuador: structure, eruptive history and hazards. <i>Journal of Volcanology and Geothermal Research</i> , 1999, 91, 1-21.	2.1	153
2	Intense interface seismicity triggered by a shallow slow slip event in the Central Ecuador subduction zone. <i>Journal of Geophysical Research: Solid Earth</i> , 2013, 118, 2965-2981.	3.4	114
3	Partitioning of oblique convergence in the Northern Andes subduction zone: Migration history and the present-day boundary of the North Andean Sliver in Ecuador. <i>Tectonics</i> , 2016, 35, 1048-1065.	2.8	96
4	The rhyolitic-andesitic eruptive history of Cotopaxi volcano, Ecuador. <i>Bulletin of Volcanology</i> , 2008, 70, 675-702.	3.0	82
5	The enormous Chillón Valley Lahar: an ash-flow-generated debris flow from Cotopaxi Volcano, Ecuador. <i>Bulletin of Volcanology</i> , 1998, 59, 233-244.	3.0	71
6	Areas prone to slow slip events impede earthquake rupture propagation and promote afterslip. <i>Science Advances</i> , 2018, 4, eaao6596.	10.3	70
7	The Response of Vegetation on the Andean Flank in Western Amazonia to Pleistocene Climate Change. <i>Science</i> , 2011, 331, 1055-1058.	12.6	57
8	Towards coordinated regional multi-satellite InSAR volcano observations: results from the Latin America pilot project. <i>Journal of Applied Volcanology</i> , 2018, 7, .	2.0	53
9	Juvenile magma recognition and eruptive dynamics inferred from the analysis of ash time series: The 2015 reawakening of Cotopaxi volcano. <i>Journal of Volcanology and Geothermal Research</i> , 2016, 328, 134-146.	2.1	51
10	Source process of very-long-period events accompanying long-period signals at Cotopaxi Volcano, Ecuador. <i>Journal of Volcanology and Geothermal Research</i> , 2008, 176, 119-133.	2.1	48
11	Estimating volcanic deformation source parameters with a finite element inversion: The 2001-2002 unrest at Cotopaxi volcano, Ecuador. <i>Journal of Geophysical Research: Solid Earth</i> , 2015, 120, 1473-1486.	3.4	43
12	The scientific-community interface over the fifteen-year eruptive episode of Tungurahua Volcano, Ecuador. <i>Journal of Applied Volcanology</i> , 2015, 4, .	2.0	43
13	Decaying Lava Extrusion Rate at El Reventador Volcano, Ecuador, Measured Using High-Resolution Satellite Radar. <i>Journal of Geophysical Research: Solid Earth</i> , 2017, 122, 9966-9988.	3.4	41
14	Seismic, Volcanic, and Geodetic Networks in Ecuador: Building Capacity for Monitoring and Research. <i>Seismological Research Letters</i> , 2018, 89, 432-439.	1.9	40
15	Sequential plug formation, disintegration by Vulcanian explosions, and the generation of granular Pyroclastic Density Currents at Tungurahua volcano (2013-2014), Ecuador. <i>Journal of Volcanology and Geothermal Research</i> , 2015, 306, 90-103.	2.1	39
16	Shallow earthquake inhibits unrest near Chiles-Cerro Negro volcanoes, Ecuador-Colombian border. <i>Earth and Planetary Science Letters</i> , 2016, 450, 283-291.	4.4	38
17	Enhancing volcano-monitoring capabilities in Ecuador. <i>Eos</i> , 2007, 88, 245-246.	0.1	37
18	Late Holocene phases of dome growth and Plinian activity at Guagua Pichincha volcano (Ecuador). <i>Journal of Volcanology and Geothermal Research</i> , 2008, 176, 7-15.	2.1	36

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19	Geochemistry and Petrology of the Most Recent Deposits from Cotopaxi Volcano, Northern Volcanic Zone, Ecuador. <i>Journal of Petrology</i> , 2011, 52, 1641-1678.	2.8	36
20	Volcanic eruptions with little warning: the case of Volcãn Reventador's Surprise November 3, 2002 Eruption, Ecuador. <i>Andean Geology</i> , 2004, 31, .	0.5	36
21	Pre-eruptive physical conditions of El Reventador volcano (Ecuador) inferred from the petrology of the 2002 and 2004ã€“05 eruptions. <i>Journal of Volcanology and Geothermal Research</i> , 2008, 176, 82-93.	2.1	35
22	Understanding cyclic seismicity and ground deformation patterns at volcanoes: Intriguing lessons from Tungurahua volcano, Ecuador. <i>Earth and Planetary Science Letters</i> , 2018, 482, 193-200.	4.4	35
23	Stratovolcano growth by coã€ruptive intrusion: The 2008 eruption of Tungurahua Ecuador. <i>Geophysical Research Letters</i> , 2010, 37, .	4.0	31
24	The plinian fallout associated with Quilotoa's 800ã€r BP eruption, Ecuadorian Andes. <i>Journal of Volcanology and Geothermal Research</i> , 2008, 176, 56-69.	2.1	30
25	The rise and fall of periodic â€drumbeatâ€™ seismicity at Tungurahua volcano, Ecuador. <i>Earth and Planetary Science Letters</i> , 2017, 475, 58-70.	4.4	29
26	Using satellite radar amplitude imaging for monitoring syn-eruptive changes in surface morphology at an ice-capped stratovolcano. <i>Remote Sensing of Environment</i> , 2018, 209, 480-488.	11.0	26
27	Imaging rapid early afterslip of the 2016 Pedernales earthquake, Ecuador. <i>Earth and Planetary Science Letters</i> , 2019, 524, 115724.	4.4	25
28	Continuous <sc>GPS</sc> Network Operating Throughout Ecuador. <i>Eos</i> , 2013, 94, 229-231.	0.1	23
29	Antisana volcano: A representative andesitic volcano of the eastern cordillera of Ecuador: Petrography, chemistry, tephra and glacial stratigraphy. <i>Journal of South American Earth Sciences</i> , 2017, 73, 50-64.	1.4	23
30	Ground deformation before the 2015 eruptions of Cotopaxi volcano detected by InSAR. <i>Geophysical Research Letters</i> , 2017, 44, 6607-6615.	4.0	22
31	Volcanic Eruption Forecasts From Accelerating Rates of Drumbeat Longã€Period Earthquakes. <i>Geophysical Research Letters</i> , 2018, 45, 1339-1348.	4.0	22
32	Volcano deformation survey over the Northern and Central Andes with ALOS InSAR time series. <i>Geochemistry, Geophysics, Geosystems</i> , 2016, 17, 2869-2883.	2.5	21
33	Quilotoa volcano â€ Ecuador: An overview of young dacitic volcanism in a lake-filled caldera. <i>Journal of Volcanology and Geothermal Research</i> , 2008, 176, 44-55.	2.1	17
34	Shallow-level differentiation of phonolitic lavas from Sumaco Volcano, Ecuador. <i>Contributions To Mineralogy and Petrology</i> , 2018, 173, 1.	3.1	17
35	Triggering of the powerful 14 July 2013 Vulcanian explosion at Tungurahua Volcano, Ecuador. <i>Journal of Volcanology and Geothermal Research</i> , 2020, 392, 106762.	2.1	17
36	Mapping and measuring lava volumes from 2002 to 2009 at El Reventador Volcano, Ecuador, from field measurements and satellite remote sensing. <i>Journal of Applied Volcanology</i> , 2016, 5, .	2.0	15

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37	Storage conditions of the mafic and silicic magmas at Cotopaxi, Ecuador. <i>Journal of Volcanology and Geothermal Research</i> , 2018, 354, 74-86.	2.1	14
38	Lava flow morphology at an erupting andesitic stratovolcano: A satellite perspective on El Reventador, Ecuador. <i>Journal of Volcanology and Geothermal Research</i> , 2019, 372, 34-47.	2.1	14
39	Crustal thickness and magma storage beneath the Ecuadorian arc. <i>Journal of South American Earth Sciences</i> , 2021, 110, 103331.	1.4	14
40	Monitoring the Earthquake Cycle in the Northern Andes from the Ecuadorian cGPS Network. <i>Seismological Research Letters</i> , 2018, 89, 534-541.	1.9	13
41	Enormous and far-reaching debris avalanche deposits from Sangay volcano (Ecuador): Multidisciplinary study and modeling the 30Åka sector collapse. <i>Journal of Volcanology and Geothermal Research</i> , 2021, 411, 107172.	2.1	12
42	Forests of the tropical eastern Andean flank during the middle Pleistocene. <i>Palaeogeography, Palaeoclimatology, Palaeoecology</i> , 2014, 393, 76-89.	2.3	11
43	Aquatic community response to volcanic eruptions on the Ecuadorian Andean flank: evidence from the palaeoecological record. <i>Journal of Paleolimnology</i> , 2017, 58, 437-453.	1.6	11
44	Instituto Geofísico “Escuela Politécnica Nacional, the Ecuadorian Seismology and Volcanology Service. <i>Volcanica</i> , 2021, 4, 93-112.	1.8	11
45	Forecasting mechanical failure and the 26 June 2018 eruption of Sierra Negra Volcano, Galápagos, Ecuador. <i>Science Advances</i> , 2022, 8, .	10.3	11
46	Geophysical Footprints of Cotopaxi’s Unrest and Minor Eruptions in 2015: An Opportunity to Test Scientific and Community Preparedness. <i>Advances in Volcanology</i> , 2017, , 241-270.	1.1	10
47	Landscape-scale drivers of glacial ecosystem change in the montane forests of the eastern Andean flank, Ecuador. <i>Palaeogeography, Palaeoclimatology, Palaeoecology</i> , 2018, 489, 198-208.	2.3	10
48	Rapid localized flank inflation and implications for potential slope instability at Tungurahua volcano, Ecuador. <i>Earth and Planetary Science Letters</i> , 2020, 534, 116104.	4.4	10
49	Obsidian source characterization in the Cordillera Real and eastern piedmont of the north Ecuadorian Andes. <i>Journal of Archaeological Science</i> , 2011, 38, 1069-1079.	2.4	9
50	30,000 years of landscape and vegetation dynamics in a mid-elevation Andean valley. <i>Quaternary Science Reviews</i> , 2021, 258, 106866.	3.0	9
51	Historical Distal Lahar Deposits on the Remote Eastern-Drainage of Cotopaxi Volcano, Ecuador. <i>Journal of South American Earth Sciences</i> , 2019, 95, 102251.	1.4	8
52	Hydrothermal fluid migration due to interaction with shallow magma: Insights from gravity changes before and after the 2015 eruption of Cotopaxi volcano, Ecuador. <i>Journal of Volcanology and Geothermal Research</i> , 2019, 387, 106667.	2.1	8
53	Combining Magma Flow and Deformation Modeling to Explain Observed Changes in Tilt. <i>Frontiers in Earth Science</i> , 2019, 7, .	1.8	8
54	The 1877 lahar deposits on the eastern flank of Cotopaxi volcano. <i>Geomorphologie Relief, Processus, Environnement</i> , 2007, 13, 271-280.	0.4	8

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55	Response to Comment on "The Response of Vegetation on the Andean Flank in Western Amazonia to Pleistocene Climate Change". <i>Science</i> , 2011, 333, 1825-1825.	12.6	7
56	Temporal evolution of the magmatic system at Tungurahua Volcano, Ecuador, detected by geodetic observations. <i>Journal of Volcanology and Geothermal Research</i> , 2018, 368, 63-72.	2.1	7
57	Hazards at ice-clad volcanoes: Phenomena, processes, and examples from Mexico, Colombia, Ecuador, and Chile. , 2021, , 597-639.		6
58	The "Mera" lahar deposit in the upper Amazon basin: Transformation of a late Pleistocene collapse at Huisla volcano, central Ecuador. <i>Journal of Volcanology and Geothermal Research</i> , 2019, 385, 103-119.	2.1	5
59	Drumbeat LP "Aftershocks" to a Failed Explosive Eruption at Tungurahua Volcano, Ecuador. <i>Geophysical Research Letters</i> , 2020, 47, e2020GL088301.	4.0	4
60	Lahars of Cotopaxi Volcano, Ecuador: hazard and risk evaluation. , 1992, , 53-63.		4
61	New observations on the recent eruptive activity of Sumaco Volcano (Ecuador), based on geochronology, stratigraphy and petrography. <i>Journal of South American Earth Sciences</i> , 2021, 112, 103568.	1.4	2