Thermal vesiculation during volcanic eruptions

Nature 528, 544-547

DOI: 10.1038/nature16153

Citation Report

| # | Article | IF | Citations |
|----|---|------|-----------|
| 1 | Blowing Off Steam: Tuffisite Formation As a Regulator for Lava Dome Eruptions. Frontiers in Earth Science, $2016, 4, .$ | 1.8 | 70 |
| 2 | Conduit Dynamics in Transitional Rhyolitic Activity Recorded by Tuffisite Vein Textures from the 2008–2009 Chaitén Eruption. Frontiers in Earth Science, 2016, 4, . | 1.8 | 50 |
| 3 | Early Miocene Kırka-Phrigian Caldera, western Turkey (Eskişehir province), preliminary volcanology, age and geochemistry data. Journal of Volcanology and Geothermal Research, 2016, 327, 503-519. | 2.1 | 14 |
| 4 | Characterization of moderate ashâ€andâ€gas explosions at Santiaguito volcano, Guatemala, from infrasound waveform inversion and thermal infrared measurements. Geophysical Research Letters, 2016, 43, 6220-6227. | 4.0 | 40 |
| 5 | General Approach To Construct Photoresponsive Self-Assembly in a Light-Inert Amphiphilic System. Langmuir, 2016, 32, 11973-11979. | 3.5 | 13 |
| 6 | From rock to magma and back again: The evolution of temperature and deformation mechanism in conduit margin zones. Earth and Planetary Science Letters, 2017, 463, 92-100. | 4.4 | 54 |
| 7 | Crystal-rich lava dome extrusion during vesiculation: An experimental study. Journal of Volcanology and Geothermal Research, 2017, 347, 1-14. | 2.1 | 34 |
| 8 | Crystal plasticity as an indicator of the viscous-brittle transition in magmas. Nature Communications, 2017, 8, 1926. | 12.8 | 21 |
| 9 | In situ confirmation of permeability development in shearing bubble-bearing melts and implications for volcanic outgassing. Earth and Planetary Science Letters, 2017, 458, 315-326. | 4.4 | 58 |
| 10 | Tuffaceous Mud is a Volumetrically Important Volcaniclastic Facies of Submarine Arc Volcanism and Record of Climate Change. Geochemistry, Geophysics, Geosystems, 2018, 19, 1217-1243. | 2.5 | 19 |
| 11 | Correction scheme for point-particle models applied to a nonlinear drag law in simulations of particle-fluid interaction. International Journal of Multiphase Flow, 2018, 101, 74-84. | 3.4 | 56 |
| 12 | Combined effusive-explosive silicic volcanism straddles the multiphase viscous-to-brittle transition. Nature Communications, 2018, 9, 4696. | 12.8 | 39 |
| 13 | Quantification of ash sedimentation dynamics through depolarisation imaging with AshCam. Scientific Reports, 2018, 8, 15680. | 3.3 | 2 |
| 14 | Vesiculation and Quenching During Surtseyan Eruptions at Hunga Tongaâ€Hunga Ha'apai Volcano, Tonga. Journal of Geophysical Research: Solid Earth, 2018, 123, 3762-3779. | 3.4 | 34 |
| 15 | Controls on explosive-effusive volcanic eruption styles. Nature Communications, 2018, 9, 2839. | 12.8 | 262 |
| 16 | Textural Insights Into the Evolving Lava Dome Cycles at Santiaguito Lava Dome, Guatemala. Frontiers in Earth Science, 2018, 6, . | 1.8 | 32 |
| 17 | Conduit dynamics of highly explosive basaltic eruptions: The 1085 CE Sunset Crater sub-Plinian events. Journal of Volcanology and Geothermal Research, 2019, 387, 106658. | 2.1 | 26 |
| 18 | Unusual fluidal behavior of a silicic magma during fragmentation in a deep subaqueous eruption, Havre volcano, southwestern Pacific Ocean. Geology, 2019, 47, 487-490. | 4.4 | 11 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 19 | Brittleâ€Ductile Deformation and Tensile Rupture of Dome Lava During Inflation at Santiaguito, Guatemala. Journal of Geophysical Research: Solid Earth, 2019, 124, 10107-10131. | 3.4 | 24 |
| 20 | Phase partitioning during fragmentation revealed by QEMSCAN Particle Mineralogical Analysis of volcanic ash. Scientific Reports, 2019, 9, 126. | 3.3 | 18 |
| 21 | Disruption of Long-Term Effusive-Explosive Activity at Santiaguito, Guatemala. Frontiers in Earth Science, 2019, 6, . | 1.8 | 21 |
| 22 | Frictional melt homogenisation during fault slip: Geochemical, textural and rheological fingerprints. Geochimica Et Cosmochimica Acta, 2019, 255, 265-288. | 3.9 | 11 |
| 23 | Petrological Architecture of a Magmatic Shear Zone: A Multidisciplinary Investigation of Strain Localisation During Magma Ascent at Unzen Volcano, Japan. Journal of Petrology, 2019, 60, 791-826. | 2.8 | 24 |
| 24 | Volcán de Colima. Active Volcanoes of the World, 2019, , . | 1.4 | 9 |
| 25 | The Fragility of Volcán de Colima—A Material Constraint. Active Volcanoes of the World, 2019, , 241-266. | 1.4 | 6 |
| 26 | Statistical evidence of transitioning open-vent activity towards a paroxysmal period at Volcán Santiaguito (Guatemala) during 2014–2018. Journal of Volcanology and Geothermal Research, 2020, 398, 106891. | 2.1 | 5 |
| 27 | An experimentally validated numerical model for bubble growth in magma. Journal of Volcanology and Geothermal Research, 2020, 402, 107002. | 2.1 | 11 |
| 28 | Rheological change and degassing during a trachytic Vulcanian eruption at Kilian Volcano, Chaîne des Puys, France. Bulletin of Volcanology, 2020, 82, 1. | 3.0 | 3 |
| 29 | Post-volcanic activities in the Early Miocene Kırka-Phrigian caldera, western Anatolia – caldera basin filling and borate mineralization processes. International Geology Review, 2021, 63, 1719-1736. | 2.1 | 3 |
| 30 | Post-fragmentation vesiculation timescales in hydrous rhyolitic bombs from Chaitén volcano. Journal of South American Earth Sciences, 2020, 104, 102807. | 1.4 | 8 |
| 31 | In situ observation of the percolation threshold in multiphase magma analogues. Bulletin of Volcanology, 2020, 82, 32. | 3.0 | 21 |
| 32 | Integrated constraints on explosive eruption intensification at Santiaguito dome complex, Guatemala. Earth and Planetary Science Letters, 2020, 536, 116139. | 4.4 | 15 |
| 33 | A review of the physical and mechanical properties of volcanic rocks and magmas in the brittle and ductile regimes., 2021,, 153-238. | | 8 |
| 34 | Micro-Textural Controls on Magma Rheology and Vulcanian Explosion Cyclicity. Frontiers in Earth Science, 2021, 8, . | 1.8 | 9 |
| 35 | Source Mechanism of Seismic Explosion Signals at Santiaguito Volcano, Guatemala: New Insights From Seismic Analysis and Numerical Modeling. Frontiers in Earth Science, 2021, 8, . | 1.8 | 2 |
| 36 | Volcanic emission and seismic tremor at Santiaguito, Guatemala: New insights from long-term seismic, infrasound and thermal measurements in 2018–2020. Journal of Volcanology and Geothermal Research, 2021, 411, 107154. | 2.1 | 6 |

| # | Article | IF | CITATIONS |
|----|---|-----------|-------------|
| 37 | Comparison of Bubble Shape Model Results With Textural Analysis: Implications for the Velocity Profile Across a Volcanic Conduit. Journal of Geophysical Research: Solid Earth, 2021, 126, e2021JB021841. | 3.4 | 4 |
| 38 | Pre-eruptive conditions at satellite vent eruptions at Teide-Pico Viejo complex (Tenerife, Canary) Tj ETQq1 1 0.784 | 1314 rgBT | /Qverlock 1 |
| 39 | The roles of microlites and phenocrysts during degassing of silicic magma. Earth and Planetary Science Letters, 2022, 577, 117264. | 4.4 | 10 |
| 40 | Direct nanoscale observations of degassing-induced crystallisation in felsic magmas. Contributions To Mineralogy and Petrology, 2022, 177, 1. | 3.1 | 7 |
| 43 | Strain Localization in Magmas. Reviews in Mineralogy and Geochemistry, 2022, 87, 721-765. | 4.8 | 6 |
| 44 | Transient conduit permeability controlled by a shift between compactant shear and dilatant rupture at Unzen volcano (Japan). Solid Earth, 2022, 13, 875-900. | 2.8 | O |
| 45 | Frictional Melting in Magma and Lava. Reviews in Mineralogy and Geochemistry, 2022, 87, 919-963. | 4.8 | 2 |
| 46 | Detecting multiscale periodicity from the secular effusive activity at Santiaguito lava dome complex (Guatemala). Earth, Planets and Space, 2022, 74, . | 2.5 | O |
| 47 | Complex decompression and fragmentation of mingled andesite magmas driving multi-phase Plinian eruptions at Mt. Taranaki, New Zealand. Journal of Volcanology and Geothermal Research, 2023, 433, 107728. | 2.1 | 1 |
| 48 | Bouncing Spallation Bombs During the 2021 La Palma Eruption, Canary Islands, Spain. Earth Science, Systems and Society, 0, 2, . | 0.0 | 3 |
| 49 | Analytical model of small fluctuations of compressible magma with Maxwell rheology in the feeding system of a volcano. Part 1. Density oscillations. Russian Journal of Earth Sciences, 2023, , 1-14. | 0.7 | 0 |
| 50 | H ₂ O degassing triggered by alkali depletion in bimodal magma injection processes – a new experimental approach. European Journal of Mineralogy, 2023, 35, 613-633. | 1.3 | O |
| 52 | Oxide nanolitisation-induced melt iron extraction causes viscosity jumps and enhanced explosivity in silicic magma. Nature Communications, 2024, 15, . | 12.8 | 1 |