

Publications référencées ClerVolc :

489. **Chevrel, M.O.**, Favalli, M., Villeneuve, N., **Harris, A.J.L.**, Fornaciai, A., Richter, N., Derrien, A., Boissier, P., Di Muro, A., Peltier, A. (2021). Lava flow hazard map of Piton de la Fournaise volcano. *Natural Hazards and Earth System Sciences*.

488. Delobel, F., El Rachkidy, N., **Guillon, A.** (2017). Analysis of the Delay of Confirmed Downlink Frames in Class B of LoRaWAN. 2017 IEEE 85th Vehicular Technology Conference (VTC Spring), 2017, pp. 1-6, doi: 10.1109/VTCSpring.2017.8108412.

487. Massaro, S., Dioguardi, F., Sandri, L., Tamburello, G., Selva, J., **Moune, S., Jessop, D.**, Moretti, R., Komorowski, J-C., Costa, A. (2021). Testing gas dispersion modelling: A case study at La Soufrière volcano (Guadeloupe, Lesser Antilles). *Journal of Volcanology and Geothermal Research*, 417, 107312 DOI : /10.1016/j.jvolgeores.2021.107312.

486. **Saitoh, M., Olivier, N., Garçon, M., Boyet, M.**, Thomazo, C., Alleon, J., Moyen, J-F., Motto-Ros, V., Marin-Carbonne, J. (2021). Metamorphic origin of anastomosing and wavy laminae overprinting putative microbial deposits from the 3.22 Ga Moodies Group (Barberton Greenstone Belt). *Precambrian Geology*.

485. **Roche O.**, Azzaoui N., **Guillon A.** (2021). Discharge rate of explosive volcanic eruption controls runout distance of pyroclastic density currents. *Earth and Planetary Science Letters* vol.568, p.117017, - DOI:10.1016/j.epsl.2021.117017.

484. **Vlastélic I., Bachèlery P., Sigmarsson O., Koga K., Rose-Koga E.**, Bindeman I., **Gannoun A.M., Devidal J.L.**, Falco G., Staudacher T. (2021). Prolonged trachyte storage and unusual remobilization at Piton de la Fournaise, La Réunion Island, Indian Ocean: Li, O, Sr, Nd, Pb and Th Isotope study. *Journal of Petrology*, egab048- DOI:10.1093/petrology/egab048

483. **Thivet S., Harris A., Gurioli L., Bani P., Barnie T., Bombrun M.**, Marchetti E. (2021). Multi-parametric field experiment links explosive activity and persistent degassing at Stromboli. *Frontiers in Earth Science* - DOI:10.3389/feart.2021.669661.

482. **Boyet, M., Garçon, M.**, Arndt, N., Carlson, R.W., Konc, Z. (2021). Residual liquid from deep magma ocean crystallization in the source of komatiites from the ICDP drill core in the Barberton Greenstone Belt. *Geochimica et Cosmochimica Acta*, 304, 141-159. DOI :10.1016/j.gca.2021.04.020

481. Montserrat S., Ordoñez L., Tamburrino A., **Roche O.** (2021). Influence of bottom roughness and ambient pressure conditions on the emplacement of

experimental dam-break granular flows. *Granular Matter* vol.23, p.57, - DOI:10.1007/s10035-021-01125-2.

480. **Frossard P.**, Guo Z., Spencer M., **Boyet M.**, Bouvier A. (2021). Evidence from achondrites for a temporal change in Nd nucleosynthetic anomalies within the first 1.5 million years of the inner solar system formation. *Earth and Planetary Science Letters* vol.566, p.116968, - DOI:10.1016/j.epsl.2021.116968

479. Kolzenburg S., **Chevrel M.O.**, Dingwell D. (2021). Magma suspension rheology. *Reviews In Mineralogy and Geochemistry*. (Sous presse).

478. Feldbach E., Zerr A., Museur L., Kitaura M., **Manthilake G.**, Tessier F., Krasnenko V., Kanaev A. (2021). Electronic Band Transitions in γ -Ge₃N₄. *Electronics, Magnetics and Photonics* - DOI:10.1007/s13391-021-00291-y.

477. **Tadini A.**, **Roche O.**, **Samaniego P.**, Azzaoui N., Bevilacqua A., **Guillin A.**, **Gouhier M.**, Bernard B., Aspinall W., Hidalgo S., Eychenne J., de' Michieli Vitturi M., Neri A., Cioni R., Pistolesi M., Gaunt E., Vallejo S., Encalada M., Yepes H., Proaño A., Pique M. (2021). Eruption type probability and eruption source parameters at Cotopaxi and Guagua Pichincha volcanoes (Ecuador) with uncertainty quantification. *Bulletin of Volcanology* vol.83, p.35, - DOI:10.1007/s00445-021-01458-z

476. **Roche O.**, **Van den Wildenberg S.**, Valance A., Delannay R., Mangeney A., Corna L., **Latchimy T.** (2021). Experimental assessment of the effective friction at the base of granular chute flowson a smooth incline. *Physical Review* vol.E 103, p.042905, - DOI:10.1103/PhysRevE.103.042905

475. **Bonilauri, E.M.**, **Harris, A.J.L.**, **Morin, J.**, Ripepe, M., Mangione, D., Lacanna, G., Ciolli, S., Cusolito, M., Deguy, P. (2021). Tsunami evacuation times and routes to safe zones: a GIS-based approach to tsunami evacuation planning on the island of Stromboli, Italy. *Journal of Applied Volcanology* 10, 4. DOI: org/10.1186/s13617-021-00104-9

474. **Bodart, O.**, **Cayol, V.**, **Court, S.** and **Koko J.** (2016). XFEM-Based Fictitious Domain Method for Linear Elasticity Model with Crack. *SIAM Journal on Scientific Computing* 38:2, B219-B246

473. **Dumont, Q.**, **Cayol, V.**, **Froger, J-L.** (2021). Mitigating biased ground surface displacement inversions resulting from the viewing geometries in InSAR data, *Geophysical Journal International*, 2021;, ggab229, DOI: 10.1093/gji/ggab229

472. Peng Y., **Manthilake G.**, Mookherjee M. (2021). Electrical conductivity of metasomatized lithology in subcontinental lithosphere. *American Mineralogist* - DOI:10.2138/am-2021-7942

471. Fries A., **Roche O.**, Carazzo G. (2021). Granular mixture deflation and generation of pore fluid pressure at the impact zone of a pyroclastic fountain: Experimental insights. *Journal of Volcanology and Geothermal Research* vol.414, p.107226, - DOI:10.1016/j.jvolgeores.2021.107226

470. **Bougouin A., Roche O., Paris R.**, Huppert H. (2021). Experimental Insights on the Propagation of Fine-Grained Geophysical Flows Entering Water. *Journal of Geophysical Research - Oceans* vol.126, 4, - DOI:1029/2020JC016838

469. Xu F., Morard G., Guignot N., Rivoldini A., **Manthilake G., Chantel J.**, Xie L., Yoneda A., King A., Boulard E., Pandolfi S., Ryerson F.J., Antonangeli D. (2021). Thermal expansion of liquid Fe-S alloy at high pressure. *Earth and Planetary Science Letters* vol.563, p.116884, - DOI:10.1016/j.epsl.2021.116884.

468. **Tadini A., Roche O., Samaniego P.**, Guillin A., Azzaoui N., **Gouhier M.**, de Michieli Vitturi M., Pardini F., **Eychenne J.**, Bernard B., Hidalgo S., **Le Pennec J.L.** (2020). Quantifying the Uncertainty of a Coupled Plume and Tephra Dispersal Model: PLUME-MOM/HYSPLIT Simulations Applied to Andean Volcanoes. *Journal of Geophysical Research – Solid Earth*, 125, e2019JB018390, DOI: 10.1029/2019JB018390.

467. **Aumar C., Bosse V., Merle O.**, and Monié P. (2021). Syn-rift Cretaceous deformation in the Variscan Agly massif (Eastern Pyrenees, France). *Bulletin Géologique de France*. Sous presse.

466. **Berthod C., Médard E., Bachèlery P., Gurioli L.**, Di Muro A., Peltier A., Komorowski J.C., **Benbakkar M., Devidal J.-L.**, Langlade J., Besson P., Boudon G., **Rose-Koga E.**, Deplus C., Le Friant A., Bickert M., Nowak S., Thinon I., Burckel P., Hidalgo S., Kaliwoda M., Jorry S., Fouquet Y., Feuillet N. (2021). The 2018-ongoing Mayotte submarine eruption: magma migration imaged by petrological monitoring. *Earth and Planetary Science Letters*. Sous presse.

465. **Bodart O., Cayol V, Dabaghi F., Koko J.** (2020). Fictitious Domain Method for an Inverse Problem in Volcanoes. In: *Domain Decomposition Methods in Science and Engineering XXV*. DD 2018. Lecture Notes in Computational Science and Engineering, vol 138. Springer, Cham. https://doi.org/10.1007/978-3-030-56750-7_4.

464. **Rose-Koga E.**, Bouvier A., Gaetani G., Wallace P., Allison C., Andrys J., Angeles de la Torre C., Barth A., Bodnar R., Bracco Gartner A., Butters D., Castillejo A3, Chilson-Parks B., Choudhary B., **Cluzel N.**, Cole M., Cottrell E., Daly A., Danyushevsky L., DeVitre C., Drignon M., France L., **Gaborieau M.**, Garcia M., Gatti E., Genske F., Hartley M., Hughes E., Iveson A., Johnson E., Jones M., Kagoshima T., Katzir Y., Kawaguchi M., Kawamoto T., Kelley K., Koornneef J., Kurz M., **Laubier M.**, Layne G., Lerner A., Lin K-Y., Liu P.-P., Lorenzo-Merino A., Luciani N., Magalhães N., Marschall H., Michael P., Monteleone B., Moore L.,

Moussallam Y., Muth M., Myers M., Narváez D., Navon O., Newcombe M., Nichols A., Nielsen R., Pamukcu A., Plank T., Rasmussen D., Roberge J., **Schiavi F.**, Schwartz D., Shimizu K., Shimizu K., Shimizu N., Thomas J., Thompson G., Tucker J., Ustunisik G., Waelkens C., Zhang Y., Zhou T. (2021). Silicate melt inclusions in the new millennium: A review of recommended practices for preparation, analysis, and data presentation, *Chemical Geology* vol.570, p.120145, - DOI:10.1016/j.chemgeo.2021.120145

463. **Georgeais G., Koga K., Moussallam Y., Rose-Koga E.** (2021). Magma decompression rate calculations with EMBER: A user-friendly software to model diffusion of H₂O, CO₂ and S in melt embayments. *Geochemistry, Geophysics, Geosystems* - DOI:10.1029/2020GC009542 - lien HAL .

462. Marino J., **Samaniego P.**, Manrique N., Valderrama P., **Roche O., Van wyk de Vries M.**, Guillou H., Zerathe S., Arias C., Liorzou C. (2021). The Tutupaca volcanic complex (Southern Peru): Eruptive chronology and successive destabilization of a dacitic dome complex. *Journal of South American Earth Sciences* vol.109, p.103227, - DOI:10.1016/j.jsames.2021.103227.

461. Anderson O.E., Jackson M.G., **Rose-Koga E.**, Marske J.P., Peterson M.E., Price A.A., Byerly B.L., Reinhard A.A. (2021). Testing the Recycled Gabbro Hypothesis for the Origin of "Ghost Plagioclase" Melt Signatures Using ⁸⁷Sr/⁸⁶Sr of Individual Olivine-Hosted Melt Inclusions from Hawai'i. *Geochemistry, Geophysics, Geosystems* vol.22, - DOI:10.1029/2020GC009260 - lien HAL .

460. **Gailler, L.; Labazuy, P.; Régis, E.; Bontemps, M.; Souriot, T.**; Bacques, G.; Carton, B. Validation of a New UAV Magnetic Prospecting Tool for Volcano Monitoring and Geohazard Assessment. *Remote Sensing* 2021, 13, 894. <https://doi.org/10.3390/rs13050894>

459. **Rose C.**, Rissanen M.P. , Siddharth I., Duplissy J., Yan C., Nowak J.B., **Colomb A.**, Dupuy R., He X.C., Lampilahti J., Tham Y.J., Wimmer D., Metzger J.M., Tulet P., Brioude J., **Planche C.**, Kulmala M., **Sellegri K.** (2021). Investigation of several proxies to estimate sulfuric acid concentration in volcanic plume conditions. *Atmospheric Chemistry and Physics* 21, 4541–4560, <https://doi.org/10.5194/acp-21-4541-2021>

457. Antonelli A. A., Kendrick J., Yakymchuck, C., **Guitreau, M.**, Mittal, T., Moynier, F. (2021). Calcium isotope evidence for early Archaean carbonates and subduction of oceanic crust. *Nature Communications* 12, 2534. DOI :10.1038/s41467-021-22748-2

456. Frieman, B.M., Kelly, N.M., Kuiper, Y.D., Monecke, T., Kylander-Clark, A., **Guitreau, M.** (2021). Insight into Archean crustal growth and mantle evolution from multi-isotope U-Pb and Lu-Hf analysis of detrital zircon grains from Abitibi and

Pontiac subprovinces, Canada. *Precambrian Research*, 357, 106136. DOI: 10.1016/j.precamres.2021.106136.

455. Bisson M., Tadini A., Gianardi R., Angioletti A. (2021). The use of historical cartography and ALS technology to map the geomorphological changes of volcanic areas: A case study from Gran Cono of Somma-Vesuvius volcano. *Geomorphology* vol.380, p.107624, - DOI:10.1016/j.geomorph.2021.107624

454. Manthilake G., Koga K., Peng Y., Mookherjee M. (2021). Halogen Bearing Amphiboles, Aqueous Fluids, and Melts in Subduction Zones: Insights on Halogen Cycle From Electrical Conductivity. *Journal of Geophysical Research - Solid Earth* vol.126, p.e2020JB021339, - DOI:10.1029/2020JB021339

453. Paquette J.L., Médard E., Poidevin J.L., Barbet P. (2021). Precise dating of middle to late Villafranchian mammalian paleofauna from the Upper Allier River valley (French Massif Central) using U–Pb geochronology on volcanic zircons. *Quaternary Geochronology* 65, 101198, DOI:10.1016/j.quageo.2021.101198.

452. Freitas D., Monteux J., Andrault D., Manthilake G., Mathieu A., Schiavi F., Cluzel N. (2021). Thermal conductivities of solid and molten silicates: Implications for dynamos in mercury-like proto-planets. *Physics of the Earth and Planetary Interiors* vol.312, p.106655, - DOI:10.1016/j.pepi.2021.106655

451. Caracciolo A., **Gurioli L.**, Marianelli P. , Bernard J. , **Harris A.** (2021). Textural and chemical features of a “soft” plug emitted during Strombolian explosions: A case study from Stromboli volcano. *Earth and Planetary Science Letters*, 559, 116761. DOI: 10.1016/j.epsl.2021.116761.

450. **Manthilake G.**, Mookherjee M., Miyajima N. (2021). Insights on the deep carbon cycle from the electrical conductivity of carbon-bearing aqueous fluids. *Scientific Report* vol.11, p.3745, DOI:10.1038/s41598-021-82174-8 .

449. **Manthilake G.**, Chantel J., Guignot N., King A. (2021). The Anomalous Seismic Behavior of Aqueous Fluids Released during Dehydration of Chlorite in Subduction Zones. *Minerals* vol.11, p.70, DOI:10.3390/min11010070.

448. Myers M, Druitt TH, Schiavi F, Gurioli L, Flaherty T (2021). Evolution of magma ascent and discharge during a Plinian event (Late Bronze-Age eruption, Santorini) from multiple eruption-intensity proxies. *Bulletin of Volcanology* 83, 18. DOI: 10.1007/s00445-021-01438-3

447. Kawaguchi M., Hasenaka T., Koga K., **Rose-Koga E.**, Yasuda A., Hokanishi N., Mori Y., Shimizu K., Ushikubo T. (2021). Persistent gas emission originating from a deep basaltic magma reservoir of an active volcano: the case of Aso volcano, Japan. *Contribution to Mineralogy & Petrology* DOI:10.1007/s00410-020-01761-6 .

446. Tzevahirtzian A., Zaragosi S., **Bachèlery P.**, Biscara L., Marchès E. (2021). Submarine morphology of the Comoros volcanic archipelago. *Marine Geology* vol.432, p.106383, DOI:10.1016/j.margeo.2020.106383 .
445. **Tadini A.**, Bevilacqua A., Neri A., Cioni R., Biagioli G., de'Michieli Vitturi M., Esposti Ongaro T. (2021). Reproducing pyroclastic density current deposits of the 79CE eruption of the Somma–Vesuvius volcano using the box-model approach. *Solid Earth* vol.12, p.119-139, DOI:10.5194/se-12-119-2021 .
444. Colombier M., Shea T., Burgisser A., **Druitt T.**, **Gurioli L.**, Müller D., Cáceres F., Hess K.U., **Boivin P.**, Miallier D., Dingwell D.B. (2020). Rheological change and degassing during a trachytic Vulcanian eruption at Kilian Volcano, Chaîne des Puys, France. *Bulletin of Volcanology* vol.82, p.78, DOI:10.1007/s00445-020-01420-5.
443. Lormand C., **Harris A.**, **Chevrel O.**, Calvari S., **Gurioli L.**, Favalli M., Fornaciai A., Nannipieri L. (2020). The 1974 West Flank Eruption of Mount Etna: A Data-Driven Model for a Low Elevation Effusive Event. *Frontiers in Earth Science* vol.8, p.590411, DOI:10.3389/feart.2020.590411.
442. **Samaniego P.**, **Rivera M.**, Manrique N., **Schiavi F.**, **Nauret F.**, Liorzou C., **Ancellin M.** A. (2020). Linking magmatic processes and magma chemistry during the post-glacial to recent explosive eruptions of Ubinas volcano (southern Peru). *Journal of Volcanology and Geothermal Research* vol.407, p.107095, DOI:10.1016/j.jvolgeores.2020.107095.
441. **Faure P.**, **Boyet M.**, **Bouhifd A.**, **Manthilake G.**, **Hammouda T.**, **Devidal J.L.** (2021). Determination of the refractory enrichment factor of the bulk silicate Earth from metal-silicate experiments on rare Earth elements. *Earth and Planetary Science Letters* vol.554, p.116644, DOI:10.1016/j.epsl.2020.116644 .
440. Metcalfe, A., **Moune, S.**, Komorowski, J-C., Kilgour, G., **Jessop, D.E.**, Legendre, Y., Moretti, R. (2021). Magmatic Processes at La Soufrière de Guadeloupe: Insights from Crystal Studies and Diffusion Timescales for eruption onset *Frontiers in Earth-Science*, 9, 78. DOI: 10.3389/feart.2021.617294
439. **Schiavi F.**, **Bolfan-Casanova N.**, **Buso R.**, **Laumonier M.**, **Laporte D.**, Medjoubi K., Venugopal S., **Gomez-Ulla A.**, **Cluzel N.**, **Hardiagon M.** (2020). Quantifying magmatic volatiles by Raman microtomography of glass inclusion-hosted bubbles. *Geochemical Perspectives Letters* vol.16, p.17-24, DOI:10.7185/geochemlet.2038 .
438. Buff L., Jackson M.G., Konrad K., Konter J.G., Bizimis M., Price A., Rose-Koga E., Blusztajn J., Koppers A.A.P., Herrera S. (2021). “Missing links” for the long-lived Macdonald and Arago hotspots, South Pacific Ocean. *Geology* - DOI:10.1130/G48276.1.

437. **Hammouda T., Manthilake G.,** Goncalves P., Chantel J., Guignard J., Crichton W., Gaillard F. (2021). Is there a global carbonate layer in the oceanic mantle?. *Geophysical Research Letters* DOI:10.1029/2020GL089752 .
436. Van den Wildenberg S., Jia X., **Roche O.** (2020). Acoustic probing of the particle concentration in turbulent granular suspensions in air. *Nature Scientific Reports* vol.10, p.16544, DOI:10.1038/s41598-020-73427-z.
435. **Kelfoun K.,** Santoso A.B., Latchimy T., Bontemps M., Nurdien I., Beauducel F., Fahmi A., Putra R., Dahamna N., Laurin A., Rizal M.H., Sukmana J.T., **Gueugneau V.** (2021). Growth and collapse of the 2018–2019 lava dome of Merapi volcano. *Bulletin of Volcanology* DOI:10.1007/s00445-020-01428-x .
434. Colo L., Ripepe M., **Gurioli L., Harris A.** (2020). Fragmentation Processes During Strombolian Explosions Revealed Using Particle Size Distribution Mapping. *Frontiers in Earth Science* vol.8, p.356, DOI:10.3389/feart.2020.00356 .
433. **Maurice J., Bolfan-Casanova N.,** Demouchy S., **Chauvigne P., Schiavi F., Debret B.** (2020). The intrinsic nature of antigorite breakdown at 3 GPa: Experimental constraints on redox conditions of serpentinite dehydration in subduction zones. *Contribution to Mineralogy & Petrology* vol.175, p.94, DOI:10.1007/s00410-020-01731-y .
432. **Terray L., Gauthier P.J.,** Breton V., Giammanco S., **Sigmarsson O.,** Salerno G., Caltabiano T., Falvard A. (2020). Radon Activity in Volcanic Gases of Mt. Etna by Passive Dosimetry. *Journal of Geophysical Research - Solid Earth* vol.125, p.e2019JB019149, DOI:10.1029/2019JB019149 .
431. **Berthod C.,** Michon L., Famin V., Welsch B., **Bachèlery P., Bascou J.** (2020). Layered gabbros and peridotites from Piton des Neiges volcano, La Réunion Island. *Journal of Volcanology and Geothermal Research* vol.405, p.107039, DOI:10.1016/j.jvolgeores.2020.107039 .
430. **Barnoud A., Cayol V.,** Lelièvre P.G., **Portal A., Labazuy P., Boivin P.,** Gailler L. (2021). Robust Bayesian Joint Inversion of Gravimetric and Muographic Data for the Density Imaging of the Puy de Dôme Volcano (France). *Frontiers in Earth Science* vol.8, p.575842, DOI:10.3389/feart.2020.575842 .
429. **Bouhifd A.,** Jephcoat A.P., Porcelli D., Kelley S.P., Marty B. (2020). Potential of Earth's core as a reservoir for noble gases: Case for helium and neon. *Geochemical Perspectives Letters* vol.15, p.5-18, DOI:10.7185/geochemlet.2028 .
428. **Bonnand P., Bruand E.,** Matzen A.K., Jerram M., **Schiavi F.,** Wood B.J., **Boyet M.,** Halliday A.N. (2020). Redox control on chromium isotope behaviour in silicate melts in contact with magnesiochromite. *Geochimica et Cosmochimica Acta* vol.288, p.282-300, DOI:10.1016/j.gca.2020.07.038 .

427. Edwards M.J., Pioli L., **Harris A.**, **Gurioli L.**, **Thivet S.** (2020). Magma fragmentation and particle size distributions in low intensity mafic explosions: the July/August 2015 Piton de la Fournaise eruption. *Nature Scientific Reports* vol.10, p.13953, DOI:10.1038/s41598-020-69976-y .
426. **Jessop D.**, **Moune S.**, Moretti R., Gibert D., Komorowski J.C., Robert V., Heap M.J., Bosson A., Bonifacie M., Deroussi S., Dessert C., Rosas-Carbajal M.R., Lemarchand A., Burtin A. (2021). A multi-decadal view of the heat and mass budget of a volcano in unrest : La Soufrière de Guadeloupe (French West Indies). *Bulletin of Volcanology* Vol.83, DOI: 10.1007/s00445-021-01439-2.
425. **Thivet S.**, **Gurioli L.**, Di Muro A., **Eychenne J.**, Besson P., Nedelec J.M. (2020). Variability of ash deposits at Piton de la Fournaise (La Reunion Island): insights into fragmentation processes at basaltic shield volcanoes. *Bulletin of Volcanology* vol.82, 63, DOI:0.1007/s00445-020-01398-0 .
424. Chowdhury W., Trail D., **Guitreau M.**, Bell E.A, Buettner J., Mojzsis S.J. (2020). Études géochimiques et texturales des supracrustals Eoarchean Ukaliq, Nord du Québec (Canada). *Lithos* vol.372-373, p.106573, DOI:10.1016/j.lithos.2020.105673 .
423. **Gueugneau V.**, **Kelfoun K.**, Charbonnier S., Germa A., Carazzo G. (2020). Dynamics and Impacts of the May 8th, 1902 Pyroclastic Current at Mount Pelée (Martinique): New Insights From Numerical Modeling. *Frontiers in Earth Science* DOI:10.3389/feart.2020.00279
422. **Manthilake G.**, **Schiavi F.**, **Zhao C.**, Mookherjee M., **Bouhifd A.**, Jouffret L. (2020). The Electrical Conductivity of Liebermannite: Implications for Water Transport Into the Earth's Lower Mantle. *Journal of Geophysical Research - Solid Earth* vol.125, p.e2020JB02009, DOI:10.1029/2020JB020094 .
421. **Clesi V.**, **Monteux J.**, **Qaddah B.**, Le Bars M., Wacheul J.B., **Bouhifd A.** (2020). Dynamics of core-mantle separation: Influence of viscosity contrast and metal/silicate partition coefficients on the chemical equilibrium. *Physics of the Earth and Planetary Interiors* vol.306, p.106547, DOI:10.1016/j.pepi.2020.106547 .
420. **Boudoire G.**, Liuzzo M., Cappuzzo S., Griuffrida G., Cosenza P., Derrien A., Falcone E.E. (2020). The SoilExp software: An open-source Graphical User Interface (GUI) for post-processing spatial and temporal soil surveys. *Computers and Geosciences* DOI:10.1016/j.cageo.2020.104553 .
419. **Martinek L.**, **Bolfan-Casanova N.** (2020). Water quantification in olivine and wadsleyite by Raman 2spectroscopy and study of errors and uncertainties. *American Mineralogist* DOI:10.2138/am-2020-7264
418. **Guitreau M.**, **Gannoun A.M.**, Deng Z., **Marin-Carbonne J.**, Chaussidon M., Moynier F. (2020). Silicon isotope measurement in zircon by laser ablation multiple

collector inductively coupled plasma mass spectrometry. *Journal of Analytical Atomic Spectrometry* vol.35, p.1597-1606, DOI:10.1039/D0JA00214C .

417. **Doucelance R., Bruand E., Matte S., Bosq C., Auclair D., Gannoun A.M.** (2020). In-situ determination of Nd isotope ratios in apatite by LA-MC-ICPMS:Challenges and limitations. *Chemical Geology* vol.550, p.119740, DOI:10.1016/j.chemgeo.2020.119740 .

416. **Biren J., Harris A., Tuffen H., Chevrel O., Gurioli L., Vlastélic I., Schiavi F., Benbakkar M., Fonquernie C., Calabro L.** (2020). Chemical, Textural and Thermal Analyses of Local Interactions Between Lava Flow and a Tree – Case Study From Pāhoa, Hawai'i. *Frontiers in Earth Science* DOI:10.3389/feart.2020.00233 .

415. **Moine B., Bolfan-Casanova N., Radu I.B., Ionov D., Costin G., Korsakov A.V., Golovin A.V., Oleinikov O.B., Deloule E., Cottin J.Y.** (2020). Molecular hydrogen in minerals as a clue to interpret δD variations in the mantle. *Nature Communications* vol.11, p.3604, DOI:10.1038/s41467-020-17442-8 .

414. **Boudoire G., Grassa F., Giuffrida G., Liuzzo M.** (2020). Recommendations and Protocols for the Use of the Isotope Ratio Infrared Spectrometer (Delta Ray) to Measure Stable Isotopes from CO₂: An Application to Volcanic Emissions at Mount Etna and Stromboli (Sicily, Italy). *Geofluids* p.ID 4598190.

413. **Boudoire G., Rizzo A.L., Arienzo I., Di Muro A.** (2020). Paroxysmal eruptions tracked by variations of helium isotopes: inferences from piton de la fournaise (La Réunion island). *Scientific Report* vol.10, p.9809, DOI:10.1038/s41598-020-66260-x .

412. **Navarrete W.F., Le Pennec J.L., Solano S., Liorzou C., Ruiz G.A.** (2020). A first reconstruction of the evolution of Cubilche Volcanic Complex, Imbabura Province, Ecuador. *Journal of Volcanology and Geothermal Research* vol.406, p.107023, DOI:10.1016/j.jvolgeores.2020.107023 .

411. **Sigmarsson O., Moune S., Gauthier P.J.** (2020). Fractional degassing of S, Cl and F from basalt magma in the Bárðarbunga rift zone, Iceland. *Bulletin of Volcanology* vol.82, p.54, DOI:10.1007/s00445-020-01391-7 .

410. **Venugopal S., Schiavi F., Moune S., Bolfan-Casanova N., Druitt T., Williams-Jones G.** (2020). Melt inclusion vapour bubbles: the hidden reservoir for major and volatile elements. *Scientific Report* vol.10, p.9034, DOI:10.1038/s41598-020-65226-3 .407. **Gaborieau M., Laubier M., Bolfan-Casanova N., McCammon C.A., Vantelon D., Chumakov A.I., Schiavi F., Neuville D.R., Venugopal S.** (2020). In situ X-ray diffraction of silicate liquids and glasses under dynamic and static compression to megabar pressures. *Chemical Geology* vol.547, p.119646, DOI:10.1016/j.chemgeo.2020.119646 .

409. Karátson D., Telbisz T., Gertisser R., Strasse T., Nomikou P., **Druitt T., Vereb V.**, Quidelleur X., Kósik S. (2020). Constraining the landscape of Late Bronze Age Santorini prior to the Minoan eruption: Insights from volcanological, geomorphological and archaeological findings. *Journal of Volcanology and Geothermal Research* vol.401, p.106911, DOI:10.1016/j.jvolgeores.2020.106911 .
408. **Terray L.**, Royer L., Sarramia D., Achard C., Bourdeau E., Chardon P., Claude A., Fuchet J., **Gauthier P.J.**, Grimbichler D., Mezhoud J., Ogereau F., Vandaële R., Breton V. (2020). From Sensor to Cloud: An IoT Network of Radon Outdoor Probes to Monitor Active Volcanoes. *Sensors* vol.20, p.2755, DOI:10.3390/s20102755 .
407. **Gaborieau M., Laubier M., Bolfan-Casanova N.**, McCammon C.A., Vantelon D., Chumakov A.I., **Schiavi F.**, Neuville D.R., Venugopal S. (2020). Determination of Fe³⁺/ΣFe of olivine-hosted melt inclusions using Mössbauer and XANES spectroscopy. *Chemical Geology* vol.547, p.119646, DOI:10.1016/j.chemgeo.2020.119646
406. **Qaddah B., Monteux J.**, Le Bars M. (2020). Thermal evolution of a metal drop falling in a less dense, more viscous fluid. *Physical Review Fluids* vol.5, p.053801, DOI:10.1103/PhysRevFluids.5.053801 .
405. **Bougouin A., Paris R., Roche O.** (2020). Impact of Fluidized Granular Flows into Water: Implications for Tsunamis Generated by Pyroclastic Flows. *Journal of Geophysical Research - Solid Earth* vol.125, p.e2019JB018954, DOI:10.1029/2019JB018954 .
404. **Antoine C., Bruand E., Guitreau M., Devidal J.L.** (2020). Understanding preservation of primary signatures in apatite by comparing matrix and zircon-hosted crystals from the Eoarchean Acasta Gneiss Complex (Canada). *Geochemistry, Geophysics, Geosystems* DOI:10.1029/2020GC008923 .
403. **Paquette J.L.**, Chazot G., **Gannoun A.M.** (2020). Origin of zircon megacrysts in alkaline lavas (French Massif Central): Petrology and in situ U-Pb-Hf isotopes. *Journal of Volcanology and Geothermal Research* vol.399, p.106907, DOI:10.1016/j.volgeores.2020.106907 .
402. Chupin L., Dubois T., Phan M., Roche O. (2021). Pressure-dependent threshold in a granular flow: Numerical modeling and experimental validation. *Journal of Non-newtonian Fluid Mechanics* vol.291, p.104529, - DOI:10.1016/j.jnnfm.2021.104529.
401. **Thivet S., Gurioli L.**, Di Muro A. (2020). Basaltic dyke eruptions at Piton de La Fournaise: characterization of the eruptive products with implications for reservoir conditions, conduit processes and eruptive dynamics. *Contribution to Mineralogy & Petrology* vol.175, p.26, DOI:10.1007/s00410-020-1664-5 .

400. **Monteux J., Andrault D., Guitreau M.,** Samuel H., Demouchy S. (2020). A mushy Earth's mantle for more than 500 Myr after the magma ocean solidification. *Geophysical Journal International* vol.221, p.1165-1181, 2, DOI:10.1093/gji/ggaa064
399. Bablon M., Quidelleur X., Siani G., **Samaniego P., Le Pennec J.L.,** Nouet J., Liorzou G., Santamaria S., Hidalgo S. (2020). Glass shard K-Ar dating of the Chalupas caldera major eruption: Main Pleistocene stratigraphic marker of the Ecuadorian volcanic arc. *Quaternary Geochronology* vol.57, p.101053, DOI:10.1016/j.quageo.2020.101053 .
398. **Faure P., Bouhifd A., Boyet M., Manthilake G., Clesi V., Devidal J.L.** (2020). Uranium and thorium partitioning in the bulk silicate Earth and the oxygen content of Earth's core. *Geochimica et Cosmochimica Acta* vol.275, p.83-98, DOI:10.1016/j.gca.2020.02.010 .
397. **Sainlot N., Vlastélic I., Nauret F., Moune S.,** Aguilera F. (2020). Sr–Pb isotopes signature of Lascar volcano (Chile): Insight into contamination of arc magmas ascending through a thick continental crust. *Journal of South American Earth Sciences* vol.101, p.102599, DOI:10.1016/j.jsames.2020.102599 .
396. **Sainlot N., Vlastélic I., Moune S., Rose-Koga E., Schiavi F., Valade S.,** Aguilera F. (2020). Uptake of gaseous thallium, tellurium, vanadium and molybdenum into anhydrous alum, Lascar volcano fumaroles, Chile. *Geochimica et Cosmochimica Acta* vol.275, p.64-82, 10.1016/j.gca.2020.02.009 (ed.).
395. Saitoh M., Nabhan S., Thomazo C., **Olivier N., Moyen J.F.,** Ueno Y., Marin-Carbone J. (2020). Multiple Sulfur Isotope Records of the 3.222 Ga Moodies Group, Barberton Greenstone Belt. *Geosciences* vol.10, p 145, DOI : 103390/geosciences10040145.
394. Rivera M., **Samaniego P.,** Vela J., **Le Pennec J.L.,** Guillou H., **Paquette J.L.,** Liorzou C. (2020). The eruptive chronology of the Yucamane-Calientes compound volcano: A potentially active edifice of the Central Andes (southern Peru). *Journal of Volcanology and Geothermal Research* vol.393, p.106787, DOI:10.1016/j.jvolgeores.2020.106787 .
393. **Kelfoun K., Harris A.,** Bontemps M., **Labazuy P.,** Chausse F., Ripepe M., **Donnadieu F.** (2020). A method for 3D reconstruction of volcanic bomb trajectories. *Bulletin of Volcanology* vol.82, p.34, 4, DOI:10.1007/s00445-020-1372-z .
392. **Freret-Lorgeril V.,** Gilchrist J., **Donnadieu F.,** Jellinek A.M., Delanoë J., Latchimy T., Vinson J.P., Caudoux C., Peyrin F., Hervier C., **Valade S.** (2020). Ash sedimentation by fingering and sediment thermals from wind-affected volcanic

plumes. *Earth and Planetary Science Letters* vol.534, p.116072, DOI:10.1016/j.epsl.2020.116072 .

391. **Thivet S., Gurioli L.,** Di Muro A., Derrien A., Ferrazzini V., **Gouhier M.,** Coppola D., Galle B., Arellano S. (2020). Evidences of Plug Pressurization Enhancing Magma Fragmentation During the September 2016 basaltic Eruption at Piton de la Fournaise (La Réunion Island, France). *Geochemistry, Geophysics, Geosystems* DOI:10.1029/2019GC008611

390. **Bonnand P., Doucelance R., Boyet M., Bachèlery P., Bosq C., Auclair D., Schiano P.** (2020). The influence of igneous processes on the chromium isotopic compositions of Ocean Island basalts. *Earth and Planetary Science Letters* vol.532, p.116028, DOI:10.1016/j.epsl.2019.116028 .

389. Rosa A.D., **Bouhifd A.,** Morard G., Briggs R., Garbarino G., Irifune T., Mathon O., Pascarelli S. (2020). Krypton storage capacity of the Earth's lower mantle. *Earth and Planetary Science Letters* vol.532, p.116032, DOI:10.1016/j.epsl.2019.116032 .

388. Bablon M., Quidelleur X., **Samaniego P., Le Pennec J.L.,** Santamaría S., Liorzou C., Hidalgo S., Eschbach B. (2020). Volcanic history reconstruction in northern Ecuador: insights for eruptive and erosion rates on the whole Ecuadorian arc. *Bulletin of Volcanology* vol.82, DOI:10.1007/s00445-019-1346-1 .

387. **Bruand E.,** Fowler M., Storey C., Laurent O., Antoine C., **Guitreau M.,** Heilimo E., Nebel O. (2020). Accessory mineral constraints on crustal evolution: elemental fingerprints for magma discrimination. *Geochemical Perspectives Letters* vol.13, p.7-12, DOI:10.7185/geochemlet.2006 .

386. **Rose-Koga E., Koga K., Devidal J.L.,** Shimizu N., Le Voyer M., Dalou C. (2020). High precision in-situ measurements of volatile F, S and Cl by electron microprobe, secondary ion mass spectrometry, and elastic recoil detection analysis: a comparative study with application to melt inclusions. *American Mineralogist* DOI:10.2138/am-2019-7221 .

385. **Delon R.,** Demouchy S., Marrocchi Y., **Bouhifd A.,** Gasc J., Cordier P., Koizumi S., Burnard P.G. (2020). Effect of deformation on helium storage and diffusion in polycrystalline forsterite. *Geochimica et Cosmochimica Acta* vol.273, p.226-243, DOI:10.1016/j.gca.2020.01.018 .

384. **Andrault D.,** Morard G., Garbarino G., Mezouar M., **Bouhifd A.,** Kawamoto T. (2020). Melting 2 behavior of SiO₂ up to 120 Gpa. *Physics and Chemistry of Minerals* vol.47, 10, DOI:10.1007/s00269-019-01077-3 .

383. Xie L., Yoneda A., Yamazaki D., **Manthilake G.,** Higo Y., Tange Y., Guignot N., King A., Scheel M., **Andrault D.** (2020). Formation of bridgmanite-enriched layer at the top lower-mantle during magma ocean solidification. *Nature*

Communications vol.11, p.548, DOI:10.1038/s41467-019-14071-8 .382. **Israel C., Boyet M., Doucelance R., Bonnand P., Frossard P., Auclair D.**, Bouvier A. (2020). Formation of the Ce-Nd mantle array: Crustal extraction vs. Recycling by subduction. *Earth and Planetary Science Letters* vol.530, p.115941, DOI:10.1016/j.epsl.2019.115941 .

382. **Israel C., Boyet M., Doucelance R., Bonnand P., Frossard P., Auclair D.**, Bouvier A. (2020). Formation of the Ce-Nd mantle array: Crustal extraction vs. Recycling by subduction. *Earth and Planetary Science Letters* vol.530, p.115941, DOI:10.1016/j.epsl.2019.115941 .

381. Manrique N., **Samaniego P., Médard E., Schiavi F.**, Mariño J., Liorzou C. (2020). Pre-eruptive magmatic processes associated with the historical (218± 14 aBP) explosive eruption of Tutupaca volcano (southern Peru). *Bulletin of Volcanology* vol.82, p.6, DOI:10.1007/s00445-019-1335-4 .

380. Pas publié

379. Larrue S., **Paris R.**, Etienne S. (2020). The use of vascular plant densities to estimate the age of undated lava flows in semi-arid areas of Fogo Island (Cape Verde, Atlantic Ocean). *Journal of Arid Environments* vol.173, p.104042, DOI:10.1016/j.jaridenv.2019.104042 .

378. Dessimoulie L., **Delacour A., Guillaume D., Chevet J., Cottin J.Y.** (2020). Major and trace elements exchanges during fluid-rock interaction at ultraslow-spreading oceanic lithosphere: Example of the South West Indian Ridge (SWIR). *Lithos*, vol. 352-353, p 105233, DOI: 10.1016/j.lithos.2019.105233.

377. **Prival J.M., Thouret J.C.**, Japura S., **Gurioli L.**, Bonadonna C., Mariño J., Cueva K. (2020). New insights into eruption source parameters of the 1600 CE Huaynaputina Plinian eruption, Peru. *Bulletin of Volcanology* vol.82, 7, DOI:10.1007/s00445-019-1340-7

376. **Guitreau M., Boyet M., Paquette J.L., Gannoun A.M., Konc Z., Benbakkar M., Suchorski K., Hénot J.M.** (2019). Hadean protocrust reworking at the origin of the Archean Napier Complex (Antarctica). *Geochemical Perspectives Letters* vol.12, p.7-11, DOI:10.7185/geochemlet.1927 .

375. Smittarello D., **Cayol V.**, Pinel V., **Froger J.L.**, Peltier A., **Dumont Q.** (2019). Combining InSAR and GNSS to Track Magma Transport at Basaltic Volcanoes. *Remote Sensing* vol.11, p.2236, DOI:10.3390/rs11192236 .

373. **Pin C., Gannoun A.M.** (2019). Miniaturized, rapid separation of neodymium from ultramafic and chondritic samples prior to high precision measurements of $^{142}\text{Nd}/^{143}\text{Nd}$ isotoperatios by TIMS. *Journal of Analytical Atomic Spectrometry* vol.34, p.2136, DOI:10.1039/c9ja00272c .

372. **Thouret J.C.**, Antoine S., Magill C., Ollier C. (2019). Lahars and debris flows: Characteristics and impacts. *Earth Sciences Reviews* vol.201, p.103003, DOI:10.1016/j.earscirev.2019.103003 .
371. **Mannini S., Harris A., Jessop D., Chevrel O.**, Ramsey M.S. (2019). Combining ground- and ASTER-based thermal measurements to constrain fumarole field heat budgets: The case of Vulcano Fossa 2003800-2019. *Geophysical Research Letters* vol.46, p.1, DOI:10.1029/2019GL084013 .
369. **Frossard P., Boyet M., Bouvier A., Hammouda T., Monteux J.** (2019). Evidence for anorthositic crust formed on an inner solar system planetesimal. *Geochemical Perspectives Letters* vol.11, p.28-32, DOI:10.7185/geochemlet.1921
368. **Paris R.** (2020). Chapter 17 – X-ray tomography applied to tsunami deposits. *Geological Records of Tsunamis and other Extreme Waves*, p 365-380, DOI : 10.1016/B978-0-12-815686-5.00017-1.
367. **Paris R.** (2020). Chapter 4 - Mega-tsunami deposits related to ocean island flank collapses and asteroid impacts. *Geological Records of Tsunamis and other Extreme Waves*.
366. **Manthilake G.**, Chantel J., **Monteux J., Andraut D., Bouhifd A., Bolfan-Casanova N.**, Boulard E., Guignot N., King A., Itie J.P. (2019). Thermal Conductivity of FeS and Its Implications for Mercury's Long-Sustaining Magnetic Field. *Journal of Geophysical Research - Planets* vol.124, DOI:10.1029/2019JE005979 .
365. **Roche O.**, Carazzo G. (2019). The contribution of experimental volcanology to the study of the physics of eruptive processes, and related scaling issues: A review. *Journal of Volcanology and Geothermal Research* vol.384, p.103-150, DOI:10.1016/j.jvolgeores.2019.07.011 .
364. **Ingrao N., Hammouda T., Boyet M., Gaborieau M., Moine B., Vlastélic I., Bouhifd A., Devidal J.L.**, Mathon O., Testemale D., Hazemann J.L., Proux O. (2019). Rare earth element partitioning between sulphides and melt: Evidence for Yb²⁺ and Sm²⁺ in EH chondrites. *Geochimica et Cosmochimica Acta* vol.265, p.182-197, DOI:10.1016/j.gca.2019.08.036 .
363. **Freitas D., Manthilake G.** (2019). Electrical conductivity of hydrous silicate melts: Implications for the bottom-up hydration of Earth's upper mantle. *Earth and Planetary Science Letters* vol.523, p.115712, DOI:10.1016/j.epsl.2019.115712 .
362. **Ancellin M. A., Vlastélic I., Samaniego P., Nauret F., Gannoun A.M.**, Hidalgo S. (2019). Up to 1% Pb isotope disequilibrium between minerals hosted in dacites from the Guagua Pichincha volcano, Ecuador: Implication for tracing the source and crustal history of continental arc magmas. *Chemical Geology* vol.525, p.177-189, DOI:10.1016/j.chemgeo.2019.07.016 .

361. Barrat J.A., **Bachèlery P.** (2019). La Réunion Island dunites as analogs of the Martian chassignites: Tracking trapped melts with incompatible trace elements. *Lithos* vol.344-345, p.452-463, DOI:10.1016/j.lithos.2019.07.009 .
360. **Gouhier M., Paris R.** (2019). SO₂ and tephra emissions during the December 22, 2018 Anak Krakatau flank-collapse eruption. *Volcanica* vol.2, p.91-103, 2, DOI:10.30909/vol.02.02.91103 .
359. **Laumonier M., Laporte D., Faure F., Provost A., Schiano P., Ito K.** (2019). An experimental study of dissolution and precipitation of forsterite in a thermal gradient: implications for cellular growth of olivine phenocrysts in basalt and melt inclusion formation. *Contribution to Mineralogy & Petrology* vol.174, p.94, DOI:10.1007/s00410-019-1627-x .
357. Gardés E., **Laumonier M.,** Massuyeau M., Gaillard F. (2020). Unravelling partial melt distribution in the oceanic low velocity zone. *Earth and Planetary Science Letters* vol.540, p.116242, DOI:10.1016/j.epsl.2020.116242 .
356. Bromley G.R.M., **Thouret J.C.,** Schimmelpfennig I., Mariño J., Valdivia D., Rademaker K., del Pilar Vivanco Lopez S., ASTER Team, Aumaître G., Bourlès D., Keddadouche K. (2019). In situ cosmogenic ³He and ³⁶Cl and radiocarbon dating of volcanic deposits refine the Pleistocene and Holocene eruption chronology of SW Peru. *Bulletin of Volcanology* vol.81, 64, DOI:10.1007/s00445-019-1325-6 .
355. Dalou C., Füre E., Deligny C., Piani L., Caumon M.C., **Laumonier M.,** Boulliong J., Edén M. (2019). Redox control on nitrogen isotope fractionation during planetary core formation. *Proceedings of the National Academy of Sciences* DOI:10.1073/pnas.1820719116 .
354. **Nauret F., Famin V., Vlastélic I., Gannoun A.M.** (2019). A trace of recycled continental crust in the Réunion hotspot. *Chemical Geology* vol.524, p.67-76, DOI:10.1016/j.chemgeo.2019.06.009 .
353. Deng Z., Chaussidon M., **Guitreau M.,** Puchtel S., Dauphas N., Moynier F. (2019). An oceanic subduction origin for Archaean granitoids revealed by silicon isotopes. *Nature Geoscience* DOI:10.1038/s41561-019-0407-6 .
352. **Weit A., Roche O.,** Dubois T., Manga M. (2019). Maximum Solid Phase Concentration in Geophysical Turbulent Gas-Particle Flows: Insights From Laboratory Experiments. *Geophysical Research Letters* vol.46, p.6388-6396, DOI:10.1029/2019GL082658 .
351. Breard E.C.P., Dufek J., **Roche O.** (2019). Continuum Modeling of Pressure-Balanced and Fluidized Granular Flows in 2-D: Comparison With Glass Bead Experiments and Implications for Concentrated Pyroclastic Density Currents.

Journal of Geophysical Research - Solid Earth vol.124, p.5557-5583, DOI:10.1029/2018JB016874 .

350. **Monteux J.**, Arkani-Hamed J. (2019). Shock wave propagation in layered planetary interiors: Revisited. *Icarus* vol.331, p.238-256, DOI:10.1016/j.icarus.2019.05.016 .

349. **Chevrel O.**, Pinkerton H., **Harris A.** (2019). Measuring the viscosity of lava in the field: A review. *Earth Sciences Reviews* vol.196, DOI:10.1016/j.earscirev.2019.04.024 .

348. **Boyet M.**, **Doucelance R.**, **Israel C.**, **Bonnand P.**, **Auclair D.**, **Suchorski K.**, **Bosq C.** (2019). New Constraints on the Origin of the EM-1 Component Revealed by the Measurement of the La-Ce Isotope Systematics in Gough Island Lavas. *Geochemistry, Geophysics, Geosystems* vol.20, DOI:10.1029/2019GC008228 .

347. **Paris R.**, Ulvrova M., Selva J., Brizuela B., Costa A., Grezio A., Lorito S., Tonini R. (2019). Probabilistic hazard analysis for tsunamis generated by subaqueous volcanic explosions in the Campi Flegrei caldera, Italy. *Journal of Volcanology and Geothermal Research* vol.379, p.106-116, DOI:10.1016/j.jvolgeores.2019.05.010 .

346. **Gailler L.**, Kauahikaua J., **Lénat J.F.**, Revil A., Gresse M., Ahmed A.S., **Cluzel N.**, **Manthilake G.**, **Gurioli L.**, Johnson T., Finizola A., Delcher E. (2019). 3D electrical conductivity imaging of Halema'uma'u lava lake (Kīlauea volcano). *Journal of Volcanology and Geothermal Research* vol.381, p.185-192, DOI:10.1016/j.volgeores.2019.06.001 .

345. **Druitt T.**, McCoy F.W., Vougioukalakis E. (2019). The Late Bronze Age Eruption of Santorini Volcano and Its Impact on the Ancient Mediterranean World. *Elements* vol.15, p.185-190, DOI:10.2138/gselements.15.3.185 .

344. **Druitt T.**, Pyle D.M., Mather T. A. (2019). Santorini Volcano and its Plumbing System. *Elements* vol.15, p.177-184, DOI:10.2138/gselements.15.3.177 .

343. Vougioukalakis G.E., Satow C.G., **Druitt T.** (2019). Volcanism of the South Aegean Volcanic Arc. *Elements* vol.15, p.159-164, DOI:10.2138/gselements.15.3.159

342. **Guitreau M.**, Flahaut J. (2019). Record of low-temperature aqueous alteration of Martian zircon during the late Amazonian. *Nature Communications* vol.10, p.2457, DOI:10.1038/s41467-019-10382-y .

341. **Laumonier M.**, Karakas O., Bachmann O., Gaillard F., Lukács R., Seghedi L., **Menand T.**, Harangi S. (2019). Evidence for a persistent magma reservoir with large melt content beneath an apparently extinct volcano. *Earth and Planetary Science Letters* vol.521, p.79-90, DOI:10.1016/j.epsl.2019.06.004 .

340. Pioli L., **Harris A.** (2019). Real-Time Geophysical Monitoring of Particle Size Distribution During Volcanic Explosions at Stromboli Volcano (Italy). *Frontiers in Earth Science* vol.7, p.52, DOI:10.3389/feart.2019.00052 .
339. **Deniel C., Boivin P.,** Miallier D., **Gerbe M.C.** (2019). Multi-stage growth of the trachytic lava dome of the Puy de Dôme (Chaîne des Puys, France). Field, geomorphological and petro-geochemical evidence. *Journal of Volcanology and Geothermal Research* DOI:10.1016/j.jvolgeores.2019.106749 .
338. **Qaddah B., Monteux J., Clesi V., Bouhifd A.,** Le Bars M. (2019). Dynamics and stability of an iron drop falling in a magma ocean. *Physics of the Earth and Planetary Interiors* vol.289, p.75-89, DOI:10.1016/j.pepi.2019.02.006 .
337. Pansino S., Calder E.S., **Menand T.** (2019). Experimental analysis of bubble-driven magma motion in the conduit, for persistently active, open-vent volcanoes. *Bulletin of Volcanology* vol.81, p.75, DOI:10.1007/s00445-019-1339-0 .
336. **Gueugneau V., Kelfoun K., Druitt T.** (2019). Investigation of surge-derived pyroclastic flow formation by numerical modelling of the 25 June 1997 dome collapse at Soufrière Hills Volcano, Montserrat. *Bulletin of Volcanology* vol.81, p.25, DOI:10.1007/s00445-019-1284-y .
335. **Bruand E.,** Storey C., Fowler M., Heilimo E., EIMF (2019). Oxygen isotopes in titanite and apatite, and their potential for crustal evolution research. *Geochimica et Cosmochimica Acta* vol.255, p.144-152, DOI:10.1016/j.gca.2019.04.002 .
334. **Radu I.B., Harris C., Moine B.,** Costin G., **Cottin J.Y.** (2019). Subduction relics in the subcontinental lithospheric mantle evidence from variation in the $\delta^{18}\text{O}$ value of eclogite xenoliths from the Kaapvaal craton. *Contribution to Mineralogy & Petrology* vol.174, p.19, DOI:10.1007/s00410-019-1552-z .
333. **Bouvier A.,** Manzini M., **Rose-Koga E.,** Nichols A.R.L. (2019). Tracing of Cl input into the sub-arc mantle through the combined analysis of B, O and Cl isotopes in melt inclusions. *Earth and Planetary Science Letters* vol.507, p.30-39, DOI:10.1016/j.epsl.2018.11.036 .
332. **Paquette J.L., Médard E., Francomme J., Bachèlery P., Hénot J.M.** (2019). LA-ICP-MS U/Pb zircon timescale constraints of the Pleistocene latest magmatic activity in the Sancy stratovolcano (French Massif Central). *Journal of Volcanology and Geothermal Research* vol.374, p.52-61, DOI:10.1016/j.jvolgeores.2019.02.015 .
331. **Freret-Lorgeril V., Donnadiou F., Eychenne J., Soriaux C.,** Latchimy T. (2019). In situ terminal settling velocity measurements at Stromboli volcano: Input from physical characterization of ash. *Journal of Volcanology and Geothermal Research* vol.374, p.62-79, DOI:10.1016/j.jvolgeores.2019.02.005 .

330. Soria-Hoyo C., Valverde J.M., **Roche O.** (2019). A laboratory-scale study on the role of mechanical vibrations in pore pressure generation in pyroclastic materials: implications for pyroclastic flows. *Bulletin of Volcanology* vol.81, p.12, DOI:10.1007/s00445-019-1271-3 .
329. Chalayer R., **Dubois T.** (2019). A First-Order Bi-Projection Scheme For Incompressible Two-Phase Bingham Flows *Advances in Mathematical Sciences and Applications* vol.28, p.155-169.
- 328bis. Smittarello D., **Cayol V.**, Pinel V., Peltier A., **Froger J.L.**, Ferrazzini V. (2019). Magma propagation at Piton de la Fournaise from joint inversion of InSAR and GNSS. *Journal of Geophysical Research - Solid Earth*, 124, DOI:10.1029/2018JB016856.
328. **Paris R.**, Ulvrova M. (2019). Tsunamis generated by subaqueous volcanic explosions in Taal Caldera Lake, Philippines. *Bulletin of Volcanology* vol.81, p.14, DOI:10.1007/s00445-019-1272-2 .
327. **Bonnand P.**, **Israel C.**, **Boyet M.**, **Doucelance R.**, **Auclair D.** (2020). Radiogenic and stable Ceisotope measurements by 1 thermal ionisation mass spectrometry. *Journal of Analytical AtomicSpectrometry*, Royal Society of Chemistry, 2019, 34 (3), pp.504-516. DOI:10.1039/c8ja00362a.
326. **Freitas D.**, **Manthilake G.**, Chantel J., **Bouhifd A.**, **Andrault D.** (2019). Simultaneous measurements of electrical conductivity and seismic wave velocity of partially molten geological materials: effect of evolving melt texture. *Physics and Chemistry of Minerals* 46, pages535–551(2019) DOI:10.1007/s00269-019-01021-5 .
325. Gaillard F., Sator N., Gardés E., Guillot B., Massuyeau M., Sifré D., **Hammouda T.**, Richard G. (2020). TheLink between the Physical and Chemical Properties of Carbon-Bearing Melts and Their Applicationfor Geophysical Imaging of Earth's Mantle. Beth N. Orcutt; Isabelle Daniel; Rajdeep Dasgupta.*Deep Carbon: Past to Present*, Cambridge University Press, pp.163-187, 2019, 9781108477499.
324. **Paris R.**, **Falvard S.**, Chagué C., Goff J., Etienne S., Doumalin P. (2019). Sedimentary fabric characterized by X-ray tomography: A case-study from tsunami deposits on the Marquesas Islands, French Polynesia. *Sedimentology* DOI:10.1111/sed.12582 .
323. Bablon M., Quidelleur X., **Samaniego P.**, **Le Pennec J.L.**, Audin L., Jomard H., Blaize S., Liorzou C., **Hidalgo S.**, Alvarado A. (2019). Interactions between volcanism and geodynamics in the southern termination of the Ecuadorian arc. *Tectonophysics* vol.751, p.54-72, DOI:10.1016/j.tecto.2018.12.010 .

322. Lelièvre P.G., **Barnoud A.**, Niess V., Cârloganu C., **Cayol V.**, Farquharson C.G. (2019). Joint inversion methods with relative density offset correction for muon tomography and gravity data, with application to volcano imaging. *Geophysical Journal International* vol.218, p.1685-1701, DOI:10.1093/gji/ggz251 .
321. **Barnoud A.**, **Cayol V.**, Niess V., Cârloganu C., Lelièvre P., **Labazuy P.**, **Le Menedeu E.** (2019). Bayesian joint muographic and gravimetric inversion applied to volcanoes. *Geophysical Journal International* vol.218, p.2179-2194, DOI:10.1093/gji/ggz300 .
320. **Pin C.**, **Gannoun A.M.** (2019). A triple tandem columns extraction chromatography method for isolation of highly purified neodymium prior to $^{143}\text{Nd}/^{144}\text{Nd}$ and $^{142}\text{Nd}/^{144}\text{Nd}$ isotope ratios determinations. *Journal of Analytical Atomic Spectrometry* vol.34, p.310, DOI:10.1039/c8ja00360b
319. Reinhard A.A., Jackson M.G., Koornneef J.M., **Rose-Koga E.**, Blusztajn J., Konter J.G., **Koga K.**, Wallace P.J., Harvey J. (2018). Sr and Nd isotopic compositions of individual olivine-hosted melt inclusions from Hawai'i and Samoa: Implications for the origin of isotopic heterogeneity in melt inclusions from OIB lavas. *Chemical Geology* vol.495, p.36-49, doi:10.1016/j.chemgeo.2018.07.034.
318. **Chedeville C.**, **Roche O.** (2018). Autofluidization of collapsing bed of fine particles: Implications for the emplacement of pyroclastic flows. *Journal of Volcanology and Geothermal Research* vol.368, p.91-99, DOI:10.1016/j.jvolgeores.2018.11.007 .
317. Jayananda M., **Guitreau M.**, Thomas T.T., **Martin H.**, Aadhiseshan K.R., Gireesh R.V., Peucat J.J., Satyanarayanan M. (2019). Geochronology and geochemistry of Meso- to Neoproterozoic magmatic epidote-bearing potassic granites, Western Dharwar Craton (Bellur-Nagamangala-Pandavpura corridor), Southern India: Implications for the successive stages of crustal reworking and cratonization. vol.489, in : DEY, S. & MOYEN, J.-F. (eds) *Archean Granitoids of India: Windows into Early Earth Tectonics*. Geological Society, London, Special Publications, DOI:10.1144/SP489-2018-125 .
316. **Chevrel O.**, **Harris A.**, Ajas A., Biren J., **Gurioli L.**, Calabrò L. (2019). Investigating physical and thermal interactions between lava and trees: the case of Kīlauea's July 1974 flow. *Bulletin of Volcanology* vol.81, p.6, DOI:10.1007/s00445-018-1263-8 .
315. Wu J., **Koga K.** (2018) Direct analyses of fluorine in aqueous fluids extracted from 1-GPa experiments. *Chemical Geology* vol. 502, p. 44-54, DOI : 10.1016/j.chemgeo.2018.10.011.
314. **Maurice J.**, **Bolfan-Casanova N.**, Padrón-Navarta J.A., **Manthilake G.**, **Hammouda T.**, **Hénot J.M.**, **Andrault D.** (2018). The stability of hydrous phases

beyond antigorite breakdown for a magnetite-bearing natural serpentinite between 6.5 and 11 Gpa. *Contribution to Mineralogy & Petrology* vol.173, p.86, DOI:10.1007/s00410-018-1507-9

313. **Bellot N., Boyet M., Doucelance R., Bonnand P.,** Savov I.P., Plank T., Elliott T. (2018). Origin of negative cerium anomalies in subduction-related volcanic samples: Constraints from Ce and Nd isotopes. *Chemical Geology* vol.500, p.46-63, DOI:10.1016/j.chemgeo.2018.09.006 .

312. **Vlastélic I., Di Muro A., Bachèlery P., Gurioli L., Auclair D., Gannoun A.M.** (2018). Control of source fertility on the eruptive activity of Piton de la Fournaise volcano, La Réunion. *Scientific Report* vol.8, p.14478, DOI:10.1038/s41598-018-32809-0 .

311. Sahyoun M., Freney E., Brito J., Duplissy J., **Gouhier M.,** Colomb A., Dupuy R., Bourianne T., Nowak J.B., Yan C., Petäjä T., Kulmala M., Schwarzenboeck A., Planche C., Sellegri K. (2019). Evidence of New Particle Formation Within Etna and Stromboli Volcanic Plumes and Its Parameterization From Airborne In Situ Measurements. *Journal of Geophysical Research: Atmospheres* vol.124, p.5650-5668, DOI:10.1029/2018JD028882 .

310. Soldati A., **Harris A., Gurioli L.,** Villeneuve N., Rhéty M., Gomez F., Whittington A. (2018). Textural, thermal, and topographic constraints on lava flow system structure: the December 2010 eruption of Piton de la Fournaise. *Bulletin of Volcanology* vol.80, p.74, DOI:10.1007/s00445-018-1246-9

309 Narvaez D.F., **Rose-Koga E., Samaniego P., Koga K.,** Hidalgo S. (2018). Constraining magma sources using primitive olivine-hosted melt inclusions from Puñalica and Sangay volcanoes (Ecuador). *Contribution to Mineralogy & Petrology* vol.173, p.80, DOI:10.1007/s00410-018-1508-8 .

308. **Portal A.,** Fargier Y., **Labazuy P., Lénat J.F., Boivin P.,** Miallier D. (2018). 3D electrical imaging of the inner structure of a complex lava dome, Puy de Dôme volcano (French Massif Central, France). *Journal of Volcanology and Geothermal Research* vol.373, p.97-107, DOI:10.1016/j.jvolgeores.2019.01.019.

307. **Gomez-Ulla A., Sigmarsson O.,** Huertas M.J., **Devidal J.L.,** Ancochea E. (2018). The historical basanite - alkali basalt - tholeiite suite at Lanzarote, Canary Islands: Carbonated melts of heterogeneous mantle source?. *Chemical Geology* vol.494, p.56-68, doi:10.1016/j.chemgeo.2018.07.015

306. **Nicollet C., Bosse V.,** Spalla M., **Schiavi F.** (2018). Eocene ultra high temperature (UHT) metamorphism in the Gruf complex (Central Alps): constraints by LA-ICPMS zircon and monazite dating in petrographic context. *Journal of the Geological Society* vol.175, p.774-787, DOI:10.1144/jgs2018-017

305. **Flaherty T., Druitt T.**, Tuffen H., Higgins M.D., Costa F., Cadoux A. (2018). Multiple timescale constraints for high-flux magma chamber assembly prior to the Late Bronze Age eruption of Santorini (Greece). *Contribution to Mineralogy & Petrology* vol.173, p.75, doi:10.1007/s00410-018-1490-1

304. **Andrault D.** (2018) Thermodynamical constraints on the crystallization of a deep magma-ocean on Earth. *Comptes Rendus Geoscience*, 10.1016/j.crte.2018.06.003.

303. **Bolfan-Casanova N., Schiavi F.**, Novella D., Bureau H., Raepsaet C., Khodja H., Demouchy S. (2018). Examination of Water Quantification and Incorporation in Transition Zone Minerals: Wadsleyite, Ringwoodite and Phase D Using ERDA (Elastic Recoil Detection Analysis). *Frontiers in Earth Science* vol.6, doi:10.3389/feart.2018.00075

302. Chalayer R., **L. Chupin** , **T. Dubois** (2018) A bi-projection method for incompressible

Bing

ham flows with variable density, viscosity and yield stress, *SIAM J. Numer. Anal.*, 56(4), 2461–2483

301. **Rosenthal A.**, Yaxley G.M., Crichton W.A., Kovács I.J., Spandler C., Hermann J., Sándorné J.K., **Rose-Koga E.**, Pelletier A.A. (2018). Phase relations and melting of nominally 'dry' residual eclogites with variable CaO/Na₂O from 3 to 5 GPa and 1250 to 1500 °C, implications for refertilisation of upwelling heterogeneous mantle. *Lithos* vol.314-315, p.506-519, DOI:10.1016/j.lithos.2018.05.025

300. Bablon M., Quidelleur X., **Samaniego P., Le Pennec J.L.**, Lahitte P., Liorzou C., Bustillos J.E., Hidalgo S. (2018). Eruptive chronology of Tungurahua volcano (Ecuador) revisited based on new K-Ar ages and geomorphological reconstructions. *Journal of Volcanology and Geothermal Research* vol.357, p.378-398, DOI:10.1016/j.jvolgeores.2018.05.007.

299. Enroth J., Kangasluoma, J., Korhonen F., Hering S., **Picard D.**, Petäjä T. (2018). On the time response determination of condensation particle counters. *Aerosol Science and Technology* vol. 52, Issue 7, p.778-787, DOI 10.1080/02786826.2018.1460458

298. **Weit A., Roche O., Dubois T.**, Manga M. (2018). Experimental Measurement of the Solid Particle Concentration in Geophysical Turbulent Gas-Particle Mixtures. *Journal of Geophysical Research - Solid Earth* vol.123, p.3747-3761, DOI:10.1029/2018JB015530

297. Niess V., **Barnoud A.**, Cârloganu C., Le Ménédeu E. (2018). Backward Monte-Carlo applied to muon transport. *Computer Physics Communications*, vo.229, 54-67, doi:10.1016/j.cpc.2018.04.001.
296. **Chevrel O.**, **Harris A.**, James M.R., Calabrò L., Gurioli L., Pinkerton H. (2018). The viscosity of pāhoehoe lava: in situ syn-eruptive measurements from Kilauea, Hawaii. *Earth and Planetary Science Letters*.
295. Karátson D., Gertisser R., Telbisz T., Vereb V., Quidelleur X., **Druitt T.**, Nomikou P., Kósik S. (2018). Towards reconstruction of the lost Late Bronze Age intra-caldera island of Santorini, Greece. *Scientific Report* vol.8, p.7026, doi:10.1038/s41598-018-25301-2
294. Merlhiot G., Mermillod M., Le Pennec J.L., Mondillon L. (2018). Introduction and validation of the Natural Disasters Picture System (NDPS). *Plos One* vol.13, p.e0201942, 8, DOI:10.1371/journal.pone.0201942 .Introduction and validation of the Natural Disasters Picture System (NDPS)
293. Gailler L., Marti A., Lénat J.F. (2018). Complex structure of Piton de la Fournaise and its underlying lithosphere revealed by magnetotelluric 3D inversion. *Journal of Volcanology and Geothermal Research* vol.356, p.200-210, DOI:10.1016/j.jvolgeores.2018.03.006 .
292. Dalou C., Boulon J., **Koga K.**, Dalou R., Dennen R. (2018). DOUBLE FIT: Optimization procedure applied to lattice strain model. *Computers and Geosciences* doi:10.1016/j.cageo.2018.04.013
291. **LeCorvec N.**, McGovern P.J. (2018). The effect of ocean loading on the growth of basaltic ocean island volcanoes and their magmatic plumbing system. *Frontiers in Earth Science* doi:10.3389/feart.2018.00119
290. **LeCorvec N.**, Muirhead J.D., White J.D.L. (2018). Shallow magma diversions during explosive diatreme-forming eruptions. *Nature Communications* vol.9, p.1459, doi:10.1038/s41467-018-03865-x
289. Smekens J.F., **Gouhier M.** (2018). Observation of SO₂ degassing at Stromboli volcano using a hyperspectral thermal infrared imager. *Journal of Volcanology and Geothermal Research* vol.356, p.75-89, doi:10.1016/j.jvolgeores.2018.02.018
288. **Gurioli L.**, Di Muro A., **Vlastélic I.**, **Moune S.**, **Thivet S.**, Valer M., Villeneuve N., Boudoire G., Peltier I., **Bachèlery P.**, Ferrazzini V., Métrich N., Benbakkar M., Cluzel N., Constantin C., Devidal J.L., Fonquernie C., Hénot J.M. (2018) Integrating field, textural and geochemical monitoring to track eruption triggers and

dynamics: a case-study from Piton de la Fournaise Solid Earth, *Solide Earth*, DOI: 10.5194/se-9-431-2018

287. **Koga K., Rose-Koga E.** (2018). Fluorine in the Earth and the solar system, where does it come from and can it be found? - Le fluor dans la Terre et le système solaire, d'où vient-il et où peut-on le trouver ?. *Comptes Rendus de l'Académie des Sciences* doi:10.1016/j.crci.2018.02.002

286. **Boyet M., Bouvier A., Frossard P., Hammouda T., Garçon M., Gannoun A.M.** (2018). Enstatite chondrites EL3 as building blocks for the Earth: The debate over the ^{146}Sm – ^{142}Nd systematics. *Earth and Planetary Science Letters* vol.488, p.68-78, doi:10.1016/j.epsl.2018.02.004

285. **Clesi V., Bouhifd A., Bolfan-Casanova N., Manthilake G., Schiavi F., Raepsaet C., Bureau H., Khodja H., Andrault D.** (2018). Low hydrogen contents in the cores of terrestrial planets. *Science Advances* vol.4, p.e170187

284. **Marin-Carbonne J.** , Remusat L., Sforza M.C., Thomazo C., Cartigny P., Philippot P. (2018) Sulfur isotope's signal of nanopyrites enclosed in 2.7 Ga stromatolitic organic remains reveal microbial sulfate reduction. *Gebiology*, vol. 16, pp 121-138. DOI 10.1111/gbi.12275

283. **Monteux J., Golabek G.J., Rubie D.C., Tobie G., Young E.D.** (2018). Water and the interior structure of terrestrial planets and icy bodies. *Space Science Reviews* DOI:10.1007/s11214-018-0473-x .

282. **Terray L., Gauthier P.J., Salerno G., Caltabiano T., La Spina A., Sellitto P., Briole P.** (2018). A New Degassing Model to Infer Magma Dynamics from Radioactive Disequilibria in Volcanic Plumes. *Geosciences* vol.8, p.27, DOI:10.3390/geosciences8010027

281. **Guitreau M., Mora N., Paquette J.L.** (2018). Crystallization and Disturbance Histories of Single Zircon Crystals From Hadean-Eoarchean Acasta Gneisses Examined by LA-ICP-MS U-Pb Traverses. *Geochemistry, Geophysics, Geosystems* vol.19, doi:10.1002/2017GC007310.

280. **Andrault D., Muñoz M., Pesce G., Cerantola V., Chumakov A., Kantor I., Pascarelli S., Rüffer R., Hennet L.** (2018). Large oxygen excess in the primitive mantle could be the source of the Great Oxygenation Event. *Geochemical Perspectives Letters* vol.6, p.5-10, DOI:10.7185/. 2018) geochemlet.1801

279. **Andrault D., Pesce G., Manthilake G., Monteurx J., Bolfan-Casanova N., Chantel J., Novella D., Guignot N., King A., Itié J.P., Hennet L.** (2018). Deep and persistent melt layer in the Archean mantle. *Nature Geoscience*, 11, 139-143, DOI : 10.1038/s41561-017-0053-9

278. Valderrama P., **Roche O.**, Samaniego P., **VanWykDeVriesB.**, Araujo G. (2018). Granular fingering as a mechanism for ridge formation in debris avalanche deposits: Laboratory experiments and implications for Tutupaca volcano, Peru. *Journal of Volcanology and Geothermal Research* vol.349, p.409-418, doi:10.1016/j.jvolgeores.2017.12.004
277. Mullen E., **PaquetteJ.L.**, Tepper J.H., McCallum I.S. (2018). Temporal and spatial evolution of Northern Cascade Arc magmatism revealed by LA–ICP–MS U–Pb zircon dating. *Canadian Journal of Earth Sciences* vol.55, p.443-462, doi:10.1139/cjes-2017-0167
276. Tennakoon S., Peng Y., Mookherjee M., Speziale S., **ManthilakeG.**, Besara T., Andreu L., Rivera F. (2018). Single crystal elasticity of natural topaz at high-temperatures. *Scientific Report* vol.8, p.1372, doi:10.1038/s41598-017-17856-3
275. Garçon M., **BoyetM.**, Carlson R.W., Horan M.F., **AuclairD.**, Mock T.D. (2018). Factors influencing the precision and accuracy of Nd isotope measurements by thermal ionization mass spectrometry. *Chemical Geology* vol.476, p.493-514, doi:10.1016/j.chemgeo.2017.12.003
274. **FreitasD.**, **ManthilakeG.**, **SchiaviF.**, Chantel J., **Bolfan-CasanovaN.**, **BouhifdA.**, **AndraultD.** (2017). Experimental evidence supporting a global melt layer at the base of the Earth 's upper mantle. *Nature Communications* vol.8, p.2186, doi:10.1038/s41467-017-02275-9
273. **BaniP.**, Tamburello G., **Rose-KogaE.**, Liuzzo M., Aiuppa A., **CluzelN.**, Amat I., Syahbana D.K., Gunawan H., Bitetto M. (2018). Dukono, the predominant source of volcanic degassing in Indonesia, sustained by a depleted Indian-MORB. *Bulletin of Volcanology* vol.80, 5, doi:10.1007/s00445-017-1178-92
272. **NauretF.**, **SamaniegoP.**, **Ancellin M. A.**, Tournigand P., **LePennecJ.L.**, **Vlastélic I.**, **Gannoun A.M.**, Hidalgo S., **Schiano P.** (2018). The genetic relationship between andesites and dacites at Tungurahua volcano, Ecuador. *Journal of Volcanology and Geothermal Research* vol.349, p.283-297, doi:10.1016/j.jvolgeores.2017.11.012
271. **Eychenne J.**, Rust A.C., Cashman K.V., Wobrock W. (2017). Distal Enhanced Sedimentation From Volcanic Plumes: Insights From the Secondary Mass Maxima in the 1992 Mount Spurr Fallout Deposits. *Journal of Geophysical Research - Solid Earth* vol.122, p.7679-7697, 10, doi:10.1002/2017JB014412
270. **ChevrelO.**, Labroquère J., **HarrisA.**, Rowland S.K. (2018). PyFLOWGO: An open-source platform for simulation of channelized lava thermo-rheological

properties. *Computers and Geosciences* vol.111, p.167-180, doi:10.1016/j.cageo.2017.11.009

269. Merlhiot G., Mermillod M., **LePennecJ.L.**, Hidalgo S., Mondillon L. (2018). Reducing uncertainty to promote appropriate decisions when facing hazardous phenomena at an active volcano. *Journal of Applied Social Psychology* doi:10.1111/jasp.12507

268. Merlhiot G., Mermillod M., **LePennecJ.L.**, Dutheil F., Mondillon L. (2018). Influence of uncertainty on framed decisionmaking with moral dilemma. *Plos One* vol.13, p.e0197923, 5, doi:10.1371/journal.pone.0197923

267. **ParisR.**, Ramalho R.S., Madeira J., Ávila S., May S.M., Rixhon G., Engel M., Brückner H., Herzog M., Schukraft G., Perez-Torrado F.J., Rodriguez-Gonzalez A., Carracedo J.C., Giachetti T. (2017). Mega-tsunami conglomerates and flank collapses of ocean island volcanoes. *Marine Geology* vol.395, p.168-187, doi:10.1016/j.margeo.2017.10.004

266. **GuitreauM.**, Mukasa S.B., Loudin L., Krishnan S. (2017). New constraints on the early formation of the Western Dharwar Craton (India) from igneous zircon U-Pb and Lu-Hf isotopes. *Precambrian Research* vol.302, p.33-49, doi:10.1016/j.precamres.2017.09.016

265. Manzini M., Bouvier A.S., Baumgartner L.P., Müntener O., **Rose-KogaE.**, **SchianoP.**, Escrig S., Meibom A., Shimizu N. (2017). Weekly to monthly time scale of melt inclusion entrapment prior to eruption recorded by phosphorus distribution in olivine from mid-ocean ridges. *Geology* vol.45, p.1059-1062, 2,doi:10.1130/G39463.1

264. **SchiaviF.**, **Bolfan-CasanovaN.**, Withers A.C., **MédardE.**, **LaumonierM.**, **LaporteD.**, **FlahertyT.**, **Gomez-UllaA.** (2018). Water quantification in silicate glasses by Raman spectroscopy: Correcting for the effects of confocality, density and ferric iron. *Chemical Geology* vol.4, p.312-331, doi:10.1016/j.chemgeo.2018.02.036

263. Chalayer R., **Chupin, L.**, **Dubois T.** (2018). A bi-projection method for incompressible bingham flows with variable density, viscosity, and yield stress. *SIAM J. Numer. Anal.*, vol.56, n.4, pp. 2461-2483

262. **Valer M.**, **SchianoP.**, **BachèleryP.** (2017). Geochemical characteristics of the La Réunion mantle plume source inferred from olivine-hosted melt inclusions from the adventive cones of Piton de la Fournaise volcano (La Réunion Island). *Contribution to Mineralogy & Petrology* vol.172, p.74, doi:10.1007/s00410-017-1397-2

261. **Haddadi B., Sigmarsson O.**, Larse G. (2017). Magma storage beneath Grímsvötn volcano, Iceland, constrained by clinopyroxene-melt thermobarometry and volatiles in melt inclusions and groundmass glass. *Journal of Geophysical Research - Solid Earth* vol.122, doi:10.1002/2017JB01406726
260. Bombrun M., **Jessop D., Harris A.**, Barra V. (2018). An algorithm for the detection and characterisation of volcanic plumes using thermal camera imagery. *Journal of Volcanology and Geothermal Research* vol.352, p.26-37, doi:10.1016/j.jvolgeores.2018.01.006
259. **Jessop D.**, Hogg A.J., Gilbertson M.A., Schoof C. (2017). Steady and unsteady fluidised granular flows down slopes. *Journal of Fluid Mechanics* vol.827, p.67-120, doi:10.1017/jfm.2017.458
258. **Valer M., Bachèlery P., Schiano P.** (2017). The Petrogenesis of Plagioclase- ultraphyric Basalts from La Réunion Island. *Journal of Petrology* vol.58, p.675-698, 4, doi:10.1093/petrology/egx03
257. Simmons J.M., Cas R.A.F., **Druitt T.**, Carey R.J. (2017). The initiation and development of a caldera-forming Plinian eruption (172 ka Lower Pumice 2 eruption, Santorini, Greece). *Journal of Volcanology and Geothermal Research* vol.341, p.332-350, doi:10.1016/j.jvolgeores.2017.05.034
256. **Debret B., Bouilhol P.**, Pons M.L., Williams H. (2018). Carbonate Transfer during the Onset of Slab Devolatilization: New Insights from Fe and Zn Stable Isotopes. *Journal of Petrology* p.1-22, doi:10.1093/petrology/egy057
255. Couzinié S., Laurent O., Poujol M., Mintrone M., Chelle-Michou C., **Moyen J.F., Bouilhol P.**, Vezinet A., Marko L. (2017) Cadomian S-type granites as basement rocks of the Variscan belt (Massif Central, France): implications for the crustal evolution of the north Gondwana margin, *Lithos* vol.286-287, p. 16-34, DOI: 10.1016/j.lithos.2017.06.001
254. Freeburn R., **Bouilhol P.**, Maunder B., Magni V., Van Hunen J. (2017). Numerical models of the magmatic processes induced by slab breakoff. *Earth and Planetary Science Letters* vol.478, p.203-213, doi:10.1016/j.epsl.2017.09.008
253. Inglis E.C., Debret B., Burton K.W., Millet M.A., Pons M.L., Dale C.W., **Bouilhol P.**, Cooper M., Nowell G.M., McCoy-West A.J., Williams H.M. (2017). The behavior of iron and zinc stable isotopes accompanying the subduction of mafic oceanic crust: A case study from Western Alpine ophiolites. *Geochemistry, Geophysics, Geosystems* vol.18, doi:10.1002/2016GC006735

252. Magni V., Allen M.B., van Hunen J., **Bouilhol P.** (2017). Continental underplating after slab break-off. *Earth and Planetary Science Letters* vol.474, p.59-67, doi:10.1016/j.epsl.2017.06.017

251. **Falvard S., Paris R.**, Belousova M., Belousov A., Giachetti T., Cuven S. (2018). Scenario of the 1996 volcanic tsunamis in Karymskoye Lake, Kamchatka, inferred from X-ray tomography of heavy minerals in tsunami deposits. *Marine Geology* vol.396, p.160-170, doi:10.1016/j.margeo.2017.04.011

250. **Kelfoun K., Gueugneau V.**, Komorowski J.C., Aisyah N., Cholik N., **Merciecca C.** (2017). Simulation of block-and-ash flows and ash-cloud surges of the 2010 eruption of Merapi volcano with a two-layer model. *Journal of Geophysical Research - Solid Earth* vol.122, doi:10.1002/2017JB0139812

249. **Kelfoun K.** (2017). A two-layer depth-averaged model for both the dilute and the concentrated parts of pyroclastic currents. *Journal of Geophysical Research - Solid Earth* vol.122, doi:10.1002/2017JB014013

248. **Chen Y.**, Rémy Dominique, **Froger J. L.**, Peltier A., Villeneuve N., Darrozes J., Perfettini Hugo, Bonvalot Sylvain. (2017). Long-term ground displacement observations using InSAR and GNSS at Piton de la Fournaise volcano between 2009 and 2014. *Remote Sensing of Environment*, 194, 230-247, doi:10.1016/j.rse.2017.03.038

247. Simmons J.M., Carey R.J., Cas R.A.F., **Druitt T.** (2017). High magma decompression rates at the peak of a violent caldera-forming eruption (Lower Pumice 1 eruption, Santorini, Greece). *Bulletin of Volcanology* vol.79, p.42, doi:10.1007/s00445-017-1120-1.

246. Aline Peltier, **Jean-Luc Froger**, Nicolas Villeneuve, Thibault Catry. Assessing the reliability and consistency of InSAR and GNSS data for retrieving 3D-displacement rapid changes, the example of the 2015 Piton de la Fournaise eruptions. *Journal of Volcanology and Geothermal Research*, 2017, 344, pp.106 - 120. doi:10.1016/j.jvolgeores.2017.03.027

245. **Gailler L.**, Arcay D., Münch P., Martelet G., Thinon I., Lebrun J.F. (2017). Forearc structure in the Lesser Antilles inferred from depth to the Curie temperature and thermo-mechanical simulations. *Tectonophysics* vol.706-707, p.71-90, doi:10.1016/j.tecto.2017.03.014

244. **Rose-Koga E., Koga K.**, Moreira M., **Vlastélic I.**, Jackson M.G., Whitehouse M.J., Shimizu N., Habib N. (2017). Geochemical systematics of Pb isotopes,

fluorine, and sulfur in melt inclusions from São Miguel, Azores. *Chemical Geology* vol.458, p.22-37, doi:10.1016/j.chemgeo.2017.03.024

243. Ancellin M. A., **SamaniegoP.**, **VlastélicI.**, **NauretF.**, **GannounA.M.**, Hidalgo S. (2017). Across-arc versus along-arc Sr-Nd-Pb isotope variations in the Ecuadorian volcanic arc. *Geochemistry, Geophysics, Geosystems* vol.18, doi:10.1002/2016GC006679

242. **AndraultD.**, **Bolfan-CasanovaN.**, **BouhifdA.**, **Boujibar A.**, Garbarino G., **ManthilakeG.**, Mezouar M., **MonteuxJ.**, Parisiades P., Pesce G. (2017). Toward a coherent model for the melting behavior of the deep Earth's mantle. *Physics of the Earth and Planetary Interiors* vol.265, p.67-81, doi:10.1016/j.pepi.2017.02.009

241. **GueugneauV.**, **KelfounK.**, **RocheO.**, Chupin L. (2017). Effects of pore pressure in pyroclastic flows: Numerical simulation and experimental validation. *Geophysical Research Letters* vol.44, doi:10.1002/2017GL072591

240. **ParisR.**, Coello Bravo J.J., Martin Gonzalez M.E., **KelfounK.**, **NauretF.** (2017). Explosive eruption, flank collapse and megatsunami at Tenerife ca. 170 ka. *Nature Communications* vol.8, p.15246, doi:10.1038/ncomms15246

239. Lavigne F., **MorinJ.**, Mei E.T.W., Calder E.S., Usamah M., Nugroho U. (2017). Mapping Hazard Zones, Rapid Warning Communication and Understanding Communities: Primary Ways to Mitigate Pyroclastic Flow Hazard. p.1-13, *Advances in Volcanology*

238. **GaillerL.**, Kauahikaua J. (2017). Monitoring the cooling of the 1959 Kīlauea Iki lava lake using surface magnetic measurements. *Bulletin of Volcanology* vol.79, p.40, doi:10.1007/s00445-017-1119-7

237. Gailler, L., Kauahikaua, J. (2019). "Gravity signature of basaltic fill in Kīlauea caldera, Island of Hawai'i". *Geological Society of America* 538
DOI: 10.1130/SPE538

236. Colombier M., Wadsworth F.B., **GurioliL.**, Scheu B., Kueppers U., Di Muro A., Dingwell D.B. (2017). The evolution of pore connectivity in volcanic rocks. *Earth and Planetary Science Letters* vol.462, p.99-109, doi:10.1016/j.epsl.2017.01.011

235. Mead S.R., Magill C., Lemiale V., **ThouretJ.C.**, Prakash M. (2017). Examining the impact of lahars on buildings using numerical modelling. *Natural Hazard and Earth System Sciences* vol.17, p.703-719, doi:10.5194/nhess-17-703-2017

234. **Pin C.**, **Gannoun A.M.** (2017). Integrated Extraction Chromatographic Separation of the Lithophile Elements Involved in Long-Lived Radiogenic Isotope Systems (Rb–Sr, U–Th–Pb, Sm–Nd, La–Ce, and Lu–Hf). Useful in Geochemical

and Environmental Sciences. Analytical Chemistry vol.89, p.2411-2417, doi:10.1021/acs.analchem.6b04289

233. **Novella D., Dolejs D., Myhill R., Pamato M.G., ManthilakeG., Frost D.J.** (2017). Melting phase relations in the systems Mg₂SiO₄–H₂O and MgSiO₃–H₂O and the formation of hydrous melts in the upper mantle. *Geochimica et Cosmochimica Acta* vol.204, p.68-82, doi:[10.1016/j.gca.2016.12.042](https://doi.org/10.1016/j.gca.2016.12.042)
232. Colombier M., **GurioliL., DruittT.**, Shea T., **BoivinP.**, Miallier D., **CluzelN.** (2017). Textural evolution of magma during the 9.4-ka trachytic explosive eruption at Kilian Volcano, Chaîne des Puys, France. *Bulletin of Volcanology* vol.79, p.17, doi:10.1007/s00445-017-1099-7
231. **Bouhifd A., Clesi V., Boujibar A., Bolfan-Casanova N., Cartier C., HammoudaT., BoyetM., ManthilakeG., MonteuxJ., AndraultD.** (2017). Silicate melts during Earth's core formation. *Chemical Geology* vol.461, p.128 - 139, doi:10.1016/j.chemgeo.2016.12.035
230. Wasilewski B., Doucet L., **MoineB.**, Beunon H., Delpech G., Mattielli N., Debaille V., **DelacourA.**, Grégoire M., **Guillaume D., Cottin J.Y.** (2017). Ultra-refractory mantle within oceanic plateau: Petrology of the spinel harzburgites from Lac Michèle, Kerguelen Archipelago. *Lithos* vol.272-273, p.336-349, doi:10.1016/j.lithos.2016.12.010
229. **Fabbro G., DruittT.**, Costa F. (2018). Storage and Eruption of Silicic Magma across the Transition from Dominantly Effusive to Caldera-forming States at an Arc Volcano (Santorini, Greece). *Journal of Petrology* vol.58, p.2429-2464, 12, doi:10.1093/petrology/egy013
228. Juha Kangasluoma¹, Susanne Hering², **David Picard³**, Gregory Lewis², Joonas Enroth¹, Frans Korhonen¹, Markku Kulmala¹, Karine Sellegri³, Michel Attoui^{1,4}, and Tuukka Petäjä¹. (2017) Characterization of three new condensation particle counters for sub-3 nm particle detection during the Helsinki CPC workshop: the ADI versatile water CPC, TSI 3777 nano enhancer and boosted TSI 3010. *Atmos. Meas. Tech.*, 10, 2271-2281, doi: 10.5194/amt-10-2271-2017
227. Latutrie B., **HarrisA., MédardE., GurioliL.** (2017). Eruption and emplacement dynamics of a thick trachytic lava flow of the Sancy volcano (France). *Bulletin of Volcanology* vol.79, p.4, doi:10.1007/s00445-016-1084-6
226. **Gomez-UllaA., SigmarssonO.**, Gudfinnsson G.H. (2017). Trace element systematics of olivine from historical eruptions of Lanzarote, Canary Islands: constraints on mantle source and melting mode. *Chemical Geology* doi:10.1016/j.chemgeo.2016.11.021

225. Garçon M., Sauzéat L., Carlson R.W., Shirey S.B., Simon M., Balter V., **Boyet M.** (2017). Nitrile, Latex, Neoprene and Vinyl Gloves: A Primary Source of Contamination for Trace Element and Zn Isotopic Analyses in Geological and Biological Samples. *Geostandards and Geoanalytical Research* doi:10.1111/ggr.12161

224. **Fabrizio A., Bouhifd A., Andraut D., Bolfan-Casanova N., Manthilake G., Laporte D.** (2017). Argon behavior in basaltic melts in presence of a mixed H₂O-CO₂ fluid at upper mantle conditions. *Chemical Geology* vol.448, p.100-109, doi:10.1016/j.chemgeo.2016.11.014

223. Vincent Soustelle, **Geeth Manthilake**. Deformation of olivine-orthopyroxene aggregates at high pressure and temperature: Implications for the seismic properties of the asthenosphere. *Tectonophysics*, Elsevier, 2017, 694, pp.385 - 399. doi:10.1016/j.tecto.2016.11.020

222. Ioana-Bogdana Radu, **Bertrand Moine**, Dmitri Ionov, Andrey Korsakov, Alexander Golovin, Denis Mikhailenko and Jean-Yves Cottin (2017). Kyanite-bearing eclogite xenoliths from the Udachnaya kimberlite, Siberian craton, Russia. *Bulletin de la Société Géologique de France*, vol 188, 1-2 , doi :10.1051/bsgf/2017008

221. Bénard A., **Koga K.**, Shimizu N., Kendrick M.A., **Ionov D.**, Nebel O., Arculus R.J. (2017). Chlorine and fluorine partition coefficients and abundances in sub-arc mantle xenoliths (Kamchatka, Russia): Implications for melt generation and volatile recycling processes in subduction zones. *Geochimica et Cosmochimica Acta* vol.199, p.324-350, doi:10.1016/j.gca.2016.10.035

220. **Harris A.**, Rowland S.K., Villeneuve N., Thordarson T. (2017). Pāhoehoe, ‘a‘ā, and block lava: an illustrated history of the nomenclature. *Bulletin of Volcanology* vol.79, p.7, doi:10.1007/s00445-016-1075-72

219. Condamine P., **Médard E., Devidal J.L.** (2016). Experimental melting of phlogopite-peridotite in the garnet stability field. *Contribution to Mineralogy & Petrology* vol.171, p.95, doi:10.1007/s00410-016-1306-0

218. **Chupin L,** Mathe J. (2017). Existence theorem for homogeneous incompressible Navier–Stokes equation with variable rheology. *European Journal of Mechanics - B/Fluids* Vol 61, Part 1, doi:10.1016/j.euromechflu.2016.09.020

218. **Chupin L,** Mathe J. (2017). Existence theorem for homogeneous incompressible Navier–Stokes equation with variable rheology. *European Journal of Mechanics - B/Fluids* Vol 61, Part 1, doi:10.1016/j.euromechflu.2016.09.020

217. **Tridon M., Cayol V., Froger J., Augier A., Bachèlery P.** (2016). Inversion of coeval shear and normal stress of Piton de la Fournaise flank displacement. *Journal of Geophysical Research - Solid Earth* vol.121, doi:10.1002/2016JB013330
216. Castruccio A., Clavero J., Segura A., **Samaniego P., Roche O., LePennec J.L.**, Droguett B. (2016). Eruptive parameters and dynamics of the April 2015 sub-Plinian eruptions of Calbuco volcano (southern Chile). *Bulletin of Volcanology* vol.78, p.62, doi:10.1007/s00445-016-1058-8
215. **Vlastélic I., Gannoun A.M., Di Muro A., Gurioli L., Bachèlery P., Hénot J.M.** (2016). Origin and fate of sulfide liquids in hotspot volcanism (La Reunion): Pb isotope constraints from residual Fe–Cu oxides. *Geochimica et Cosmochimica Acta* vol.194, p.179-192, doi:10.1016/j.gca.2016.08.036
214. **Bernard J., Le Pennec J.L.** (2016). The milling factory: Componentry-dependent fragmentation and fines production in pyroclastic flows. *Geology* vol.44, p.907-910, 11, doi:10.1130/G38198.1
213. **Falvard S., Paris R.** (2016). X-ray tomography of tsunami deposits: Towards a new depositional model of tsunami deposits. *Sedimentology* doi:10.1111/sed.12310
212. Nomikou P., **Druitt T.**, Hübscher C., Mather T.A., Paulatto M., Kalnins L.M., **Kelfoun K.**, Papanikolaou D., Bejelou K., Lampridou D., Pyle D.M., Carey S., Watts A.B., Weis B., Parks M.M. (2016). Post-eruptive flooding of Santorini caldera and implications for tsunami generation. *Nature Communications* vol.7, doi:10.1038/ncomms13332
211. **Clesi V., Bouhifd A., Bolfan-Casanova N., Manthilake G., Fabrizio A., Andrault D.** (2016). Effect of H₂O on metal–silicate partitioning of Ni, Co, V, Cr, Mn and Fe: Implications for the oxidation state of the Earth and Mars. *Geochimica et Cosmochimica Acta* vol.192, p.97-121, doi:10.1016/j.gca.2016.07.029
210. **Chupin, L., Dubois, T.** (2016). A bi-projection method for Bingham type flows. *Computers and Mathematics with Applications*, 72 (5), 1263-1286. DOI: 10.1016/j.camwa.2016.06.026
209. **Bernard J., Eychenne J., LePennec J.L., Narvaez D.** (2016). Mass budget partitioning during explosive eruptions: insights from the 2006 paroxysm of Tungurahua volcano, Ecuador. *Geochemistry, Geophysics, Geosystems* vol.17, p.3224-3240, doi:10.1002/2016GC006431

208. Demouchy S., Thoraval C., **Bolfan-Casanova N.**, **Manthilake G.** (2016). Diffusivity of hydrogen in iron-bearing olivine at 3 Gpa. *Physics of the Earth and Planetary Interiors* vol.260, p.1-13, doi:10.1016/j.pepi.2016.08.005
207. **Gailler L.**, **Lénat J.F.**, **Blakely R.J.** (2016). Depth to Curie temperature or bottom of the magnetic sources in the volcanic zone of la Réunion hot spot. *Journal of Volcanology and Geothermal Research* vol.324, p.169-178, doi:10.1016/j.jvolgeores.2016.06.005
206. Simmons J.M., Cas R.A.F., **Druitt T.**, Folkes C.B. (2016). Complex variations during a caldera-forming Plinian eruption, including precursor deposits, thick pumice fallout, co-ignimbrite breccias and climactic lag breccias: The 184 ka Lower Pumice 1 eruption sequence, Santorini, Greece. *Journal of Volcanology and Geothermal Research* vol.324, p.200-219, doi:10.1016/j.jvolgeores.2016.05.013
205. **Monteux J.**, **Andrault D.**, Samuel H. (2016). On the cooling of a deep terrestrial magma ocean. *Earth and Planetary Science Letters* vol.448, p.140-149, doi:10.1016/j.epsl.2016.05.010
203. **Boujibar A.**, **Bolfan-Casanova N.**, **Andrault D.**, **Bouhifd A.**, Trcera, N. (2016). Incorporation of Fe²⁺ and Fe³⁺ in bridgmanite during magma ocean crystallization *American Mineralogist* vol.101, p.1560-1570, doi:doi:10.2138/am-2016-5561.
202. Saubin E., Tuffen H., **Gurioli L.**, Owen J., Castro J.M., Berlo K., McGowan E.M., Schipper C.I., Wehbe K. (2016). Conduit Dynamics in Transitional Rhyolitic Activity Recorded by Tuffisite Vein Textures from the 2008–2009 Chaitén Eruption. *Frontiers in Earth Science* vol.4, doi:10.3389/feart.2016.00059
201. Ulvrova M., **Paris R.**, Nomikou P., **Kelfoun K.**, Leibrandt S., Tappin D.R., McCoy F.W. (2016). Source of the tsunami generated by the 1650 AD eruption of Kolumbo submarine volcano (Aegean Sea, Greece). *Journal of Volcanology and Geothermal Research* vol.321, p.125-139, doi:10.1016/j.jvolgeores.2016.04.034
200. **Samaniego P.**, Rivera M., Mariño J., Guillou H., Liorzou C., Zerathe S., Delgado R., Valderrama P., Scao V. (2016). The eruptive chronology of the Ampato–Sabancaya volcanic complex (Southern Peru). *Journal of Volcanology and Geothermal Research* vol.323, p.110-128, doi:10.1016/j.jvolgeores.2016.04.038
199. **Manthilake G.**, **Bolfan-Casanova N.**, Novella D., Mookherjee M., **Andrault D.** (2016). Dehydration of chlorite explains anomalously high electrical conductivity in the mantle wedges. *Science Advances* vol.2, p.e1501631, doi:10.1126/sciadv.1501631

198. **AndraultD., MonteuxJ.,** LeBars M., Samuel H. (2016). The deep Earth may not be cooling down. *Earth and Planetary Science Letters* vol.443, p.195-203, doi:10.1016/j.epsl.2016.03.020
197. **DruittT.,** Mercier M., Florentin L., Deloule E., **CluzelN., MédardE.,** Cadoux A. (2016). Magma storage and extraction during plinian and interplinian periods at Santorini caldera (Greece). *Journal of Petrology* vol.57, p.461-494, doi:10.1093/petrology/egw015
196. Baasner A., **MédardE., LaporteD.,** Hoffer G. (2016). Partial melting of garnet lherzolite with water and carbon dioxide at 3 GPa using a new melt extraction technique: implications for intraplate magmatism. *Contribution to Mineralogy & Petrology* vol.171, p.45, doi:10.1007/s00410-016-1233-0
195. O'Neil J., Rizo A., **BoyetM.,** Carlson R.W., Rosing M.T. (2016). Geochemistry and Nd isotopic characteristics of Earth's Hadean mantle and primitive crust. *Earth and Planetary Science Letters* vol.442, p.194-205, doi:10.1016/j.epsl.2016.02.055
194. **Chanceaux L., Menand T.** (2016). The effects of solidification on sill propagation dynamics and morphology. *Earth and Planetary Science Letters* vol.442, p.39-50, doi:10.1016/j.epsl.2016.02.044
193. **ThouretJ.C.,** Jicha B.R., **PaquetteJ.L.,** Cubukcu E.H. (2016). A 25 myr chronostratigraphy of ignimbrites in south Peru: implications for the volcanic history of the Central Andes. *Journal of The Geological Society of London* vol.173, p.734-756, doi:10.1144/jgs2015-162
192. **GauthierP.J., SigmarssonO., GouhierM., Haddadi B., MouneS.** (2016). Elevated gas flux and trace metal degassing from the 2014–2015 fissure eruption at the Bárðarbunga volcanic system, Iceland. *Journal of Geophysical Research - Solid Earth* vol.121, p.1610–1630, doi:10.1002/2015JB012111
191. **Jordan S., LePennecJ.L., GurioliL., RocheO., BoivinP.** (2016). Highly explosive eruption of the monogenetic 8.6 ka BP La Vache et Lassolas scoria cone complex (Chaîne des Puys, France). *Journal of Volcanology and Geothermal Research* vol.313, p.15-28, doi:10.1016/j.jvolgeores.2015.12.006
190. Bodart O., **CayolV.,** Court S., Koko J. (2016). XFEM-Based fictitious domain method for linear elasticity model with crack. *SIAM Journal on Scientific Computing (SISC)* vol.38, p.B219-246, 2, doi:10.1137/15M1008385

189. Montserrat S., Tamburrino A., **RocheO.**, Niño Y., Ihle C.F. (2016). Enhanced run-out of dam-break granular flows caused by initial fluidization and initial material expansion. *Granular Matter* vol.18, p.11, doi:10.1007/s10035-016-0604-6

188. **RocheO.**, Buesch D.C., Valentine G.A. (2016). Slow-moving and far-travelled dense pyroclastic flows during the Peach Spring super-eruption. *Nature Communications* vol.7, p.10890, doi:10.1038/ncomms10890

187. **Harris A.**, De Groeve T., Garel F. (2016). Detecting, Modelling and Responding to Effusive Eruptions. p.683, *Geological Society Special Publication* : 426, The Geological Society London

186. Valderrama P., **RocheO.**, **SamaniegoP.**, **VanWykDeVriesB.**, **BernardK.**, Mariño J. (2016). Dynamic implications of ridges on a debris avalanche deposit at Tutupaca volcano (southern Peru). *Bulletin of Volcanology* vol.78, p.14, doi:10.1007/s00445-016-1011-x

185. Athanassas C.D., Bourlès D.L., Braucher R., **DruittT.**, Nomikou P., Léanni L. (2016). Evidence from cosmic ray exposure (CRE) dating for the existence of a pre-Minoan caldera on Santorini, Greece. *Bulletin of Volcanology* vol.78, p.35, doi:10.1007/s00445-016-1026-3

184. Miller P.I., **HarrisA.** (2016). Near-real-time service provision during effusive crises at Etna and Stromboli: basis and implementation of satellite-based IR operations. p.463-488, *Detecting, Modelling and Responding to Effusive Eruptions*. Harris, A. J. L., De Groeve, T., Garel, F. & Carn, S. A. (eds), Geological Society, London, Special Publications, 426, The Geological Society of London, doi:10.1144/SP426.26

183. Debret B., **KogaK.**, Cattani F., **NicolletC.**, Van De Bleeken G., Schwartz S. (2016). Volatile (Li, B, F and Cl) mobility during amphibole breakdown in subduction zones. *Lithos* vol.244, p.165-181, doi:10.1016/j.lithos.2015.12.004

181. **Portal A.**, **GaillerL.**, **LabazuyP.**, **LénatJ.F.** (2016). Geophysical imaging of the inner structure of a lava dome and its environment through gravimetry and magnetism. *Journal of Volcanology and Geothermal Research* vol.320, p.88-99, doi:10.1016/j.jvolgeores.2016.04.012.

180. **JessopD.**, Gilchrist J., Jellinek A.M., **RocheO.** (2016). Are eruptions from linear fissures and caldera ring dykes more likely to produce pyroclastic flows?. *Earth and Planetary Science Letters* vol.454, p.142-153, doi:10.1016/j.epsl.2016.09.005

179. Brothelande E., Peltier A., Got J.-L., **MerleO.**, Lardy M., Garaebiti E. (2016). Constraints on the source of resurgent doming inferred from analogue and

numerical modeling — Implications on the current feeding system of the Yenkahe dome–Yasur volcano complex (Vanuatu). *Journal of Volcanology and Geothermal Research* vol.322, p.225-240, doi:10.1016/j.jvolgeores.2015.11.023

178. **GannounA.M.**, Burton K.W., Day J.M.D., Harvey J., **SchianoP.**, Parkinson I. (2016). Highly Siderophile Element and Os Isotope Systematics of Volcanic Rocks at Divergent and Convergent Plate Boundaries and in Intraplate Settings. *Reviews in Mineralogy and Geochemistry* vol.81, p.651-724, doi:10.2138/rmg.2016.81.11

177. Chantel J., **ManthilakeG.**, Frost J, Beyer C., Ballaran T. B, Jing Z, Wang Y (2016). Elastic wave velocities in polycrystalline Mg₃Al₂Si₃O₁₂-pyrope garnet to 24 GPa and 1300K. *American Mineralogist* vol.101, 4, doi:10.2138/am-2016-5335

176. **SchiaviF.**, **ProvostA.**, **SchianoP.**, **CluzelN.** (2016). P–V–T–X evolution of olivine-hosted melt inclusions during high-temperature homogenization treatment. *Geochimica et Cosmochimica Acta* vol.172, p.1-21, doi:10.1016/j.gca.2015.09.025

175. **ManthilakeG.**, Mookherjee M., **Bolfan-CasanovaN.**, **AndraultD.** (2015). Electrical conductivity of lawsonite and dehydrating fluids at high pressures and temperatures. *Geophysical Research Letters* vol.42, doi:10.1002/2015GL064804

174. Chantel J., **ManthilakeG.**, **AndraultD.**, Novella D., Yu T., Wang Y. (2016). Experimental evidence supports mantle partial melting in the asthenosphere. *Science Advances* vol.2, p.e1600246, doi:10.1126/sciadv.1600246

173. Carpentier M., **GannounA.M.**, **PinC.**, **SigmarssonO.** (2016). New Thorium Isotope Ratio Measurements in Silicate Reference Materials: A-THO, AGV-2, BCR-2, BE-N, BHVO-2 and BIR-1. *Geostandards and Geoanalytical Research* vol.40, p.239-256, 2, doi:10.1111/j.1751-908X.2015.00385.x

172. **Paris R.** (2015). Source mechanisms of volcanic tsunamis. *Philosophical Transactions of the Royal Society A* vol.373, p.1-15, doi:10.1098/rsta.2014.0380

170bis. **Boujibar A.**, **AndraultD.**, **Bolfan-CasanovaN.**, **BouhifdA.**, **MonteuxJ.** (2015). Cosmochemical fractionation by collisional erosion during the Earth's accretion. *Nature* vol.6, p.8295, doi:10.1038/ncomms9295

170. **ThouretJ.C.**, Kassouk Z., Gupta A., Liew S.C., Solikhin A. (2015). Tracing the evolution of 2010 Merapi volcanic deposits (Indonesia) based on object-oriented classification and analysis of multi-temporal, very high resolution images. *Remote sensing of Environment* vol.170, p.350-371, doi:10.1016/j.rse.2015.09.028

169. **Chedeville C., RocheO.** (2015). Influence of slope angle on pore pressure generation and kinematics of pyroclastic flows: insights from laboratory experiments. *Bulletin of Volcanology* vol.77, p.96, doi:10.1007/s00445-015-0981-4
168. Bombrun M., Spampinato L., **HarrisA.**, Barra V., Caltabiano T. (2016). On the transition from strombolian to fountaining activity: a thermal energy-based driver. *Bulletin of Volcanology* vol.78, p.15, doi:10.1007/s00445-016-1009-4
167. Rodríguez I., **RocheO., MouneS.**, Aguilera F., Campos E., Pizarro M. (2015). Evolution of Irruputuncu volcano, Central Andes, northern Chile. *Journal of South American Earth Sciences* vol.63, p.385-399, doi:10.1016/j.jsames.2015.08.012
166. Jackson M.G., Cabral R.A., **Rose-KogaE., KogaK.**, Price A., Hauri E.H., Michael P. (2015). Ultra-depleted melts in olivine-hosted melt inclusions from the Ontong Java Plateau. *Chemical Geology* vol.414, p.124-137, doi:10.1016/j.chemgeo.2015.08.014
- 165bis. Chevalier L., **DonnadieuF.** (2015). Considerations on ejection velocity estimation from infrared radiometer data: a case study at Stromboli volcano. *Journal of Volcanology and Geothermal Research* doi:10.1016/j.jvolgeores.2015.06.022
165. Van De Bleeken G., **KogaK.** (2015). Experimentally determined distribution of fluorine and chlorine upon hydrous slab melting, and implications for F–Cl cycling through subduction zones. *Geochimica et Cosmochimica Acta* vol.171, p.353-373, doi:10.1016/j.gca.2015.09.030
164. Cadoux A., Scaillet B., Bekki S., Oppenheimer C., **Druitt T.** (2015). Stratospheric Ozone destruction by the Bronze-Age Minoan eruption (Santorini Volcano, Greece). *Nature Scientific Reports* vol.5, p.12243, doi:10.1038/srep12243
163. **VlastélicI., SuchorskiK.**, Sellegri K., Colomb A., **NauretF.**, Bouvier L. (2015). The high field strength element budget of atmospheric aerosols (puy de Dôme, France). *Geochimica et Cosmochimica Acta* vol.167, p.253-268, doi:10.1016/j.gca.2015.07.006
162. Collinet M., **MédardE.**, Charlier B., Vander Auwera J., Grove T.L. (2015). Melting of the primitive martian mantle at 0.5–2.2 GPa and the origin of basalts and alkaline rocks on Mars. *Earth and Planetary Science Letters* vol.427, p.83-94, doi:10.1016/j.epsl.2015.06.056
161. **LePennecJ.L.**, Ramon P., Robin C., Almeida E. (2016). Combining historical and ¹⁴C data to assess pyroclastic density current hazards in Baños city near

Tungurahua volcano (Ecuador). *Quaternary International* vol.394, p.98-114, doi:10.1016/j.quaint.2015.06.052

160. Merlhiot G., Mermillod M., Bugaiska A., Bonin P., Le Pennec J.L., Mondillon L. (2015) The role of uncertainty in decision-making following death thought. *Cognition and Emotion*

159. **Samaniego P.**, Valderrama P., Mariño J., **VanWykDeVries B.**, **Roche O.**, Manrique N., Chedeville C., Fidel L., Malnati J. (2015). The historical (218 ± 14 aAP) explosive eruption of Tutupaca volcano (Southern Peru). *Bulletin of Volcanology* vol.77, p.51, doi:10.1007/s00445-015-0937-8

158. Novella D., **Bolfan-Casanova N.**, Nestola F., Harris J.W. (2015). H₂O in olivine and garnet inclusions still: trapped in diamonds from the Siberian craton: Implications for the water content of cratonic lithosphere peridotite. *Lithos* vol.230, p.180-183, doi:10.1016/j.lithos.2015.05.013

157. Le Guennec L., Rachkidy N., Guitton A., Misson M., **Kelfoun K.** (2015). MAC protocol for volcano monitoring using a wireless sensor network. *Network of the Future (NoF)*, pp.1 - 5, DOI: 10.1109/NOF.2015.7333310

156. **Merle O.** (2015). The scaling of experiments on volcanic systems. *Frontiers in Earth Science* vol.3, 26, doi:10.3389/feart.2015.00026

155. **Sigmarsson O.**, Condomines M., **Gauthier P.J.** (2015). Excess ²¹⁰Po in 2010 Eyjafjallajökull tephra (Iceland): evidence for pre-eruptive gas accumulation. *Earth and Planetary Science Letters* vol.427, p.66-73, doi:10.1016/j.epsl.2015.06.054

154. **Gurioli L.**, Andronico D., **Bachèlery P.**, Balcone-Boissard H., **Battaglia J.**, Boudon G., Burgisser A., Burton M.R., Cashman K., Cichy S., Cioni R., Di Muro A., Dominguez L., D'Orlando C., **Druitt T.**, **Harris A.**, Hort M., **Kelfoun K.**, Komorowski J.C., Kueppers U., **Le Pennec J.L.**, **Menand T.**, **Paris R.**, Pioli L., Pistolesi M., Polacci M., Pompilio M., Ripepe M., **Roche O.**, **Rose-Koga E.**, Rust A., **Schiavi F.**, Sharff L., Sulpizio R., Taddeucci J., Thordarson T. (2015). MeMoVolc consensual document: a review of cross-disciplinary approaches to characterizing small explosive magmatic eruptions. *Bulletin of Volcanology* vol.77, p.49, doi:10.1007/s00445-015-0935-x

152. **Médard E.**, Schmidt M.W., Wämle M., Keller N.S., Günther D. (2015). Platinum partitioning between metal and silicate melts: Core formation, late veneer and the nanonuggets issue. *Geochimica et Cosmochimica Acta* vol.162, p.183-201, doi:10.1016/j.gca.2015.04.019

151. **HammoudaT.**, Keshav S. (2015). Melting in the mantle in presence of carbon: review of experiments and discussion on the origin of carbonatites. *Chemical Geology* vol.418, p.171-188, doi:10.1016/j.chemgeo.201.05.018
150. Cadoux A., Scaillet B., **DruittT.**, Deloule E. (2014). Magma storage conditions of large Plinian eruptions of Santorini Volcano (Greece). *Journal of Petrology* vol.55, p.1129-1171, doi:10.1093/petrology/egu1021
146. Cerminara, M., Esposti Ongaro, T., Valade, S., **Harris, A.J.L.** (2015). Volcanic plume vent conditions retrieved from infrared images: A forward and inverse modeling approach, *Journal of Volcanology and Geothermal Research*, 129-147
145. Brothelande E., **LénaJ.F.**, Normier A., Bacri C., Peltier A., **ParisR.**, **Kelfoun K.**, **MerleO.**, Finizola A., Garaebiti E. (2015). Insights into the evolution of the Yenkahe resurgent dome (Siwi caldera, Tanna Island, Vanuatu) inferred from aerial high-resolution photogrammetry. *Journal of Volcanology and Geothermal Research* vol.299, p.78-90, doi:10.1016/j.jvolgeores.2015.04.006
144. **Leibrandt S.**, **LePennecJ.L.** (2015). Towards fast and routine analyses of volcanic ash morphometry for eruption surveillance applications. *Journal of Volcanology and Geothermal Research* vol.297, p.11-27, doi:10.1016/j.jvolgeores.2015.03.014
143. **GannounA.M.**, **Vlastélicl.**, **SchianoP.** (2015). Escape of unradiogenic osmium during sub-aerial lava degassing: Evidence from fumarolic deposits, Piton de la Fournaise, Réunion Island. *Geochimica et Cosmochimica Acta* vol.166, p.312-326, doi:10.1016/j.gca.2015.06.039
142. **Cartier C.**, **HammoudaT.**, **BoyetM.**, Mathon O., Testemale D., **MoineB.** (2015). Evidence for Nb²⁺ and Ta³⁺ in silicate melts under highly reducing conditions: a XANES study. *American Mineralogist* vol.100, p.2152-2158, doi:10.2138/am-2015-5330
141. **RocheO.** (2015). Nature and velocity of pyroclastic density currents inferred from models of entrainment of substrate lithic clasts. *Earth and Planetary Science Letters* vol.418, p.115-125, doi:10.1016/j.epsl.2015.03.001
140. **Ettinger S.**, Mounaud L., Magill C., Yao-Lafourcade A-F., **ThouretJ.C.**, Manville V., Negulescu C., Zuccaro G., De Gregorio D., Nardone S., Uchuchoque J.A.L., Arguedas A., Macedo L., Llerena N.M. (2016). Building vulnerability to hydro-geomorphic hazards: Estimating damage probability from qualitative vulnerability assessment using logistic regression. *Journal of Hydrology* vol.541, p.563-581, doi:10.1016/j.jhydrol.2015.04.017

139. Bodart O., **CayolV.**, Court S., Koko J. (2016). Fictitious domain method for fracture models in elasticity, Progress in industrial mathematics at ECMI 2014. vol.22, Editors G. Russo, V. Capasso, G. Nicosia, V. Romano, ISBN 978-3-319-23412-0, Springer International Publishing (ed.)

138. Ambrosino F., Anastasio A., Bross A., Béné S., **Boivin P.**, Bonechi L., **Cârloganu C.**, Ciaranfi R., Cimmino L., Combaret Ch., D'Alessandro R., Durand S., Fehr F., Français V., Garufi F., **GaillerL.**, **LabazuypP.**, Laktineh I., **LénatJ.F.**, Masone V., Miallier D., Mirabito L., Morel L., Mori N., Niess V., Noli P., Pla- Dalmau A., **Portal A.**, Rubinov P., Saracino G., Scarlini E., Strolin P., Vulpescu B. (2015). Joint measurement of the atmospheric muon flux through the Puy de Dôme volcano with plastic scintillators and Resistive Plate Chambers detectors. Journal of Geophysical Research - Solid Earth vol.120, 7290-7307, doi:10.1002/2015JB011969

137. Daniels K.A., **Menand T.** (2015). An experimental investigation of dyke injection under regional extensional stress. Journal of Geophysical Research - Solid Earth vol.120, p.2014-2035, 3, doi:10.1002/2014JB011627

136. Andular J., Scaillet B., Pichavant M., **DruittT.** (2016). Generation Conditions of Dacite and Rhyodacite via the Crystallization of an Andesitic Magma. Implications for the Plumbing System at Santorini (Greece) and the Origin of Tholeiitic or Calc- alkaline Differentiation Trends in Arc Magmas. Journal of Petrology vol.57, p.1887-1920, 10, doi:10.1093/petrology/egw061.

135. **KelfounK.**, Vallejo Vargas S. (2015). VolcFlow capabilities and potential development for the simulation of lava flows. Testing a GIS for damage and evacuation assessment during an effusive crisis. vol.426, In : Harris, A., De Groeve, T., Garel, F., & Carn, S.A. (eds) Detecting, Modelling and Responding to Effusive Eruptions, Geological Society, London, Special Publications

134. **Bernard J.**, **KelfounK.**, **LePennecJ.L.**, Vallejo Vargas S. (2014). Pyroclastic flow erosion and bulking processes: comparing field-based vs. modeling results at Tungurahua volcano, Ecuador. Bulletin of Volcanology vol.76, p.858, doi:10.1007/s00445-014-0858-y

133. **BouhifdA.**, Whittington A.G., Richet P. (2015). Density of hydrous silicate melts: New measurements and predictions. Chemical Geology vol.418, p.40-50, doi:10.1016/j.chemgeo.2015.01.012

132. **Brothelande E.**, **MerleO.** (2015). Estimation of magma depth for resurgent domes: an experimental approach. Earth and Planetary Science Letters vol.412, p.143-151, doi:10.1016/j.epsl.2014.12011

130. **Menand T.**, Annen C., De Saint Blanquet M. (2015). Rates of magma transfer in the crust: Insights into magma reservoir recharge and pluton growth. *Geology* vol.43, p.199-202, doi:10.1130/G36224.1
129. **Gannoun A.M.**, Burton K.W., Barfod D.N., **Schiano P.**, **Vlastélic I.**, Halliday A.N. (2015). Resolving mantle and magmatic processes in basalts from the Cameroon volcanic line using the Re–Os isotope system. *Lithos* vol.224-225, p.1-12, doi:10.1016/j.lithos.2015.02.017
128. **Girolami L.**, **Druitt T.**, **Roche O.** (2015). Towards a quantitative understanding of pyroclastic flows: Effects of expansion on the dynamics of laboratory fluidized granular flows. *Journal of Volcanology and Geothermal Research* vol.296, p.31-39, doi:10.1016/j.jvolgeores.2015.03.008
127. **Dalou C.L.**, **Koga K.**, **Le Voyer M.**, Shimizu N. (2014). Contrasting partition behavior of F and Cl during hydrous mantle melting: implications for Cl/F signature in arc magmas. *Progress in Earth and Planetary Science* vol.1, p.26, doi:10.1186/s40645-014-0026-1
126. Cabral R.A., Jackson M.G., **Koga K.**, **Rose-Koga E.**, Hauri E.H., Whitehouse M.J., Price A.A., Day J.M.D., Shimizu N., Kelley K.A. (2014). Volatile cycling of H₂O, CO₂, F, and Cl in the HIMU mantle: A new window provided by melt inclusions from oceanic hot spot lavas at Mangaia, Cook Islands. *Geochemistry, Geophysics, Geosystems* vol.15, p.4445-4467, doi:10.1002/2014GC005473
125. **Bellot N.**, **Boyet M.**, **Doucelance R.**, **Pin C.**, Chauvel C., **Auclair D.** (2015). Ce isotope systematics of island arc lavas from the Lesser Antilles. *Geochimica et Cosmochimica Acta* vol.168, p.261-279, doi:10.1016/j.gca.2015.07.002
- 124.. Sehlke A., Whittington A., Robert B., **Harris A.**, **Gurioli L.**, **Médard E.** (2014). Pahoehoe to `a`a transition of Hawaiian lavas: an experimental study. *Bulletin of Volcanology* vol.76, p.876, doi:10.1007/s00445-014-0876-9
123. **Bouhifd A.**, **Boyet M.**, **Cartier C.**, **Hammouda T.**, **Bolfan-Casanova N.**, **Devidal J.L.**, **Andrault D.** (2015). Superchondritic Sm/Nd ratio of the Earth: Impact of Earth's core formation. *Earth and Planetary Science Letters* vol.413, p.158-166, doi:10.1016/j.epsl.2014.12.054
122. **Doucelance R.**, **Bellot N.**, **Boyet M.**, **Hammouda T.**, **Bosq C.** (2014). What coupled cerium and neodymium isotopes tell us about the deep source of oceanic carbonatites. *Earth and Planetary Science Letters* vol.407, p.175-186, doi:10.1016/j.epsl.2014.09.042
121. **Barnie T.**, **Bombrun M.**, Burton M.R., **Harris A.**, **Sawyer G.** (2015). Quantification of gas and solid emissions during Strombolian explosions using

simultaneous sulphur dioxide and infrared camera observations. *Journal of Volcanology and Geothermal Research* vol.300, p.167-174, doi:10.1016/j.jvolgeores.2014.10.003

120. **Bato M., Froger J., Harris A., Villeneuve N.** (2016). Monitoring an effusive eruption at Piton de la Fournaise using radar and thermal infrared remote sensing data: insights into the October 2010 eruption and its lava flows. p.533-552, *Detecting, Modelling and Responding to Effusive Eruptions*. Harris, A. J. L., De Groeve, T., Garel, F. & Carn, S. A. (eds), Geological Society, London, Special Publications, 426, doi:10.1144/SP426.30

119. **Vlastélic I., Suchorski K., Sellegri K., Colomb A., Nauret F., Bouvier L., Piro J.** (2014). The trace metal signature of atmospheric aerosols sampled at a European regional background site (Puy de Dôme, France). *Journal of Atmospheric Chemistry* vol.71, p.195-212, doi:10.1007/s10874-014-9290-0

118. **Vlastélic I., Pietruszka A.J.** (2015). A review of the recent geochemical evolution of Piton de la Fournaise volcano, Réunion Island (1927-2010). vol.11, p.185-201, In : *Active Volcanoes of the Southwest Indian Ocean: Piton de la Fournaise and Karthala*. Bachelery, P. : Lenat, J.-F.: Di Muro, A.: Michon, L. (Eds.), Springer book series : *Active Volcanoes of the World*

117. **Menard G., Moune S., Vlastélic I., Aguilera F., Valade S., Bontemps M., González R.** (2014). Gas and aerosol emissions from Lascar volcano (Northern Chile): insights into the origin of gases and their links with the volcanic activity. *Journal of Volcanology and Geothermal Research* 287, 51-67. doi:10.1016/j.jvolgeores.2014.09.004

116bis- **Schweitzer, P.C. Mazel, D. R. C. Hill and C. Cârloganu**, "Performance analysis with a memory-bound Monte Carlo simulation on Xeon Phi," 2015 International Conference on High Performance Computing & Simulation (HPCS), Amsterdam, Netherlands, 2015, pp. 444-452, doi: 10.1109/HPCSim.2015.7237074. Extended abstract.

116- **Schweitzer, P., S. Cipièrre, A. Dufaure, H. Payno, Y. Perrot, D. R. C. Hill, L. Maigne**, "Performance Evaluation of Multithreaded Geant4 Simulations Using an Intel Xeon Phi Cluster", *Scientific Programming*, vol. 2015, Article ID 980752, 10 pages, 2015. Extended abstract. <https://doi.org/10.1155/2015/980752>

115. **Bombrun M., Harris A., Gurioli L., Battaglia J., Barra V.** (2015). Anatomy of a Strombolian eruption : inferences from particle data recorded with thermal video. *Journal of Geophysical Research - Solid Earth* vol.120, p.2367-2387, 4, doi:10.1002/2014JB011556

114. **Bombrun M., Barra V., HarrisA.** (2014). Algorithm for particle detection and parameterization in high-frame-rate thermal video. *A définir* vol.8, p.083549, 1, doi:10.1117/1.JRS.8.083549
113. **GannounA.M.,** Burton M. (2014). High precision osmium elemental and isotope measurements of North Atlantic seawater. *Journal of Analytical Atomic Spectrometry* 29, 2330
112. **HammoudaT.,** Chantel J., **ManthilakeG.,** Guignard J., Crichton W. (2014). Hot mantle geotherms stabilize calcic carbonatite magmas up to the surface. *Geology*. doi:10.1130/G35778.1
111. **Laporte D., Lambart S., Schiano P.,** Ottolini L. (2014). Experimental derivation of nepheline syenite and phonolite liquids by partial melting of upper mantle peridotites. *Earth and Planetary Science Letters* 404, 319-331. doi:10.1016/j.epsl.2014.08.002
110. Leduc L., **GurioliL., HarrisA.,** Colò L., **Rose-KogaE.** (2015). Types and mechanisms of strombolian explosions: characterization of a gas-dominated explosion at Stromboli. *Bulletin of Volcanology* vol.77, 1-15, doi:10.1007/s00445-014-0888-5.
109. Solikhin A., **ThouretJ.C.,** Liew S.C., Gupta A., Sayudi D.S., Oehler J-F., Kassouk Z. (2015). High-spatial-resolution imagery helps map deposits of the large (VEI 4) 2010 Merapi Volcano eruption and their impact. *Bulletin of Volcanology* vol.77, p.20, doi:10.1007/s00445-015-0908-0
108. **Laurent O., MartinH., MoyenJ.F., DoucelanceR.** (2014). The diversity and evolution of late-Archean granitoids: evidence for the onset of « modern-style » plate tectonics between 3.0 and 2.5 Ga. *Lithos* 205, 208-235. doi:10.1016/j.lithos.2014.06.012
107. **Rose-KogaE., KogaK.,** Hamada M., Helouis T., Whitehouse M.J., Shimizu N. (2014). Volatile (F and Cl) concentrations in Iwate olivine-hosted melt inclusions indicating low-temperature subduction. *Earth Planets Space* 66, 81. doi:10.1186/1880-5981-66-81
106. Rowley P.J., **RocheO., DruittT.,** Cas R. (2014). Experimental study of dense pyroclastic density currents using sustained gas-fluidized granular flows: *Bulletin of Volcanology*, v. 855, p. 76. doi:10.1007/s00445-014-0855-1
105. **PinC., GannounA.M.,** Dupont A. (2014). Rapid, simultaneous of Sr, Pb and Nd, and Nd by extraction chromatography prior to isotope ratios determination by TIMS and MC-ICP-MS. *Journal of Analytical Atomic Spectrometry* 29, 1858-1870. *Journal of Analytical Atomic Spectrometry*, doi:10.1039/c4ja00169a

104. **Chanceaux L., Menand T.** (2014). Solidification effects in sill formation: An experimental approach. *Earth and Planetary Science Letters* 403, 79-88. doi:10.1016/j.epsl.2014.06.018
103. **Boyet M.,** Carlson R.W., Borg L.E., Horan M. (2015). Sm–Nd systematics of lunar ferroan anorthositic suite rocks: Constraints on lunar crust formation. *Geochimica et Cosmochimica Acta* vol.148, p.203-218, doi:10.1016/j.gca.2014.09.021
102. **Ettinger S.,** Zeghdoudi M., Manrique Llerena N., Yao-Lafourcade A.-F., **Thouret J.C.** (2015). L'apport de l'imagerie Pléiades à la cartographie des enjeux et de leur vulnérabilité face aux crues torrentielles : La ville d'Arequipa, Pérou. *Revue Française de Photogrammétrie et de Télédétection* vol.Pléiades Days 2014 (2ème partie), p.73-79, 1768-9791
101. **Cartier C., Hammouda T., Boyet M., Bouhifd A., Devidal J.L.** (2014). Redox control of the fractionation of niobium and tantalum during planetary accretion and core formation. *Nature Geoscience* 7, 573-576. doi:10.1038/ngeo2195
100. **Koga K.,** Garrido C.J., Padrón-Navarta J.A. (2014). FTIR and Raman spectroscopy characterization of fluorine-bearing titanian clinohumite in antigorite serpentinite and chlorite harzburgite. *Earth Planet Space* 66, 60
99. **Andrault D.,** Trønnes R.G., Konopkova Z., Morgenroth W., Liermann H.P. (2014). Phase diagram and P-V-T equation of state of Al-bearing seifertite at lowermost mantle conditions. *American Mineralogist* 99, 2035-2042. doi:10.2138/am-2014-4697.
98. **Andrault D.,** Pesce G., **Bouhifd A., Bolfan-Casanova N., Hénot J.M.,** Mezouar M. (2014). Melting of subducted basalt at the core-mantle boundary. *Science* 344, 892-895
97. Robert B., **Harris A., Gurioli L., Médard E.,** Sehlke A., Whittington A. (2014). Textural and rheological evolution of basalt flowing down a lava channel. *Bulletin of Volcanology* 76, 824. doi:10.1007/s00445-014-0824-8
98. Robert, B., **A. Harris, L. Gurioli, E. Médard,** A. Sehlke, A. Whittington (2014) Textural and rheological evolution of basalt flowing down a lava channel, *Bulletin of Volcanology*, v. 76, p. 824, doi: 10.1007/s00445-014-0824-8
96. **Chédeville C., Roche O.** (2014). Autofluidization of pyroclastic flows propagating on rough substrates as shown by laboratory experiments. *Journal of Geophysical Research-Solid Earth* 119, 1764-1776. doi:10.1002/2013JB010554

95bis- Schweitzer, P., C. Mazel, D. R. C. Hill and C. Cârloganu, "Inputs of aspect oriented programming for the profiling of C++ parallel applications on manycore platforms," 2014 International Conference on High Performance Computing & Simulation (HPCS), Bologna, Italy, 2014, pp. 793-802, doi: 10.1109/HPCSim.2014.6903769. Extended abstract.

95. Dennen R.L., Bursik M.I., **RocheO.** (2014). Dome collapse mechanisms and block-and-ash flow emplacement dynamics inferred from deposit and impact mark analysis, Mono Craters, CA. *Journal of Volcanology and Geothermal Research* 276, 1-9. doi:10.1016/j.jvolgeores.2014.02.0166

94. Debret B., Andreani M., Muñoz M., **Bolfan-CasanovaN.**, Carlut J., **NicolletC.**, Schwartz S., Trcera N. (2014). Evolution of Fe redox state in serpentine during subduction. *Earth and Planetary Science Letters* 400, 206-218. doi:10.1016/j.epsl.2014.05.038

93. **DoucelanceR.**, **KelfounK.**, **LabazuyP.**, **BosqC.** (2014). Geochemical insights into the internal dynamics of debris avalanches. A case study: the Socompa avalanche, Chile. *Geochemistry, Geophysics, Geosystem* 15, 2282-2300. doi:10.1002/2014GC005235

92. Condomine P., **MédardE.** (2014). Experimental melting of phlogopite-bearing mantle at 1 GPa: Implications for potassic magmatism. *Earth and Planetary Science Letters* 397, 80-92. doi:10.1016/j.epsl.2014.04.027

91. **CayoIV.**, Catry T., Michon L., Chaput M., Famin V., Bodart O., **FrogerJ.**, Romagnoli C. (2014). Sheared sheet intrusions as mechanism for lateral flank displacement on basaltic volcanoes: Application to Réunion Island volcanoes. *Journal of Geophysical Research Letters* 119. doi:10.1002/2014JB011139

90. **ParisR.**, Wassmer P., Lavigne F., Belousov A., Belousova E., Iskandarsyah Y., **BenbakkarM.**, Ontowirjo B., Mazzoni N. (2014). Coupling eruption and tsunami records: the Krakatau 1883 case study, Indonesia. *Bulletin of Volcanology* 74, 814. doi:10.1007/s00445-014-0814-x

88. **Ettinger S.**, Manville M., Kruse S., **ParisR.** (2014). GPR-derived architecture of a lahar-generated fan at Cotopaxi volcano, Ecuador. *Geomorphology* 213, 225-239. doi:10.1016/j.geomorph.2014.01.013

87. **MartinH.**, **MoyenJ.F.**, **Guitreau M.**, Blichert-Toft J., **LePennecJ.L.** (2014). Why Archaean TTG cannot be generated by MORB melting in subduction zones. *Lithos* 198-199, 1-13. doi:10.1016/j.lithos.2014.02.017

88. Ulvrová M., **ParisR.**, **KelfounK.**, Nomikou P. (2014). Numerical simulations of tsunami generated by underwater volcanic explosions at Karymskoye Lake

(Kamchatka, Russia) and Kolumbo volcano (Aegean Sea, Greece). *Natural Hazards and Earth System Sciences* 14, 401-412

85. Valade S.A., **HarrisA.**, Cerminara M. (2014). Plume AscentTracker: Interactive Matlab software for analysis of ascending plumes in image data. *Computers & Geosciences* 66, 132-144. doi:10.1016/j.cageo.2013.12.015

84. **Boujibar A., AndraultD., BouhifdA., Bolfan-CasanovaN., DevidalJ.L., Trcera N.** (2014). Metal-silicate partitioning of sulfur, new experimental and thermodynamical constraints on planetary accretion. *Earth and Planetary Science Letters* 391, 42-54. doi:10.1016/j.epsl.2014.01.021

83. **GurioliL.**, Colo L., Bollasina A.J., **HarrisA.**, Whittington A., Ripepe M. (2014). Dynamics of Strombolian explosions: Inferences from field and laboratory studies of erupted bombs from Stromboli volcano. *Journal of Geophysical Research: Solid Earth* 119, 319–345. doi:10.1002/2013JB010355

82. Zanella E., Sulpizio R., **GurioliL.**, Lanza R. (2015). Temperatures of the pyroclastic density currents deposits emplaced in the last 22 kyr at Somma-Vesuvius (Italy). vol.396, p.13-33, *The Use of Palaeomagnetism and Rock Magnetism to Understand Volcanic Processes?* Ort, M.H., Porreca M. & Geissman, J. W. (eds), Special Publications, Geological Society Geological Society of London (ed)

81. **SigmarrssonO.**, Haddadi B., Carn S., **MouneS.**, Gudnason J., Yang K., Clarisse L. (2013). The sulfur budget of the 2011 Grímsvötn eruption, Iceland: *Geophysical Research Letters*, v. 40, p. 1-6. doi:10.1002/2013GL057760

80. Farin M., Mangeney A., **RocheO.** (2014). Fundamental changes of granular flow dynamics, deposition and erosion processes at high slope angles: insights from laboratory experiments. *Journal of Geophysical Research-Earth Surface* 119, 504-532. doi:10.1002/2013JF002750

79. **DruittT.** (2014). New insights into the initiation and venting of the Bronze-Age eruption of Santorini, from component analysis. *Bulletin of Volcanology* 76, 794. doi:10.1007/s00445-00014-00794-x

78. **Rivera M., ThouretJ.C., SamaniegoP., LePennecJ.L.** (2014). The 2006–2009 activity of the Ubinas volcano (Peru): Petrology of the 2006 eruptive products and insights into genesis of andesite magmas, magma recharge and plumbing system. *Journal of Volcanology and Geothermal Research* 270, 122-114. doi:10.1016/j.jvolgeores.2013.11.010

77. Daniels K.A., Bastow I.D., Keir D., Sparks R.S.J., **Menand T.** (2014). Thermal models of dyke intrusion during development of continent–ocean transition. *Earth and Planetary Science Letters* 385, 145-153. doi:10.1016/j.epsl.2013.09.018
76. Fabbro G.N., **Druitt T.**, Scaillet S. (2013). Evolution of the crustal plumbing system during the build-up to the 22 ka caldera-forming eruption of Santorini (Greece): *Bulletin of Volcanology*, v. 75, p. 767. doi:10.1007/s00445-013-0767-5
75. **Merle O.**, **Brothelande E.**, **Bachèlery P.**, **Lénat J.F.**, Garabéiti E. (2013). A structural outline of the Yenkahe volcanic resurgent dome (Tanna Island, Vanuatu Arc, South Pacific): *Journal of Volcanology and Geothermal Research*, v. 268, p. 64-72. doi:10.1016/j.jvolgeores.2013.10.009
74. **Sorbadere F.**, **Médard E.**, **Laporte D.**, **Schiano P.** (2013). Experimental melting of hydrous peridotite–pyroxenite mixed sources: Constraints on the genesis of silica-undersaturated magmas beneath volcanic arcs: *Earth and Planetary Science Letters*, v. 384, p. 42-56. doi:10.1016/j.epsl.2013.09.026
73. **Bouhifd A.**, Jephcoat A.P., Heber V.S., Kelley S.P. (2013). Helium in Earth's early core: *Nature Geoscience*, v. 6, p. 982-986. doi:10.1038/NGEO1959
72. **Debret B.**, **Koga K.**, **Nicollet C.**, Andreani M., Schwartz S. (2014). F, Cl and S input via serpentinite in subduction zones: implications for the nature of the fluid released at depth. *Terra Nova* 26, 96-101. 106p.. doi:10.1111/ter.12074
71. **Debret B.**, Andreani M., Godard M., **Nicollet C.**, Schwartz S., Lafay R. (2013). Trace element behavior during serpentinization/de-serpentinization of an eclogitized oceanic lithosphere: A LA-ICPMS study of the Lanzo ultramafic massif (Western Alps): *Chemical Geology*, v. 357, p. 117-133. doi:10.1016/j.chemgeo.2013.08.025
70. **Paris R.**, Switzer A.D., Belousova M., Belousov A., Ontowirjo B., Whelley P.L., Ulvrova M. (2014). Volcanic tsunamis: a review of source mechanisms, past events and hazards in Southeast Asia (Indonesia, Philippines, Papua New Guinea). *Natural Hazards* 70, 447-470. doi:10.1007/s11069-013-0822-8
69. **Sorbadère F.**, **Schiano P.**, Métrich N., Bertagnini A. (2013). Small-scale coexistence of island-arc- and enriched-MORB-type basalts in the central Vanuatu arc: *Contributions to Mineralogy and Petrology*, v. 166, p. 1305-1321. doi:10.1007/s00410-013-0928-8
68. **Bolfan-Casanova N.**, Montagnac N., Reynard B. (2014). Measurement of water contents in olivine using Raman spectroscopy. *American Mineralogist* 99, 149-156. doi:10.2138/am.2014.4444

67. Sandri L., **Thouret J.C.**, Constantinescu R., Biass S., Tonini R. (2014). Long-term multi-hazard assessment for El Misti volcano (Peru). *Bulletin of Volcanology* 76,771-797. doi:10.1007/s00445-013-0771-9
66. **Menard G.**, **Vlastélic I.**, **Ionov D.A.**, **Rose-Koga E.**, **Piro J.**, **Pin C.** (2013). Precise and accurate determination of boron concentration in silicate rocks by direct isotope dilution ICP-MS: Insight into the B budget of the mantle and B behavior in magmatic systems: *Chemical Geology* v. 354, p. 139-149. doi:10.1016/j.chemgeo.2013.06.017
- 65 - **Harris A.J.L.**, **S. Valade**, G. M. Sawyer, F. **Donnadieu J.**, **Battaglia L.**, **Gurioli K.**, **Kelfoun P.**, **Labazuy T.**, Stachowicz, **M. Bombrun V.**, **Barra** (2013). Modern Multispectral Sensors Help Track Explosive Eruptions. *EOS, Transactions American Geophysical Union* 94, 321-322. <https://doi.org/10.1002/2013EO370001>
64. **Roche O.**, Niño Y., Mangeney A., Brand B., Pollock N., Valentine G.A. (2013). Dynamic pore-pressure variations induce substrate erosion by pyroclastic flows: *Geology*, v. 41, p. 1107-1110. doi:10.1130/G34668.1
63. Breton T., **Nauret F.**, Pichat S., **Moine B.**, Moreira M., **Rose-Koga E.**, **Auclair D.**, **Bosq C.**, Wavrant L.M. (2013). Geochemical heterogeneities within the Crozet hotspot: *Earth and Planetary Science Letters*, v. 376, p. 126-136. doi:10.1016/j.epsl.2013.06.020
62. Smyth J.R., **Bolfan-Casanova N.**, Avignant D., El-Ghozzi M. (2014). Tetrahedral Ferric Iron in oxidized hydrous Wadsleyite. *American Mineralogist* 99,458-466. doi:10.2138/am.2014.4520
61. Bunger A.P., **Menand T.**, Cruden A., Zhang X., Halls H. (2013). Analytical predictions for a natural spacing within dyke swarms: *Earth and Planetary Science Letters*, v. 375, p. 270-279. doi:10.1016/j.epsl.2013.05.044
60. Roskosz M., **Bouhifd A.**, Jephcoat A.P., Marty B., Mysen B.O. (2013). Nitrogen solubility in molten metal and silicate at high pressure and temperature: *Geochimica et Cosmochimica Acta*, v. 121, p. 15-28. doi:10.1016/j.gca.2013.07.007
59. Armytage R.M.G., Jephcoat A.P., **Bouhifd A.**, Porcelli D. (2013). Metal–silicate partitioning of iodine at high pressures and temperatures: Implications for the Earth's core and ^{129}Xe budgets: *Earth and Planetary Science Letters*, v. 373, p. 140-149. doi:10.1016/j.epsl.2013.04.031.
58. **Bouhifd A.**, **Andrault D.**, **Bolfan-Casanova N.**, **Hammouda T.**, **Devidal J.L.** (2013). Metal–silicate partitioning of Pb and U: Effects of metal composition and

oxygen fugacity: *Geochimica et Cosmochimica Acta*, v. 114, p. 13-28.
doi:10.1016/j.gca.2013.03.034

57. Cuven S., **Paris R.**, **Falvard S.**, Miot-Noirault E., **Benbakkar M.**, Schneider J.L., Billy I. (2013). High-resolution analysis of a tsunami deposit: Case-study from the 1755 Lisbon tsunami in southwestern Spain: *Marine Geology*, v. 337, p. 98-111.
doi:10.1016/j.margeo.2013.02.002

56. **Thouret J.C.**, Enjolras G., Martelli K., Santoni O., Luque J.A., Nagata M., Arguedas A., Macedo L. (2013). Combining criteria for delineating lahar- and flash flood-prone hazard and risk zones for the city of Arequipa, Peru: *Natural Hazard and Earth Science System*, v. 13, p. 339-360. doi:10.5194/nhess-13-1-2013

55. **Le Corvec N.**, **Menand T.**, Lindsay J. (2013). Interaction of ascending magma with pre-existing crustal fractures in monogenetic basaltic volcanism: an experimental approach. *Journal of Geophysical Research - Solid Earth* vol.118, p.968-984, 3, doi:10.1002/jgrb.50142

54. Cabral R.A., Jackson M.G., **Rose-Koga E.**, **Koga K.**, Whitehouse M.J., Antonelli M.A., Farquhar J., Day J.M.D., Hauri E.H. (2013). Anomalous sulphur isotopes in plume lavas reveal deep mantle storage of Archaean crust: *Nature*, v.496, p. 490-494. doi:10.1038/nature12020

53. **Harris A.**, Delle Donne D., Dehn J., Ripepe M., Worden K. (2013). Volcanic plume and bomb field masses from thermal infrared camera imagery: *Earth and Planetary Science Letters*, v. 365, p. 77-85. doi:10.1016/j.epsl.2013.01.004

52bis **Schweitzer P.**, C. Mazel, F. Fehr, C. **Cârloganu, C.**, **Hill, D.** (2013). Proper parallel Monte Carlo for computed tomography of volcanoes, 2013 International Conference on High Performance Computing & Simulation (HPCS), Helsinki, Finland, 2013, pp. 519-526, doi: 10.1109/HPCSim.2013.6641463. Extended abstract.

52. Saint-Ange F., **Bachèlery P.**, Babonneau N., Michon L., Jorry S.J. (2013). Volcaniclastic sedimentation on the submarine slopes of a basaltic hotspot volcano: Piton de la Fournaise volcano (La Réunion Island, Indian Ocean): *Marine Geology*, v.337, p. 35-52. doi:10.1016/j.margeo.2013.01.004

51. **LePennec J.L.**, de Saulieu G., **Samaniego P.**, Jaya D., **Gailler L.** (2013). A devastating Plinian eruption at Tungurahua volcano reveals Formative occupation at ca 1100 cal BC in Central Ecuador: *Radiocarbon*, v. 55, p. 1199-1214

50. **Vlastélic I.**, **Menard G.**, **Gannoun M.**, **Piro J.**, Staudacher T., Famin V. (2013). Magma degassing during the April 2007 collapse of Piton de la Fournaise: the record of semi-volatile trace elements (Li, B, Cu, In, Sn, Cd, Re, Tl, Bi): *Journal of*

Volcanology and Geothermal Research, v. 254, p. 94-107.
doi:10.1016/j.jvolgeores.2012.12.027

49. **BoyetM., GannounA.M.** (2013). Nucleosynthetic Nd isotope anomalies in primitive enstatite chondrites: *Geochimica et Cosmochimica Acta*, v. 121, p. 652-666. doi:10.1016/j.gca.2013.07.036

48. **Portal A., LabazuyP., LénatJ.F., Béné S., BoivinP., Busato E., Cârloganu C., Combaret C., Dupieux P., Fehr F., Gay P., Laktineth I., Miallier D., Mirabito L., Niess V., Vulpescu B.** (2013). Inner structure of the Puy de Dôme volcano: cross-comparison of geophysical models (ERT, gravimetry, muon imaging): *Geoscientific Instrumentation Methods and Data Systems*, v. 2, p. 47-54. doi:10.5194/gi-2-47-2013

47. **GurioliL., HarrisA., Colò L., Bernard J., Favalli M., Ripepe M., Andronico D.** (2013). Classification, landing distribution, and associated flight parameters for a bomb field emplaced during a single major explosion at Stromboli, Italy: *Geology*, v.41, p. 559-562. doi:10.1130/G33967.1

46. **Lambart S., Laporte D., Schiano P.** (2013). Markers of the pyroxenite contribution in the major-element compositions of oceanic basalts: Review of the experimental constraints: *Lithos*, v. 160-161, p. 14-36. doi:10.1016/j.lithos.2012.11.018

45. **SigmarssonO., LaporteD., Carpentier M., Devouard B., DevidalJ.L., Marti J.** (2013). Formation of U-depleted rhyolite from a basanite at El Hierro, Canary Islands: *Contributions to Mineralogy and Petrology*, v. 165, p. 601-622. doi:10.1007/s00410-012-0826-5.

44. **Eychenne J., LePennecJ.L., Ramón P., Yepes H.** (2013). Dynamics of explosive paroxysms at open-vent andesitic systems: High-resolution mass distribution analyses of the 2006 Tungurahua fall deposit (Ecuador): *Earth and Planetary Science Letters*, v. 361, p. 343-355. doi:10.1016/j.epsl.2012.11.002

43. Welsch B., Faure F., Famin V., Baronnet A., **BachèleryP.** (2013). Dendritic Crystallization: A Single Process for all the Textures of Olivine in Basalts?: *Journal of Petrology*, v. 54, p. 559-574. doi:10.1093/petrology/egs077

42. **O'Neil J., BoyetM., Carlson R.W., PaquetteJ.L.** (2013). Half a billion years of reworking of Hadean mafic crust to produce the Nuvvuagittuq Eoarchean felsic crust: *Earth and Planetary Science Letters*, v. 379, p. 13-25. doi:10.1016/j.epsl.2013.07.030

41. **HarrisA.** (2013). Thermal Remote Sensing of Active Volcanoes: A User's

Manual. ISBN: 9780521859455.

40. **Rose-KogaE., KogaK., SchianoP., Le Voyer M.**, Shimizu N., Whitehouse M.J., Clocchiatti R. (2012). Mantle source heterogeneity for South Tyrrhenian magmas revealed by Pb isotopes and halogen contents of olivine-hosted melt inclusions. *Chemical Geology* 334, 266-279. doi:10.1016/j.chemgeo.2012.10.033
39. Ontowirjo B., **Paris R.** (2013). Modeling of coastal erosion and sediment deposition during the 2004 Indian Ocean tsunami in Lhok Nga, Sumatra, Indonesia: *Natural Hazards*, v. 65, p. 1967-1979. doi:10.1007/s11069-012-0455-3
38. Shea T., **GurioliL.**, Houghton B.F. (2012). Transitions between fall phases and pyroclastic density currents during the AD 79 eruption at Vesuvius: building a transient conduit model from the textural and volatile record. *Bulletin of Volcanology* 74, 2363–2381. doi:10.1007/s00445-012-0668-z
37. Rodríguez González A., **ParisR.**, Criado T., Fernández Turiel J.L. (2013). The Teide Volcanic Complex: Physical environment and Geomorphology, in J. C. Carracedo, Troll, V., ed., *Teide volcano - Evolution of an active ocean island volcano*
36. Carracedo J.C., Rodríguez-Gonzalez A., Pérez-Torrado F.J., Fernández-Turiel J.-L., **ParisR.**, Rodríguez-Badiola E., Pestana-Pérez G., Troll V.R., Wiesmaier S. (2013). Geological Hazards in the Teide Volcanic Complex. p.249-272, *Teide Volcano*, Part of the series *Active Volcanoes of the World*, doi:10.1007/978-3-642-25893-0_14.
35. Pérez Torrado F.J., Carracedo J.C., Rodríguez Gonzalez A., Badiola E., **Paris R.**, Troll V.R., Clarke H., Wiesmaier S. (2013). Eruptive styles at the Teide volcanic complex, in J. C. Carracedo, Troll, V., ed., *Teide volcano - Evolution of an active ocean island volcano*, v. XIV, Springer
34. **BouhifdA.**, Whittington A.G., Withers A.C., Richet P. (2013). Heat capacities of hydrous silicate glasses and liquids: *Chemical Geology*, v. 346, p. 125-134. doi:10.1016/j.chemgeo.2012.10.026
33. **Sorbadère F., SchianoP.**, Metrich N. (2013). Constraints on the Origin of Nepheline-Normative Primitive Magmas in Island Arcs Inferred from Olivine-hosted Melt Inclusion Compositions. *Journal of Petrology* vol.54, p.215-233, 2, doi:10.1093/petrology/egs063
32. **Eychenne J., LePennecJ.L.** (2012). Sigmoidal particle density distribution in a subplinian scoria fall deposit. *Bulletin of Volcanology* 74, 2243–2249. doi:10.1007/s00445-012-0671-4

31. **Vlastélic I.**, Staudacher T., **Deniel C.**, **Devidal J.L.**, **Devouard B.**, Finizola A., Télouk P. (2013). Lead isotopes behavior in the fumarolic environment of the Piton de la Fournaise volcano (Réunion Island). *Geochimica et Cosmochimica Acta* vol.100, p.297-314, doi:10.1016/j.gca.2012.09.016
30. **Rizo H.**, **Boyet M.**, Blichert-Toft J., **O'Neil J.**, Rosing M.T., **Paquette J.L.** (2012). The elusive Hadean enriched reservoir revealed by ¹⁴²Nd deficits in Isua Archean rocks. *Nature* 491, 96-100. doi:10.1038/nature11565
29. Kavanagh J.L., Menand T., Daniels K.A. (2013). Gelatine as a crustal analogue: Determining elastic properties for modelling magmatic intrusions: *Tectonophysics*, v.582, p. 101-111. doi:10.1016/j.tecto.2012.09.032
28. **Jessop D.**, **Kelfoun K.**, **Labazuy P.**, Mangeney A., Roche O., Tillier J.L., Trouillet M., Thibault G. (2012). LiDAR derived morphology of the 1993 Lascar pyroclastic flow deposits, and implication for flow dynamics and rheology. *Journal of Volcanology and Geothermal Research* 245-246, 81-97. doi:10.1016/j.jvolgeores.2012.06.030
27. **Lénat J.F.**, **Bachèlery P.**, **Merle O.** (2012). Anatomy of Piton de la Fournaise volcano (La Réunion, Indian Ocean). *Bulletin of Volcanology* vol.74, p.1945-1961, 9, doi:10.1007/s00445-012-0640-y
26. **Andrault D.**, Petitgirard S., Io Nigro G., **Devidal J.L.**, Veronesi G., Garbarino G., Mezouar M. (2012). Solid-liquid iron partitioning in the deep Earth's mantle. *Nature* 487, 354-357
25. **Roche O.** (2012). Depositional processes and gas pore pressure in pyroclastic flows: an experimental perspective. *Bulletin of Volcanology* 74, 1807-1820. doi:10.1007/s00445-012-0639-4.
24. **Férot A.**, **Bolfan-Casanova N.** (2012). Water storage capacity in olivine and pyroxene to 14 GPa: Implications for the water content of the Earth's upper mantle and nature of seismic discontinuities. *Earth and Planetary Science Letters* 349-350, 218-230. doi:10.1016/j.epsl.2012.06.022
23. **Schiano P.**, **David K.**, **Vlastélic I.**, **Gannoun A.M.**, **Klein M.**, **Nauret F.**, **Bonnand P.** (2012). Osmium isotope systematics of historical lavas from Piton de la Fournaise (Réunion Island, Indian Ocean). *Contributions to Mineralogy and Petrology* 164, 805-820. doi:10.1007/s00410-012-0774-0
22. Wu J., Koga K. (2013). Fluorine partitioning between hydrous minerals and aqueous fluid at 1 GPa and 770–947°C: A new constraint on slab flux: *Geochimica et Cosmochimica Acta*, v. 119, p. 77-92. doi:10.1016/j.gca.2013.05.025

21. Ramsey M.S., **Harris A.** (2013). Volcanology 2020: How will thermal remote sensing of volcanic surface activity evolve over the next decade?: Journal of Volcanology and Geothermal Research, v. 249, p. 217-233. doi:10.1016/j.jvolgeores.2012.05.011
20. **Harris A.**, Alparone S., Bonforte A., Dehn J., Gambino S., Lodato L., Spampinato L. (2012). Vent temperature trends at the Vulcano Fossa fumarole field: the role of permeability. Bulletin of Volcanology 74, 1293-1311. doi:10.1007/s00445-012-0593-1.
19. **Bolfan-Casanova N.**, Muñoz M., McCammon C., Deloule E., Férot A., Demouchi S., France L., **Andrault D.**, Pascarelli S. (2012). Ferric iron and water incorporation in wadsleite under hydrous and oxidizing conditions: a XANES and SIMS study. American Mineralogist 97, 1483-1493
18. **Harris A.**, Ripepe M., Hughes E.E. (2012). Detailed analysis of particle launch velocities, size distributions and gas densities during normal explosions at Stromboli. Journal of Volcanology and Geothermal Research 231-232, 109-131. doi:10.1016/j.jvolgeores.2012.02.012.
17. **Gurioli L.**, Zanella E., Gioncada A., Sbrana A. (2012). The historic magmatic-hydrothermal eruption of the Breccia di Commenda, Vulcano, Italy. Bulletin of Volcanology 74, 1235-1254. doi:10.1007/s00445-012-0590-4
16. Jakob K., **Sigmarsson O.** (2012). Geothermobarometry of the 2010 Eyjafjallajökull eruption: New constraints on Icelandic magma plumbing systems. Journal of Geophysical Research 117, BC00C09. doi:10.1029/2011JB008829
15. **LePennec J.L.**, Ruiz G.A., Ramón P., Palacios E., Mothes P.A., Yepes H. (2012). Impact of tephra falls on Andean communities: The influences of eruption size and weather conditions during the 1999–2001 activity of Tungurahua volcano, Ecuador. Journal of Volcanology and Geothermal Research 217-218, 91-103. doi:10.1016/j.jvolgeores.2011.06.011
14. **Lénat J.F.**, **Bachèlery P.**, **Peltier A.** (2012). The interplay between collapse structures, hydrothermal systems and magma intrusions: the case of the central area of Piton de la Fournaise volcano. Bulletin of Volcanology 74, 407-421. doi:10.1007/s00445-011-0535-3.
13. **Gailler L.**, **Lénat J.F.** (2012). Internal architecture of La Réunion (Indian Ocean) inferred from geophysical data. Journal of Volcanology and Geothermal Research 221-222, 83-98. doi:10.1016/j.jvolgeores.2012.01.015

12. **Donnadieu F.** (2012). Volcanological Applications of Doppler Radars: A Review and Examples from a Transportable Pulse Radar in L-Band. In: J Bech and JL Chau (eds.) Doppler Radar Observations - Weather Radar, Wind Profiler, Ionospheric Radar, and Other Advanced Applications. pp. doi:10.5772/35940. InTech
11. **Harris A., Gurioli L.,** Hughes E.E., Lagreulet S. (2012). Impact of the Eyjafjallajökull ash cloud: A newspaper perspective. Journal of Geophysical Research 117, B00C08. doi:10.1029/2011JB008735
10. **Samaniego P.,** Barba D., **Robin C.,** Fornari M., Bernard B. (2012). Eruptive history of Chimborazo volcano (Ecuador): A large, ice-capped and hazardous compound volcano in the Northern Andes. Journal of Volcanology and Geothermal Research 221-222, 33-51. doi:10.1016/j.jvolgeores.2012.01.014
9. **Labazuy P., Gouhier M., Harris A.,** Guéhenneux Y., Hervo M., Bergès J.C., Cacault P., Rivet S. (2012). Near real-time monitoring of the April-May 2010 Eyjafjallajökull ash cloud: an example of a web-based, satellite data- driven, reporting system. International Journal of Environment and Pollution 48, 262 - 272. doi:10.1504/IJEP.2012.049673
8. **Paquette J.L., LePennec J.L.** (2012). 3.8 Ga zircons sampled by neogene ignimbrite eruptions in Central Anatolia. Geology 40, 239-242. doi:10.1130/G32472.1
7. **Meune S., Sigmarsson O., Schiano P.,** Thordarson T., Keiding J.K. (2012). Melt inclusion constraints on the magma source of Eyjafjallajökull 2010 flank eruption. Journal of Geophysical Research - Solid Earth vol.117, p.B00C07, doi:10.1029/2011JB008718
6. Daniels K.A., Kavanagh J.L., **Menand T.,** Stephen J.S.R. (2012). The shapes of dykes : Evidence for the influence of cooling and inelastic deformation. Geological Society of America Bulletin 124, 1102-1112. doi:10.1130/B30537.1
5. **Thouret J.C.,** Liew S.C., Gupta A. (2011). Proceedings of the International Conference: Remote Sensing, Natural Hazards and Environmental Change, CRISP National University of Singapore, LMV-CLERVOLC, Université Blaise Pascal. Presses universitaires Blaise Pascal, Ceramac, Hors-série 3, Clermont-F
4. Hurai V., **Paquette J.L.,** Huraiová M., Sabol M. (2012). U-Pb geochronology of zircons from fossiliferous sediments of the Hajnácka I maar (Slovakia)-type locality of the MN 16a biostratigraphic subzone. Geological Magazine vol.149, p.989-1000, doi:10.1017/s0016756812000106

3. **GouhierM., HarrisA.,** Calvari S., **LabazuyP.,** Guéhenneux Y., **DonnadiouF., Valade S.** (2012). Lava discharge during Etna's January 2011 fire fountain tracked using MSG-SEVIRI. *Bulletin of Volcanology* vol.74, p.787-793, 4, doi:10.1007/s00445-011-0572-y

2. **SigmarssonO., Vlastélicl.,** Andreassen R., Bindeman I., DevidalJ.L., Moune S., Keiding J.K., Larsen G., Höskuldsson A., Thordarson T. (2011). Remobilization of silicic intrusion by mafic magmas during the 2010 Eyjafjallajökull eruption: *Solid Earth*, v. 2, p. 271-281. *Solid Earth* vol.2, p.271-281

1. **DruittT.,** Costa F., Deloule E., Dungan M., Scaillet B. (2012). Decadal to monthly timescales of magma transfer and reservoir growth at a caldera volcano. *Nature* 482, 77-80. vol.482, p.77-80, doi:10.1038/nature10706