Shanaka de Silva

List of Publications by Year
in descending order

103 papers	4,962 citations	71097 41 h-index	98792 67 g-index
107 all docs	107 docs citations	107 times ranked	2831 citing authors

#	Article	IF	Citations
1	Altiplano-Puna volcanic complex of the central Andes. Geology, 1989, 17, 1102.	4.4	393
2	Episodic construction of batholiths: Insights from the spatiotemporal development of an ignimbrite flare-up. Journal of Volcanology and Geothermal Research, 2007, 167, 320-335.	2.1	269
3	The volcanicâ€“plutonic connection as a stage for understanding crustal magmatism. Journal of Volcanology and Geothermal Research, 2007, 167, 1-23.	2.1	258
4	Magmatic Evolution of the La Pacana Caldera System, Central Andes, Chile: Compositional Variation of Two Cogenetic, Large-Volume Felsic Ignimbrites. Journal of Petrology, 2001, 42, 459-486.	2.8	204
5	Global influence of the AD 1600 eruption of Huaynaputina, Peru. Nature, 1998, 393, 455-458.	27.8	158
6	Catastrophic caldera-forming eruptions: Thermomechanics and implications for eruption triggering and maximum caldera dimensions on Earth. Journal of Volcanology and Geothermal Research, 2012, 241-242, 1-12.	2.1	156
7	Origin of the Medusae Fossae Formation, Mars: Insights from a synoptic approach. Journal of Geophysical Research, 2008, 113, .	3.3	141
8	Excessive sulfur dioxide emissions from Chilean volcanoes. Journal of Volcanology and Geothermal Research, 1991, 46, 323-329.	2.1	129
9	40Ar/39Ar chronostratigraphy of Altiplano-Puna volcanic complex ignimbrites reveals the development of a major magmatic province. Bulletin of the Geological Society of America, 2011, 123, 821-840.	3.3	129
10	Geochronology and stratigraphy of the ignimbrites from the 21Â°30â€²S to 23Â°30â€²S portion of the Central Andes of northern Chile. Journal of Volcanology and Geothermal Research, 1989, 37, 93-131.	2.1	123
11	Thermomechanical feedbacks in magmatic systems: Implications for growth, longevity, and evolution of large caldera-forming magma reservoirs and their supereruptions. Journal of Volcanology and Geothermal Research, 2014, 282, 77-91.	2.1	112
12	Slab-rollback ignimbrite flareups in the southern Great Basin and other Cenozoic American arcs: A distinct style of arc volcanism. , 2016, 12, 1097-1135.		108
13	Quickening the Pulse: Fractal Tempos in Continental Arc Magmatism. Elements, 2015, 11, 113-118.	0.5	107
14	La Pacana caldera, N. Chile: a re-evaluation of the stratigraphy and volcanology of one of the world's largest resurgent calderas. Journal of Volcanology and Geothermal Research, 2001, 106, 145-173.	2.1	105
15	Large ignimbrite eruptions and volcano-tectonic depressions in the Central Andes: a thermomechanical perspective. Geological Society Special Publication, 2006, 269, 47-63.	1.3	87
16	Yardangs in terrestrial ignimbrites: Synergistic remote and field observations on Earth with applications to Mars. Planetary and Space Science, 2010, 58, 459-471.	1.7	84
17	Gravel-mantled megaripples of the Argentinean Puna: A model for their origin and growth with implications for Mars. Bulletin of the Geological Society of America, 2013, 125, 1912-1929.	3.3	78
18	Magma evolution in the Purico ignimbrite complex, northern Chile: evidence for zoning of a dacitic magma by injection of rhyolitic melts following mafic recharge. Contributions To Mineralogy and Petrology, 2001, 140, 680-700.	3.1	77

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19	Turning up the Heat: High-Flux Magmatism in the Central Andes. Elements, 2018, 14, 245-250.	0.5	77
20	The physical volcanology of the 1600 eruption of Huaynaputina, southern Peru. Bulletin of Volcanology, 2001, 62, 493-518.	3.0	71
21	Arc magmatism, calderas, and supervolcanoes. Geology, 2008, 36, 671.	4.4	70
22	Volcanic rocks from the Bolivian Altiplano: Insights into crustal structure, contamination, and magma genesis in the central Andes. Geology, 1992, 20, 1127.	4.4	67
23	Hydro-isostatic deflection and tectonic tilting in the central Andes: Initial results of a GPS survey of Lake Minchin shorelines. Geophysical Research Letters, 1994, 21, 293-296.	4.0	67
24	Late Cenozoic magmatism of the Bolivian Altiplano. Contributions To Mineralogy and Petrology, 1995, 119, 387-408.	3.1	65
25	A re-appraisal of the stratigraphy and volcanology of the Cerro GalÃ¡n volcanic system, NW Argentina. Bulletin of Volcanology, 2011, 73, 1427-1454.	3.0	62
26	Synthesis: PLUTONS: Investigating the relationship between pluton growth and volcanism in the Central Andes. , 2018, 14, 954-982.		61
27	Volcanological and petrological evolution of Volcan Tata Sabaya, SW Bolivia. Journal of Volcanology and Geothermal Research, 1993, 55, 305-335.	2.1	60
28	Uâ€"Pb zircon chronostratigraphy of early-Pliocene ignimbrites from La Pacana, north Chile: implications for the formation of stratified magma chambers. Journal of Volcanology and Geothermal Research, 2003, 120, 43-53.	2.1	59
29	Thermomechanics of shallow magma chamber pressurization: Implications for the assessment of ground deformation data at active volcanoes. Earth and Planetary Science Letters, 2013, 384, 100-108.	4.4	59
30	Correlation of large ignimbrites â€" Two case studies from the Central Andes of northern Chile. Journal of Volcanology and Geothermal Research, 1989, 37, 133-149.	2.1	58
31	Disequilibrium melting during crustal anatexis and implications for modeling open magmatic systems. Geology, 2012, 40, 435-438.	4.4	56
32	Smallâ€scale disequilibrium in a magmatic inclusion and its more silicic host. Journal of Geophysical Research, 1990, 95, 17661-17675.	3.3	55
33	Voluminous plutonism during volcanic quiescence revealed by thermochemical modeling of zircon. Geology, 2016, 44, 683-686.	4.4	55
34	Surface uplift in the Central Andes driven by growth of the Altiplano Puna Magma Body. Nature Communications, 2016, 7, 13185.	12.8	55
35	Million-year meltâ€"presence in monotonous intermediate magma for a volcanicâ€"plutonic assemblage in the Central Andes: Contrasting histories of crystal-rich and crystal-poor super-sized silicic magmas. Earth and Planetary Science Letters, 2017, 457, 73-86.	4.4	54
36	Recording the transition from flare-up to steady-state arc magmatism at the Puricoâ€"Chascon volcanic complex, northern Chile. Earth and Planetary Science Letters, 2015, 422, 75-86.	4.4	52

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37	The role of crustal and eruptive processes versus source variations in controlling the oxidation state of iron in Central Andean magmas. Earth and Planetary Science Letters, 2016, 440, 92-104.	4.4	52
38	Volcanic biotite-sanidine 40Ar/39Ar age discordances reflect Ar partitioning and pre-eruption closure in biotite. Geology, 2010, 38, 923-926.	4.4	51
39	The VEI-7 Millennium eruption, Changbaishan-Tianchi volcano, China/DPRK: New field, petrological, and chemical constraints on stratigraphy, volcanology, and magma dynamics. Journal of Volcanology and Geothermal Research, 2017, 343, 45-59.	2.1	51
40	A reconnaissance of U-Pb zircon ages in the Cerro GalÃ¡n system, NW Argentina: Prolonged magma residence, crystal recycling, and crustal assimilation. Journal of Volcanology and Geothermal Research, 2011, 206, 136-147.	2.1	50
41	Geochemical homogeneity of a long-lived, large silicic system; evidence from the Cerro GalÃ¡n caldera, NW Argentina. Bulletin of Volcanology, 2011, 73, 1455-1486.	3.0	49
42	Effusive eruption of viscous silicic magma triggered and driven by recharge: a case study of the Cerro Chascon-Runtu Jarita Dome Complex in Southwest Bolivia. Bulletin of Volcanology, 1999, 61, 241-264.	3.0	45
43	Geochronological imaging of an episodically constructed subvolcanic batholith: U-Pb in zircon chronochemistry of the Altiplano-Puna Volcanic Complex of the Central Andes. , 2016, 12, 1054-1077.		44
44	Triggering explosive eruptionsâ€"The case for silicic magma recharge at Huaynaputina, southern Peru. Geology, 2008, 36, 387.	4.4	42
45	Post-supereruption recovery at Toba Caldera. Nature Communications, 2017, 8, 15248.	12.8	42
46	Distinct erosional progressions in the Medusae Fossae Formation, Mars, indicate contrasting environmental conditions. Icarus, 2009, 204, 471-477.	2.5	40
47	The origin and significance of crystal rich inclusions in pumices from two Chilean ignimbrites. Geological Magazine, 1989, 126, 159-175.	1.5	34
48	Resurgent TobaÃ¢â‚¬â€field, chronologic, and model constraints on time scales and mechanisms of resurgence at large calderas. Frontiers in Earth Science, 2015, 3, .	1.8	34
49	Catastrophic caldera-forming eruptions II: The subordinate role of magma buoyancy as an eruption trigger. Journal of Volcanology and Geothermal Research, 2015, 305, 100-113.	2.1	34
50	Formation of gravel-mantled megaripples on Earth and Mars: Insights from the Argentinean Puna and wind tunnel experiments. Aeolian Research, 2015, 17, 49-60.	2.7	32
51	Late Pleistocene to present day eruptive history of the Changbaishan-Tianchi Volcano, China/DPRK: New field, geochronological and chemical constraints. Journal of Volcanology and Geothermal Research, 2020, 399, 106870.	2.1	30
52	Application of the Landsat Thematic Mapper to the identification of potentially active volcanoes in the central Andes. Remote Sensing of Environment, 1989, 28, 245-255.	11.0	29
53	Amplification of bedrock canyon incision by wind. Nature Geoscience, 2015, 8, 305-310.	12.9	28
54	Sr- and Nd- isotope variations along the Pleistocene San Pedro â€" Linzor volcanic chain, N. Chile: Tracking the influence of the upper crustal Altiplano-Puna Magma Body. Journal of Volcanology and Geothermal Research, 2017, 341, 172-186.	2.1	27

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55	Catastrophic Caldera-Forming (CCF) Monotonous Silicic Magma Reservoirs: Geochemical and Petrological Constraints on Heterogeneity, Magma Dynamics, and Eruption Dynamics of the 3Â·49â€‰Ma Tara Supereruption, Guacha II Caldera, SW Bolivia. Journal of Petrology, 2017, 58, 227-260.	2.8	26
56	Potentially active volcanoes of Peru-Observations using Landsat Thematic Mapper and Space Shuttle imagery. Bulletin of Volcanology, 1990, 52, 286-301.	3.0	24
57	Explosive volcanism (VEI 6) without caldera formation: insight from Huaynaputina volcano, southern Peru. Bulletin of Volcanology, 2006, 68, 333-348.	3.0	24
58	Correlation of ignimbrites using characteristic remanent magnetization and anisotropy of magnetic susceptibility, Central Andes, Bolivia. Geochemistry, Geophysics, Geosystems, 2013, 14, 141-157.	2.5	24
59	LARGE-SCALE SILICIC VOLCANISM â€" THE RESULT OF THERMAL MATURATION OF THE CRUST. , 0, , 215-230.		22
60	Tectonic and climate history influence the geochemistry of large-volume silicic magmas: New Î´18O data from the Central Andes with comparison to N America and Kamchatka. Journal of Volcanology and Geothermal Research, 2013, 262, 90-103.	2.1	20
61	Eruptive style and flow dynamics of the pyroclastic density currents related to the Holocene Cerro Blanco eruption (Southern Puna plateau, Argentina). Journal of South American Earth Sciences, 2020, 98, 102482.	1.4	19
62	Pulsating flow dynamics of sustained, forced pyroclastic density currents: insights from a facies analysis of the Campo de la Piedra PÃ³mez ignimbrite, southern Puna, Argentina. Bulletin of Volcanology, 2020, 82, 1.	3.0	18
63	Characterizing the continental basement of the Central Andes: Constraints from Bolivian crustal xenoliths. Bulletin of the Geological Society of America, 2013, 125, 985-997.	3.3	17
64	Some unique surface patterns on ignimbrites on Earth: A â€œbird's eyeâ€• view as a guide for planetary mappers. Journal of Volcanology and Geothermal Research, 2017, 342, 47-60.	2.1	17
65	Neogene to Quaternary ash deposits in the Coastal Cordillera in northern Chile: Distal ashes from supereruptions in the Central Andes. Journal of Volcanology and Geothermal Research, 2014, 269, 68-82.	2.1	14
66	Structural control on volcanism at the Ubinas, Huaynaputina, and Ticsani Volcanic Group (UHTVG), southern Peru. Journal of Volcanology and Geothermal Research, 2009, 186, 253-264.	2.1	13
67	Magma Dynamics and Petrological Evolution Leading to the VEI 5 2000 bp Eruption of El Misti Volcano, Southern Peru. Journal of Petrology, 2013, 54, 2033-2065.	2.8	13
68	The geological and structural evolution of the long-lived Miocene-Pleistocene La Hoyada Volcanic Complex in the geodynamic framework of the Central Andes, Argentina. Journal of Volcanology and Geothermal Research, 2019, 385, 120-142.	2.1	13
69	Volcanic rocks from the Bolivian Altiplano: Insights into crustal structure, contamination, and magma genesis: Comment and Reply. Geology, 1993, 21, 1147.	4.4	12
70	Sulfur yield of the 1600 eruption of Huaynaputina, Peru: Contributions from magmatic, fluid-phase, and hydrothermal sulfur. Journal of Volcanology and Geothermal Research, 2010, 197, 303-312.	2.1	12
71	Enigmatic clastogenic rhyolitic volcanism: The Corral de Coquena spatter ring, North Chile. Journal of Volcanology and Geothermal Research, 2008, 177, 812-821.	2.1	10
72	The largest wind ripples on Earth: COMMENT. Geology, 2010, 38, e218-e218.	4.4	10

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73	Caldera-forming eruptions of mushy magma modulated by feedbacks between ascent rate, gas retention/loss and bubble/crystal framework interaction. Scientific Reports, 2019, 9, 15845.	3.3	10
74	Chasing the mantle: Deciphering cryptic mantle signals through Earth's thickest continental magmatic arc. Earth and Planetary Science Letters, 2020, 531, 115985.	4.4	10
75	Aerodynamic roughness height for gravel-mantled megaripples, with implications for wind profiles near TARs on Mars. Icarus, 2016, 266, 306-314.	2.5	9
76	Resurgence initiation and subsolidus eruption of cold carapace of warm magma at Toba Caldera, Sumatra. Communications Earth & Environment, 2021, 2, .	6.8	9
77	The socioeconomic consequences of the A.D. 1600 eruption of Huaynaputina, southern Peru. , 2000, , .		8
78	Magmas in collision: Rethinking chemical zonation in silicic magmas: Comment and Reply. Geology, 2001, 29, 1063.	4.4	8
79	The 2 ka Eruption of Misti Volcano, Southern Peruâ€"The Most Recent Plinian Eruption of Arequipaâ€™s Iconic Volcano. , 2011, , .		7
80	Catastrophic Caldera-Forming (CCF) Monotonous Silicic Magma Reservoirs: Constraints from Volatiles in Melt Inclusions from the 3Â·49 Ma Tara Supereruption, Guacha II Caldera, SW Bolivia. Journal of Petrology, 2017, 58, 2115-2142.	2.8	7
81	Controls on Eolian Landscape Evolution in Fractured Bedrock. Geophysical Research Letters, 2019, 46, 12012-12020.	4.0	6
82	A roadmap for amphibious drilling at the Campi Flegrei caldera: insights from a MagellanPlus workshop. Scientific Drilling, 0, 26, 29-46.	0.6	6
83	Experimental and petrological constraints on long-term magma dynamics and post-climactic eruptions at the Cerro GalÃ¡n caldera system, NW Argentina. Journal of Volcanology and Geothermal Research, 2017, 347, 296-311.	2.1	5
84	Late Cenozoic magmatism of the Bolivian Altiplano. Contributions To Mineralogy and Petrology, 1995, 119, 387-408.	3.1	5
85	Probabilistic Volcanic Hazard Assessment of the 22.5â€"28Â°S Segment of the Central Volcanic Zone of the Andes. Frontiers in Earth Science, 0, 10, .	1.8	5
86	The Merzbacher & Eggler (1984) Geohygrometer: a Cautionary Note on its Suitability for High-K Suites. Journal of Petrology, 2000, 41, 357-362.	2.8	4
87	Thermal Budgets of Magma Storage Constrained by Diffusion Chronometry: the Cerro GalÃ¡n Ignimbrite. Journal of Petrology, 2022, 63, .	2.8	4
88	Comment on: â€œCobeÃ±as, G., Thouret, J.-C., Bonadonna, C., Boivin, P., 2012. The c.2030yr BP Plinian eruption of El Misti volcano, Peru: Eruption dynamics and hazard implications. Journal of Volcanology and Geothermal Research 241-242, 105-120.â€• Journal of Volcanology and Geothermal Research, 2013, 265, 94-101.	2.1	3
89	Paleomagnetic observations from lake sediments on Samosir Island, Toba caldera, Indonesia, and its late Pleistocene resurgence. Quaternary Research, 2020, 95, 97-112.	1.7	3
90	Eruptions linked to El NiÃ±o. Nature, 2003, 426, 239-241.	27.8	2

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91	On Synchronous Supereruptions. Frontiers in Earth Science, 2022, 10, .	1.8	2
92	Crustal Forensics at PÅ«tauaki (Mt. Edgecumbe), New Zealand reveal the influence of deep crustal arc processes on magma evolution in the Taupo Volcanic Zone. Contributions To Mineralogy and Petrology, 2022, 177, 1.	3.1	1
93	Capturing the Extreme in Volcanology: The Case for the Term â€œSupervolcanoâ€. Frontiers in Earth Science, 2022, 10, .	1.8	1
94	PETROLOGICAL FORENSICS OF MAGMA MINGLING DURING 2013 TO PRESENT ERUPTIONS OF SINABUNG VOLCANO, SUMATRA. , 2017, , .		0
95	THE ARGENTINEAN PUNA: AN AEOLIAN WONDERLAND AND PREMIER MARS ANALOG TERRAIN. , 2018, , .		0
96	WIND SCULPTING OF PLANETARY SURFACES: CONSTRAINTS FROM SIMULATIONS AND PHYSICAL EXPERIMENTS ON AEOLIAN LANDSCAPES OF THE ARGENTINIAN PUNA. , 2018, , .		0
97	CONSTRAINING THE ORIGIN AND INFLUENCE OF ANDESITE IN THE ZONED PURICO IGNIMBRITE, N. CHILE. , 2018, , .		0
98	UNDERSTANDING THE DEEP MAGMATIC PROCESSES CONTROLLING THE EARLY EVOLUTION OF ARC MAGMAS: A COMPARISON OF THE CENTRAL VOLCANIC ZONE IN NORTHERN CHILE WITH THE ALEUTIAN ISLAND ARC. , 2019, , .		0
99	PETROLOGICAL FORENSICS OF THE MOUNT SINABUNG, SUMATRA, INDONESIA MAGMA RESERVOIR PRIOR TO MAY 2016 DOME COLLAPSE. , 2019, , .		0
100	INSIGHTS INTO TRANSCRUSTAL PROCESSES BENEATH CONTINENTAL MONOGENETIC VOLCANOES FROM MINOR CENTERS ON THE BOLIVIAN ALTIPLANO. , 2019, , .		0
101	U-PB AGES OF DETRITAL ZIRCON AND THEIR CORRELATION TO LOCAL TECTONICS OF THE ANDEAN PLATEAU, CHILE. , 2020, , .		0
102	U-PB AGES OF DETRITAL ZIRCON AND THEIR CORRELATION TO LOCAL TECTONICS OF THE ALTIPLANO-PUNA, CHILE. , 2020, , .		0
103	PRODUCTION AND PRESERVATION OF SMALL VOLUME RHYOLITIC MELTS RECORDED IN THE MIDST OF A MONOTONOUS CONTINENTAL ARC FLARE-UP - THE HETEROGENOUS CASPANA IGNIMBRITE OF THE ALTIPLANO-PUNA VOLCANIC COMPLEX OF THE CENTRAL ANDES. , 2021, , .		0