

The GNS Staff Publications list is divided into the following sections:

[Peer-Reviewed Journal Articles](#)

[Peer-Reviewed Books/Chapters in Books](#)

[Refereed Conference Proceedings/Paper](#)

[Other Publications](#)

[Conference Abstracts](#)

Peer-Reviewed Journal Articles

- Angove, M.; Arcas, D.; Bailey, R.; Carrasco, P.; Coetzee, D.; Fry, B.; Gledhill, K.R.; Harada, S.; von Hillebrandt-Andrade, C.; Kong, L.; McCreery, C.; McCurrach, S.-J.; Sakya, A.E.; Miao, Y.; Schindele, F. 2019** Ocean observations required to minimize uncertainty in global tsunami forecasts, warnings, and emergency response. *Frontiers in Marine Science*, 6: article 350; doi: [10.3389/fmars.2019.00350](https://doi.org/10.3389/fmars.2019.00350)
- Antriasian, A.; Harris, R.N.; Trehu, A.M.; Henrys, S.A.; Phrampus, B.J.; Lauer, R.; Gorman, A.R.; Pecher, I.A.; Barker, D.H.N. 2019** Thermal regime of the northern Hikurangi Margin, New Zealand. *Geophysical Journal International*, 216(2): 1177-1190; doi: [10.1093/gji/ggy450](https://doi.org/10.1093/gji/ggy450)
- Argentino, C.; Conti, S.; Crutchley, G.J.; Fioroni, C.; Fontana, D.; Johnson, J.E. 2019** Methane-derived authigenic carbonates on accretionary ridges: Miocene case studies in the northern Apennines (Italy) compared with modern submarine counterparts. *Marine and Petroleum Geology*, 102: 860-872; doi: [10.1016/j.marpetgeo.2019.01.026](https://doi.org/10.1016/j.marpetgeo.2019.01.026)
- Au, E.V.; MacRae, G.; Pettinga, D.; Deam, B.; Sadashiva, V.K.; Soleimankhani, H. 2019** Seismic response of torsionally irregular single story structures. *Bulletin of the New Zealand Society for Earthquake Engineering*, 52(1): 44-53
- Bahiru, E.A.; Rowland, J.V.; Eccles, J.D.; Kellett, R.L. 2019** Regional crustal-scale structural control on epithermal deposits within the Hauraki Goldfield, Coromandel Volcanic Zone, New Zealand: insight from integrated geological and aeromagnetic structural patterns. *New Zealand Journal of Geology and Geophysics*, 62(4): 461-482; doi: [10.1080/00288306.2019.1574268](https://doi.org/10.1080/00288306.2019.1574268)
- Barnes, J.D.; Cullen, J.; Barker, S.; Agostini, S.; Penniston-Dorland, S.; Lassiter, J.C.; Klügel, A.; Wallace, L.M. 2019** The role of the upper plate in controlling fluid-mobile element (Cl, Li, B) cycling through subduction zones: Hikurangi forearc, New Zealand. *Geosphere*, 15(3): 642-658; doi: [10.1130/GES02057.1](https://doi.org/10.1130/GES02057.1)
- Barrell, D.J.A.; Putnam, A.E.; Denton, G.H. 2019** Reconciling the onset of deglaciation in the upper Rangitata valley, Southern Alps, New Zealand. *Quaternary Science Reviews*, 203: 141-150; doi: [10.1016/j.quascirev.2018.11.003](https://doi.org/10.1016/j.quascirev.2018.11.003)
- Barrell, D.J.A.; Putnam, A.E.; Denton, G.H. 2019** Reply to comment received from J. Shulmeister et al. regarding "Reconciling the onset of deglaciation in the upper Rangitata valley, Southern Alps, New Zealand" (*Quaternary Science Reviews* 203 (2019), 141–150.). *Quaternary Science Reviews*, 219: 316-318; doi: [10.1016/j.quascirev.2019.06.040](https://doi.org/10.1016/j.quascirev.2019.06.040)
- Barrier, A.; Nicol, A.; Browne, G.H.; Bassett, K. 2019** Early Oligocene marine canyon-channel systems: implications for regional paleogeography in the Canterbury Basin, New Zealand. *Marine Geology*, 418: 106037; doi: [10.1016/j.margeo.2019.106037](https://doi.org/10.1016/j.margeo.2019.106037)

- Beall, A.; Fagereng, Å.; Ellis, S.M. 2019** Fracture and weakening of jammed subduction shear zones, leading to the generation of slow slip events. *Geochemistry Geophysics Geosystems*, 20(11): 4869-4884; [doi: 10.1029/2019GC008481](https://doi.org/10.1029/2019GC008481)
- Beall, A.; Fagereng, Å.; Ellis, S.M. 2019** Strength of strained two-phase mixtures: application to rapid creep and stress amplification in subduction zone melange. *Geophysical Research Letters*, 46(1): 169-178; [doi: 10.1029/2018GL081252](https://doi.org/10.1029/2018GL081252)
- Becker, J.S.; Potter, S.H.; McBride, S.K.; Wein, A.; Doyle, E.E.H.; Paton, D. 2019** When the earth doesn't stop shaking: how experiences over time influenced information needs, communication, and interpretation of aftershock information during the Canterbury Earthquake Sequence, New Zealand. *International Journal of Disaster Risk Reduction*, 34: 397-411; [doi: 10.1016/j.ijdr.2018.12.009](https://doi.org/10.1016/j.ijdr.2018.12.009)
- Bennett, J.; Davy, P.K.; Trompeter, W.J.; Wang, Y.; Piersse, N.; Boulic, N.; Phipps, R.; Howden-Chapman, P. 2019** Sources of indoor air pollution at a New Zealand urban primary school: a case study. *Atmospheric pollution research*, 10(2): 435-444; [doi: 10.1016/j.apr.2018.09.006](https://doi.org/10.1016/j.apr.2018.09.006)
- Berkenbosch, H.A.; de Ronde, C.E.J.; Ryan, C.G.; McNeill, A.W.; Howard, D.L.; Gemmell, J.B.; Danyushevsky, L.V. 2019** Trace element mapping of copper- and zinc-rich black smoker chimneys from Brothers Volcano, Kermadec Arc, using synchrotron radiation XFM and LA-ICP-MS. *Economic Geology*, 114(1): 67-92; [doi: 10.5382/econgeo.2019.4620](https://doi.org/10.5382/econgeo.2019.4620)
- Berndt, C.; Chi, W.-C.; Jegen, M.; Lebas, E.; Crutchley, G.J.; Muff, S.; Hölz, S.; Sommer, M.; Lin, S.; Liu, C.-S.; Lin, A.T.; Klaeschen, D.; Klauke, I.; Chen, L.; Hsu, H.-H.; Kunath, P.; Elger, J.; McIntosh, K.D.; Feseker, T. 2019** Tectonic controls on gas hydrate distribution off SW Taiwan. *Journal of Geophysical Research. Solid Earth*, 124(2): 1164-1184; [doi: 10.1029/2018JB016213](https://doi.org/10.1029/2018JB016213)
- Biemiller, J.; Ellis, S.M.; Mizera, M.; Little, T.; Wallace, L.M.; Lavier, L. 2019** Tectonic inheritance following failed continental subduction: a model for core complex formation in cold, strong lithosphere. *Tectonics*, 38(5): 1742-1763; [doi: 10.1029/2018TC005383](https://doi.org/10.1029/2018TC005383)
- Bland, K.J.; Nicol, A.; Kamp, P.J.J.; Nelson, C.S. 2019** Stratigraphic constraints on the late Miocene–Pleistocene evolution of the North Island Fault System and axial ranges in the central Hikurangi subduction margin, New Zealand. *New Zealand Journal of Geology and Geophysics*, 62(2): 248-272; [doi: 10.1080/00288306.2018.1545675](https://doi.org/10.1080/00288306.2018.1545675)
- Blundell, C.C.; Armit, R.; Ailleres, L.; Micklethwaite, S.; Martin, A.P.; Betts, P. 2019** Interpreting geology from geophysics in poly-deformed and mineralised terranes; the Otago Schist and the Hyde-Macraes Shear Zone. *New Zealand Journal of Geology and Geophysics*, 62(4): 550-572; [doi: 10.1080/00288306.2019.1579741](https://doi.org/10.1080/00288306.2019.1579741)
- Bostock, H.; Prebble, J.G.; Cortese, G.; Hayward, B.; Calvo, E.; Quiros-Callazos, L.; Kienast, M.; Kim, K. 2019** Paleo-productivity in the SW Pacific Ocean during the early Holocene Climatic Optimum. *Paleoceanography and Paleoclimatology*, 34(4): 580-599; [doi: 10.1029/2019PA003574](https://doi.org/10.1029/2019PA003574)
- Boulton, C.; Niemeijer, A.R.; Hollis, C.J.; Townend, J.; Raven, M.D.; Kulhanek, D.K.; Shepherd, C.L. 2019** Temperature-dependent frictional properties of heterogeneous Hikurangi Subduction Zone input sediments, ODP Site 1124. *Tectonophysics*, 757: 123-139; [doi: 10.1016/j.tecto.2019.02.006](https://doi.org/10.1016/j.tecto.2019.02.006)

- Bracegirdle, T.J.; Colleoni, F.; Abram, N.J.; Bertler, N.A.N.; Dixon, D.A.; England, M.; Favier, V.; Fogwill, C.J.; Fyfe, J.C.; Goodwin, I.; Goosse, H.; Hobbs, W.; Jones, J.M.; Keller, E.D.; Khan, A.L.; Phipps, S.J.; Raphael, M.N.; Russell, J.; Sime, L.; Thomas, E.R.; van den Broeke, M.R.; Wainer, I. 2019** Back to the future: using long-term observational and paleo-proxy reconstructions to improve model projections of Antarctic climate. *Geosciences (Basel, Switzerland)*, 9(6): article 255; doi: [10.3390/geosciences9060255](https://doi.org/10.3390/geosciences9060255)
- Brahney, J.; Ballantyne, A.P.; Vandergoes, M.J.; Baisden, W.T.; Neff, J.C. 2019** Increased dust deposition in New Zealand related to twentieth century Australian land use. *Journal of Geophysical Research. Biogeosciences*, 124(5): 1181-1193; doi: [10.1029/2018JG004627](https://doi.org/10.1029/2018JG004627)
- Brideau, M.-A.; Shugar, D.H.; Bevington, A.R.; Willis, M.J.; Wong, C. 2019** Evolution of the 2014 Vulcan Creek landslide-dammed lake, Yukon, Canada, using field and remote survey techniques. *Landslides*, 16(10): 1823-1840; doi: [10.1007/s10346-019-01199-3](https://doi.org/10.1007/s10346-019-01199-3)
- Brideau, M.-A.; Stead, D.; Millard, T.H.; Ward, B.C. 2019** Field characterisation and numerical modelling of debris avalanche runout on Vancouver Island, British Columbia, Canada. *Landslides*, 16(5): 875-891; doi: [10.1007/s10346-019-01141-7](https://doi.org/10.1007/s10346-019-01141-7)
- Brown, C.; McDonald, G.; Uma, S.R.; Smith, N.; Sadashiva, V.K.; Buxton, R.; Grace, E.S.; Seville, E.; Daly, M.C. 2019** From physical disruption to community impact: modelling a Wellington Fault earthquake. *Australasian Journal of Disaster and Trauma Studies*, 23(2): 65-75
- Brown, N.A.; Rovins, J.E.; Feldmann-Jensen, S.; Orchiston, C.; Johnston, D.M. 2019** Measuring disaster resilience within the hotel sector: an exploratory survey of Wellington and Hawke's Bay, New Zealand hotel staff and management. *International Journal of Disaster Risk Reduction*, 33: 108-121; doi: [10.1016/j.ijdr.2018.09.014](https://doi.org/10.1016/j.ijdr.2018.09.014)
- Bull, S.; Nicol, A.; Strogon, D.P.; Kroeger, K.F.; Seebeck, H. 2019** Tectonic controls on Miocene sedimentation in the Southern Taranaki Basin and implications for New Zealand plate boundary deformation. *Basin research*, 31(2): 253-273; doi: [10.1111/bre.12319](https://doi.org/10.1111/bre.12319)
- Buriticá, L.F.; Schwartz, J.J.; Klepeis, K.A.; Miranda, E.A.; Tulloch, A.J.; Coble, M.A.; Kylander-Clark, A.R.C. 2019** Temporal and spatial variations in magmatism and transpression in a Cretaceous arc, Median Batholith, Fiordland, New Zealand. *Lithosphere*, 11(5): 652-682; doi: [10.1130/L1073.1](https://doi.org/10.1130/L1073.1)
- Burton, Z.F.M.; Moldowan, J.M.; Magoon, L.B.; Sykes, R.; Graham, S.A. 2019** Correction to: Interpretation of source rock depositional environment and age from seep oil, east coast of New Zealand. *International journal of earth sciences*, 108(4): 1093; doi: [10.1007/s00531-019-01722-w](https://doi.org/10.1007/s00531-019-01722-w)
- Burton, Z.F.M.; Moldowan, J.M.; Magoon, L.B.; Sykes, R.; Graham, S.A. 2019** Interpretation of source rock depositional environment and age from seep oil, east coast of New Zealand. *International journal of earth sciences*, 108(4): 1079-1091; doi: [10.1007/s00531-018-01675-6](https://doi.org/10.1007/s00531-018-01675-6)
- Caratori Tontini, F.; Bassett, D.; de Ronde, C.E.J.; Timm, C.; Wysoczanski, R. 2019** Early evolution of a young back-arc basin in the Havre Trough. *Nature geoscience*, 12: 856-862; doi: [10.1038/s41561-019-0439-y](https://doi.org/10.1038/s41561-019-0439-y)
- Caratori Tontini, F.; Tivey, M.A.; de Ronde, C.E.J.; Humphris, S.E. 2019** Heat flow and near-seafloor magnetic anomalies highlight hydrothermal circulation at Brothers Volcano caldera, southern Kermadec Arc, New Zealand. *Geophysical Research Letters*, 46(14): 8252-8260; doi: [10.1029/2019GL083517](https://doi.org/10.1029/2019GL083517)

- Carere, C.R.; McDonald, B.; Peach, H.A.; Greening, C.; Grapes, D.J.; Collet, C.; Stott, M.B. 2019** Hydrogen oxidation influences glycogen accumulation in a verrucomicrobial methanotroph. *Frontiers in Microbiology*, 10: article 1873; doi: [10.3389/fmicb.2019.01873](https://doi.org/10.3389/fmicb.2019.01873)
- Carey, J.M.; Crutchley, G.J.; Mountjoy, J.J.; Petley, D.N.; McSaveney, M.J.; Lyndsell, B.M. 2019** Slow episodic movement driven by elevated pore-fluid pressures in shallow subaqueous slopes. *Geomorphology*, 329: 99-107; doi: [10.1016/j.geomorph.2018.12.034](https://doi.org/10.1016/j.geomorph.2018.12.034)
- Carey, J.M.; Massey, C.I.; Lyndsell, B.M.; Petley, D.N. 2019** Displacement mechanisms of slow-moving landslides in response to changes in pore water pressure and dynamic stress. *Earth Surface Dynamics*, 7(3): 707-722; doi: [10.5194/esurf-2018-73](https://doi.org/10.5194/esurf-2018-73)
- Christie, A.B. 2019** Introduction to New Zealand hard rock gold deposits and their exploration models. *New Zealand Journal of Geology and Geophysics*, 62(4): 394-413; doi: [10.1080/00288306.2019.1653328](https://doi.org/10.1080/00288306.2019.1653328)
- Christie, A.B. 2019** Preface to the special issue: exploration models of New Zealand's hard rock gold deposits. *New Zealand Journal of Geology and Geophysics*, 62(4): 391-393; doi: [10.1080/00288306.2019.1681477](https://doi.org/10.1080/00288306.2019.1681477)
- Christie, A.B.; Simpson, M.P.; Barker, R.G.; Brathwaite, R.L. 2019** Exploration for epithermal Au–Ag deposits in New Zealand: history and strategy. *New Zealand Journal of Geology and Geophysics*, 62(4): 414-441; doi: [10.1080/00288306.2019.1677251](https://doi.org/10.1080/00288306.2019.1677251)
- Clague, J.; Stenger, R.; Morgenstern, U. 2019** The influence of unsaturated zone drainage status on denitrification and the redox succession in shallow groundwater. *Science of the Total Environment*, 660: 1232-1244; doi: [10.1016/j.scitotenv.2018.12.383](https://doi.org/10.1016/j.scitotenv.2018.12.383)
- Clark, K.J.; Howarth, J.D.; Litchfield, N.J.; Cochran, U.A.; Turnbull, J.C.; Dowling, L.; Howell, A.; Berryman, K.R.; Wolfe, F. 2019** Geological evidence for past large earthquakes and tsunamis along the Hikurangi subduction margin, New Zealand. *Marine Geology*, 412: 139-172; doi: [10.1016/j.margeo.2019.03.004](https://doi.org/10.1016/j.margeo.2019.03.004)
- Clement, C.; Abeling, S.; Deely, J.; Teng, A.; Thomson, G.; Johnston, D.M.; Wilson, N. 2019** Descriptive epidemiology of New Zealand's highest mortality earthquake: Hawke's Bay in 1931. *Scientific Reports*, 9(1): article no. 4914; doi: [10.1038/s41598-019-41432-6](https://doi.org/10.1038/s41598-019-41432-6)
- Cole, R.P.; Ohneiser, C.; White, J.D.L.; Townsend, D.B.; Leonard, G.S. 2019** Paleomagnetic evidence for cold emplacement of eruption-fed density current deposits beneath an ancient summit glacier, Tongariro volcano, New Zealand. *Earth and Planetary Science Letters*, 522: 155-165; doi: [10.1016/j.epsl.2019.07.004](https://doi.org/10.1016/j.epsl.2019.07.004)
- Collett, C.M.; Duvall, A.R.; Flowers, R.M.; Tucker, G.E.; Upton, P. 2019** The timing and style of oblique deformation within New Zealand's Kaikoura Ranges and Marlborough Fault System, from low-temperature thermochronology. *Tectonics*, 38(4): 1250-1272; doi: [10.1029/2018TC005268](https://doi.org/10.1029/2018TC005268)
- Conran, J.G.; Kaulfuss, U.; Bannister, J.M.; Mildenhall, D.C.; Lee, D.E. 2019** An *Akania* (Akaniaceae) inflorescence with associated pollen from the early Miocene of New Zealand. *American Journal of Botany*, 106(2): 292-302; doi: [10.1002/ajb2.1236](https://doi.org/10.1002/ajb2.1236)
- Crampton, J.S.; Mortimer, N.; Bland, K.J.; Strogon, D.P.; Sagar, M.W.; Hines, B.R.; King, P.R.; Seebeck, H. 2019** Cretaceous termination of subduction at the Zealandia margin of Gondwana: the view from the paleo-trench. *Gondwana Research*, 70: 222-242; doi: [10.1016/j.gr.2019.01.010](https://doi.org/10.1016/j.gr.2019.01.010)

- Craw, D.; King, T.M.; McCulloch, G.A.; Upton, P.; Waters, J.M. 2019** Biological evidence constraining river drainage evolution across a subduction-transcurrent plate boundary transition, New Zealand. *Geomorphology*, 336: 119-132; [doi: 10.1016/j.geomorph.2019.03.032](https://doi.org/10.1016/j.geomorph.2019.03.032)
- Crawford, M.H.; Saunders, W.S.A.; Doyle, E.E.H.; Leonard, G.S.; Johnston, D.M. 2019** The low-likelihood challenge: risk perception and the use of risk modelling for destructive tsunami policy development in New Zealand local government. *Australasian Journal of Disaster and Trauma Studies*, 23(1): 20 p.
- Dadic, R.; Schneebeli, M.; Wiese, M.; Bertler, N.A.N.; Salamantin, A.N.; Theile, T.C.; Alley, R.B.; Lipenkov, V.Y. 2019** Temperature-driven bubble migration as proxy for internal bubble pressures and bubble trapping function in ice cores. *Journal of Geophysical Research. Atmospheres*, 124(17-18): 10264-10282; [doi: 10.1029/2019JD030891](https://doi.org/10.1029/2019JD030891)
- de Ronde, C.E.J.; Caratori Tontini, F.; Keam, R.F. 2019** Where are the Pink and White Terraces of Lake Rotomahana? *Journal of the Royal Society of New Zealand*, 49(1): 36-59; [doi: 10.1080/03036758.2018.1474479](https://doi.org/10.1080/03036758.2018.1474479)
- de Ronde, C.E.J.; Humphris, S.E.; Höfig, T.W.; Reyes, A.G.; IODP Expedition 376 Scientists 2019** Critical role of caldera collapse in the formation of seafloor mineralization: the case of Brothers volcano. *Geology*, 47(8): 762-766; [doi: 10.1130/G46047.1](https://doi.org/10.1130/G46047.1)
- de Vilder, S.J.; Brain, M.J.; Rosser, N.J. 2019** Controls on the geotechnical response of sedimentary rocks to weathering. *Earth Surface Processes and Landforms*, 44(10): 1910-1929; [doi: 10.1002/esp.4619](https://doi.org/10.1002/esp.4619)
- Dickie, J.E.; Scott, J.M.; Sagar, M.W.; Blakemore, H. 2019** Cretaceous igneous-related mineralisation in the Reefton Goldfield, New Zealand. *New Zealand Journal of Geology and Geophysics*, 62(1): 87-99; [doi: 10.1080/00288306.2018.1529684](https://doi.org/10.1080/00288306.2018.1529684)
- Diederichs, A.; Nissen, E.K.; Lajoie, L.J.; Langridge, R.M.; Malireddi, S.R.; Clark, K.J.; Hamling, I.J.; Tagliasacchi, A. 2019** Unusual kinematics of the Papatea fault (2016 Kaikoura earthquake) suggest anelastic rupture. *Science Advances*, 5(10): article eaax5703; [doi: 10.1126/sciadv.aax5703](https://doi.org/10.1126/sciadv.aax5703)
- Doyle, E.E.H.; Johnston, D.M.; Smith, R.; Paton, D. 2019** Communicating model uncertainty for natural hazards: a qualitative systematic thematic review. *International Journal of Disaster Risk Reduction*, 33: 449-476; [doi: 10.1016/j.ijdrr.2018.10.023](https://doi.org/10.1016/j.ijdrr.2018.10.023)
- Duncan, B.; McKay, R.; Bendle, J.; Naish, T.R.; Inglis, G.N.; Moossen, H.; Levy, R.H.; Ventura, G.T.; Lewis, A.; Chamberlain, B.; Walker, C. 2019** Lipid biomarker distributions in Oligocene and Miocene sediments from the Ross Sea region, Antarctica: implications for use of biomarker proxies in glacially-influenced settings. *Palaeogeography, Palaeoclimatology, Palaeoecology*, 516: 71-89; [doi: 10.1016/j.palaeo.2018.11.028](https://doi.org/10.1016/j.palaeo.2018.11.028)
- Eaves, S.R.; Winckler, G.; Mackintosh, A.N.; Schaefer, J.M.; Townsend, D.B.; Doughty, A.M.; Jones, R.S.; Leonard, G.S. 2019** Late-glacial and Holocene glacier fluctuations in North Island, New Zealand. *Quaternary Science Reviews*, 223: article 105914; [doi: 10.1016/j.quascirev.2019.105914](https://doi.org/10.1016/j.quascirev.2019.105914)
- Edwards, T.L.; Brandon, M.A.; Durand, G.; Edwards, N.R.; Golledge, N.R.; Holden, P.B.; Nias, I.J.; Payne, A.J.; Ritz, C.; Wernecke, A. 2019** Revisiting Antarctic ice loss due to marine ice-cliff instability. *Nature*, 566(7742): 58-64; [doi: 10.1038/s41586-019-0901-4](https://doi.org/10.1038/s41586-019-0901-4)

- Ellis, S.M.; Ghisetti, F.; Barnes, P.M.; Boulton, C.; Fagereng, Å.; Buiter, S. 2019** The contemporary force balance in a wide accretionary wedge: numerical models of the southcentral Hikurangi margin of New Zealand. *Geophysical Journal International*, 219: 776-795; doi: [10.1093/gji/ggz317](https://doi.org/10.1093/gji/ggz317)
- Fagereng, Å.; Savage, H.M.; Morgan, J.K.; Wang, M.; Meneghini, F.; Barnes, P.M.; Bell, R.; Kitajima, H.; McNamara, D.D.; Saffer, D.M.; Wallace, L.M.; Petronotis, K.; LeVay, L.; IODP Expedition 372/375 Scientists 2019** Mixed deformation styles observed on a shallow subduction thrust, Hikurangi margin, New Zealand. *Geology*, 47(9): 872-876; doi: [10.1130/G46367.1](https://doi.org/10.1130/G46367.1)
- Fiebig, J.; Stefánsson, A.; Ricci, A.; Tassi, F.; Viveiros, F.; Silva, C.; Lopez, T.M.; Schreiber, C.; Hofmann, S.; Mountain, B.W. 2019** Abiogenesis not required to explain the origin of volcanic-hydrothermal hydrocarbons. *Geochemical Perspectives Letters*, 11: 23-27; doi: [10.7185/geochemlet.1920](https://doi.org/10.7185/geochemlet.1920)
- Flay, R.G.J.; King, A.B.; Revell, M.; Carpenter, P.; Turner, R.; Cenek, P.; Safaei Pirooz, A.A. 2019** Wind speed measurements and predictions over Belmont Hill, Wellington, New Zealand. *Journal of Wind Engineering and Industrial Aerodynamics*, 195: article 104018; doi: [10.1016/j.jweia.2019.104018](https://doi.org/10.1016/j.jweia.2019.104018)
- Foote, M.; Sadler, P.M.; Cooper, R.A.; Crampton, J.S. 2019** Completeness of the known graptoloid palaeontological record. *Journal of the Geological Society*, 176(6): 1038-1055; doi: [10.1144/jgs2019-061](https://doi.org/10.1144/jgs2019-061)
- Gangl, S.K.; Moy, C.M.; Stirling, C.H.; Jenkyns, H.C.; Crampton, J.S.; Clarkson, M.O.; Ohneiser, C.; Porcelli, D. 2019** High-resolution records of Oceanic Anoxic Event 2: insights into the timing, duration and extent of environmental perturbations from the palaeo-South Pacific Ocean. *Earth and Planetary Science Letters*, 518: 172-182; doi: [10.1016/j.epsl.2019.04.028](https://doi.org/10.1016/j.epsl.2019.04.028)
- Garcia E.S.M.; Sandwell, D.T.; Bassett, D. 2019** Outer trench slope flexure and faulting at Pacific Basin subduction zones. *Geophysical Journal International*, 218(1): 708-728; doi: [10.1093/gji/ggz155](https://doi.org/10.1093/gji/ggz155)
- Gase, A.C.; Van Avendonk, H.J.A.; Bangs, N.L.; Luckie, T.W.; Barker, D.H.N.; Henrys, S.A.; Bassett, D.; Okaya, D.A.; Jacobs, K.M.; Kodaira, S.; Fujie, G.; Arnulf, A.F.; Yamamoto, Y. 2019** Seismic evidence of magmatic rifting in the offshore Taupo Volcanic Zone, New Zealand. *Geophysical Research Letters*, 46(22): 12949-12957; doi: [10.1029/2019GL085269](https://doi.org/10.1029/2019GL085269)
- Giona Bucci, M.; Smith, C.; Almond, P.; Villamor, P.; Tuttle, M. 2019** Micromorphological analysis of liquefaction features in alluvial and coastal environments of Christchurch, New Zealand. *Sedimentology*, 66(3): 963-982; doi: [10.1111/sed.12526](https://doi.org/10.1111/sed.12526)
- Goded, T.; Gerstenberger, M.C.; Stirling, M.W.; Cousins, W.J.; Canessa, S. 2019** High-intensity assignments for the 22 February 2011 M_w 6.2 Christchurch, Canterbury, New Zealand, earthquake: a contribution toward understanding the severe damage caused by this event. *Seismological Research Letters*, 90(4): 1468-1482; doi: [10.1785/0220180385](https://doi.org/10.1785/0220180385)
- Golledge, N.R.; Keller, E.D.; Gomez, N.; Naughten, K.A.; Bernales, J.; Trusel, L.D.; Edwards, T.L. 2019** Global environmental consequences of twenty-first-century ice-sheet melt. *Nature*, 566(7742): 65-72; doi: [10.1038/s41586-019-0889-9](https://doi.org/10.1038/s41586-019-0889-9)

- Gomez-Vasconcelos, M.G.; Villamor, P.; Procter, J.; Palmer, A.; Cronin, S.; Wallace, C.; Townsend, D.B.; Leonard, G.S. 2019** Characterisation of faults as earthquake sources from geomorphic data in the Tongariro Volcanic Complex, New Zealand. *New Zealand Journal of Geology and Geophysics*, 62(1): 131-142; doi: [10.1080/00288306.2018.1548495](https://doi.org/10.1080/00288306.2018.1548495)
- Goto, H.; Kaneko, Y.; Young, J.; Avery, H.; Damiano, L. 2019** Extreme accelerations during earthquakes caused by elastic flapping effect. *Scientific Reports*, 9: article 1117; doi: [10.1038/s41598-018-37716-y](https://doi.org/10.1038/s41598-018-37716-y)
- Goto, T.; Satake, K.; Sugai, T.; Ishibe, T.; Harada, T.; Gusman, A.R. 2019** Tsunami history over the past 2000 years on the Sanriku coast, Japan, determined using gravel deposits to estimate tsunami inundation behavior. *Sedimentary Geology*, 382: 85-102; doi: [10.1016/j.sedgeo.2019.01.001](https://doi.org/10.1016/j.sedgeo.2019.01.001)
- Grant .G.R.; Naish, T.R.; Dunbar, G.B.; Stocchi, P.; Kominz, M.A.; Kamp, P.J.J.; Tapia, C.A.; McKay, R.M.; Levy, R.H.; Patterson, M.O. 2019** The amplitude and origin of sea-level variability during the Pliocene epoch. *Nature*, 574(7777): doi: [10.1038/s41586-019-1619-z](https://doi.org/10.1038/s41586-019-1619-z)
- Gray, M.; Bell, R.; Morgan, J.; Henrys, S.A.; Barker, D.H.N.; IODP Expedition 372 and 375 science parties 2019** Imaging the shallow subsurface structure of the north Hikurangi subduction zone, New Zealand, using 2D Full-Waveform Inversion. *Journal of Geophysical Research. Solid Earth*, 124(8): 9049-9074; doi: [10.1029/2019JB017793](https://doi.org/10.1029/2019JB017793)
- Griffin, A.G. 2019** Subsurface S_{HMAX} determined from a borehole image log, onshore southern East Coast Basin, New Zealand. *New Zealand Journal of Geology and Geophysics*, 62(2): 273-290; doi: [10.1080/00288306.2019.1570946](https://doi.org/10.1080/00288306.2019.1570946)
- Gunawan, E.; Widiyantoro, S.; Marliyani, G.I.; Sunarti, E.; Ida, R.; Gusman, A.R. 2019** Fault source of the 2 September 2009 Mw 6.8 Tasikmalaya intraslab earthquake, Indonesia: analysis from GPS data inversion, tsunami height simulation, and stress transfer. *Physics of the Earth and Planetary Interiors*, 291: 54-61; doi: [10.1016/j.pepi.2019.04.004](https://doi.org/10.1016/j.pepi.2019.04.004)
- Gupta, P.S.; Fang, F.; Rubanov, S.; Loho, T.; Koo, A.; Swift, N.; Fiedler, H.; Leveneur, J.; Murmu, P.P.; Markwitz, A.; Kennedy, J.V. 2019** Decorative black coatings on titanium surfaces based on hard bi-layered carbon coatings synthesized by carbon implantation. *Surface and Coatings Technology*, 358: 386-393; doi: [10.1016/j.surfcoat.2018.11.060](https://doi.org/10.1016/j.surfcoat.2018.11.060)
- Gusman, A.R.; Supendi, P.; Nugraha, A.D.; Power, W.L.; Lateif, H.; Sunendar, H.; Widiyantoro, S.; Daryono; Wyono, S.H.; Hakim, A.; Muhari, A.; Wang, X.; Burbidge, D.R.; Palgunadi, K.; Hamling, I.J.; Daryono, M.R. 2019** Source model for the tsunami inside Palu Bay following the 2018 Palu earthquake, Indonesia. *Geophysical Research Letters*, 46(15): 8271-8230; doi: [10.1029/2019GL082717](https://doi.org/10.1029/2019GL082717)
- Gusyev, M.A.; Morgenstern, U.; Nishihara, T.; Hayashi, T.; Akata, N.; Ichiyanagi, K.; Sugimoto, A.; Hasegawa, A.; Stewart, M.K. 2019** Evaluating anthropogenic and environmental tritium effects using precipitation and Hokkaido snowpack at selected coastal locations in Asia. *Science of the Total Environment*, 659: 1307-1321; doi: [10.1016/j.scitotenv.2018.12.342](https://doi.org/10.1016/j.scitotenv.2018.12.342)
- Haines, A.J.; Wallace, L.M.; Dimitrova, L. 2019** Slow slip event detection in Cascadia using vertical derivatives of horizontal stress rates. *Journal of Geophysical Research. Solid Earth*, 124(5): 5153-5173; doi: [10.1029/2018JB016898](https://doi.org/10.1029/2018JB016898)

- Hamling, I.J.; Cevuard, S.; Garaebiti, E. 2019** Large-scale drainage of a complex magmatic system: observations from the 2018 eruption of Ambrym volcano, Vanuatu. *Geophysical Research Letters*, 46(9): 4609-4617; doi: [10.1029/2019GL082606](https://doi.org/10.1029/2019GL082606)
- Harte, D.S. 2019** Evaluation of earthquake stochastic models based on their real-time forecasts: a case study of Kaikoura 2016. *Geophysical Journal International*, 217(3): 1894-1914; doi: [10.1093/gji/ggz088](https://doi.org/10.1093/gji/ggz088)
- Hatem, A.E.; Dolan, J.F.; Zinke, R.W.; Van Dissen, R.J.; McGuire, C.M.; Rhodes, E.J. 2019** A 2000 yr paleoearthquake record along the Conway segment of the Hope Fault: implications for patterns of earthquake occurrence in northern South Island and southern North Island, New Zealand. *Bulletin of the Seismological Society of America*, 109(6): 2216-2239; doi: [10.1785/0120180313](https://doi.org/10.1785/0120180313)
- Hayes, J.L.; Calderon, R.B.; Deligne, N.I.; Jenkins, S.F.; Leonard, G.S.; McSparran, A.M.; Williams, G.T.; Wilson, T.M. 2019** Timber-framed building damage from tephra fall and lahar: 2015 Calbuco eruption, Chile. *Journal of Volcanology and Geothermal Research*, 374: 142-159; doi: [10.1016/j.jvolgeores.2019.02.017](https://doi.org/10.1016/j.jvolgeores.2019.02.017)
- Hayes, J.L.; Wilson, T.M.; Stewart, C.; Villarosa, G.; Salgado, P.; Beigt, D.; Outes, V.; Deligne, N.I.; Leonard, G.S. 2019** Tephra clean-up after the 2015 eruption of Calbuco volcano, Chile: a quantitative geospatial assessment in four communities. *Journal of applied volcanology*, 8: article 7; doi: [10.1186/s13617-019-0087-3](https://doi.org/10.1186/s13617-019-0087-3)
- Head, M.; Hickey, J.; Gottsmann, J.; Fournier, N. 2019** The influence of viscoelastic crustal rheologies on volcanic ground deformation: insights from models of pressure and volume change. *Journal of Geophysical Research. Solid Earth*, 124(8): doi: [10.1029/2019JB017832](https://doi.org/10.1029/2019JB017832)
- Heise, W.; Ogawa, Y.; Bertrand, E.A.; Caldwell, T.G.; Yoshimura, R.; Ichihara, H.; Bennie, S.L.; Seki, K.; Saito, Z.; Matsunaga, Y.; Suzuki, A.; Kishita, T.; Kinoshita, Y. 2019** Electrical resistivity imaging of the inter-plate coupling transition at the Hikurangi subduction margin, New Zealand. *Earth and Planetary Science Letters*, 524: article 115710; doi: [10.1016/j.epsl.2019.115710](https://doi.org/10.1016/j.epsl.2019.115710)
- Higgs, B.; Mountjoy, J.J.; Crutchley, G.J.; Townend, J.; Ladroit, Y.; Greinert, J.; McGovern, C. 2019** Seep-bubble characteristics and gas emissions from a high density seep field on the shelf to slope transition of the Hikurangi subduction margin. *Journal of Geophysical Research. Oceans*, 417: article 105985; doi: [10.1016/j.margeo.2019.105985](https://doi.org/10.1016/j.margeo.2019.105985)
- Higgs, K.E.; Browne, G.H.; Sahoo, T.R. 2019** Reservoir characterisation of syn-rift and post-rift sandstones in frontier basins: an example from the Cretaceous of Canterbury and Great South basins, New Zealand. *Marine and Petroleum Geology*, 101: 1-29; doi: [10.1016/j.marpetgeo.2018.11.030](https://doi.org/10.1016/j.marpetgeo.2018.11.030)
- Hines, B.R.; Gazley, M.F.; Collins, K.S.; Bland, K.J.; Crampton, J.S.; Ventura, G.T. 2019** Chemostratigraphic resolution of widespread reducing conditions in the southwest Pacific Ocean during the Late Paleocene. *Chemical Geology*, 504: 236-252; doi: [10.1016/j.chemgeo.2018.11.020](https://doi.org/10.1016/j.chemgeo.2018.11.020)
- Hinojosa, J.; Moy, C.M.; Vandergoes, M.J.; Feakins, S.J.; Sessions, A.L. 2019** Hydrologic change in New Zealand during the last deglaciation linked to reorganization of the Southern Hemisphere westerly winds. *Paleoceanography and Paleoclimatology*, 34(12): 2158-2170; doi: [10.1029/2019PA003656](https://doi.org/10.1029/2019PA003656)

- Hoffmann, J.L.; Gorman, A.R.; Crutchley, G.J. 2019** Seismic evidence for repeated vertical fluid flow through polygonally faulted strata in the Canterbury Basin. *Marine and Petroleum Geology*, 109: 317-329; doi: <https://doi.org/10.1016/j.marpetgeo.2019.06.025>
- Hogg, A.G.; Wilson, C.J.N.; Lowe, D.J.; Turney, C.S.M.; White, P.A.; Lorrey, A.M.; Manning, S.W.; Palmer, J.G.; Bury, S.; Brown, J.; Southon, J.; Petchey, F. 2019** Wiggle-match radiocarbon dating of the Taupo eruption. *Nature communications*, 10(1): article 4669; doi: [10.1038/s41467-019-12532-8](https://doi.org/10.1038/s41467-019-12532-8)
- Hollis, C.J.; Dunkley Jones, T.; Anagnostou, E.; Bijl, P.K.; Cramwinckel, M.J.; Cui, Y.; Dickens, G.R.; Edgar, K.M.; Eley, Y.; Evans, D.; Foster, G.L.; Frieling, J.; Inglis, G.N.; Kennedy, E.M.; Kozdon, R.; Lauretano, V.; Lear, C.H.; Littler, K.; Meckler, N.; Naafs, B.D.A.; Pälike, H.; Pancost, R.D.; Pearson, P.; Royer, D.L.; Salzmann, U.; Schubert, B.; Seebeck, H.; Sluijs, A.; Speijer, R.; Stassen, P.; Tierney, J.; Tripathi, A.; Wade, B.; Westerhold, T.; Witkowski, C.; Zachos, J.C.; Zhang, Y.G.; Huber, M.; Lunt, D.J. 2019** The DeepMIP contribution to PMIP4: methodologies for selection, compilation and analysis of latest Paleocene and early Eocene climate proxy data, incorporating version 0.1 of the DeepMIP database. *Geoscientific Model Development*, 12(7): 3149-3206; doi: [10.5194/gmd-2018-309](https://doi.org/10.5194/gmd-2018-309)
- Houghton, K.M.; Carere, C.R.; Stott, M.B.; McDonald, I.R. 2019** Thermophilic methanotrophs: in hot pursuit. *FEMS Microbiology Ecology*, 95(9): doi: [10.1093/femsec/fiz125](https://doi.org/10.1093/femsec/fiz125)
- Hu, W.; Huang, R.; McSaveney, M.J.; Yao, L.; Xu, Q.; Feng, M.; Zhang, X. 2019** Superheated steam, hot CO₂ and dynamic recrystallization from frictional heat jointly lubricated a giant landslide: field and experimental evidence. *Earth and Planetary Science Letters*, 510: 85-93; doi: [10.1016/j.epsl.2019.01.005](https://doi.org/10.1016/j.epsl.2019.01.005)
- Hughes, E.C.; Buse, B.; Kearns, S.L.; Blundy, J.D.; Kilgour, G.N.; Mader, H.M. 2019** Low analytical totals in EPMA of hydrous silicate glass due to sub-surface charging: obtaining accurate volatiles by difference. *Chemical Geology*, 505: 48-56; doi: [10.1016/j.chemgeo.2018.11.015](https://doi.org/10.1016/j.chemgeo.2018.11.015)
- Hughes, E.C.; Mazot, A.; Kilgour, G.N.; Asher, C.; Michelini, M.; Britten, K.; Chardot, L.; Feisel, Y.; Werner, C. 2019** Understanding degassing pathways along the 1886 Tarawera (New Zealand) volcanic fissure by combining soil and lake CO₂ fluxes. *Frontiers in Earth Science*, 7: article 264; doi: [10.3389/feart.2019.00264](https://doi.org/10.3389/feart.2019.00264)
- Hyslop, N.P.; Trzepla, K.; Yatkin, S.; White, W.H.; Ancelet, T.; Davy, P.K.; Butler, O.; Gerboles, M.; Kohl, S.; McWilliams, A.; Saucedo, L.; Van Der Haar, M.; Jonkers, A. 2019** An inter-laboratory evaluation of new multi-element reference materials for atmospheric particulate matter measurements. *Aerosol Science and Technology*, 53(7): 771-782; doi: [10.1080/02786826.2019.1606413](https://doi.org/10.1080/02786826.2019.1606413)
- Iezzi, A.M.; Fee, D.; Kim, K.; Jolly, A.D.; Matoza, R.S. 2019** Three-Dimensional Acoustic Multipole Waveform Inversion at Yasur Volcano, Vanuatu. *Journal of Geophysical Research. Solid Earth*, 124(8): 8679-8703; doi: [10.1029/2018JB017073](https://doi.org/10.1029/2018JB017073)
- Illsley-Kemp, F.; Savage, M.K.; Wilson, C.J.N.; Bannister, S. 2019** Mapping stress and structure from subducting slab to magmatic rift: crustal seismic anisotropy of the North Island, New Zealand. *Geochemistry Geophysics Geosystems*, 20(11): 5038-5056; doi: [10.1029/2019GC008529](https://doi.org/10.1029/2019GC008529)

- Jago, J.B.; Bentley, C.J.; Cooper, R.A. 2019** Cambrian biostratigraphy of the Bowers back-arc basin, Northern Victoria Land, Antarctica: a review. *Palaeoworld*, 28(3): 276-288; doi: [10.1016/j.palwor.2018.12.002](https://doi.org/10.1016/j.palwor.2018.12.002)
- Johnson, P.J.; Zvoloski, G.A.; Stauffer, P.H. 2019** Impact of porosity-dependent retention function on simulations of porous flow. *Transport in Porous Media*, 127(1): 211-232; doi: [10.1007/s11242-018-1188-x](https://doi.org/10.1007/s11242-018-1188-x)
- Jolly, A.D. 2019** On the shallow volcanic response to remote seismicity. *Geology*, 47(1): 95-96; doi: [10.1130/focus012019.1](https://doi.org/10.1130/focus012019.1)
- Jovane, L.; Florindo, F.; Acton, G.; Ohneiser, C.; Sagnotti, L.; Strada, E.; Verosub, K.L.; Wilson, G.S.; Iacoviello, F.; Levy, R.H.; Passchier, S. 2019** Miocene glacial dynamics recorded by variations in magnetic properties in the ANDRILL-2A drill core. *Journal of Geophysical Research. Solid Earth*, 124(3): 2297-2312; doi: [10.1029/2018JB016865](https://doi.org/10.1029/2018JB016865)
- Kaneko, Y.; Ito, Y.; Chow, B.; Wallace, L.M.; Tape, C.; Grapenthin, R.; D'Anastasio, E.; Henrys, S.A.; Hino, R. 2019** Ultra-long duration of seismic ground motion arising from a thick, low velocity sedimentary wedge. *Journal of Geophysical Research. Solid Earth*, 124(10): 10347-10359; doi: [10.1029/2019JB017795](https://doi.org/10.1029/2019JB017795)
- Kaulfuss, U.; Conran, J.G.; Bannister, J.M.; Mildenhall, D.C.; Lee, D.E. 2019** A new Miocene fern (*Palaeosorum: Polypodiaceae*) from New Zealand bearing in situ spores of *Polypodiisporites*. *New Zealand Journal of Botany*, 57(1): 2-17; doi: [10.1080/0028825X.2018.1560336](https://doi.org/10.1080/0028825X.2018.1560336)
- Kaviyarasu, K.; Mola, G.T.; Oseni, S.O.; Kanimozhi, K.; Magdalene, C.M.; Kennedy, J.V.; Maaza, M. 2019** ZnO doped single wall carbon nanotube as an active medium for gas sensor and solar absorber. *Journal of Materials Science: Materials in Electronics*, 30(1): 147-158; doi: [10.1007/s10854-018-0276-6](https://doi.org/10.1007/s10854-018-0276-6)
- Kearse, J.; Kaneko, Y.; Little, T.; Van Dissen, R.J. 2019** Curved slickenlines preserve direction of rupture propagation. *Geology*, 47(9): 838-842; doi: [10.1130/G46563.1](https://doi.org/10.1130/G46563.1)
- Kellett, R.L.; Bromley, C.J. 2019** Geophysical signatures of New Zealand epithermal Au-Ag deposits, and methods for new exploration. *New Zealand Journal of Geology and Geophysics*, 62(4): 442-460; doi: [10.1080/00288306.2018.1548494](https://doi.org/10.1080/00288306.2018.1548494)
- Kelpeis, K.; Webb, L.; Blatchford, H.; Schwartz, J.; Jongens, R.; Turnbull, R.E.; Stowell, H. 2019** Deep slab collision during Miocene subduction causes uplift along crustal-scale reverse faults in Fiordland, New Zealand. *GSA today*, 29(9): 4-10; doi: [10.1130/GSATG399A.1](https://doi.org/10.1130/GSATG399A.1)
- Kilgour, G.N.; Gates, S.; Kennedy, B.M.; Farquhar, A.; McSporran, A.; Asher, C. 2019** Phreatic eruption dynamics derived from deposit analysis: a case study from a small, phreatic eruption from Whakaari/White Island, New Zealand. *Earth, Planets and Space*, 71: Article 36; doi: [10.1186/s40623-019-1008-8](https://doi.org/10.1186/s40623-019-1008-8)
- Kilvington, M.; Saunders, W.S.A. 2019** Gaining public input on natural hazard risk and land-use planning: a case study from New Zealand. *Disaster prevention and management*, 28(2): 228-244; doi: [10.1108/DPM-04-2018-0134](https://doi.org/10.1108/DPM-04-2018-0134)
- Kleint, C.; Bach, W.; Diehl, A.; Fröhberg, A.; Garbe-Schönberg, D.; Hartmann, J.F.; de Ronde, C.E.J.; Sander, S.G.; Strauss, H.; Stucker, V.K.; Thal, J.; Zitoun, R.; Koschinsky, A. 2019** Geochemical characterization of highly diverse hydrothermal fluids from volcanic vent systems of the Kermadec intraoceanic arc. *Chemical Geology*, 528: 119289; doi: [10.1016/j.chemgeo.2019.119289](https://doi.org/10.1016/j.chemgeo.2019.119289)

- Klepeis, K.A.; Webb, L.E.; Blatchford, H.J.; Jongens, R.; Turnbull, R.E.; Schwartz, J.J. 2019** The age and origin of Miocene-Pliocene fault reactivations in the upper plate of an incipient subduction zone, Puysegur Margin, New Zealand. *Tectonics*, 38(8): 3237-3260; doi: [10.1029/2019TC005674](https://doi.org/10.1029/2019TC005674)
- Knowing, M.J.; White, J.T.; Moore, C.R. 2019** Role of model parameterization in risk-based decision support: an empirical exploration. *Advances in Water Resources*, 128: 59-73; doi: [10.1016/j.advwatres.2019.04.010](https://doi.org/10.1016/j.advwatres.2019.04.010)
- Kroeger, K.F.; Crutchley, G.J.; Kellett, R.L.; Barnes, P.M. 2019** A 3D model of gas generation, migration and gas hydrate formation at a young convergent margin (Hikurangi Margin, New Zealand). *Geochemistry Geophysics Geosystems*, 20(11): 5126-5147; doi: [10.1029/2019GC008275](https://doi.org/10.1029/2019GC008275)
- Kroeger, K.F.; Thrasher, G.P.; Sarma, M. 2019** The evolution of a Middle Miocene deep-water sedimentary system in northwestern New Zealand (Taranaki Basin): depositional controls and mechanisms. *Marine and Petroleum Geology*, 101: 355-372; doi: [10.1016/j.marpetgeo.2018.11.052](https://doi.org/10.1016/j.marpetgeo.2018.11.052)
- Kulhanek, D.K.; Levy, R.H.; Clowes, C.D.; Prebble, J.G.; Rodelli, D.; Jovane, L.; Morgans, H.E.G.; Kraus, C.; Zwingmann, H.; Griffith, E.M.; Scher, H.D.; McKay, R.M.; Naish, T.R. 2019** Revised chronostratigraphy of DSDP Site 270 and late Oligocene to early Miocene paleoecology of the Ross Sea sector of Antarctica. *Global and Planetary Change*, 178: 46-64; doi: [10.1016/j.gloplacha.2019.04.002](https://doi.org/10.1016/j.gloplacha.2019.04.002)
- Kusakabe, M.; Tiodjio, R.E.; Christenson, B.W.; Saiki, K.; Ohba, T.; Yaguchi, M. 2019** Enrichment of ferrous iron in the bottom water of Lake Nyos. *Journal of African earth sciences*, 150: 37-46; doi: [10.1016/j.jafrearsci.2018.10.014](https://doi.org/10.1016/j.jafrearsci.2018.10.014)
- Kutovaya, A.; Kroeger, K.F.; Seebeck, H.; Back, S.; Littke, R. 2019** Thermal effects of magmatism on surrounding sediments and petroleum systems in the northern offshore Taranaki Basin. *Geosciences (Basel, Switzerland)*, 9(7): article 288; doi: [10.3390/geosciences9070288](https://doi.org/10.3390/geosciences9070288)
- Kwok, A.H.; Becker, J.S.; Paton, D.; Hudson-Doyle, E.; Johnston, D.M. 2019** Stakeholders' perspectives of social capital in informing the development of neighborhood-based disaster resilience measurements. *Journal of Applied Social Science*, 13(1): 26-57; doi: [10.1177%2F1936724419827987](https://doi.org/10.1177/2F1936724419827987)
- Lanza, F.; Chamberlain, C.J.; Jacobs, K.M.; Warren-Smith, E.; Godfrey, H.J.; Kortink, M.; Thurber, C.H.; Savage, M.K.; Townend, J.; Roecker, S.; Eberhart-Phillips, D. 2019** Crustal fault connectivity of the Mw 7.8 2016 Kaikoura earthquake constrained by aftershock relocations. *Geophysical Research Letters*, 46(12): 6487-6496; doi: [10.1029/2019GL082780](https://doi.org/10.1029/2019GL082780)
- Leveneur, J.; Williams, G.V.M.; Mitchell, D.R.G.; Kennedy, J.V. 2019** Exchange bias and large room temperature magnetoresistance in ion beam-synthesized Co nanoparticles in SiO₂. *Emergent Materials*, 2(3): doi: [10.1007/s42247-019-00034-8](https://doi.org/10.1007/s42247-019-00034-8)
- Levy, R.H.; Meyers, S.R.; Naish, T.R.; Golledge, N.R.; McKay, R.M.; Crampton, J.S.; DeConto, R.M.; De Santis, L.; Florindo, F.; Gasson, E.G.W.; Harwood, D.M.; Luyendyk, B.P.; Powell, R.D.; Clowes, C.D.; Kulhanek, D.K. 2019** Antarctic ice-sheet sensitivity to obliquity forcing enhanced through ocean connections. *Nature geoscience*, 12(2): 132-137; doi: [10.1038/s41561-018-0284-4](https://doi.org/10.1038/s41561-018-0284-4)

- Lin, S.-L.; King, A.B.; Horspool, N.A.; Sadashiva, V.K.; Paulik, R.; Williams, S. 2019** Development and application of the Real-time Individual Asset Attribute Collection Tool. *Frontiers in Built Environment*, 5: Article 15; [doi: 10.3389/fbuil.2019.00015](https://doi.org/10.3389/fbuil.2019.00015)
- Little, T.A.; Webber, S.M.; Mizera, M.; Boulton, C.; Oesterle, J.; Ellis, S.M.; Boles, A.; van der Pluijm, B.; Norton, K.; Seward, D.; Biemiller, J.; Wallace, L.M. 2019** Evolution of a rapidly slipping, active low-angle normal fault, Suckling-Dayman metamorphic core complex, SE Papua New Guinea. *Geological Society of America Bulletin*, 131(7/8): 1333-1363; [doi: 10.1130/B35051.1](https://doi.org/10.1130/B35051.1)
- Liu, Z.; Yuan, Y.; Zhang, Y.; Shi, Y.; Hu, G.; Zhu, J.; Rogers, K.M. 2019** Geographical traceability of Chinese green tea using stable isotope and multi-element chemometrics. *Rapid Communications in Mass Spectrometry*, 33(8): 778-788; [doi: 10.1002/rcm.8405](https://doi.org/10.1002/rcm.8405)
- Liu, Z.; Zhang, T.; Zhang, Y.; Shao, S.; Nie, J.; Yuan, Y.; Rogers, K.M. 2019** Influence of leaf age, species and soil depth on the authenticity and geographical origin assignment of green tea. *Rapid Communications in Mass Spectrometry*, 33(7): 625-634; [doi: 10.1002/rcm.8387](https://doi.org/10.1002/rcm.8387)
- Liu, Z.; Zhang, W.; Zhang, Y.; Chen, T.; Shao, S.; Zhou, L.; Yuan, Y.; Xie, T.; Rogers, K.M. 2019** Assuring food safety and traceability of polished rice from different production regions in China and Southeast Asia using chemometric models. *Food control*, 99: 1-10; [doi: 10.1016/j.foodcont.2018.12.011](https://doi.org/10.1016/j.foodcont.2018.12.011)
- Loame, R.C.; Villamor, P.; Lowe, D.J.; Milicich, S.D.; Pittari, A.; Barker, S.L.L.; Rae, A.J.; Gomez-Vasconcelos, M.G.; Martinez-Martos, M.; Ries, W.F. 2019** Using paleoseismology and tephrochronology to reconstruct fault rupturing and hydrothermal activity since c. 40 ka in Taupo Rift, New Zealand. *Quaternary international*, 500: 52-70; [doi: 10.1016/j.quaint.2019.02.031](https://doi.org/10.1016/j.quaint.2019.02.031)
- Lowry, D.P.; Golledge, N.R.; Bertler, N.A.N.; Jones, R.S.; McKay, R. 2019** Deglacial grounding-line retreat in the Ross Embayment, Antarctica, controlled by ocean and atmosphere forcing. *Science Advances*, 5(8): eaav8754; [doi: 10.1126/sciadv.aav8754](https://doi.org/10.1126/sciadv.aav8754)
- Lowry, D.P.; Golledge, N.R.; Menviel, L.; Bertler, N.A.N. 2019** Deglacial evolution of regional Antarctic climate and Southern Ocean conditions in transient climate simulations. *Climate of the past*, 15(1): 189-215; [doi: 10.5194/cp-15-189-2019](https://doi.org/10.5194/cp-15-189-2019)
- Magdalene, C.M.; Kaviyarasu, K.; Priyadharsini, G.M.A.; Bashir, A.K.H.; Mayedwa, N.; Matinise, N.; Isaev, A.B.; Abdullah Al-Dhabi, N.; Arasu, M.V.; Arokiyaraj, S.; Kennedy, J.V.; Maaza, M. 2019** Improved photocatalytic decomposition of aqueous Rhodamine-B by solar light illuminated hierarchical yttria nanosphere decorated ceria nanorods. *Journal of materials science*, 8(3): 2898-2909; [doi: 10.1016/j.jmrt.2018.11.019](https://doi.org/10.1016/j.jmrt.2018.11.019)
- Mandon, C.L.; Christenson, B.W.; Schipper, C.I.; Seward, T.M.; Garaebiti, E. 2019** Metal transport in volcanic plumes: a case study at White Island and Yasur volcanoes. *Journal of Volcanology and Geothermal Research*, 369: 155-171; [doi: 10.1016/j.jvolgeores.2018.11.024](https://doi.org/10.1016/j.jvolgeores.2018.11.024)
- Mannen, K.; Roman, D.; Leonard, G.S.; Prejean, S.; Nakagawa, M. 2019** Special issue "Towards forecasting phreatic eruptions: examples from Hakone volcano and some global equivalents". *Earth, Planets and Space*, 71(1): article 91; [doi: 10.1186/s40623-019-1068-9](https://doi.org/10.1186/s40623-019-1068-9)
- Martindale, H.; Morgenstern, U.; Singh, R.; Stewart, B. 2019** Optimisation of enrichment methods and evaluation of errors for high sensitivity measurement of ²²²Rn in natural waters. *Journal of radioanalytical and nuclear chemistry*, 320(2): 361-367; [doi: 10.1007/s10967-019-06474-0](https://doi.org/10.1007/s10967-019-06474-0)

- Martindale, H.; van der Raaij, R.W.; Daughney, C.J.; Morgenstern, U.; Singh, R.; Jha, N.; Hadfield, J. 2019** Assessment of excess N₂ for quantifying actual denitrification in New Zealand groundwater systems. *Journal of Hydrology, New Zealand*, 58(1): 1-17
- Massiot, C.; Seebeck, H.; Nicol, A.; McNamara, D.D.; Lawrence, M.J.F.; Griffin, A.G.; Thrasher, G.P.; O'Brien, G.; Viskovic, G.P.D. 2019** Effects of regional and local stresses on fault slip tendency in the southern Taranaki Basin, New Zealand. *Marine and Petroleum Geology*, 107: 467-483; doi: [10.1016/j.marpetgeo.2019.05.030](https://doi.org/10.1016/j.marpetgeo.2019.05.030)
- Materna, K.; Bartlow, N.; Wech, A.; Williams, C.A.; Bürgmann, R. 2019** Dynamically triggered changes of plate interface coupling in southern Cascadia. *Geophysical Research Letters*, 46(22): 12890-12899; doi: [10.1029/2019GL084395](https://doi.org/10.1029/2019GL084395)
- Mazot, A.; Rae, A.J.; Jentsch, A.; Britten, K. 2019** Testing the tunable diode laser system in extreme environments: measuring high and low CO₂ concentrations in both active volcanic and geothermal settings. *Journal of Volcanology and Geothermal Research*, 376: 1-14; doi: [10.1016/j.jvolgeores.2019.03.011](https://doi.org/10.1016/j.jvolgeores.2019.03.011)
- McNamara, D.D.; Milicich, S.D.; Massiot, C.; Villamor, P.; McLean, K.; Sepulveda, F.; Ries, W.F. 2019** Tectonic controls on Taupo Volcanic Zone geothermal expression: insights from Te Mihi, Wairakei Geothermal Field. *Tectonics*, 38(8): 3011-3033; doi: [10.1029/2018TC005296](https://doi.org/10.1029/2018TC005296)
- Meng, J.; Liu, Z.; Gou, C.-L.; Rogers, K.M.; Yu, W.-J.; Zhang, S.S.; Yuan, Y.-W.; Zhang, L. 2019** Geographical origin of Chinese wolfberry (goji) determined by carbon isotope analysis of specific volatile compounds. *Journal of chromatography. B, Analytical Technologies in the Biomedical and Life Sciences*, 1105: 104-112; doi: [10.1016/j.jchromb.2018.12.011](https://doi.org/10.1016/j.jchromb.2018.12.011)
- Miyoshi, Y.; Ishibashi, J.-I.; Uehara, S.; Shimada, K.; Faure, K. 2019** The subseafloor thermal gradient at Iheya North Knoll, Okinawa Trough, based on oxygen and hydrogen isotope ratios of clay minerals. *Journal of Volcanology and Geothermal Research*, 384: 263-274; doi: [10.1016/j.jvolgeores.2019.07.017](https://doi.org/10.1016/j.jvolgeores.2019.07.017)
- Mizera, M.; Little, T.A.; Biemiller, J.; Ellis, S.M.; Webber, S.; Norton, K.P. 2019** Structural and geomorphic evidence for rolling-hinge style deformation of an active continental low-angle normal fault, SE Papua New Guinea. *Tectonics*, 38(5): 1556-1583; doi: [10.1029/2018TC005167](https://doi.org/10.1029/2018TC005167)
- Mochizuki, K.; Sutherland, R.; Henrys, S.A.; Bassett, D.; Van Avendonk, H.; Arai, R.; Kodaira, S.; Fujie, G.; Yamamoto, Y.; Bangs, N.; Barker, D.H.N. 2019** Recycling of depleted continental mantle by subduction and plumes at the Hikurangi Plateau large igneous province, southwestern Pacific Ocean. *Geology*, 47(8): 795-798; doi: [10.1130/G46250.1](https://doi.org/10.1130/G46250.1)
- Moreau, M.; Hadfield, J.; Hughey, J.; Sanders, F.; Lapworth, D.J.; White, D.; Civil, W. 2019** A baseline assessment of emerging organic contaminants in New Zealand groundwater. *Science of the Total Environment*, 686: 425-439; doi: [10.1016/j.scitotenv.2019.05.210](https://doi.org/10.1016/j.scitotenv.2019.05.210)
- Morgans, H.E.G.; Clowes, C.D. 2019** Proposed new reference section for the base of the Bortonian stage (middle Eocene), New Zealand. *New Zealand Journal of Geology and Geophysics*, 62(1): 100-110; doi: [10.1080/00288306.2018.1531035](https://doi.org/10.1080/00288306.2018.1531035)
- Morgenstern, R.; Turnbull, R.E.; Ashwell, P.A.; Horton, T.W.; Oze, C. 2019** Petrological and geochemical characteristics of REE mineralization in the A-type French Creek Granite, New Zealand. *Mineralium deposita*, 54(7): 935-958; doi: [10.1007/s00126-018-0854-9](https://doi.org/10.1007/s00126-018-0854-9)
- Morris, C.J.; Mroczek, E.K.; Misa, T.N. 2019** Geothermal steam condition performance. *Geothermics*, 81: 101-112; doi: [10.1016/j.geothermics.2019.04.009](https://doi.org/10.1016/j.geothermics.2019.04.009)

- Mortimer, N.; Dadd, K.A.; O'Toole, L.; Crundwell, M.P.; Seton, M.; Williams, S.; Etienne, S.; Collot, J. 2019** Eocene nephelinite and basanite from the Fairway Ridge, North Zealandia. *Deep-Sea Research. Part I, Oceanographic Research Papers*, 152: article 103101; doi: [10.1016/j.dsr.2019.103101](https://doi.org/10.1016/j.dsr.2019.103101)
- Mortimer, N.; van den Bogaard, P.; Hoernle, K.; Timm, C.; Gans, P.B.; Werner, R.; Riefstahl, F. 2019** Late Cretaceous oceanic plate reorganization and the breakup of Zealandia and Gondwana. *Gondwana Research*, 65: 31-42; doi: [10.1016/j.gr.2018.07.010](https://doi.org/10.1016/j.gr.2018.07.010)
- Mouslopoulou, V.; Saltogianni, V.; Nicol, A.; Oncken, O.; Begg, J.G.; Babeyko, A.; Cesca, S.; Moreno, M. 2019** Breaking a subduction-termination from top to bottom: the large 2016 Kaikoura Earthquake, New Zealand. *Earth and Planetary Science Letters*, 506: 221-230; doi: [10.1016/j.epsl.2018.10.020](https://doi.org/10.1016/j.epsl.2018.10.020)
- Mroczek, E.K.; Graham, D.J.; Bacon, L. 2019** Removal of arsenic and silica from geothermal fluid by electrocoagulation. *Journal of Environmental Chemical Engineering*, 7(4): article 103232; doi: [10.1016/j.jece.2019.103232](https://doi.org/10.1016/j.jece.2019.103232)
- Mulia, I.E.; Gusman, A.R.; Williamson, A.L.; Satake, K. 2019** An optimized array configuration of tsunami observation network off Southern Java, Indonesia. *Journal of Geophysical Research. Solid Earth*, 124(9): doi: [10.1029/2019JB017600](https://doi.org/10.1029/2019JB017600)
- Muramoto, T.; Ito, Y.; Inazu, D.; Wallace, L.M.; Hino, R.; Suzuki, S.; Webb, S.C.; Henrys, S.A. 2019** Seafloor crustal deformation on ocean bottom pressure records with nontidal variability corrections: application to Hikurangi Margin, New Zealand. *Geophysical Research Letters*, 46(1): 303-310; doi: [10.1029/2018GL080830](https://doi.org/10.1029/2018GL080830)
- Murmu, P.P.; Chong, S.V.; Storey, J.; Rubanov, S.; Kennedy, J.V. 2019** Secondary phase induced electrical conductivity and improvement in thermoelectric power factor of zinc antimonide films. *Materials Today Energy*, 13: 249-255; doi: [10.1016/j.mtener.2019.06.001](https://doi.org/10.1016/j.mtener.2019.06.001)
- Murmu, P.P.; Kennedy, J.V.; Suman, S.; Chong, S.V.; Leveneur, J.; Storey, J.; Rubanov, S.; Ramanath, G. 2019** Multifold improvement of thermoelectric power factor by tuning bismuth and antimony in nanostructured n-type bismuth antimony telluride thin films. *Materials & Design*, 163: article 107549; doi: [10.1016/j.matdes.2018.107549](https://doi.org/10.1016/j.matdes.2018.107549)
- Naeher, S.; Hollis, C.J.; Clowes, C.D.; Ventura, G.T.; Shepherd, C.L.; Crouch, E.M.; Morgans, H.E.G.; Bland, K.J.; Strogon, D.P.; Sykes, R. 2019** Depositional and organofacies influences on the petroleum potential of an unusual marine source rock: Waipawa Formation (Paleocene) in southern East Coast Basin, New Zealand. *Marine and Petroleum Geology*, 104: 468-488; doi: [10.1016/j.marpetgeo.2019.03.035](https://doi.org/10.1016/j.marpetgeo.2019.03.035)
- Nakayuchi, K.; Becker, J.S.; Potter, S.H.; Dixon, M. 2019** Residents' reactions to earthquake early warnings in Japan. *Risk analysis*, 39(8): 1723-1740; doi: [10.1111/risa.13306](https://doi.org/10.1111/risa.13306)
- Nathan, S. 2019** John Buchanan (1819–1898): New Zealand's first scientific illustrator. *Journal of the Royal Society of New Zealand*, 49(4): 508-516; doi: [10.1080/03036758.2019.1656261](https://doi.org/10.1080/03036758.2019.1656261)
- Ohneiser, C.; Yoo, K.-C.; Albot, O.B.; Cortese, G.; Riesselman, C.; Lee, J.I.; McKay, R.; Bollen, M.; Lee, M.K.; Moon, H.S.; Kim, S.; Beltran, C.; Levy, R.H.; Wilson, G.S. 2019** Magneto-biostratigraphic age models for Pleistocene sedimentary records from the Ross Sea. *Global and Planetary Change*, 176: 36-49; doi: [10.1016/j.gloplacha.2019.02.013](https://doi.org/10.1016/j.gloplacha.2019.02.013)

- Okada, T.; Iio, Y.; Matsumoto, S.; Bannister, S.; Ohmi, S.; Horiuchi, S.; Sato, T.; Miura, T.; Pettinga, J.; Ghisetti, F.; Sibson, R.H. 2019 Comparative tomography of reverse-slip and strike-slip seismotectonic provinces in the northern South Island, New Zealand. *Tectonophysics*, 765: 172-186; doi: [10.1016/j.tecto.2019.03.016](https://doi.org/10.1016/j.tecto.2019.03.016)
- Olsen, N.J.; Mountain, B.W.; Seward, T.M. 2019 Antimony(III) Speciation in Hydrosulfide Solutions from 70 to 400 °C and up to 300 bar. *ACS Earth and Space Chemistry*, 3(6): 1058-1072; doi: [10.1021/acsearthspacechem.8b00211](https://doi.org/10.1021/acsearthspacechem.8b00211)
- Ortuño, M.; Corominas, O.; Villamor, P.; Zúñiga R.; Lacan, P.; Aguirre-Díaz, G.; Perea, H.; Štěpánčíková, P.; Ramírez-Herrera, T. 2019 Evidence of recent ruptures in the central faults of the Acambay graben (central Mexico). *Geomorphology*, 326: 17-37; doi: [10.1016/j.geomorph.2018.07.010](https://doi.org/10.1016/j.geomorph.2018.07.010)
- Pallister, J.; Papale, P.; Eichelberger, J.; Newhall, C.; Mandeville, C.; Nakada, S.; Marzocchi, W.; Loughlin, S.; Jolly, G.E.; Ewert, J.; Selva, J. 2019 Volcano observatory best practices (VOBP) workshops: a summary of findings and best-practice recommendations. *Journal of applied volcanology*, 8(1): Article 2; doi: [10.1186/s13617-019-0082-8](https://doi.org/10.1186/s13617-019-0082-8)
- Park, I.; Jolly, A.D.; Kim, K.Y.; Kennedy, B. 2019 Temporal variations of repeating low frequency volcanic earthquakes at Ngauruhoe Volcano, New Zealand. *Journal of Volcanology and Geothermal Research*, 373: 108-119; doi: [10.1016/j.jvolgeores.2019.01.024](https://doi.org/10.1016/j.jvolgeores.2019.01.024)
- Paulik, R.; Gusman, A.R.; Williams, J.H.; Pratama, G.M.; Lin, S.-L.; Prawirabhakti, A.; Sulendra, K.; Zachari, K.S.; Fortuna, Z.E.D.; Layuk, N.B.P.; Suwarni, N.W.I. 2019 Tsunami hazard and built environment damage observations from Palu City after the September 28 2018 Sulawesi earthquake and tsunami. *Pure and Applied Geophysics*, 176(8): 3305-3321; doi: [10.1007/s00024-019-02254-9](https://doi.org/10.1007/s00024-019-02254-9)
- Paulik, R.; Lane, E.; Williams, S.; Power, W.L. 2019 Changes in tsunami risk to residential buildings at Omaha Beach, New Zealand. *Geosciences (Basel, Switzerland)*, 9(3): article 113; doi: [10.3390/geosciences9030113](https://doi.org/10.3390/geosciences9030113)
- Portnov, A.; Cook, A.E.; Sawyer, D.E.; Yang, C.; Hillman, J.I.T.; Waite, W.F. 2019 Clustered BSRs: evidence for gas hydrate-bearing turbidite complexes in folded regions, example from the Perdido Fold Belt, northern Gulf of Mexico. *Earth and Planetary Science Letters*, 528: article 115483; doi: [10.1016/j.epsl.2019.115843](https://doi.org/10.1016/j.epsl.2019.115843)
- Poupart, T.A.; Waugh, S.M.; Bost, C.A.; Kato, A.; Miskelly, C.M.; Rogers, K.M.; Arnould, J.P.Y. 2019 Foraging ecology of a winter breeder, the Fiordland penguin. *Marine Ecology Progress Series*, 614: 183-197; doi: [10.3354/meps12910](https://doi.org/10.3354/meps12910)
- Poupart, T.A.; Waugh, S.M.; Miskelly, C.M.; Kato, A.; Angel, L.P.; Rogers, K.M.; Arnould, J.P.Y. 2019 Fine-scale foraging behaviour of southern Buller's albatross, the only *Thalassarche* that provisions chicks through winter. *Marine Ecology Progress Series*, 625: 163-179; doi: [10.3354/meps13042](https://doi.org/10.3354/meps13042)
- Quigley, M.C.; Bennetts, L.G.; Durance, P.M.J.; Kuhnert, P.M.; Linsay, M.D.; Pembleton, K.G.; Roberts, M.E.; White, C.J. 2019 The provision and utility of earth science to decision-makers: synthesis and key findings. *Environment Systems and Decisions*, 39(3): 349-367; doi: [10.1007/s10669-019-09737-z](https://doi.org/10.1007/s10669-019-09737-z)

- Quigley, M.C.; Bennetts, L.G.; Durance, P.M.J.; Kuhnert, P.M.; Linsay, M.D.; Pembleton, K.G.; Roberts, M.E.; White, C.J. 2019** The provision and utility of science and uncertainty to decision-makers: earth science case studies. *Environment Systems and Decisions*, 39(3): 307-348; doi: [10.1007/s10669-019-09728-0](https://doi.org/10.1007/s10669-019-09728-0)
- Rainsley, E.; Turney, C.S.M.; Golledge, N.R.; Wilmshurst, J.M.; McGlone, M.S.; Hogg, A.G.; Li, B.; Thomas, Z.A.; Roberts, R.; Jones, R.T.; Palmer, J.G.; Flett, V.; De Wet, G.; Hutchinson, D.K.; Lipson, M.J.; Fenwick, P.; Hines, B.R.; Binetti, U.; Fogwill, C.J. 2019** Pleistocene glacial history of the New Zealand subantarctic islands. *Climate of the past*, 15(2): 423-448; doi: [10.5194/cp-15-423-2019](https://doi.org/10.5194/cp-15-423-2019)
- Rathnakumar, S.S.; Noluthando, K.; Kulandaiswamy, A.J.; Rayappan, J.B.B.; Kaviyarasu, K.; Kennedy, J.V.; Maaza, M. 2019** Stalling behaviour of chloride ions: a non-enzymatic electrochemical detection of [alpha]-Endosulfan using CuO interface. *Sensors and actuators. B, Chemical*, 293: 100-106; doi: [10.1016/j.snb.2019.04.141](https://doi.org/10.1016/j.snb.2019.04.141)
- Ratna, P.N.; Gusman, A.R.; Nugraha, A.D. 2019** Teleseismic body wave inversion in determining rupture process of Sumbawa doublet earthquake, November 25th , 2007. *IOP Conference Series. Earth and Environmental Science*, 318: article 012022; doi: [10.1088/1755-1315/318/1/012022](https://doi.org/10.1088/1755-1315/318/1/012022)
- Reichgelt, T.; Kennedy, E.M.; Conran, J.G.; Lee, W.G.; Lee, D.E. 2019** The presence of moisture deficits in Miocene New Zealand. *Global and Planetary Change*, 172: 268-277; doi: [10.1016/j.gloplacha.2018.10.013](https://doi.org/10.1016/j.gloplacha.2018.10.013)
- Rhoades, D.A.; Christophersen, A. 2019** Time-varying probabilities of earthquake occurrence in central New Zealand based on the EEPAS model compensated for time-lag. *Geophysical Journal International*, 219(1): 417-429; doi: [10.1093/gji/ggz301](https://doi.org/10.1093/gji/ggz301)
- Rhoades, D.A.; McVerry, G.H. 2019** Obituary: David Dowrick (1935-2019). *Bulletin of the New Zealand Society for Earthquake Engineering*, 52(4): i
- Ring, U.; Mortimer, N.; Deckert, H. 2019** Critical-wedge theory and the Mesozoic accretionary wedge of New Zealand. *Journal of Structural Geology*, 122: 1-10; doi: [10.1016/j.jsg.2019.02.005](https://doi.org/10.1016/j.jsg.2019.02.005)
- Rissman, C.W.F.; Pearson, L.K.; Beyer, M.; Couldrey, M.A.; Lindsay, J.L.; Martin, A.P.; Baisden, W.T.; Clough, T.J.; Horton, T.W.; Webster-Brown, J.G. 2019** A hydrochemically guided landscape classification system for modelling spatial variation in multiple water quality indices: process-attribute mapping. *Science of the Total Environment*, 672: 815-833; doi: [10.1016/j.scitotenv.2019.03.492](https://doi.org/10.1016/j.scitotenv.2019.03.492)
- Rogers, K.M. 2019** Provenance, authentication and residue analysis of some Maori taonga using portable X-ray fluorescence. *Tuhinga*, 30: 256-268
- Ruhl, C.J.; Melgar, D.; Geng, J.; Goldberg, D.E.; Crowell, B.W.; Allen, R.M.; Bock, Y.; Barrientos, S.; Riquelme, S.; Baez, J.C.; Cabral-Cano, E.; Pérez-Campos, X.; Hill, E.M.; Protti, M.; Ganas, A.; Ruiz, M.; Mothes, P.; Jarrín, P.; Nocquet, J.M.; Avouac, J.P.; D'Anastasio, E. 2019** A global database of strong-motion displacement GNSS recordings and an example application to PGD scaling. *Seismological Research Letters*, 90(1): 271-279; doi: [10.1785/0220180177](https://doi.org/10.1785/0220180177)

- Sagar, M.W.; Browne, G.H.; Arnot, M.J.; Seward, D.; Strogon, D.P. 2019** New U-Pb zircon ages and a revised integrated age model for the late Miocene northern Taranaki coastal section, New Zealand. *New Zealand Journal of Geology and Geophysics*, 62(3): 357-370; doi: [10.1080/00288306.2019.1600555](https://doi.org/10.1080/00288306.2019.1600555)
- Sand, C.; Grant-Mackie, J.A.; Campbell, H.J.; Turnbull, J.C. 2019** Seashore settlement patterns in the Koné and Naïa periods: case studies from southwestern New Caledonia. *Journal of Island and Coastal Archaeology*, 14(1): 130-142; doi: [10.1080/15564894.2018.1513101](https://doi.org/10.1080/15564894.2018.1513101)
- Sandupatla, A.; Arulkumaran, S.; Ranjan, K.; Ing, G.I.; Murmu, P.P.; Kennedy, J.V.; Nitta, S.; Honda, Y.; Deki, M.; Amano, H. 2019** Low voltage high-energy [alpha]-particle detectors by GaN-on-GaN Schottky diodes with record-high charge collection efficiency. *Sensors*, 19(23): article 5107; doi: [10.3390/s19235107](https://doi.org/10.3390/s19235107)
- Sarris, T.S.; Close, M.E.; Moore, C.R. 2019** Uncertainty assessment of nitrate reduction in heterogeneous aquifers under uncertain redox conditions. *Stochastic Environmental Research and Risk Assessment*, 33(8-9): 1609-1627; doi: [10.1007/s00477-019-01715-w](https://doi.org/10.1007/s00477-019-01715-w)
- Sarris, T.S.; Scott, D.M.; Close, M.E.; Humphries, B.; Moore, C.R.; Burberry, L.F.; Rajanayaka, C.; Barkle, G.; Hadfield, J. 2019** The effects of denitrification parameterization and potential benefits of spatially targeted regulation for the reduction of N-discharges from agriculture. *Journal of environmental management*, 247: 299-312; doi: [10.1016/j.jenvman.2019.06.074](https://doi.org/10.1016/j.jenvman.2019.06.074)
- Schipper, C.I.; Castro, J.M.; Kennedy, B.M.; Christenson, B.W.; Aiuppa, A.; Alloway, B.; Forte, P.; Seropian, G.; Tuffen, H. 2019** Halogen (Cl, F) release during explosive, effusive, and intrusive phases of the 2011 rhyolitic eruption at Cordón Caulle volcano (Chile). *Volcanica*, 2(1): 73-90; doi: [10.30909/vol.02.01.7390](https://doi.org/10.30909/vol.02.01.7390)
- Scott, G.H. 2019** Recognition of *Truncorotalia Crassaformis* as a modern planktonic foraminiferal morphospecies in the Caribbean and Equatorial Atlantic Ocean and proposal of a neotype. *Journal of foraminiferal research*, 49(1): 94-102; doi: [10.2113/gsjfr.49.1.94](https://doi.org/10.2113/gsjfr.49.1.94)
- Seton, M.; Williams, S.; Mortimer, N.; Meffre, S.; Micklethwaite, S.; Zahirovic, S. 2019** Magma production along the Lord Howe Seamount Chain, northern Zealandia. *Geological Magazine*, 156(9): 1605-1617; doi: [10.1017/S0016756818000912](https://doi.org/10.1017/S0016756818000912)
- Shao, J.; Stott, L.D.; Gray, W.R.; Greenop, R.; Pecher, I.A.; Neil, H.L.; Coffin, R.B.; Davy, B.W.; Rae, W.B. 2019** Atmosphere-ocean CO₂ exchange across the last deglaciation from the boron isotope proxy. *Paleoceanography and Paleoclimatology*, 34(10): 1650-1670; doi: [10.1029/2018PA003498](https://doi.org/10.1029/2018PA003498)
- Sheehan, A.F.; Gusman, A.R.; Satake, K. 2019** Improving forecast accuracy with tsunami data assimilation: the 2009 Dusky Sound, New Zealand, tsunami. *Journal of Geophysical Research. Solid Earth*, 124(1): 566-577; doi: [doi:doi.org/10.1029/2018JB016575](https://doi.org/10.1029/2018JB016575)
- Shibazaki, B.; Wallace, L.M.; Kaneko, Y.; Hamling, I.J.; Matsuzawa, T. 2019** Three-dimensional modeling of spontaneous and triggered slow-slip events at the Hikurangi subduction zone, New Zealand. *Journal of Geophysical Research. Solid Earth*, 124(12): 13250-13268; doi: [10.1029/2019JB018190](https://doi.org/10.1029/2019JB018190)
- Silva, V.; Horspool, N.A. 2019** Combining USGS ShakeMaps and the OpenQuake-engine for damage and loss assessment. *Earthquake Engineering and Structural Dynamics*, 48(6): 634-652; doi: [10.1002/eqe.3154](https://doi.org/10.1002/eqe.3154)

- Simpson, M.P.; Christie, A.B. 2019** Hydrothermal alteration mineralogical footprints for New Zealand epithermal Au-Ag deposits. *New Zealand Journal of Geology and Geophysics*, 62(4): 483-512; doi: [10.1080/00288306.2019.1577278](https://doi.org/10.1080/00288306.2019.1577278)
- Simpson, M.P.; Gazley, M.F.; Stuart, A.G.; Pearce, M.A.; Birchall, R.; Chappell, D.A.; Christie, A.B.; Stevens, M.R. 2019** Hydrothermal alteration at the Karangahake epithermal Au-Ag deposit, Hauraki Goldfield, New Zealand. *Economic Geology*, 114(2): 243-273; doi: [10.5382/econgeo.2019.4630](https://doi.org/10.5382/econgeo.2019.4630)
- Snelder, T.H.; Moore, C.R.; Kilroy, C. 2019** Nutrient concentration targets to achieve periphyton biomass objectives incorporating uncertainties. *Journal of the American Water Resources Association*, 55(6): 1443-1463; doi: [10.1111/1752-1688.12794](https://doi.org/10.1111/1752-1688.12794)
- Squance, H.; Johnston, D.M.; Stewart, C.; Riley, C.B. 2019** An integrative review of the 2017 Port Hills fires' impact on animals, their owners and first responders' encounters with the human-animal interface. *Australasian Journal of Disaster and Trauma Studies*, 22: 97-108
- Stewart, L.C.; Algar, C.K.; Fortunato, C.S.; Larson, B.I.; Vallino, J.J.; Huber, J.A.; Butterfield, D.A.; Holden, J.F. 2019** Fluid geochemistry, local hydrology, and metabolic activity define methanogen community size and composition in deep-sea hydrothermal vents. *The ISME journal*, 13(7): 1711-1721; doi: [10.1038/s41396-019-0382-3](https://doi.org/10.1038/s41396-019-0382-3)
- Stewart, M.K.; Morgenstern, U. 2019** Response to comment. *Journal of Hydrology, New Zealand*, 58(2): 121-122
- Stott, L.; Davy, B.W.; Shao, J.; Coffin, R.; Pecher, I.A.; Neil, H.; Rose, P.; Bialas, J. 2019** CO₂ release from pockmarks on the Chatham Rise-Bounty Trough at the glacial termination. *Paleoceanography and Paleoclimatology*, 34(11): 1726-1743; doi: [10.1029/2019PA003674](https://doi.org/10.1029/2019PA003674)
- Strand, P.D.; Schaefer, J.M.; Putnam, A.E.; Denton, G.H.; Barrell, D.J.A.; Koffman, T.N.B.; Schwartz, R. 2019** Millennial-scale pulsebeat of glaciation in the Southern Alps of New Zealand. *Quaternary Science Reviews*, 220: 165-177; doi: [10.1016/j.quascirev.2019.07.022](https://doi.org/10.1016/j.quascirev.2019.07.022)
- Strogen, D.P.; Higgs, K.E.; Griffin, A.G.; Morgans, H.E.G. 2019** Late Eocene - Early Miocene facies and stratigraphic development, Taranaki Basin, New Zealand: the transition to plate boundary tectonics during regional transgression. *Geological Magazine*, 156(10): 1751-1770; doi: [10.1017/S0016756818000997](https://doi.org/10.1017/S0016756818000997)
- Strong, E.E.; Puillandre, N.; Beu, A.G.; Castelin, M.; Bouchet, P. 2019** Frogs and tuns and tritons: a molecular phylogeny and revised family classification of the predatory gastropod superfamily Tonnoidea (Caenogastropoda). *Molecular Phylogenetics and Evolution*, 130: 18-34; doi: [10.1016/j.ympev.2018.09.016](https://doi.org/10.1016/j.ympev.2018.09.016)
- Suschke, K.; Gupta, P.S.; Williams, G.V.M.; Hübner, R.; Markwitz, A.; Kennedy, J.V. 2019** Observation of multiple magnetic phases and complex nanostructures in Co implanted amorphous carbon films. *Journal of Physics and Chemistry of Solids*, 127: 158-163; doi: [10.1016/j.jpcs.2018.12.020](https://doi.org/10.1016/j.jpcs.2018.12.020)
- Tanioka, Y.; Shibata, M.; Yamanaka, Y.; Gusman, A.R.; Ioki, K. 2019** Generation mechanism of large later phases of the 2011 Tohoku-oki tsunami causing damages in Hakodate, Hokkaido, Japan. *Progress in Earth and Planetary Science*, 6(1): Article 30
- Taylor-Offord, S.; Horgan, H.; Townend, J.; Winberry, J.P. 2019** Seismic observations of crevasse growth following rain-induced glacier acceleration, Haupapa/Tasman Glacier, New Zealand. *Annals of Glaciology*, 60(79): 14-22; doi: [10.1017/aog.2019.20](https://doi.org/10.1017/aog.2019.20)

- Timm, C.; de Ronde, C.E.J.; Hoernle, K.; Coussens, B.; Wartho, J.-A.; Caratori Tontini, F.; Wysoczanski, R.; Hauff, F.; Handler, M. 2019** New age and geochemical data from the southern Colville and Kermadec Ridges, SW Pacific: insights into the recent geological history of petrogenesis of the proto-Kermadec (Vitiaz) arc. *Gondwana Research*, 72: 169-193; doi: [10.1016/j.gr.2019.02.008](https://doi.org/10.1016/j.gr.2019.02.008)
- Tinto, K.J.; Padman, L.; Siddoway, C.S.; Springer, S.R.; Fricker, H.A.; Das, I.; Caratori Tontini, F.; Porter, D.F.; Frearson, N.P.; Howard, S.L.; Siegfried, M.R.; Mosbeux, C.; Becker, M.K.; Bertinato, C.; Boghosian, A.; Brady, N.; Burton, B.L.; Chu, W.; Cordero, S.I.; Dhakal, T.; Dong, L.; Gustafson, C.D.; Keeshin, S.; Locke, C.; Lockett, A.; O'Brien, G.; Spergel, J.J.; Starke, S.E.; Tankersley, M.; Wearing, M.G.; Bell, R.E. 2019** Ross Ice Shelf response to climate driven by the tectonic imprint on seafloor bathymetry. *Nature geoscience*, 12(6): 441-449; doi: [10.1038/s41561-019-0370-2](https://doi.org/10.1038/s41561-019-0370-2)
- Tirpitz, J.-L.; Pöhler, D.; Bobrowski, N.; Christenson, B.W.; Rüdiger, J.; Schmitt, S.; Platt, U. 2019** Non-dispersive UV absorption spectroscopy: a promising new approach for in-situ detection of sulphur dioxide. *Frontiers in Earth Science*, 7: Article 26; doi: [10.3389/feart.2019.00026](https://doi.org/10.3389/feart.2019.00026)
- Tulloch, A.J.; Mortimer, N.; Ireland, T.; Waight, T.; Maas, R.; Palin, M.; Sahoo, T.R.; Seebeck, H.; Sagar, M.W.; Barrier, A.; Turnbull, R.E. 2019** Reconnaissance basement geology and tectonics of south Zealandia. *Tectonics*, 38(2): 516-551; doi: [10.1029/2018TC005116](https://doi.org/10.1029/2018TC005116)
- Turnbull, J.C.; Karion, A.; Davis, K.J.; Lauvaux, T.; Miles, N.L.; Richardson, S.J.; Sweeney, C.; McKain, K.; Lehman, S.J.; Gurney, K.R.; Patarasuk, R.; Liang, J.; Shepson, P.B.; Heimbürger, A.; Harvey, R.; Whetstone, J. 2019** Synthesis of urban CO₂ emission estimates from multiple methods from the Indianapolis Flux Project (INFLUX). *Environmental science & technology*, 53(1): 287-295; doi: [10.1021/acs.est.8b05552](https://doi.org/10.1021/acs.est.8b05552)
- Turnbull, R.E.; Rogers, K.M.; Martin, A.P.; Rattenbury, M.S.; Morgan, R. 2019** Human impacts recorded in chemical and isotopic fingerprints of soils from Dunedin City, New Zealand. *Science of the Total Environment*, 673: 455-469; doi: [10.1016/j.scitotenv.2019.04.063](https://doi.org/10.1016/j.scitotenv.2019.04.063)
- Tuttle, M.P.; Wolf, L.W.; Starr, M.E.; Villamor, P.; Lafferty III, R.H.; Morrow, J.E.; Scott Jr., R.S.; Forman, S.L.; Hess, K.; Tucker, K.; Dunahue, J.; Haynes, M.L. 2019** Evidence for large New Madrid earthquakes about A.D. 0 and 1050 B.C., central United States. *Seismological Research Letters*, 90(3): 1393-1406; doi: [10.1785/0220180371](https://doi.org/10.1785/0220180371)
- Van Dissen, R.J.; Stahl, T.; King, A.B.; Pettinga, J.R.; Fenton, C.; Little, T.A.; Litchfield, N.J.; Stirling, M.W.; Langridge, R.M.; Nicol, A.; Kearse, J.; Barrell, D.J.A.; Villamor, P. 2019** Impacts of surface fault rupture on residential structures and rural infrastructure during the 2016 M_w Kaikoura earthquake, New Zealand. *Bulletin of the New Zealand Society for Earthquake Engineering*, 52(1): 1-22
- Van Houtte, C.; Abbott, E.R. 2019** OpenQuake implementation of the Canterbury seismic hazard model. *Seismological Research Letters*, 90(6): 2227-2235; doi: [10.1785/0220190100](https://doi.org/10.1785/0220190100)
- Vick, L.M.; Zimmer, V.; White, C.; Massey, C.I.; Davies, T. 2019** Significance of substrate soil moisture content for rockfall hazard assessment. *Natural Hazards and Earth System Sciences*, 19(5): 1105-1117; doi: [10.5194/nhess-2019-11](https://doi.org/10.5194/nhess-2019-11)

- Vimont, I.J.; Turnbull, J.C.; Petrenko, V.V.; Place, P.F.; Sweeney, C.; Miles, N.; Richardson, S.; Vaughn, B.H.; White, J.W.C. 2019** An improved estimate for the $[\delta^{13}\text{C}]$ and $[\delta^{18}\text{C}]$ signatures of carbon monoxide produced from atmospheric oxidation of volatile organic compounds. *Atmospheric chemistry and physics*, 19(13): 8547-8562; doi: [10.5194/acp-19-8547-2019](https://doi.org/10.5194/acp-19-8547-2019)
- Walsh, B.; Procter, J.; Lokmer, I.; Thun, J.; Hurst, A.W.; Christenson, B.W.; Jolly, A.D. 2019** Geophysical examination of the 27 April 2016 Whakaari/White Island, New Zealand, eruption and its implications for vent physiognomies and eruptive dynamics. *Earth, Planets and Space*, 71(1): Article 25; doi: [10.1186/s40623-019-1003-0](https://doi.org/10.1186/s40623-019-1003-0)
- Wang, G.; Naeher, S.; Li, J.; Shi, S.; Chang, R. 2019** 1H-pyrrole-2, 5-diones (maleimides):the novel biomarkers in petroleum geochemistry. *Shi you xue bao = Acta petrolei Sinica*, 40(2): 176-181; doi: [10.7623/syxb201902005](https://doi.org/10.7623/syxb201902005)
- Wang, X.; Rogers, K.M.; Li, Y.; Yang, S.; Chen, L.; Zhou, J. 2019** Untargeted and targeted discrimination of honey collected by *Apis cerana* and *Apis mellifera* based on volatiles using HS-GC-IMS and HS-SPME-GC-MS. *Journal of Agricultural and Food Chemistry*, 67(43): 12144-12152; doi: [10.1021/acs.jafc.9b04438](https://doi.org/10.1021/acs.jafc.9b04438)
- Wang, Y.; Maeda, T.; Satake, K.; Heidarzadeh, M.; Su, H.; Sheehan, A.F.; Gusman, A.R. 2019** Tsunami data assimilation without a dense observation network. *Geophysical Research Letters*, 46(4): 2045-2053; doi: [10.1029/2018GL080930](https://doi.org/10.1029/2018GL080930)
- Warren-Smith, E.; Fry, B.; Wallace, L.M.; Chon, E.; Henrys, S.A.; Sheehan, A.; Mochizuki, K.; Schwartz, S.; Webb, S.; Lebedev, S. 2019** Episodic stress and fluid pressure cycling in subducting oceanic crust during slow slip. *Nature geoscience*, 12(6): 475-481; doi: [10.1038/s41561-019-0367-x](https://doi.org/10.1038/s41561-019-0367-x)
- Weaver, K.C.; Cox, S.C.; Townend, J.; Rutter, H.; Hamling, I.J.; Holden, C. 2019** Seismological and hydrogeological controls on New Zealand-wide groundwater level changes induced by the 2016 M_W Kaikoura earthquake. *Geofluids*, 2019: article 9809458; doi: [10.1155/2019/9809458](https://doi.org/10.1155/2019/9809458)
- Weaver, K.C.; Doan, M.-L.; Cox, S.C.; Townend, J.; Holden, C. 2019** Tidal behavior and water-level changes in gravel aquifers in response to multiple earthquakes: a case study from New Zealand. *Water Resources Research*, 55(2): 1263-1278; doi: [10.1029/2018WR022784](https://doi.org/10.1029/2018WR022784)
- Wells, N.S.; Clough, T.J.; Johnson-Beebout, S.E.; Elberling, B.; Baisden, W.T. 2019** Effects of denitrification and transport on the isotopic composition of nitrate ($\delta^{18}\text{O}$, $\delta^{15}\text{N}$) in freshwater systems. *Science of the Total Environment*, 651(2): 2228-2234; doi: [10.1016/j.scitotenv.2018.10.065](https://doi.org/10.1016/j.scitotenv.2018.10.065)
- Wespestad, C.E.; Thurber, C.H.; Andersen, N.L.; Singer, B.S.; Cardona, C.; Zeng, X.; Bennington, N.L.; Keranen, K.; Peterson, D.E.; Cordell, D.; Unsworth, M.; Miller, C.A.; Williams-Jones, G. 2019** Magma reservoir below Laguna de Maule volcanic field, Chile imaged with surface-wave tomography. *Journal of Geophysical Research. Solid Earth*, 124(3): 2858-2872; doi: [10.1029/2018JB016485](https://doi.org/10.1029/2018JB016485)
- Williams, G.V.M.; Kennedy, J.V.; Murmu, P.P.; Rubanov, S.; Chong, S.V.; 2019** The effect of different Fe concentrations on the structural and magnetic properties of near surface superparamagnetic $\text{Ni}_{1-x}\text{Fe}_x$ nanoparticles in SiO_2 made by dual low energy ion implantation. *Journal of Magnetism and Magnetic Materials*, 473: 125-130; doi: [10.1016/j.jmmm.2018.10.072](https://doi.org/10.1016/j.jmmm.2018.10.072)

- Williams, J.H.; Wilson, T.M.; Horspool, N.A.; Lane, E.M.; Hughes, M.W.; Davies, T.; Le, L.; Scheele, F.R. 2019** Tsunami impact assessment: development of vulnerability matrix for critical infrastructure and application to Christchurch, New Zealand. *Natural hazards*, 96(3): 1167-1211; doi: [10.1007/s11069-019-03603-6](https://doi.org/10.1007/s11069-019-03603-6)
- Winstrup, M.; Vallelonga, P.; Kjær, H.A.; Fudge, T.J.; Lee, J.E.; Riis, M.H.; Edwards, R.; Bertler, N.A.N.; Blunier, T.; Brook, E.J.; Buizert, C.; Ciobanu, G.; Conway, H.; Dahl-Jensen, D.; Ellis, A.; Emanuelsson, B.D.; Hindmarsh, R.C.A.; Keller, E.D.; Kurbatov, A.V.; Mayewski, P.A.; Neff, P.D.; Pyne, R.L.; Simonsen, M.F.; Svensson, A.; Tuohy, A.; Waddington, E.D.; Wheatley, S. 2019** A 2700-year annual timescale and accumulation history for an ice core from Roosevelt Island, West Antarctica. *Climate of the past*, 15(2): 751-779; doi: [10.5194/cp-15-751-2019](https://doi.org/10.5194/cp-15-751-2019)
- Wu, H.; Tian, L.; Chen, B.; Jin, B.; Tian, B.; Xie, L.; Rogers, K.M.; Lin, G. 2019** Verification of imported red wine origin into China using multi isotope and elemental analyses. *Food chemistry*, 301: article 125137; doi: [10.1016/j.foodchem.2019.125137](https://doi.org/10.1016/j.foodchem.2019.125137)
- Wysoczanski, R.; Leonard, G.S.; Gill, J.; Wright, I.; Calvert, A.; McIntosh, W.; Jicha, B.; Gamble, J.; Timm, C.; Handler, M.; Drewes-Todd, E.; Zohrab, A. 2019** Ar-Ar age constraints on the timing of Havre Trough opening and magmatism. *New Zealand Journal of Geology and Geophysics*, 62(3): 371-377; doi: [10.1080/00288306.2019.1602059](https://doi.org/10.1080/00288306.2019.1602059)
- Yarce, J.; Sheehan, A.F.; Nakai, J.S.; Schwartz, S.Y.; Mochizuki, K.; Savage, M.K.; Wallace, L.M.; Henrys, S.A.; Webb, S.C.; Ito, Y.; Abercrombie, R.E.; Fry, B.; Shaddox, H.; Todd, E.K. 2019** Seismicity at the northern Hikurangi Margin, New Zealand, and investigation of the potential spatial and temporal relationships with a shallow slow slip event. *Journal of Geophysical Research. Solid Earth*, 124(5): 4751-4766; doi: [10.1029/2018JB017211](https://doi.org/10.1029/2018JB017211)
- Yates, A.S.; Savage, M.K.; Jolly, A.D.; Caudron, C.; Hamling, I.J. 2019** Volcanic, coseismic, and seasonal changes detected at White Island (Whakaari) Volcano, New Zealand, using seismic ambient noise. *Geophysical Research Letters*, 46(1): 99-108; doi: [10.1029/2018GL080580](https://doi.org/10.1029/2018GL080580)
- Yohler, R.; Bartlow, N.; Wallace, L.M.; Williams, C.A. 2019** Time-dependent behavior of a near trench slow slip event at the Hikurangi subduction zone. *Geochemistry Geophysics Geosystems*, 20(8): 4292-4304; doi: [10.1029/2019GC008229](https://doi.org/10.1029/2019GC008229)
- Zhan, Y.; Gregg, P.M.; Le Mével, H.; Miller, C.A.; Cardona, C. 2019** Integrating reservoir dynamics, crustal stress, and geophysical observations of the Laguna del Maule magmatic system by FEM models and data assimilation. *Journal of Geophysical Research. Solid Earth*, 124(12): 13547-13562; doi: [10.1029/2019JB018681](https://doi.org/10.1029/2019JB018681)
- Zhang, Q.; Li, L.; Ebert, B.; Golding, B.; Johnston, D.M.; Mills, B.; Panchuk, S.; Potter, S.H.; Riemer, M.; Sun, J.; Taylor, A.; Jones, S.; Ruti, P.; Keller, J. 2019** Increasing the value of weather-related warnings. *Science Bulletin*, 64(10): 647-649; doi: [10.1016/j.scib.2019.04.003](https://doi.org/10.1016/j.scib.2019.04.003)
- Zhao, S.; Zhao, Y.; Rogers, K.M.; Chen, A.; Zhang, T.; Yang, S. 2019** Two new defatted beef reference materials CAAS-1801, CAAS-1802 for carbon and nitrogen stable isotope-ratio measurements. *Rapid Communications in Mass Spectrometry*, 33(8): 803-810; doi: [10.1002/rcm.8411](https://doi.org/10.1002/rcm.8411)

Zinke, R.; Dolan, J.F.; Rhodes, E.J.; Van Dissen, R.J.; McGuire, C.P.; Hatem, A.E.; Brown, N.D.; Langridge, R.M. 2019 Multimillennial incremental slip rate variability of the Clarence fault at the Tophouse Road site, Marlborough fault system, New Zealand. *Geophysical Research Letters*, 46(2): 717-725; doi: [10.1029/2018GL080688](https://doi.org/10.1029/2018GL080688)

Zinke, R.; Hollingsworth, J.; Dolan, J.F.; Van Dissen, R.J. 2019 3D surface deformation in the 2016 MW 7.8 Kaikoura, New Zealand earthquake from optical image correlation: Implications for strain localization and long-term evolution of the Pacific–Australian plate boundary. *Geochemistry Geophysics Geosystems*, 20(3): 1609-1628; doi: [10.1029/2018GC007951](https://doi.org/10.1029/2018GC007951)

[Top of the Document](#)

Peer-Reviewed Books/Chapters in Books

- Adams, C.J.; Campbell, H.J.; Mortimer, N.; Griffin, W.L. 2019** Crossing Cook Strait: terranes of the Marlborough Schist, Kapiti Island and Wellington. p.323-330; [doi: 10.1144/M49.4](https://doi.org/10.1144/M49.4) In: Robertson, A.H.F. (ed.) *Paleozoic-Mesozoic geology of South Island, New Zealand: subduction-related processes adjacent to SE Gondwana*. London: Geological Society. Memoir (Geological Society of London) 49
- Campbell, H.J. 2019** Biostratigraphic age review of New Zealand's Permian-Triassic central terranes. p. 31-41; [doi: 10.1144/M49.6](https://doi.org/10.1144/M49.6) In: Robertson, A.H.F. (ed.) *Paleozoic-Mesozoic geology of South Island, New Zealand: subduction-related processes adjacent to SE Gondwana*. London: Geological Society. Memoir (Geological Society of London) 49
- Christie, A.B.; Bierlein, F.; Chambeftort, I.; Goldfarb, R.; Rae, A.J. (eds) 2019** Special issue: exploration models for New Zealand hard rock gold deposits. Wellington, N.Z.: Royal Society of New Zealand. *New Zealand journal of geology and geophysics* 62(4). p. 391-587
- Clare, M.A.; Chaytor, J.; Dabson, O.; Gamboa, D.; Georgiopoulou, A.; Eady, H.; Hunt, J.; Jackson, C.; Katz, O.; Krastel, S.; León, R.; Micallef, A.; Moernaut, J.; Moriconi, R.; Moscardelli, L.; Mueller, C.; Normandeau, A.; Patacci, M.; Steventon, M.; Urlaub, M.; Völker, D.; Wood, L.; Jobe, Z. 2019** A consistent global approach for the morphometric characterization of subaqueous landslides. p. 455-477; [doi: 10.1144/SP477.15](https://doi.org/10.1144/SP477.15) In: Lintern, G.; Mocher, D.C.; Moscardelli, L.G.; Bobrowky, P.T.; Campbell, C.; Chaytor, J.D.; Clague, J.J.; Georgiopoulou, A.; Lajeunesse P.; Normandeau, A.; Piper, D.J.W.; Scherwath, M.; Stacey, C.; Turmel, D. (eds) *Subaqueous mass movements and their consequences: assessing geohazards, environmental implications and economic significance of subaqueous landslides*. London: Geological Society of London. Geological Society special publication 477
- de Ronde, C.E.J.; Humphris, S.E.; Höfig, T.W.; Brandl, P.A.; Cai, L.; Cai, Y.; Caratori Tontini, F.; Deans, J.R.; Farough, A.; Jamieson, J.W.; Kolandaivelu, K.P.; Kutovaya, A.; Labonté, J.M.; Martin, A.J.; Massiot, C.; McDermitt, J.M.; McIntosh, I.M.; Nozaki, T.; Pellizari, V.H.; Reyes, A.G.; Roberts, S.; Rouxel, O.; Schlicht, I.E.M.; Seo, J.H.; Straub, S.M.; Strehlow, K.; Takai, K.; Tanner, D.; Tepley III, F.J.; Zhang, C. 2019** Expedition 376 methods. 60 p.; [doi: 10.14379/iodp.proc.376.102.2019](https://doi.org/10.14379/iodp.proc.376.102.2019) In: de Ronde, C.E.J.; Humphris, S.; Höfig, T.W.; Expedition 376 Scientists *Brothers Arc Flux*. College Station, TX: International Ocean Discovery Program. Proceedings of the International Ocean Discovery Program 376
- Hreinsdottir, S. 2019** Volcanoes in Iceland and crustal deformation processes. 22 p.; [doi: 10.1007/978-3-642-27737-5_598-2](https://doi.org/10.1007/978-3-642-27737-5_598-2) In: Meyers, R.A. (ed.) *Encyclopedia of complexity and systems science*. Berlin: Springer.
- Jasim, A.; Hemmings, B.J.C.; Mayer, K.; Scheu, B. 2019** Groundwater flow and volcanic unrest. p. 83-99; [doi: 10.1007/11157_2018_33](https://doi.org/10.1007/11157_2018_33) In: Gottsmann, J.; Neuberg, J.; Scheu, B. (eds) *Volcanic unrest: from science to society*. Cham, Switzerland: Springer. Advances in volcanology
- Jugum, D.; Stewart, E.; Palin, J.M.; Mortimer, N.; Norris, R.J.; Lamb, W.M. 2019** Correlations between a heterogeneous mantle and multiple stages of crustal growth: a review of the Dun Mountain ophiolite, New Zealand. p. 75-92; [doi: 10.1144/M49.3](https://doi.org/10.1144/M49.3) In: Robertson, A.H.F. (ed.) *Paleozoic-Mesozoic geology of South Island, New Zealand: subduction-related processes adjacent to SE Gondwana*. London: Geological Society. Memoir (Geological Society of London) 49

- Kuhlmann, J.; Orpin, A.R.; Mountjoy, J.J.; Crutchley, G.J.; Henrys, S.A.; Lunenburg, R.; Huhn, K. 2019** Seismic and lithofacies characterization of a gravity core transect down the submarine Tuaheni Landslide Complex, NE New Zealand. p. 479-495; [doi: 10.1144/SP477.37](https://doi.org/10.1144/SP477.37) In: Lintern, G.; Mocher, D.C.; Moscardelli, L.G.; Bobrowky, P.T.; Campbell, C.; Chaytor, J.D.; Clague, J.J.; Georgiopoulou, A.; Lajeunesse P.; Normandeau, A.; Piper, D.J.W.; Scherwath, M.; Stacey, C.; Turmel, D. (eds) *Subaqueous mass movements and their consequences: assessing geohazards, environmental implications and economic significance of subaqueous landslides*. London: Geological Society of London. Geological Society special publication 477
- Mortimer, N.; Turnbull, R.E.; Robertson, A.H.F.; Campbell, H.J. 2019** A 251 Ma diorite clast from a Maitai Group conglomerate and a c. 259 Ma microdiorite sill intruding the Productus Creek Group, Southland, New Zealand: note. p. 287-292; [doi: 10.1144/M49.1](https://doi.org/10.1144/M49.1) In: Robertson, A.H.F. (ed.) *Paleozoic-Mesozoic geology of South Island, New Zealand: subduction-related processes adjacent to SE Gondwana*. London: Geological Society. Memoir (Geological Society of London) 49
- Mountjoy, J.J.; Wang, X.; Woelz, S.; Fitzsimons, S.; Howarth, J.D.; Orpin, A.R.; Power, W.L. 2019** Tsunami hazard from lacustrine mass wasting in Lake Tekapo, New Zealand. [doi: 10.1144/SP477.21](https://doi.org/10.1144/SP477.21) In: Lintern, G.; Mocher, D.C.; Moscardelli, L.G.; Bobrowky, P.T.; Campbell, C.; Chaytor, J.D.; Clague, J.J.; Georgiopoulou, A.; Lajeunesse P.; Normandeau, A.; Piper, D.J.W.; Scherwath, M.; Stacey, C.; Turmel, D. (eds) *Subaqueous mass movements and their consequences: assessing geohazards, environmental implications and economic significance of subaqueous landslides*. London: Geological Society of London. Geological Society special publication 477
- Rattenbury, M.S.; White, P.A.; Tschirter, C.; Jones, K.E.; Hill, M.P.; Alcaraz, S.A.; Viskovic, G.P.D. 2019** New Zealand 3D geological mapping and modelling. p. 201-212 In: MacCormack, K.E.; Berg, R.C.; Kessler, H.; Russell, H.A.J.; Thorleifson, L.H. *2019 synopsis of current three-dimensional geological mapping and modelling in geological survey organizations*. Edmonton, Alta.: Alberta Geological Survey. Special report (Alberta Geological Survey) 112
- Robertson, A.H.F.; Campbell, H.J.; Johnston, M.R.; Mortimer, N. 2019** Introduction to Paleozoic-Mesozoic geology of South Island, New Zealand: subduction-related processes adjacent to SE Gondwana. p. 1-14; [doi: 10.1144/M49.7](https://doi.org/10.1144/M49.7) In: Robertson, A.H.F. (ed.) *Paleozoic-Mesozoic geology of South Island, New Zealand: subduction-related processes adjacent to SE Gondwana*. London: Geological Society. Memoir (Geological Society of London) 49
- Robertson, A.H.F.; Campbell, H.J.; Johnston, M.R.; Palamakumbra, R. 2019** Construction of a paleozoic-mesozoic accretionary orogen along the active continental margin of SE Gondwana (South Island, New Zealand): summary and overview. p.331-372; [doi: 10.1144/M49.8](https://doi.org/10.1144/M49.8) In: Robertson, A.H.F. (ed.) *Paleozoic-Mesozoic geology of South Island, New Zealand: subduction-related processes adjacent to SE Gondwana*. London: Geological Society. Memoir (Geological Society of London) 49
- Robertson, A.H.F.; Palamakumbura, R.; Campbell, H.J. 2019** Permian-Triassic felsic tuffs in South Island, New Zealand: significance for oceanic and active continental margin subduction. p. 293-321; [doi: 10.1144/M49.15](https://doi.org/10.1144/M49.15) In: Robertson, A.H.F. (ed.) *Paleozoic-Mesozoic geology of South Island, New Zealand: subduction-related processes adjacent to SE Gondwana*. London: Geological Society. Memoir (Geological Society of London) 49

- Robertson, A.H.F.; Palamakumbura, R.; Campbell, H.J. 2019** Sedimentary geochemistry used to infer the provenance of Permian–Triassic marine sandstones related to the SE Gondwana active continental margin, South Island, New Zealand. p. 231-265; [doi: 10.1144/M49.14](https://doi.org/10.1144/M49.14) In: Robertson, A.H.F. (ed.) *Paleozoic-Mesozoic geology of South Island, New Zealand: subduction-related processes adjacent to SE Gondwana*. London: Geological Society. Memoir (Geological Society of London) 49
- Saffer, D.M.; Wallace, L.M.; Petronotis, K.P.; LeVay, L.J.; Expedition 375 Scientists 2019** Hikurangi subduction margin coring, logging, and observatories. College Station, TX: International Ocean Discovery Program. *Proceedings of the International Ocean Discovery Program 372B/375*. [doi: 10.14379/iodp.proc.372B375.2019](https://doi.org/10.14379/iodp.proc.372B375.2019)
- Uma, S.R.; Beskhyroun, S. 2019** Developments in seismic instrumentation and health monitoring of structures in New Zealand. p. 385-406; [doi: 10.1007/978-3-030-13976-6_16](https://doi.org/10.1007/978-3-030-13976-6_16) In: Limongelli, M.P.; Celebi, M. (eds) *Seismic structural health monitoring: from theory to successful applications*. Cham, Switzerland: Springer.

[Top of the Document](#)

Refereed Conference Proceedings/Paper

- Bromley, C.J.; Sepulveda, F.; Mannington, W.; Currie, S.; Abele, M. 2019** Novel application of continuous gravity and GNSS to understand effects of liquid saturation changes on yielding deformation. paper 24 In: *Proceedings 41st New Zealand Geothermal Workshop, 25-27 November 2019, Auckland, New Zealand*. Auckland, N.Z.: University of Auckland.
- Chambefort, I.; Mountain, B.W.; Blair, A.; Bignall, G. 2019** Geothermal: the next generation. paper 59 In: *Proceedings 41st New Zealand Geothermal Workshop, 25-27 November 2019, Auckland, New Zealand*. Auckland, N.Z.: University of Auckland.
- Chambefort, I.; Rowe, M.; Mazot, A.; Yang, T.-H.J.; Farsky, D. 2019** Superhot fluids: the origin and flux of natural greenhouse gases in volcanic areas. paper 58 In: *Proceedings 41st New Zealand Geothermal Workshop, 25-27 November 2019, Auckland, New Zealand*. Auckland, N.Z.: University of Auckland.
- Christie, A.B.; Dunn, C.E. 2019** Biogeochemical surveys for epithermal Au-Ag exploration in New Zealand. p. 1359-1362 In: *Proceedings of the 15th SGA Biennial Meeting, 27-30 August 2019, Glasgow, Scotland*. Society for Geology Applied to Mineral Deposits.
- Croucher, A.; O'Sullivan, M.; O'Sullivan, J.; Yeh, A.; Burnell, J.G.; Kissling, W.M. 2019** An update on the Waiwera geothermal flow simulator: development and applications. paper 42 In: *Proceedings 41st New Zealand Geothermal Workshop, 25-27 November 2019, Auckland, New Zealand*. Auckland, N.Z.: University of Auckland.
- Dempsey, D.; Riffault, J.; Ardid, A.; Bertrand, E.A.; Archer, R. 2019** Toward magnetotelluric and microseismic calibration of geothermal reservoir models. 12 p. In: *Proceedings, 44th Workshop on Geothermal Reservoir Engineering, Stanford University, Stanford, California, February 11-13, 2019*. Stanford, Calif.: Stanford University. Stanford Geothermal Program Workshop report SGP-TR-214
- Franz, P.; Clearwater, J.; Burnell, J.G. 2019** Introducing the Volsung geothermal simulator: benchmarking and performance. paper 19 In: *Proceedings 41st New Zealand Geothermal Workshop, 25-27 November 2019, Auckland, New Zealand*. Auckland, N.Z.: University of Auckland.
- Fukuda, Y.; Takiguchi, H.; Kazama, T.; Nishijima, J.; Gulyeav, S.; Natusch, T.; Amoss, M.; Stagpoole, V.M.; Pearson, C. 2019** New absolute gravity measurements in New Zealand. p. 95-101; doi: [10.1007/1345_2017_18](https://doi.org/10.1007/1345_2017_18) In: Vergos, G.S.; Pail, R.; Barzaghi, R. *International Symposium on Gravity, Geoid and Height Systems 2016: Proceedings organized by IAG Commission 2 and the International Gravity Field Service, Thessaloniki, Greece, September 19-23, 2016*. Cham, Switzerland: Springer International Publishing. International Association of Geodesy symposia
- Garrido, J.; Saunders, W.S.A. 2019** Disaster risk reduction and land use planning: opportunities to improve practice. p. 161-165; doi: [10.1007/978-3-319-93136-4_20](https://doi.org/10.1007/978-3-319-93136-4_20) In: Shakoor, A.; Cato, K. (eds) *IAEG/AEG Annual Meeting Proceedings, San Francisco, California, 2018. Volume 5, Geologic hazards: earthquakes, land subsidence, coastal hazards, and emergency response*. Springer: Cham, Switzerland.

- Horspool, N.A.; Elwood, K.; Johnston, D.M.; Ardagh, M.; Deely, J. 2019** Insights into casualties from the 2016 Kaikoura Earthquake. paper 407 In: *2019 Pacific Conference on Earthquake Engineering: turning hazard awareness into risk mitigation, 4-6 April, Sky City, Auckland, New Zealand*. Melbourne, Vic.: Australian Earthquake Engineering Society.
- Kissling, W.M.; Massiot, C. 2019** Characteristics of flows in pervasively fractured andesites, Rotokawa Geothermal Field, New Zealand. paper 64 In: *Proceedings 41st New Zealand Geothermal Workshop, 25-27 November 2019, Auckland, New Zealand*. Auckland, N.Z.: University of Auckland.
- Martin, A.P.; Gazley, M.F.; Turnbull, R.E.; Frontin-Rollet, G.; Strong, D.T. 2019** Normalisation of pathfinder element in soil data to aid orogenic gold exploration with an example from southern New Zealand. p. 811-813 In: *Proceedings of the 15th SGA Biennial Meeting, 27-30 August 2019, Glasgow, Scotland*. Society for Geology Applied to Mineral Deposits.
- Martin, A.P.; Ohneiser, C.; Turnbull, R.E.; Strong, D.T.; Rieger, P. 2019** Soil magnetic susceptibility mapping as a vectoring tool for mineral exploration: an example from southern New Zealand. p. 1385-1388 In: *Proceedings of the 15th SGA Biennial Meeting, 27-30 August 2019, Glasgow, Scotland*. Society for Geology Applied to Mineral Deposits.
- Milicich, S.D.; Chambeftort, I.; Wilson, C.J.N.; Alcaraz, S.A.; Calibugan, A.; Bardsley, C. 2019** Geological evolution of the Rotokawa geothermal system, New Zealand. paper 95 In: *Proceedings 41st New Zealand Geothermal Workshop, 25-27 November 2019, Auckland, New Zealand*. Auckland, N.Z.: University of Auckland.
- Olsen, M.J.; Senogles, A.; Leshchinsky, B.; Massey, C.I.; Archibald, G.C.; Wartman, J. 2019** Rockfall activity rates following the Canterbury New Zealand Earthquake Sequence. p. 4210-4217 In: Silvestri, F.; Moraci, N. (eds) *Earthquake geotechnical engineering for protection and development of environment and constructions: proceedings of the 7th International Conference on Earthquake Geotechnical Engineering (ICEGE 2019), June 17-20 2019, Rome Italy*. Boca Raton: CRC Press.
- Pareira, T.M.; Kennedy, J.V.; Potgieter, J. 2019** A comparison of traditional manufacturing vs additive manufacturing, the best method for the job. p. 231-238; [doi: 10.1016/j.promfg.2019.02.034](https://doi.org/10.1016/j.promfg.2019.02.034) In: Yarlagadda, P.K.D.V.; Xavier, A.M.; Gibson, I.; Zhu, Y. (eds) *Digital manufacturing transforming industry towards sustainable growth*. Amsterdam: Elsevier. Procedia Manufacturing 30
- Reyes, A.G. 2019** Geothermal energy from petroleum wells in New Zealand. paper 11 In: *Proceedings 41st New Zealand Geothermal Workshop, 25-27 November 2019, Auckland, New Zealand*. Auckland, N.Z.: University of Auckland.
- Sadashiva, V.K.; Heron, D.W.; Dellow, G.D.; Duggan, J. 2019** Impact of a major earthquake on bulk water pipeline network in four cities of Wellington region in New Zealand. paper 322 In: Gazetas, G.; Anastasopoulos, I. (eds in chief) *ICONHIC 2019: 2nd International Conference on Natural Hazards & Infrastructure, 23-26 June 2019, Chania, Greece*. Athens, Greece: National Technical University of Athens.
- Seward, A.M.; Brakenrig, T.; Lor, S. 2019** Determination of thermal properties of New Zealand's soils and investigations of external factors influencing the near surface low-temperature geothermal resources. 11 p. In: *European Geothermal Congress 2019, The Hague, 11-14 June 2019: Proceedings*. Brussels: EGEC.

- Siega, F.; Mountain, B.W.; Richardson, I.; Calibugan, A. 2019** Mechanism of silica deposition in formation and management options investigated in laboratory study. paper 67 In: *Proceedings 41st New Zealand Geothermal Workshop, 25-27 November 2019, Auckland, New Zealand*. Auckland, N.Z.: University of Auckland.
- Simi, T.; Williams, S.; Paulik, R.; Scheele, F.R.; Giblin, J.; Lin, S.-L.; Holland, P. 2019** Strengthening natural hazards resilience through evidence-based risk information: preliminary analysis results of the PARTneR project, Samoa. p. 72-86 In: Seve, S.F.; Akeli, T.S.; Niusulu, A.L.; Milo, S.L.M. (eds) *Proceedings of the Samoa Conference IV, 2018, 4-6 September 2018, National University of Samoa Le Papaigalagala*. Apia: National University of Samoa.
- Stenger, R.; Rivas, A.; Wilson, S.; Friedel, M.J.; Barkle, G.; Clague, J.; Wöhling, T.; Moorhead, B.; Lilburne, L.; Eger, A.; McDowell, R.; Morgenstern, U.; Fuller, R.; Journeaux, P.; Kusabs, I. 2019** Critical pathways: unravelling sub-catchment scale nitrogen delivery to waterways. 8 p. In: Currie, L.D.; Christensen, C.L., (eds) *Nutrient loss mitigations for compliance in agriculture*. Palmerston North, N.Z.: Massey University.
- Tan, M.L.; Prasanna, R.; Stock, K.; Hudson-Doyle, E.; Leonard, G.S.; Johnston, D.M. 2019** Enhancing the usability of a disaster app: exploring the perspectives of a public as users. p. 876-886 In: Franco, Z.; González, J.J.; Canós, J.H. (eds.) *Proceedings of the 16th International Conference on Information Systems for Crisis Response and Management, Valencia, Spain, May 2019*.
- Wartman, J.; Gibson, M.; Grant, A.; Arnold, I.; Massey, C.I.; Olsen, M.L.; McLaughlin, M.; Keefer, D. 2019** Seismically induced failure of rock slopes: Insights from field observations and analytical modeling. p. 491-505 In: Silvestri, F.; Moraci, N. (eds) *Earthquake geotechnical engineering for protection and development of environment and constructions: proceedings of the 7th International Conference on Earthquake Geotechnical Engineering (ICEGE 2019), June 17-20 2019, Rome Italy*. Boca Raton: CRC Press.

[Top of the Document](#)

Other Publications

- Arnot, M.J.; Bland, K.J.; Seebeck, H.C.; Kellett, R.L.; Gerrard, T.; Browne, G.H.; Waitaiki-Curry, H.; Bonica-Kururangi, T. 2019** Te Kura Whenua ki Pukearuhe wananga completion report. Lower Hutt, N.Z.: GNS Science. *GNS Science miscellaneous series 130*. 34 p.; [doi: 10.21420/V38C-0246](https://doi.org/10.21420/V38C-0246)
- Bannister, S. 2019** Seismology and tsunami science - a decade of significant progress. p. 6-7 In: Pinal, C.; Coomer, M.A. *Natural hazards 2018*. Lower Hutt, N.Z.: GNS Science. GNS Science miscellaneous series 127
- Barker, D.H.N.; Van Avendonk, H.; Fujie, G. 2019** Seismogenesis at Hikurangi Integrated Research Experiment (SHIRE) Report of RV *Tangaroa* cruise TAN1710, 23 Oct-20 Nov 2017. Lower Hutt, N.Z.: GNS Science. *GNS Science report 2019/01*. 22 p. + 3 appendices; [doi: 10.21420/H28Y-5N43](https://doi.org/10.21420/H28Y-5N43)
- Barker, D.H.N.; Wallace, L.M.; Woods, K.; Savage, M.; TAN1809 Science Party 2019** Hikurangi Ocean Bottom Investigation of Tremor and Slow Slip (HOBITSS V). Lower Hutt, N.Z.: GNS Science. *GNS Science report 2019/16*. 30 p. + 4 appendices; [doi: 10.21420/Z4FK-SK46](https://doi.org/10.21420/Z4FK-SK46)
- Beban, J.G.; Gunnell, S.N.; Saunders, W.S.A. 2019** Integrating tsunami inundation modelling into risk-based land-use planning: an update of guidance. Lower Hutt, N.Z.: GNS Science. *GNS Science miscellaneous series 132*. 47 p.; [doi: 10.21420/6MGN-4T72](https://doi.org/10.21420/6MGN-4T72)
- Bell, R.; Gray, M.; Morgan, J.; Warner, M.; Fagereng, A.; McNeill, L.; Jacobs, K.M.; Henrys, S.A.; Fry, B.; Watkins, S.; Lacey, H.; Black, J.; Lane, V.; Daly, D.; Lindsay, D.; Bangs, N.; Arai, R.; Kodaira, S.; NZ3D-FWI team 2019** New Zealand 3D full waveform inversion (NZ3D-FWI) 2017-2018 field acquisition report. Lower Hutt, N.Z.: GNS Science. *GNS Science report 2019/71*. 79 p.; [doi: 10.21420/ZZ8R-QR04](https://doi.org/10.21420/ZZ8R-QR04)
- Bertler, N.A.N. 2019** Stable isotope analysis in ice core paleoclimatology. 14 p. In: Vandergoes, M.J.; Faure, K.; Turnbull, J.C.; Keller, E.D.; Cowan, H.; Wanden, R. *Quaternary Techniques Short Course, 9 & 10 May 2019, National Isotope Centre*. Lower Hutt, N.Z.: GNS Science.
- Black, J.; de Ronde, C.E.J. 2019** Art meets science: the centre of New Zealand's Continental Shelf. Lower Hutt, N.Z.: GNS Science. *GNS Science report 2019/22*. 10 p.; [doi: 10.21420/RF7A-NT31](https://doi.org/10.21420/RF7A-NT31)
- Boersen, K.; Kaiser, L.H.; Power, W.L. 2019** Quicker, safer tsunami evacuations. p. 28-29 In: Pinal, C.; Coomer, M.A. *Natural hazards 2018*. Lower Hutt, N.Z.: GNS Science. GNS Science miscellaneous series 127
- Bromley, C.J.; Axelsson, G. 2019** Deep roots of volcanic systems. PowerPoint presentation In: *International Workshop on Geothermal Energy, 8th and 9th April 2019 held at ITC Pozo Izquierdo, Gran Canaria*. IEA Geothermal.
- Byett, A.; Davies, B.; Blakeley, R.; Bowie, C.; Fairclough, R.; Fidler, D.; Furner, W.; Guthrie, G.; Haines, L.; Halliday, A.; James, A.; Kerr, S.; Levy, R.H.; McColl, B.; Meade, R.; Paulik, R.; Pearce, P.; Pohatu, J.; Riley, S.; Tinnion-Morgan, J.; Ziedins, I. 2019** Climate change adaptation within New Zealand's transport system. 11 p.
- Campbell, H.J.; Hudson, N. 2019** Focus on the Jurassic: the 7th Symposium of IGCP 632, held during 2018 Geosciences, Napier (GSNZ annual conference). *Geoscience Society of New Zealand newsletter, 28*: 38-39

- Campbell, H.J.; Mortimer, N. 2019** Announcing a substantive new contribution to our understanding of New Zealand's basement geology. *Geoscience Society of New Zealand newsletter*, 28: 32-33
- Chadwick, M.; Jones, J.; Lawler, K.-A.; Prebble, J.G.; Kohfeld, K.E.; Crosta, X. 2019** Understanding glacial-interglacial changes in Southern Ocean sea ice. *Past Global Changes Magazine*, 27(2): 86; doi: [10.22498/pages.27.2.86](https://doi.org/10.22498/pages.27.2.86)
- Christophersen, A.; Bailey, L.; Cavana, R.Y. 2019** Risk and Decision-Making Conference 2019: how different aspects of risk underpin responsible and culturally-appropriate decision-making, 13-14 November 2019, Rutherford House, Wellington, New Zealand. Lower Hutt, N.Z.: GNS Science. *GNS Science miscellaneous series 133*. 60 p.; doi: [10.21420/8026-VR13](https://doi.org/10.21420/8026-VR13)
- Clark, K.J.; Howell, A.; Thomson, J. 2019** Paleo-coastal uplift along the Kaikoura coastline: detecting multi-fault rupture and implications for the southern Hikurangi margin. Lower Hutt, N.Z.: GNS Science. *GNS Science report 2019/82*. 30 p.; doi: [10.21420/VR7W-0K75](https://doi.org/10.21420/VR7W-0K75)
- Cortese, G.; Prebble, J.G.; Hollis, C.J. 2019** Paleoenvironmental reconstruction using marine microfossils. 7 p. In: Vandergoes, M.J.; Faure, K.; Turnbull, J.C.; Keller, E.D.; Cowan, H.; Wanden, R. *Quaternary Techniques Short Course, 9 & 10 May 2019, National Isotope Centre*. Lower Hutt, N.Z.: GNS Science.
- Crampton, J.S.; Schioler, P. 2019** Measured section through the boundary stratotype sections of the Arowhanan, Mangaotanean and Teratan stages (Late Cretaceous) in Mangaotane Stream, Raukumara Peninsula, New Zealand. Lower Hutt, N.Z.: GNS Science. *GNS Science report 2019/32*. 142 p.; doi: [10.21420/4BGX-A271](https://doi.org/10.21420/4BGX-A271)
- Crundwell, M.P. 2019** Humble beginnings - micropaleontology and applied foraminiferal biostratigraphy. *Geoscience Society of New Zealand newsletter*, 27: 19-23
- Daly, M.C.; Glassey, P.J.; Woods, R.J.; Kilgour, G.N.; Fournier, N.; Berryman, K.R.; Fathani, F.; Wilopo, W.; Anantasari, E.; Sentianto, A.; Satyarno, I.; Geld, A.; Goldsmith, M. 2019** Development of DRR Action Plans for local government in Indonesia. Geneva: UN Office for Disaster Risk Reduction. 23 p.
- Davey, F.J. 2019** Dr E I Robertson cuts the 100th Anniversary Cake for 2019 RSNZ Academy Centennial Dinner. *Geoscience Society of New Zealand newsletter*, 27: 44-45
- de Ronde, C.E.J.; Humphris, S.; Höfig, T.W.; Expedition 376 Scientists 2019** Brothers Arc Flux. College Station, TX: International Ocean Discovery Program. *Proceedings of the International Ocean Discovery Program 376*. doi: [10.14379/iodp.proc.376.2019](https://doi.org/10.14379/iodp.proc.376.2019)
- Deligne, N.I.; Leonard, G.S.; Jolly, A.D.; Christenson, B.W.; Hamling, I.J.; Hreinsdottir, S.; Mazot, A.; Miller, C.A.; Roberts, R.; van Wijk, K. 2019** DEVORA novel monitoring techniques workshop, 25 October 2018. Lower Hutt, N.Z.: GNS Science. *GNS Science report 2019/21*. 50 p.; doi: [10.21420/GMZJ-J453](https://doi.org/10.21420/GMZJ-J453)
- Deligne, N.I.; Miller, C.A.; Ashraf, S.; Behr, Y.; Fournier, N.; Jolly, A.D.; Hamling, I.J.; Leonard, G.S.; Scott, B.J.; Sherburn, S.; Aru, M.; Cevuard, S.; Garaebiti, E. 2019** Material provided to the Vanuatu Meteorology and Geo-Hazards Department by GNS Science in response to Ambrym volcano activity in December 2018–early 2019. Lower Hutt, N.Z.: GNS Science. *GNS Science report 2019/74*. 53 p.; doi: [10.21420/Q9HT-HD56](https://doi.org/10.21420/Q9HT-HD56)
- Dellow, G.D.; Massey, C.I. 2019** Lessons from New Zealand landslides and rockfall. p. 9 In: Pinal, C.; Coomer, M.A. *Natural hazards 2018*. Lower Hutt, N.Z.: GNS Science. *GNS Science miscellaneous series 127*

- Ditchburn, R.G.; Durrant, B.; Futter, R.J.; Mawdesley, S.; Zondervan, A. 2019** An improved method for separating quartz from rock using pyrophosphoric acid. 2nd ed. Lower Hutt, N.Z.: GNS Science. *GNS Science report 2019/10*. 11 p.; doi: [10.21420/1TFF-RQ08](https://doi.org/10.21420/1TFF-RQ08)
- Elliott, S.; Rajanayaka, C.; Yang, J.; White, J. 2019** CLUES-GW: a simple coupled steady state surface-groundwater model for contaminant transport. Lower Hutt, N.Z.: GNS Science. *GNS Science report 2018/44*. 51 p.; doi: [10.21420/34XR-AG12](https://doi.org/10.21420/34XR-AG12)
- Faure, K. 2019** Stable isotope geochemistry: definitions, terminology, measurement and some applications. 26 p. In: Vandergoes, M.J.; Faure, K.; Turnbull, J.C.; Keller, E.D.; Cowan, H.; Wanden, R. *Quaternary Techniques Short Course, 9 & 10 May 2019, National Isotope Centre*. Lower Hutt, N.Z.: GNS Science.
- Fu, G.; Moore, C.R.; Turnadge, C.; Barron, O. 2019** Joint Industry Plan (JIP): case study in the Surat Cumulative Management Area (CMA): review and applications of the trend analysis methodology outlined in Appendix D of the JIP. Canberra: Commonwealth Scientific and Industrial Research Organisation. 63 p.; doi: [10.25919/5cf6bfb92d39f](https://doi.org/10.25919/5cf6bfb92d39f)
- Gohl, K.; Wellner, J.S.; Klaus, A.; Expedition 379 Scientists 2019** Expedition 379 preliminary report: Amundsen Sea West Antarctic Ice Sheet history. College Station, TX: International Ocean Discovery Program. 33 p.; doi: [10.14379/iodp.pr.379.2019](https://doi.org/10.14379/iodp.pr.379.2019)
- Grace, E.S.; Frances-Hudson, B.T.; Kilvington, M.J. 2019** Reducing risk through the management of existing uses: tensions under the RMA. Lower Hutt, N.Z.: GNS Science. *GNS Science report 2019/55*. 131 p.; doi: [10.21420/27S5-E538](https://doi.org/10.21420/27S5-E538)
- Griffin, A.G.; Kellett, R.L.; Lawrence, M.J.F. 2019** SLIDE (Wellington): summary of borehole image and full-waveform acoustic processing and interpretation results. Lower Hutt, N.Z.: GNS Science. *GNS Science report 2019/41*. 36 p.; doi: [10.21420/6QBV-C705](https://doi.org/10.21420/6QBV-C705)
- Gunnell, S. 2019** A quantitative risk-based planning approach for managing life risk from slope instability: adaptation of the Christchurch District Plan approach. Lower Hutt, N.Z.: GNS Science. *GNS Science report 2018/31*. 21 p.; doi: [10.21420/NWC0-2758](https://doi.org/10.21420/NWC0-2758)
- Gunnell, S.N. 2019** Application of a risk-based planning approach in the Bay of Plenty Regional Policy Statement. Lower Hutt, N.Z.: GNS Science. *GNS Science report 2019/33*. 24 p.; doi: [10.21420/8N30-1D86](https://doi.org/10.21420/8N30-1D86)
- Gunnell, S.N. 2019** Translating natural hazard science into policy and practice: 'It's Our Fault' course summary and recommendations report. Lower Hutt, N.Z.: GNS Science. *GNS Science miscellaneous series 128*. 83 p.; doi: [10.21420/MGJY-HV52](https://doi.org/10.21420/MGJY-HV52)
- Gusman, A.R.; Power, W.L.; Mueller, C. 2019** Tsunami modelling for Porirua City: the methodology to inform land use planning response. Lower Hutt, N.Z.: GNS Science. *GNS Science report 2019/80*. 51 p.; doi: [10.21420/SEG2-Q850](https://doi.org/10.21420/SEG2-Q850)
- Gusman, A.R.; Wang, X.; Power, W.L.; Lukovic, B.; Mueller, C.; Burbidge, D.R. 2019** Tsunami threat level database update. Lower Hutt, N.Z.: GNS Science. *GNS Science report 2019/67*. 110 p.; doi: [10.21420/QM31-NA61](https://doi.org/10.21420/QM31-NA61)
- Hamilton, A.R.; Campbell, K.A.; Guido, D.M. 2019** Atlas of siliceous hot spring deposits (sinter) and other silicified surface manifestations in epithermal environments. Lower Hutt, N.Z.: GNS Science. *GNS Science report 2019/06*. 56 p.; doi: [10.21420/BQDR-XQ16](https://doi.org/10.21420/BQDR-XQ16)

- Hart, R.J.A.; Palmer, N.G. 2019** Field report on GNSS surveys of the Top of the South Island Network in 2018 (TOPS2018). Lower Hutt, N.Z.: GNS Science. *GNS Science report 2019/20*. 90 p.; doi: [10.21420/POCY-D396](https://doi.org/10.21420/POCY-D396)
- Hart, R.J.A.; Palmer, N.G. 2019** Kinematics of the New Zealand plate boundary: field report on GNSS surveys of the Taranaki Network in 2019 (TARA2019). Lower Hutt, N.Z.: GNS Science. *GNS Science report 2019/69*. 26 p.; doi: [10.21420/EZHG-WX25](https://doi.org/10.21420/EZHG-WX25)
- Hayes, J.L.; Deligne, N.I.; Bertin, L.; Calderon, R.; Wardman, J.B.; Wilson, T.M.; Leonard, G.S.; Stewart, C.; Wallace, K.L.; Baxter, P.J. 2019** Impacts of the 2015 eruption of Calbuco volcano on Chilean infrastructure, utilities, agriculture, and health. Lower Hutt, N.Z.: GNS Science. *GNS Science report 2019/04*. 102 p.; doi: [10.21420/02YC-VX66](https://doi.org/10.21420/02YC-VX66)
- Hayward, B.W.; Browne, G.H. 2019** We continue to damage our heritage. *Geoscience Society of New Zealand newsletter*, 27: 31-34
- Hemmings, B.J.C.; Knowling, M.J.; Moore, C.R. 2019** Assessing the uncertainty of water quality and lake influx predictions made using complex regional models: Ruamahanga South case study. Lower Hutt, N.Z.: GNS Science. *GNS Science report 2019/30*. 72 p.; doi: [10.21420/9N73-QE35](https://doi.org/10.21420/9N73-QE35)
- Hemmings, B.J.C.; Knowling, M.J.; Moore, C.R. 2019** Assessing the uncertainty of water quality and quantity predictions made using complex regional models: Ruamahanga North case study. Lower Hutt, N.Z.: GNS Science. *GNS Science report 2019/29*. 80 p.; doi: [10.21420/J32Q-W248](https://doi.org/10.21420/J32Q-W248)
- Hill, M.P. 2019** Borehole database for urban geological mapping, southern Auckland area, New Zealand. Lower Hutt, N.Z.: GNS Science. *GNS Science report 2019/12*. 34 p.; doi: [10.21420/EZ5W-5K59](https://doi.org/10.21420/EZ5W-5K59)
- Hillman, J.I.T. 2019** Fiery ice - gas hydrates. *Frontiers for Young Minds*, 7: article 96; doi: [10.3389/frym.2019.00096](https://doi.org/10.3389/frym.2019.00096)
- Hillman, J.I.T. 2019** Mapping the oceans. *Frontiers for Young Minds*, 7: article 25; doi: [10.3389/frym.2019.00096](https://doi.org/10.3389/frym.2019.00096)
- Howard, S.W.; Griffiths, J.; Zammit, C.; Rouse, H. 2019** Model choice effects on ecological modelling in Matura River: SAM Programme 2018. Lower Hutt, N.Z.: GNS Science. *GNS Science report 2019/05*. 55 p.; doi: [10.21420/J32Q-W248](https://doi.org/10.21420/J32Q-W248)
- Howarth, J.D. 2019** Age-depth modelling with radiocarbon. 12 p. In: Vandergoes, M.J.; Faure, K.; Turnbull, J.C.; Keller, E.D.; Cowan, H.; Wanden, R. *Quaternary Techniques Short Course, 9 & 10 May 2019, National Isotope Centre*. Lower Hutt, N.Z.: GNS Science.
- Kamp, P.J.J.; Pittari, A. (eds) 2019** Abstract volume: Geosciences 2019, 24-27 November 2019, Hamilton. Wellington, N.Z.: Geoscience Society of New Zealand. *Geoscience Society of New Zealand miscellaneous publication 155A*. 224 p.
- Kellett, R.L.; Bassett, D.; Arai, R.; Obana, K.; Stucker, V.K.; Henrys, S.A.; Davidson, S.R.; Hart, R.J.A.; Kodaira, S.; Maekawa, T.; Michailos, K.; Mori, S.; O'Brien, G.A.; Saijo, T.; Terada, I.; Tsukuda, K.; Bangs, N.L.; Bell, R. 2019** TAN1712-1803 voyage report for ocean bottom seismograph recovery in support of seismic surveys (ORCSS 2 and 3): 3D survey offshore East Coast North Island. Lower Hutt, N.Z.: GNS Science. *GNS Science report 2018/36*. 31 p. + appendices; doi: [10.21420/A8MV-S722](https://doi.org/10.21420/A8MV-S722)

- Kereszturi, G.; Schaefer, L.; Miller, C.A.; Mead, S. 2019** Collapse or not? Exploring flank collapse hazards of Mt Ruapehu. p. 12-13 In: Pinal, C.; Coomer, M.A. *Natural hazards 2018*. Lower Hutt, N.Z.: GNS Science. GNS Science miscellaneous series 127
- Kilvington, M.; Saunders, W.S.A. 2019** Summary of Kaikoura District Council risk engagement workshop for the proposed review of the district plan. Lower Hutt, N.Z.: GNS Science. *GNS Science report 2019/07*. 10 p.; [doi: 10.21420/9X9B-FW11](https://doi.org/10.21420/9X9B-FW11)
- Kroeger, K.F.; Funnell, R.H.; Fohrmann, M.; Hill, M.G. 2019** Integrated 3D petroleum generation, migration and charge modelling in the Kupe-Kapuni region, south-eastern Taranaki Basin. Lower Hutt, N.Z.: GNS Science. *GNS Science report 2019/73*. 67 p.; [doi: 10.21420/VHDN-9755](https://doi.org/10.21420/VHDN-9755)
- Lambie, E.; Becker, J.S.; Coomer, M.A. 2019** New Zealand ShakeOut 2018 Observation Evaluation Report: a summary of high-level findings. Lower Hutt, N.Z.: GNS Science. *GNS Science report 2019/09*. 25 p.; [doi: 10.21420/NSPF-YK57](https://doi.org/10.21420/NSPF-YK57)
- Langridge, R.M.; Clark, K.J. 2019** The Kaikoura earthquake and past fault rupture. p. 14-15 In: Pinal, C.; Coomer, M.A. *Natural hazards 2018*. Lower Hutt, N.Z.: GNS Science. GNS Science miscellaneous series 127
- Langridge, R.M.; Nicol, A.; Barrell, D.J.A.; Almond, P.; Clark, K.J.; Stirling, M.W. 2019** Pre-historic ruptures on 2016 Kaikoura earthquake faults and implications for seismic hazard. Lower Hutt, N.Z.: GNS Science. *GNS Science miscellaneous series 131*. 50 p.; [doi: 10.21420/87E7-1N65](https://doi.org/10.21420/87E7-1N65)
- Macdonald, N.; Reeves, R.R.; Graham, D.J.; Brakenrig, T. 2019** Obtaining water level data at Whakarewarewa Geothermal Valley using unmanned aerial vehicle photogrammetry. Lower Hutt, N.Z.: GNS Science. *GNS Science report 2019/14*. 20 p.; [doi: 10.21420/HCDF-P412](https://doi.org/10.21420/HCDF-P412)
- Massey, C.I.; Thomas, K.-L.; King, A.B.; Singeisen, C.; Taig, T.; Horspool, N.A. 2019** SLIDE (Wellington): vulnerability of dwellings to landslides (Project No. 16/SP740). Lower Hutt, N.Z.: GNS Science. *GNS Science report 2018/27*. 76 p.; [doi: 10.21420/G2DD2Q](https://doi.org/10.21420/G2DD2Q)
- Massey, C.I.; Townsend, D.B.; Dellow, G.D.; Lukovic, B.; Rosser, B.J.; Archibald, G.C.; Villeneuve, M.; Davidson, J.; Jones, K.E.; Morgenstern, R.; Strong, D.T.; Lyndsell, B.M.; Tunnicliffe, J.; Carey, J.M.; McColl, S. 2019** Kaikoura Earthquake Short-Term Project: landslide inventory and landslide dam assessments. Lower Hutt, N.Z.: GNS Science. *GNS Science report 2018/19*. 43 p.; [doi: 10.21420/G2FP82](https://doi.org/10.21420/G2FP82)
- Moreau, M.; White, P.A.; Mourot, F.; Rawlinson, Z.; Tschirter, C.; Cameron, S.G.; Westerhoff, R.S. 2019** Classification of New Zealand hydrogeological systems. Lower Hutt, N.Z.: GNS Science. *GNS Science report 2018/35*. 28 p.; [doi: 10.21420/42QW-MC74](https://doi.org/10.21420/42QW-MC74)
- Morgenstern, U.; Davidson, P.; Townsend, D.B.; White, P.A.; van der Raaij, R.W.; Stewart, M.K.; Moreau, M.; Daughney, C.J. 2019** From rain through river catchment to aquifer: the flow of water through the Wairau hydraulic system. Lower Hutt, N.Z.: GNS Science. *GNS Science report 2019/63*. 83 p.; [doi: 10.21420/7125-ST46](https://doi.org/10.21420/7125-ST46)
- Morgenstern, U.; van der Raaij, R.W. 2019** 2019 Groundwater residence time assessment of Hawke's Bay municipal water supply wells in the context of the Drinking-water Standards for New Zealand. Lower Hutt, N.Z.: GNS Science. *GNS Science report 2019/76*. 48 p.; [doi: 10.21420/8KKH-4W33](https://doi.org/10.21420/8KKH-4W33)

- Morgenstern, U.; van der Raaij, R.W.; Baisden, W.T.; Stewart, M.K.; Martindale, H.; Matthews, A.; Collins, S. 2019** Ohau and Waikawa catchments of the Horowhenua Groundwater Management Zone: groundwater dynamics, source, and hydrochemical processes as inferred from the groundwater tracer data. Lower Hutt, N.Z.: GNS Science. *GNS Science report 2018/06*. 52 p.; doi: [10.21420/G2434W](https://doi.org/10.21420/G2434W)
- Mortimer, N.; Crampton, J.S. 2019** Hamish Campbell. *Geoscience Society of New Zealand newsletter*, 27: 43-44
- Mourot, F.; Westerhoff, R.S.; Macdonald, N.; Cameron, S.G. 2019** Better spatial characterisation of evapotranspiration and rainfall recharge estimates to groundwater using remote sensing multispectral techniques at lysimeter sites. Lower Hutt, N.Z.: GNS Science. *GNS Science report 2019/17*. 82 p.; doi: [10.21420/Z3NQ-CE33](https://doi.org/10.21420/Z3NQ-CE33)
- Naeher, S. 2019** Tracing environmental and climate change using lipid biomarkers: the world of organic geochemistry. 9 p. In: Vandergoes, M.J.; Faure, K.; Turnbull, J.C.; Keller, E.D.; Cowan, H.; Wanden, R. *Quaternary Techniques Short Course, 9 & 10 May 2019, National Isotope Centre*. Lower Hutt, N.Z.: GNS Science.
- Nathan, S. 2019** A geological gallery from the 1950s. *Journal of the Historical Studies Group / Geological Society of New Zealand*, 61: 22-31
- Nathan, S. 2019** David Kear (1923-2019). *Geoscience Society of New Zealand newsletter*, 28: 48-51
- Nathan, S. 2019** Flying high: the photography of Lloyd Homer. Wellington, N.Z.: Geoscience Society of New Zealand. *Geoscience Society of New Zealand miscellaneous publication 153*. 148 p.
- Nathan, S. 2019** George Grindley (1925-2019). *Journal of the Historical Studies Group / Geological Society of New Zealand*, 61: 41-44
- Nathan, S. 2019** Mrs Bell in the field. *Journal of the Historical Studies Group / Geological Society of New Zealand*, 62: 39-40
- Nathan, S. 2019** South Westland geology: memories and some unresolved problems. *Geoscience Society of New Zealand newsletter*, 28: 16-20
- Nathan, S. 2019** Trevor Chinn (1937-2018). *Geoscience Society of New Zealand newsletter*, 27: 49
- Nguyen, Q.; Diaz-Rainey, I.; Moore, T.; Thorsnes, P.; Cox, S.C.; McKenzie, L.; Stirk-Wang, L. 2019** Risk to residential property values from climate change-related flooding hazards: a mixed methods approach. doi: [10.2139/ssrn.3489445](https://doi.org/10.2139/ssrn.3489445)
- Perrin, N.D. 2019** Possibly unreliable reminiscences of Harold Wellman. *Journal of the Historical Studies Group / Geological Society of New Zealand*, 63: 11-13
- Pinal, C.; Coomer, M.A. 2019** Natural hazards 2018. Lower Hutt, N.Z.: GNS Science. *GNS Science miscellaneous series 127*. 56 p.; doi: [10.21420/KJNM-R522](https://doi.org/10.21420/KJNM-R522)
- Power, W.L.; Boersen, K.; Thomas, K.-L.; Tilley, L.; Hudson-Doyle, E.E.; Kaiser, L.H.; Lukovic, B.; Heron, D.W.; Wilson, T.M.; Leonard, G.S.; Johnston, D.M. 2019** Quicker and safer tsunami evacuations through agent-based modelling. Lower Hutt, N.Z.: GNS Science. *GNS Science miscellaneous series 134*. 59 p.; doi: [10.21420/9H4N-TH30](https://doi.org/10.21420/9H4N-TH30)
- Rawlinson, Z.J.; Gardiner, L. 2019** Ngati Haua Piako: review of information available for freshwater resource management in the Piako River Catchment within Ngati Haua rohe. Lower Hutt, N.Z.: GNS Science. *GNS Science report 2019/35*. 96 p.; doi: [10.21420/7HGH-RQ33](https://doi.org/10.21420/7HGH-RQ33)

- Reeves, R.R.; Sanders, F. 2019** 2019 thermal infrared survey of the Waiotapu Geothermal Field. Lower Hutt, N.Z.: GNS Science. *GNS Science report 2019/57*. 22 p.; doi: [10.21420/ZD6D-GD88](https://doi.org/10.21420/ZD6D-GD88)
- Rhoades, D.A.; Christophersen, A. 2019** Earthquake forecasting: small earthquakes show when big ones are more likely. *Research Outreach*, 111: 54-57; doi: [10.32907/RO-111-5457](https://doi.org/10.32907/RO-111-5457)
- Richards-Dinger, K.; Fry, B.; Gerstenberger, M.C.; Williams, C.A. 2019** Earthquake simulator hazard: Natural Hazards Research Platform. Lower Hutt, N.Z.: GNS Science. *GNS Science report 2019/78*. 7 p.; doi: [10.21420/509X-PM49](https://doi.org/10.21420/509X-PM49)
- Rogers, K.M. 2019** How to take environmental samples for stable isotope analyses. 5 p. In: Vandergoes, M.J.; Faure, K.; Turnbull, J.C.; Keller, E.D.; Cowan, H.; Wanden, R. *Quaternary Techniques Short Course, 9 & 10 May 2019, National Isotope Centre*. Lower Hutt, N.Z.: GNS Science.
- Saunders, W.S.A. 2019** Principles of project-based engagement. Lower Hutt, N.Z.: GNS Science. *GNS Science miscellaneous series 129*. 42 p.; doi: [10.21420/VJPZ-Q393](https://doi.org/10.21420/VJPZ-Q393)
- Saunders, W.S.A.; Kaiser, L.H. 2019** Analysing processes of inclusion and use of natural hazard information in iwi and hapu management plans: case studies from the Bay of Plenty. Lower Hutt, N.Z.: GNS Science. *GNS Science report 2019/03*. 20 p.; doi: [10.21420/6GFC-7G29](https://doi.org/10.21420/6GFC-7G29)
- Saunders, W.S.A.; Kaiser, L.H. 2019** Iwi and Hapu Management Plans. *New Zealand local government*
- Scheele, F.R.; Lukovic, B.; Horspool, N.A. 2019** Revisiting fire following earthquake modelling for Wellington City. Lower Hutt, N.Z.: GNS Science. *GNS Science report 2019/24*. 27 p.; doi: [10.21420/QYQ1-RE79](https://doi.org/10.21420/QYQ1-RE79)
- Scheele, F.R.; Uma, S.R.; Goded, T.; Coomer, M.A.; Horspool, N.A.; Moratalla, J.M. 2019** Post-earthquake building functionality and habitability in New Zealand Survey results. Lower Hutt, N.Z.: GNS Science. *GNS Science report 2019/23*. 21 p.; doi: [10.21420/TAT3-0313](https://doi.org/10.21420/TAT3-0313)
- Scott, B.J. 2019** Rotorua geothermal system: the science story: environmental summary report. [Whakatane, N.Z.]: Bay of Plenty Regional Council. 1 v.
- Simmons, S.F. 2019** The geometry and evolution of the boiling zone that produced the Favona ore bodies in the Hauraki Goldfield, and the implications for exploration. Lower Hutt, N.Z.: GNS Science. *GNS Science report 2019/02*. 29 p.; doi: [10.21420/393T-G091](https://doi.org/10.21420/393T-G091)
- Simpson, M.P.; Clarkin, P.; Christie, A.B.; Bradshaw, D. 2019** Hei koha tu, hei kura huna a papa: a resource characterisation and ancestry of minerals for Ngati Hako. Lower Hutt, N.Z.: GNS Science. *GNS Science report 2019/53*. 117 p.; doi: [10.21420/ZS70-3P52](https://doi.org/10.21420/ZS70-3P52)
- Stagpoole, V.M.; Miller, C.A.; Brakenrig, T.; Macdonald, N.; Caratori Tontini, F. 2019** Residual gravity anomalies of the Taupo Volcanic Zone and adjacent region. Lower Hutt, N.Z.: GNS Science. *GNS Science geophysical map 1*. 1 map + 22 p.
- Stevens, G.R. 2019** Observations on the culture of the New Zealand Geological Survey 1950s-1970s. *Journal of the Historical Studies Group / Geological Society of New Zealand*, 61: 33-41
- Stevens, G.R. 2019** Snakestones and devil's toenails. *Journal of the Historical Studies Group / Geological Society of New Zealand*, 61: p, 16-21

- Stewart, C.; Leonard, G.S. 2019** Assessing the potential of a modified version of USEPA Method 1312 for use in eruption response in New Zealand. Lower Hutt, N.Z.: GNS Science. *GNS Science report 2018/41*. 12 p.; [doi: 10.21420/07QM-Z915](https://doi.org/10.21420/07QM-Z915)
- Stewart, C.; Smid, E.; Charlton, D.; Leonard, G.S.; Tomašek, I.; Wilson, T.M.; Talbot, N. 2019** Preparing for a sustained volcanic degassing episode in Auckland. Lower Hutt, N.Z.: GNS Science. *GNS Science report 2019/58*. 41 p.; [doi: 10.21420/4NKW-TR68](https://doi.org/10.21420/4NKW-TR68)
- Stewart, M.K.; van der Raaij, R.W. 2019** Interpretation of the 2017 groundwater age tracer and isotope results for the Christchurch aquifer system. Lower Hutt, N.Z.: GNS Science. *GNS Science report 2019/65*. 41 p.; [doi: 10.21420/Y32E-BC76](https://doi.org/10.21420/Y32E-BC76)
- Strehlow, K.; Sandri, L.; Gottsmann, J.; Kilgour, G.N.; Rust, A.; Tonini, R. 2019** Eject! for Matlab.
- Strong, C.P. 2019** Uppermost Teurian to lowermost Bortonian foraminiferal biostratigraphy of the Mead Stream section, Clarence River valley, Kaikoura district, New Zealand. Lower Hutt, N.Z.: GNS Science. *GNS Science report 2019/25*. 32 p.; [doi: 10.21420/E2T1-HC11](https://doi.org/10.21420/E2T1-HC11)
- Sutherland, R.; Dickens, G.R.; Blum, P.; Agnini, C.; Alegret, L.; Asatryan, G.; Bhattacharya, J.; Bordenave, A.; Chang, L.; Collot, J.; Cramwinckel, M.J.; Dallanave, E.; Drake, M.K.; Etienne, S.J.G.; Giorgioni, M.; Gurnis, M.; Harper, D.T.; Huang, H.-H.M.; Keller, A.L.; Lam, A.R.; Li, H.; Matsui, H.; Morgans, H.E.G.; Newsam, C.; Park, Y.-H.; Pascher, K.M.; Pekar, S.F.; Penman, D.E.; Saito, S.; Stratford, W.R.; Westerhold, T.; Zhou, X. 2019** Expedition 371 summary. 33 p.; [doi: 10.14379/iodp.proc.371.101.2019](https://doi.org/10.14379/iodp.proc.371.101.2019) In: Sutherland, R.; Dickens, G.R.; Blum, P.; Expedition 371 Scientists *Tasman Frontier subduction initiation and Paleogene climate*. College Station, TX: International Ocean Discovery Program. Proceedings of the International Ocean Discovery Program 371
- Sutherland, R.; Dickens, G.R.; Blum, P.; Expedition 371 Scientists 2019** Tasman Frontier subduction initiation and Paleogene climate. College Station, TX: International Ocean Discovery Program. *Proceedings of the International Ocean Discovery Program 371*. [doi: 10.14379/iodp.proc.371.2019](https://doi.org/10.14379/iodp.proc.371.2019)
- Tsang, S.W.R.; Lindsay, J.M. 2019** Response to and short-term recovery from a lava flow inundation: lessons from the 2018 Lower East Rift Zone eruption at Kilauea Volcano, Hawaii, USA. Lower Hutt, N.Z.: GNS Science. *GNS Science report 2019/75*. 82 p.; [doi: 10.21420/MW46-NH92](https://doi.org/10.21420/MW46-NH92)
- Tsang, S.W.R.; Lindsay, J.M.; Deligne, N.I. 2019** Short-term preparation for and response to an impending lava flow: lessons from the June 27th lava flow (2014–2015), Hawaii, USA. Lower Hutt, N.Z.: GNS Science. *GNS Science report 2019/61*. 87 p.; [doi: 10.21420/XPT9-XG94](https://doi.org/10.21420/XPT9-XG94)
- Tulloch, A.J.; Cooper, A.F.; Smith Lyttle, B. 2019** Geology of the Victoria Range area. Lower Hutt, N.Z.: GNS Science. *GNS Science geological map 6*.
- Turnbull, J.C.; Prior, C.A.; Zondervan, A. 2019** Radiocarbon dating. 11 p. In: Vandergoes, M.J.; Faure, K.; Turnbull, J.C.; Keller, E.D.; Cowan, H.; Wanden, R. *Quaternary Techniques Short Course, 9 & 10 May 2019, National Isotope Centre*. Lower Hutt, N.Z.: GNS Science.
- Van Houtte, C.; Abbott, E.R. 2019** Implementation of the GNS Science Canterbury Seismic Hazard Model in OpenQuake. Lower Hutt, N.Z.: GNS Science. *GNS Science report 2019/11*. 38 p.; [doi: 10.21420/1AEM-PZ85](https://doi.org/10.21420/1AEM-PZ85)
- Van Houtte, C.; Gerstenberger, M.C. 2019** Potential short-term aftershock sequences of an Alpine Fault earthquake and their ground motion fields. Lower Hutt, N.Z.: GNS Science. *GNS Science report 2019/13*. 23 p.; [doi: 10.21420/33J4-TW37](https://doi.org/10.21420/33J4-TW37)

- Vandergoes, M.J. 2019** Hyperspectral imaging of sedimentary archives. 1 p. In: Vandergoes, M.J.; Faure, K.; Turnbull, J.C.; Keller, E.D.; Cowan, H.; Wanden, R. *Quaternary Techniques Short Course, 9 & 10 May 2019, National Isotope Centre*. Lower Hutt, N.Z.: GNS Science.
- Vandergoes, M.J.; Cochran, U.A. 2019** Paleoenvironmental reconstruction using microfossils: terrestrial. 21 p. In: Vandergoes, M.J.; Faure, K.; Turnbull, J.C.; Keller, E.D.; Cowan, H.; Wanden, R. *Quaternary Techniques Short Course, 9 & 10 May 2019, National Isotope Centre*. Lower Hutt, N.Z.: GNS Science.
- Vandergoes, M.J.; Faure, K.; Turnbull, J.C.; Keller, E.D.; Cowan, H.; Wanden, R. 2019** Quaternary Techniques Short Course, 9 & 10 May 2019, National Isotope Centre. Lower Hutt, N.Z.: GNS Science. 1 v.
- Wallace, L.M.; TAN1705 Science Party 2019** Hikurangi Ocean Bottom Investigation of Tremor and Slow Slip (HOBITTS IV). Lower Hutt, N.Z.: GNS Science. *GNS Science report 2017/40*. 28 p. + appendices; [doi: 10.21420/G2DG92](https://doi.org/10.21420/G2DG92)
- Wild, A.J.; Lindsay, J.M.; Costello, S.B.; Deligne, N.I.; Doherty, A.; Leonard, G.S.; Maxwell, K.; Rollin, J.; Wilson, T.M. 2019** Auckland Volcanic Field eruption crisis management decision-making pilot workshop. Lower Hutt, N.Z.: GNS Science. *GNS Science report 2019/70*. 44 p.; [doi: 10.21420/V1B6-NC43](https://doi.org/10.21420/V1B6-NC43)
- Wilson, G. 2019** Quaternary paleomagnetism & environmental magnetism. 19 p. In: Vandergoes, M.J.; Faure, K.; Turnbull, J.C.; Keller, E.D.; Cowan, H.; Wanden, R. *Quaternary Techniques Short Course, 9 & 10 May 2019, National Isotope Centre*. Lower Hutt, N.Z.: GNS Science.
- Zammit, C.; Yang, J.; Griffiths, J.; Rajanayaka, C. 2019** Smart models for aquifer management: TopNet modelling suite. Lower Hutt, N.Z.: GNS Science. *GNS Science report 2019/27*. 118 p.; [doi: 10.21420/FBS9-G965](https://doi.org/10.21420/FBS9-G965)

[Top of the Document](#)

Conference Abstracts

- Aden-Antoniow, F.; Frank, W.B.; Chamberlain, C.J.; Townend, J.; Wallace, L.M.; Bannister, S. 2019** Low-frequency earthquakes accompany deep slow-slip beneath the North Island of New Zealand. abstract S13F-0496 In: *AGU Fall Meeting, San Francisco, 9-13 December 2019*. [Washington, D.C.]: American Geophysical Union.
- Aden-Antoniow, F.; Frank, W.B.; Chamberlain, C.J.; Townend, J.; Wallace, L.M.; Bannister, S. 2019** Low-frequency earthquakes accompany deep slow-slip beneath the North Island of New Zealand. p. 7 In: Kamp, P.J.J.; Pittari, A. (eds) *Abstract volume: Geosciences 2019, 24-27 November 2019, Hamilton*. Wellington, N.Z.: Geoscience Society of New Zealand. Geoscience Society of New Zealand miscellaneous publication 155A
- Amesbury, M.; Ronald, T.; Charman, D.; Royles, J.; Griffiths, H.; Newnham, R.; Rees, A.; Ratcliffe, J.; Campbell, D.; Keller, E.D.; Baisden, W.T. 2019** Refining the calibration of oxygen stable isotopes as a proxy for the Southern Annular Mode in New Zealand restiad peatlands. abstract P-2872 In: *INQUA 2019, Dublin, Ireland: 20th Congress of the International Union for Quaternary Research (INQUA)*.
- Arai, R.; Kodaira, S.; Henrys, S.A.; Bangs, N.L.; Obana, K.; Fujie, G.; Miura, S.; Barker, D.H.N.; Bassett, D.; Bell, R.E.; Morgan, J.V.; Warner, M.; Mochizuki, K.; Kellett, R.L.; Stucker, V.K.; Fry, B. 2019** Three-dimensional anisotropic P-wave velocity structure around the shallow plate boundary in the Northern Hikurangi margin, New Zealand. abstract T51F-0357 In: *AGU Fall Meeting, San Francisco, 9-13 December 2019*. [Washington, D.C.]: American Geophysical Union.
- Arata, Y.; Massey, C.I.; Rosser, B.J.; Carey, J.M. 2019** Evaluation of fissure formation processes caused by earthquakes using numerical simulations. abstract EGU2019-11366 In: *European Geosciences Union General Assembly 2019, Vienna, Austria, 7-12 April 2019*. Goettingen, Germany: Copernicus Gesellschaft. Geophysical research abstracts 21
- Arnulf, A.F.; Bassett, D.; Harding, A.J.; Kodaira, S.; Nakanishi, A. 2019** Anatomy of the Nankai subduction zone. abstract T41C-07 In: *AGU Fall Meeting, San Francisco, 9-13 December 2019*. [Washington, D.C.]: American Geophysical Union.
- Aylward, I.E.; Solomon, E.A.; Torres, M.E.; Whorley, T.L.; Harris, R.N.; Phillip, B.T.; Hillman, J.I.T.; Abbott, A.; Luo, M.; Centurion, R.; McKinley, C.C.; Seabrook, S.; Hoffmann, J.; Andrew, D.; Favorito, J. 2019** Probing the nature of the Hikurangi Margin hydrogeologic system – Preliminary results from the SAFFRONZ Expedition. abstract T51F-0355 In: *AGU Fall Meeting, San Francisco, 9-13 December 2019*. [Washington, D.C.]: American Geophysical Union.
- Bahiru, E.A.; Rowland, J.V.; Eccles, J.D.; Kellett, R.L. 2019** Crustal structures in the Coromandel Volcanic Zone and Hauraki Goldfield: insight from qualitative and quantitative potential field analysis. abstract NS23B-0853 In: *AGU Fall Meeting, San Francisco, 9-13 December 2019*. [Washington, D.C.]: American Geophysical Union.
- Bani, P.; Moussallam, Y.; Medard, E.; Rose-Koga, E.; Koga, K.; Gauthier, P.J.; Carn, S.; Aiuppa, A.; Coppola, D.; Tari, D.; Bani, I.; Benbakkar, M.; Voyard, M.; Scott, B.J.; Garraebiti, E.; Lardy, M. 2019** Insights into the 2017-2018 Ambae eruption. abstract 183 In: *Goldschmidt 2019 abstracts*. Cambridge, U.K.: White Iron Conferences Limited.

- Barker, D.H.N.; Bassett, D.; Henrys, S.A.; Bangs, N.; Van Avendonk, H.; Gase, A. 2019** Along-strike structure of the Hikurangi margin from SHIRE seismic reflection data. p. 11 In: Kamp, P.J.J.; Pittari, A. (eds) *Abstract volume: Geosciences 2019, 24-27 November 2019, Hamilton*. Wellington, N.Z.: Geoscience Society of New Zealand. Geoscience Society of New Zealand miscellaneous publication 155A
- Barrell, D.J.A. 2019** Tracking the demise of the last glaciation in the Southern Alps. p. 13 In: Kamp, P.J.J.; Pittari, A. (eds) *Abstract volume: Geosciences 2019, 24-27 November 2019, Hamilton*. Wellington, N.Z.: Geoscience Society of New Zealand. Geoscience Society of New Zealand miscellaneous publication 155A
- Barrell, D.J.A.; Denton, G.; Putnam, A. 2019** Tracking the last glacial termination in the Southern Alps of New Zealand. abstract O-4021 In: *INQUA 2019, Dublin, Ireland: 20th Congress of the International Union for Quaternary Research (INQUA)*.
- Barrell, D.J.A.; Glassey, P.J.; Smith Lyttle, B. 2019** 3-D subsurface geology for the Dunedin urban geologic map. p. 12 In: Kamp, P.J.J.; Pittari, A. (eds) *Abstract volume: Geosciences 2019, 24-27 November 2019, Hamilton*. Wellington, N.Z.: Geoscience Society of New Zealand. Geoscience Society of New Zealand miscellaneous publication 155A
- Bartlow, N.; Chadwell, D.; Wallace, L.M.; Yohler, R.; Schmidt, D.; Zumberge, M.; Webb, S.; Newman, A. 2019** Recent observations and new frontiers in seafloor geodesy. p. 152 In: *Southern California Earthquake Center Annual Meeting 2019: Proceedings volume XXIX, September 7-11, 2019*. Los Angeles, Calif.: Southern California Earthquake Center.
- Bartlow, N.M.; Williams, C.A. 2019** Characterizing episodic tremor and slip in Cascadia. abstract T13D-0305 In: *AGU Fall Meeting, San Francisco, 9-13 December 2019*. [Washington, D.C.]: American Geophysical Union.
- Bassett, D.; Henrys, S.A.; Barker, D.H.N.; Amulf, A.F.; Arai, R.; Kodaira, S.; Van Avendonk, H.J.; Bangs, N.L.; Fujie, G.; Yamamoto, Y.; Obana, K.; Hillman, J.I.T.; SHIRE Team 2019** The relationship between forearc structure and geodetic locking along the Hikurangi Margin from SHIRE seismic data. p. 14 In: Kamp, P.J.J.; Pittari, A. (eds) *Abstract volume: Geosciences 2019, 24-27 November 2019, Hamilton*. Wellington, N.Z.: Geoscience Society of New Zealand. Geoscience Society of New Zealand miscellaneous publication 155A
- Beall, A.; Fagereng, A.; Ellis, S.M. 2019** Dynamic rheology of subduction zone melange undergoing semi-brittle deformation (Invited). abstract T41A-02 In: *AGU Fall Meeting, San Francisco, 9-13 December 2019*. [Washington, D.C.]: American Geophysical Union.
- Bebout, G.E.; Scholl, D.W.; Stern, R.J.; Wallace, L.M.; Agard, P. 2019** Subduction top 2 bottom 2 (ST2B-2): the concept and progress on a major publication venture. abstract T41I-0229 In: *AGU Fall Meeting, San Francisco, 9-13 December 2019*. [Washington, D.C.]: American Geophysical Union.
- Behr, Y.; Deligne, N.I.; Trancoso, R.; Davis, C.; Hurst, A.W.; Peng, B.; Dooley, D. 2019** New ashfall forecasts for New Zealand. p. 18 In: Kamp, P.J.J.; Pittari, A. (eds) *Abstract volume: Geosciences 2019, 24-27 November 2019, Hamilton*. Wellington, N.Z.: Geoscience Society of New Zealand. Geoscience Society of New Zealand miscellaneous publication 155A

- Bell, R.; Bardsley, A.; Sciascia, A.; Saunders, W.S.A.; Awatere, S.; Fairclough, R.; Fakhruddin, B.; Lemire, E. 2019** Framework for Aotearoa New Zealand's 1st national climate change risk assessment. p. 42 In: *New Zealand Coastal Society - Te Hunga Takutai o Aotearoa annual conference: Life on the edge - Mataora kei runga i te Tapatai, November 12th - 15th in Murihiku - Invercargill*. [Auckland, N.Z.]: New Zealand Coastal Society.
- Bell, R.E.; Bastow, I.D.; Braham, C.; Compton, E.; Facey, M.; Fagereng, A.; Fry, B.; Henrys, S.A.; Jacobs, K.M.; McNeill, L.C.; Morgan, J.V.; Warner, M.; Lane, V.; Daly, D. 2019** Local earthquake analysis in a region of slow slip and mud volcanism: the onshore NZ3D Hikurangi margin experiment. abstract T51H-0405 In: *AGU Fall Meeting, San Francisco, 9-13 December 2019*. [Washington, D.C.]: American Geophysical Union.
- Bertler, N.A.N.; Dahl-Jensen, D.; Conway, H. 2019** Rapid Ross Sea deglaciation as captured in the RICE ice cores. abstract C06p-018 In: *27th IUGG General Assembly, July 8-18 Juillet 2019, Montréal, Canada*. Prague: C-IN.
- Bertler, N.A.N.; Dahl-Jensen, D.; Conway, H.; RICE Team 2019** Rapid Ross Sea deglaciation as captured in the RICE ice cores. p. 80 In: *Our future in focus: New Zealand Antarctic Science Conference 2019, 17-19 June 2019 Christchurch Town Hall*. Christchurch, N.Z.: New Zealand Antarctic Research Institute.
- Bertrand, E.A.; Kannberg, P.; Constable, S.; Scott, B.J.; Heise, W.; Caldwell, T.G. 2019** Magma imaged beneath the Rotorua and Okataina calderas with combined land and lake magnetotelluric data. p. 20 In: Kamp, P.J.J.; Pittari, A. (eds) *Abstract volume: Geosciences 2019, 24-27 November 2019, Hamilton*. Wellington, N.Z.: Geoscience Society of New Zealand. Geoscience Society of New Zealand miscellaneous publication 155A
- Biemiller, J.; Wallace, L.M.; Ellis, S.M.; Little, T.A.; Haines, A.J.; Boulton, C.J.; Mizera, M.; Lavier, L. 2019** Mixed-mode seismic slip and aseismic creep on a highly active low-angle normal fault system in Papua New Guinea. abstract T52A-07 In: *AGU Fall Meeting, San Francisco, 9-13 December 2019*. [Washington, D.C.]: American Geophysical Union.
- Bland K.J.; Morgans, H.E.G.; Harvey, H.; Strogen, D.P. 2019** Ihungia Formation in southern Hawke's Bay: a record of plate boundary processes within the early Hikurangi subduction margin. p. 22 In: Kamp, P.J.J.; Pittari, A. (eds) *Abstract volume: Geosciences 2019, 24-27 November 2019, Hamilton*. Wellington, N.Z.: Geoscience Society of New Zealand. Geoscience Society of New Zealand miscellaneous publication 155A
- Bland, K.J.; Strogen, D.P.; Viskovic, G.P.D.; Arnot, M.J.; Sahoo, T.R.; Seebeck, H.C.; Kellett, R.L.; Thrasher, G.P.; Zhu, H.; Bull, S. 2019** A new map of New Zealand's offshore sedimentary basins. p. 21 In: Kamp, P.J.J.; Pittari, A. (eds) *Abstract volume: Geosciences 2019, 24-27 November 2019, Hamilton*. Wellington, N.Z.: Geoscience Society of New Zealand. Geoscience Society of New Zealand miscellaneous publication 155A
- Bollen, M.; Riesselman, M.; Ohneiser, C.; Lee, M.K.; Yoo, K.-C.; Albot, O.; McKay, R.; Kim, S.; Lee, J.I.; Levy, R.H. 2019** Diatom micropaleontology and paleomagnetism of the sediment core RS15-LC42: insights to paleoceanographic processes at the continental rise. abstract A212 In: *ISAES 2019: XIII International Symposium on Antarctic Earth Sciences, 22-26 July 2019, Songdo Convensia, Incheon, South Korea: abstract list - poster (Wed/Thu)*. Incheon, Republic of Korea: ISAES.

- Brathwaite, R.L.; Rae, A.J. 2019** Epithermal zeolite mineralisation, central Taupo Volcanic Zone, New Zealand. p. 264-266 In: Sims, D. (chair) *PACRIM 2019, 3-5 April 2019, Auckland, New Zealand*. Carlton, Vic.: Australasian Institute of Mining and Metallurgy. Publication series / Australasian Institute of Mining and Metallurgy 1/2019
- Brideau, M.-A.; Massey, C.I.; Carey, J.M.; de Vilder, S.J.; Lyndsell, B.M. 2019** Engineering geology characterisation of anthropogenic fill sites in the Wellington region and their performance during seismic shaking. p. 27 In: Kamp, P.J.J.; Pittari, A. (eds) *Abstract volume: Geosciences 2019, 24-27 November 2019, Hamilton*. Wellington, N.Z.: Geoscience Society of New Zealand. Geoscience Society of New Zealand miscellaneous publication 155A
- Bromley, C.J. 2019** Benefits of non-damaging, publicly-acceptable, geothermal induced micro-seismicity in New Zealand. p. 60 In: *3rd Induced Seismicity Workshop, Schatzalp, Davos, 5-8 May 2019: abstract book*. Zurich: ETH Zurich.
- Bull, S.; Browne, G.H.; Arnot, M.J.; Bland, K.J.; Strachan, L. 2019** Mass transport deposits from northwest New Zealand: what can they tell us about the past and future evolution of Zealandia. p. 29 In: Kamp, P.J.J.; Pittari, A. (eds) *Abstract volume: Geosciences 2019, 24-27 November 2019, Hamilton*. Wellington, N.Z.: Geoscience Society of New Zealand. Geoscience Society of New Zealand miscellaneous publication 155A
- Burbidge, D.R.; Christophersen, A.; Dunant, A.; Horspool, N.A.; Sadashiva, V.K. 2019** Developing a risk assessment framework for cascading hazards. p. 44 In: Christophersen, A.; Bailey, L.; Cavana, R.Y. *Risk and Decision-Making Conference 2019: how different aspects of risk underpin responsible and culturally-appropriate decision-making, 13-14 November 2019, Rutherford House, Wellington, New Zealand*. Lower Hutt, N.Z.: GNS Science. GNS Science miscellaneous series 133
- Calderón, R.; Wilson, T.; Leonard, G.S. 2019** Long-term risk management strategies for rhyolitic unrest and eruption. p. 31 In: Kamp, P.J.J.; Pittari, A. (eds) *Abstract volume: Geosciences 2019, 24-27 November 2019, Hamilton*. Wellington, N.Z.: Geoscience Society of New Zealand. Geoscience Society of New Zealand miscellaneous publication 155A
- Cameron, S.G.; Mourof, F.; Westerhoff, R.S.; White, P.A.; Macdonald, N. 2019** Improving rainfall recharge models via drone remote sensing. p. 362 In: Hernández, J.J.G.; Navarro, B.A. (eds) *Groundwater management and governance: coping with uncertainty: proceedings of IAHR 2019. 46th Annual Congress of the International Association of Hydrogeologists, Málaga (Spain), September 22-27, 2019*. Barcelona: Asociación Internacional de Hidrogeólogos.
- Campbell, G.C.; Wilson, T.M.; Leonard, G.S.; Kennedy, B.; Davies, T.; Scott, B.J.; Wilson, C.J.N. 2019** Hazard and impact scenario development for silicic volcanoes in New Zealand. p. 33 In: Kamp, P.J.J.; Pittari, A. (eds) *Abstract volume: Geosciences 2019, 24-27 November 2019, Hamilton*. Wellington, N.Z.: Geoscience Society of New Zealand. Geoscience Society of New Zealand miscellaneous publication 155A
- Capponi, G.; Montomoli, C.; Casale, S.; Simonetti, M.; Cox, S.C.; Läufer, A.; Musumeci, G.; Salvatore, M.C. 2019** Geological mapping in the Convoy Range (Victoria Land, Antarctica) and the GeoMap database. abstract EP53F-2191 In: *AGU Fall Meeting, San Francisco, 9-13 December 2019*. [Washington, D.C.]: American Geophysical Union.

- Caratori Tontini, F.; Turner, G.M.; Reyes, A.G.; Speranza, F.; Tivey, M.; de Ronde, C.E.J.; Humphris, S.E. 2019** Paleomagnetic properties of hydrothermally altered rocks from IODP Expedition 376 at Brothers Volcano, New Zealand. abstract V33E-0222 In: *AGU Fall Meeting, San Francisco, 9-13 December 2019*. [Washington, D.C.]: American Geophysical Union.
- Caratori Tontini, F.; de Ronde, C.E.J.; Tivey, M. 2019** A decade of near-seafloor geophysical surveys at Brothers volcano (southern Kermadec Arc, New Zealand). p. 214 In: Sims, D. (chair) *PACRIM 2019, 3-5 April 2019, Auckland, New Zealand*. Carlton, Vic.: Australasian Institute of Mining and Metallurgy. Publication series / Australasian Institute of Mining and Metallurgy 1/2019
- Carey, J.M.; Mountjoy, J.J.; Crutchley, G.J.; Petley, D.N. 2019** Laboratory simulations of the movement mechanisms in a submarine landslide during seismic loading. abstract EP11B-05 In: *AGU Fall Meeting, San Francisco, 9-13 December 2019*. [Washington, D.C.]: American Geophysical Union.
- Cartwright, I.; Atkinson, A.; Gilfedder, B.; Hofmann, H.; Cendon, D.; Morgenstern, U. 2019** Sources and transit times of water in headwater temperate rainforest streams. abstract EGU2019-2341 In: *European Geosciences Union General Assembly 2019, Vienna, Austria, 7-12 April 2019*. Goettingen, Germany: Copernicus Gesellschaft. Geophysical research abstracts 21
- Cartwright, I.; Atkinson, A.; Gilfedder, B.; Hofmann, H.; Cendon, D.; Morgenstern, U. 2019** Understanding the sources and transit times of water sustaining streamflow in upland catchments. abstract 47 In: *NCGRT/IAH Australasian Groundwater Conference 2019*. Adelaide, S.A.: National Centre for Groundwater Research and Training.
- Chambefort, I.; Burnell, J.G.; Mountain, B.W.; Blair, A.; Bignall, G. 2019** New Zealand Geothermal: the next generation - harnessing supercritical fluids. abstract 9-Chambefort et al_GNS Science In: *1st Philippine International Geothermal Conference October 2-3, 2019, Marquis Events Place, Bonifacio Global City, Philippines*. Bonifacio Global City: National Geothermal Association of the Philippines.
- Chamberlain, C.J.; Townend, J.; Gerstenberger, M.C. 2019** Near-real-time matched-filtering for the development of dense earthquake catalogs during sequences of seismicity. abstract S53G-0568 In: *AGU Fall Meeting, San Francisco, 9-13 December 2019*. [Washington, D.C.]: American Geophysical Union.
- Chamberlain, C.J.; Townend, J.; Gerstenberger, M.C. 2019** Near-real-time matched-filtering for the development of dense earthquake catalogues during sequences of seismicity in New Zealand. p. 35 In: Kamp, P.J.J.; Pittari, A. (eds) *Abstract volume: Geosciences 2019, 24-27 November 2019, Hamilton*. Wellington, N.Z.: Geoscience Society of New Zealand. Geoscience Society of New Zealand miscellaneous publication 155A
- Chow, B.; Kaneko, Y.; Modrak, R.; Tape, C.; Townend, J. 2019** A semi-automated adjoint tomography workflow applied to New Zealand's North Island. abstract S34A-02 In: *AGU Fall Meeting, San Francisco, 9-13 December 2019*. [Washington, D.C.]: American Geophysical Union.

- Chow, B.; Kaneko, Y.; Modrak, R.; Tape, C.; Townend, J. 2019** A semi-automated adjoint tomography workflow applied to New Zealand's North Island. p. 37 In: Kamp, P.J.J.; Pittari, A. (eds) *Abstract volume: Geosciences 2019, 24-27 November 2019, Hamilton*. Wellington, N.Z.: Geoscience Society of New Zealand. Geoscience Society of New Zealand miscellaneous publication 155A
- Christenson, B.W. 2019** Phreatic eruptions from wet volcanic systems: insights from the 27 April 2016 eruption from White Island, New Zealand. abstract EGU2019-6143-2 In: *European Geosciences Union General Assembly 2019, Vienna, Austria, 7-12 April 2019*. Goettingen, Germany: Copernicus Gesellschaft. Geophysical research abstracts 21
- Christie, A.B.; Simpson, M.P. 2019** 'The devil is in the detail' - vein mineralogy and texture as an aid to exploration in the Hauraki Goldfield, New Zealand. p. 132-137 In: Sims, D. (chair) *PACRIM 2019, 3-5 April 2019, Auckland, New Zealand*. Carlton, Vic.: Australasian Institute of Mining and Metallurgy. Publication series / Australasian Institute of Mining and Metallurgy 1/2019
- Christophersen, A. 2019** Introducing the Australasian Bayesian Network Modelling Society (ABNMS). p. 40 In: Christophersen, A.; Bailey, L.; Cavana, R.Y. *Risk and Decision-Making Conference 2019: how different aspects of risk underpin responsible and culturally-appropriate decision-making, 13-14 November 2019, Rutherford House, Wellington, New Zealand*. Lower Hutt, N.Z.: GNS Science. GNS Science miscellaneous series 133
- Christophersen, A.; Deligne, N.I.; Hanea, A.; Chardot, L.; Fournier, N.; Aspinall, W.P. 2019** Bayesian networks as decision-support tools in the next volcanic crisis. p. 29 In: Christophersen, A.; Bailey, L.; Cavana, R.Y. *Risk and Decision-Making Conference 2019: how different aspects of risk underpin responsible and culturally-appropriate decision-making, 13-14 November 2019, Rutherford House, Wellington, New Zealand*. Lower Hutt, N.Z.: GNS Science. GNS Science miscellaneous series 133
- Christophersen, A.; Gerstenberger, M.C. 2019** Robust methods for expert judgement: examples from geological hazards in New Zealand. p. 44 In: Christophersen, A.; Bailey, L.; Cavana, R.Y. *Risk and Decision-Making Conference 2019: how different aspects of risk underpin responsible and culturally-appropriate decision-making, 13-14 November 2019, Rutherford House, Wellington, New Zealand*. Lower Hutt, N.Z.: GNS Science. GNS Science miscellaneous series 133
- Civel-Mazens, M.; Crosta, X.; Cortese, G.; Michel, E.; Mazaud, A.; Jaccard, S.; Thöle, L.; Ikehara, M.; Itaki, T. 2019** High-resolution ocean temperature reconstructions over last glacial-interglacial cycle in the Kerguelen region, Southern Ocean. p. [171] In: *ICP13 abstract book: 13th International Conference on Paleoceanography, 2-6 September 2019, Sydney, Australia*. Sydney, N.S.W.: ICP13 Conference Secretariat.
- Clark, K.J.; Howarth, J.D.; Litchfield, N.J.; Cochran, U.A. 2019** Untangling subduction interface and upper plate fault coastal deformation signatures to constrain the seismic hazard of the Hikurangi subduction margin, New Zealand. p. [44] In: *The Tectonic Studies Group Annual General Meeting, 14-16 January, 2019, University of Bergen*.
- Clark, M.C.; Zekkos, D.; West, A.J.; Medwedeff, W.; Knoper, L.; Atwood, A.; Willis, M.J.; Chamlagain, D.; Manousakis, J.; Massey, C.I. 2019** Emerging tools and techniques for taking advantage of remote sensing imagery to understand the landslide hazard cascade. abstract NH11A-02 In: *AGU Fall Meeting, San Francisco, 9-13 December 2019*. [Washington, D.C.]: American Geophysical Union.

- Cleary, C.; Kennedy, B.; Villeneuve, M.; Prior, D.; Jolly, A.D. 2019** Evaluating the effect of discontinuities and textural heterogeneity in volcanic rock masses when upscaling lab seismic velocities to field measurements. p. 39 In: Kamp, P.J.J.; Pittari, A. (eds) *Abstract volume: Geosciences 2019, 24-27 November 2019, Hamilton*. Wellington, N.Z.: Geoscience Society of New Zealand. Geoscience Society of New Zealand miscellaneous publication 155A
- Clilverd, M.A.; Rodger, C.J.; Brundell, J.B.; Dalzell, M.; Martin, I.; Mac Manus, D.H.; Thomson, N.R.; Petersen, T.; Obana, Y.; Clarke, E.; Thomson, A.; Richardson, G.; Bailey, R.-L.; Sakharov, Y.; Selivanov, V.; MacLeod, F.; Frame, I.; Freeman, M. 2019** Mid-latitude magnetic field perturbations and geomagnetically induced currents during the 07-08 September 2017 geomagnetic storm. In: *16th European Space Weather Week, 18-22 November 2019, Liege, Belgium*. Brussels: Solar-Terrestrial Centre of Excellence.
- Coffin, R.; Rose, P.; Pecher, I.A.; Crutchley, G.J. 2019** Geochemical enhancement of seismic data interpretations of gas hydrate loadings: proof of concept along the eastern coast of New Zealand. In: Beggs, M. (convener) *AAPG Asia Pacific Region Geosciences Technology Workshop: gas hydrates - from potential geohazard to carbon-efficient fuel?* Tulsa, Okla.: AAPG.
- Collins, S.; Morgenstern, U. 2019** Combining the use of age and isotope tracers to shed light on catchment hydrology, groundwater processes and land use effects. p. 37-38 In: Kronvang, B.; Fraters, D.; Kovar, K. (compilers) *International Interdisciplinary Conference on Land Use and Water Quality: agriculture and the environment: Aarhus, Denmark 3-6 June 2019: volume of abstracts*. Aarhus: Aarhus University.
- Collot, J.; Roest, W.R.; Sutherland, R.; Patriat, M.; Etienne, S.; Bordenave, A.; Marcaillou, B.; Philippe, S.; Juan, C.; Barker, D.H.N.; Stratford, W.R.; Williams, S.; Wolf, S.; Clerc, C.N.; Crundwell, M.P. 2019** Stratigraphy and tectonics of the continental Norfolk Ridge, SW Pacific Ocean. abstract T23G-0514 In: *AGU Fall Meeting, San Francisco, 9-13 December 2019*. [Washington, D.C.]: American Geophysical Union.
- Conrey, R.M.; Deline, N.I.; Wozniak, K.; Welch, R.; Castronovo, D.; Bourque, E.; Huq, A.C.; Langston, J.; Shields, J.; Skeldon, C. 2019** Sand Mountain volcanic field update: completion of a five decade mapping project in the High Cascade range of Oregon. abstract 329803 In: *2019 GSA Cordilleran Section 115th Annual Meeting, 15-17 May 2019, Portland, Oregon USA*. Boulder, Colo.: Geological Society of America. Abstracts with programs / Geological Society of America 51(4)
- Cortese, G.; Armand, L.; Civel-Mazens, M.; Crosta, X.; Ikehara, M.; Itaki, T.; Leventer, A.; Lawler, K.-A.; Nair, A.; Rogers, J. 2019** Radiolarians as proxies: an integrated approach to improve their use in paleoceanography studies in the South Pacific, South Indian, and Southern Oceans. p. [346] In: *ICP13 abstract book: 13th International Conference on Paleoceanography, 2-6 September 2019, Sydney, Australia*. Sydney, N.S.W.: ICP13 Conference Secretariat.
- Cousins, B.; Timm, C.; Abraham, A. 2019** Isotopic and geochemical characteristics of Mid- to Late-Miocene continental and oceanic arc volcanic and intrusive rocks, central North Island and offshore, New Zealand. abstract T23G-0515 In: *AGU Fall Meeting, San Francisco, 9-13 December 2019*. [Washington, D.C.]: American Geophysical Union.
- Cox, S.C. 2019** Building GeoMAP 'on the sniff of an oily rag'. p. 40 In: *Our future in focus: New Zealand Antarctic Science Conference 2019, 17-19 June 2019 Christchurch Town Hall*. Christchurch, N.Z.: New Zealand Antarctic Research Institute.

- Cox, S.C.; GeoMAP Action Group 2019** Release of the continent-wide dataset GeoMAP v.201907. abstract A252 In: *ISAES 2019: XIII International Symposium on Antarctic Earth Sciences, 22-26 July 2019, Songdo Convensia, Incheon, South Korea: abstract list - oral*. Incheon, Republic of Korea: ISAES.
- Cox, S.C.; Lelli, L.; Dal Seno, N.; Smith Lyttle, B. 2019** GeoMAP dataset of the Antarctic Peninsula. p. 44 In: *Our future in focus: New Zealand Antarctic Science Conference 2019, 17-19 June 2019 Christchurch Town Hall*. Christchurch, N.Z.: New Zealand Antarctic Research Institute.
- Cox, S.C.; Morin, P.; Smith Lyttle, B. 2019** GeoMAP on REMA. abstract A253 In: *ISAES 2019: XIII International Symposium on Antarctic Earth Sciences, 22-26 July 2019, Songdo Convensia, Incheon, South Korea: abstract list - poster (Wed/Thu)*. Incheon, Republic of Korea: ISAES.
- Crouch, E.M.; Morgans, H.E.G.; Shepherd, C.L.; Naafs, D.; Dallanave, E.; Pancost, R.; Hollis, C.J. 2019** Climatic and biotic changes during the Early Eocene Climatic Optimum (EECO) in the Canterbury Basin, New Zealand. p. [272] In: *ICP13 abstract book: 13th International Conference on Paleooceanography, 2-6 September 2019, Sydney, Australia*. Sydney, N.S.W.: ICP13 Conference Secretariat.
- Crundwell, M.P. 2019** New Zealand Neogene climate: an overview. p. 44 In: Kamp, P.J.J.; Pittari, A. (eds) *Abstract volume: Geosciences 2019, 24-27 November 2019, Hamilton*. Wellington, N.Z.: Geoscience Society of New Zealand. Geoscience Society of New Zealand miscellaneous publication 155A
- Crutchley, G.J.; Kroeger, K.F.; Pecher, I.A.; Gorman, A.R.; Mountjoy, J.J.; Hillman, J.I.T. 2019** Gas hydrate reservoirs of the southern Hikurangi subduction margin: insights from geophysics and numerical modelling. In: Beggs, M. (convener) *AAPG Asia Pacific Region Geosciences Technology Workshop: gas hydrates - from potential geohazard to carbon-efficient fuel?* Tulsa, Okla.: AAPG.
- Crutchley, G.J.; Mountjoy, J.J.; Hillman, J.I.T.; Davy, B.W.; Watson, S.; Woelz, S.; Kane, T.; Gerring, P.; Turco, F.; Gorman, A.R. 2019** Concentrated gas hydrates in anticlines adjacent to high-sediment-flux submarine canyons: New Zealand's Hikurangi subduction margin. abstract OS43A-06 In: *AGU Fall Meeting, San Francisco, 9-13 December 2019*. [Washington, D.C.]: American Geophysical Union.
- Dal Seno, N.; Lelli, L.; Millikin, L.; Smith Lyttle, B.; Cox, S.C.; Crispini, L.; Burton-Johnson, A. 2019** GeoMAP dataset of the Antarctic Peninsula. abstract A237 In: *ISAES 2019: XIII International Symposium on Antarctic Earth Sciences, 22-26 July 2019, Songdo Convensia, Incheon, South Korea: abstract list - poster (Wed/Thu)*. Incheon, Republic of Korea: ISAES.
- Dallanave, E.; Maurizot, P.; Agnini, C.; Sutherland, R.; Bachtadse, V.; Hollis, C.J.; Collot, J.; Dickens, G.R.; Strogon, D.P.; Morgans, H.E.G. 2019** Timing of the Eocene plate motion change in the southwest Pacific: the magnetostratigraphic record of New Caledonia and New Zealand. abstract EGU2019-16413 In: *European Geosciences Union General Assembly 2019, Vienna, Austria, 7-12 April 2019*. Goettingen, Germany: Copernicus Gesellschaft. Geophysical research abstracts 21
- Davey, F.J. 2019** Cenozoic continental tectonics in north-western Ross Sea, Antarctica. abstract A300 In: *ISAES 2019: XIII International Symposium on Antarctic Earth Sciences, 22-26 July 2019, Songdo Convensia, Incheon, South Korea: abstract list - poster (Wed/Thu)*. Incheon, Republic of Korea: ISAES.

- Davey, F.J. 2019** Cenozoic continental tectonics in north-western Ross Sea, Antarctica. p. 45 In: Kamp, P.J.J.; Pittari, A. (eds) *Abstract volume: Geosciences 2019, 24-27 November 2019, Hamilton*. Wellington, N.Z.: Geoscience Society of New Zealand. Geoscience Society of New Zealand miscellaneous publication 155A
- Davis, K.J.; Lauvaux, T.; Miles, N.; Richardson, S.; Shepson, P.; Turnbull, J.C.; Duren, R.M.; Gurney, K.R.; Keeling, R.F.; Kim, J.; Miller, C.E.; Verhulst, K.R.; Weiss, R.F.; Yadav, V.; Gourджи, S.; Karion, A.; Lopez-Coto, I.; Ghosh, S.; Mueller, K.L.; Whetstone, J.R. 2019** Monitoring urban greenhouse gas emissions: lessons from the NIST greenhouse gas measurements test-bed program. abstract B51E-12 In: *AGU Fall Meeting, San Francisco, 9-13 December 2019*. [Washington, D.C.]: American Geophysical Union.
- Davy, B.W.; Hillman, J.I.T.; Crutchley, G.J.; Mountjoy, J. 2019** Gas venting at Kekerengu Ridge, offshore Marlborough - fault controlled vent locations at an oblique convergent margin. p. 48 In: Kamp, P.J.J.; Pittari, A. (eds) *Abstract volume: Geosciences 2019, 24-27 November 2019, Hamilton*. Wellington, N.Z.: Geoscience Society of New Zealand. Geoscience Society of New Zealand miscellaneous publication 155A
- de Ronde, C.E.J. 2019** What is the link between Cu-Au mineralization and modern seafloor hydrothermal systems associated with submarine volcanic arcs? p. 21-22 In: Sims, D. (chair) *PACRIM 2019, 3-5 April 2019, Auckland, New Zealand*. Carlton, Vic.: Australasian Institute of Mining and Metallurgy. Publication series / Australasian Institute of Mining and Metallurgy 1/2019
- de Ronde, C.E.J.; Humphris, S.; Hoefig, T.; Reyes, A.G.; Expedition 376 Scientists 2019** Symbiosis between caldera collapse and hydrothermalism at Brothers submarine volcano, Kermadec arc. abstract 782 In: *Goldschmidt 2019 abstracts*. Cambridge, U.K.: White Iron Conferences Limited.
- de Ronde, C.E.J.; Humphris, S.E.; Höfig, T.W.; Reyes, A.G.; IODP Expedition 376 Scientists 2019** Critical role of caldera collapse in the formation of seafloor mineralization: Brothers volcano, Kermadec arc. abstract V32B-02 In: *AGU Fall Meeting, San Francisco, 9-13 December 2019*. [Washington, D.C.]: American Geophysical Union.
- De Santis, L.; Bart, P.; Bergamasco, A.; Gales, J.; Bohm, G.; Wardell, N.; Colleoni, F.; Kovacevic, V.; Bensi, M.; Rebesco, M.; Forlin, E.; Viezzoli, D.; Cortese, G.; McKay, R.; Kulhanek, D.K.; Expedition 374 Scientists 2019** The Whales Deep Basin - Houtz and Hayes Bank system (Southeastern Ross Sea, Antarctica): a scenario for Pleistocene continental outer shelf and slope processes evolution. abstract A219 In: *ISAES 2019: XIII International Symposium on Antarctic Earth Sciences, 22-26 July 2019, Songdo Convensia, Incheon, South Korea: abstract list - poster (Wed/Thu)*. Incheon, Republic of Korea: ISAES.
- de Vilder, S.J.; Massey, C.I.; Archibald, G.C.; Morgenstern, R. 2019** Analysis of the Alpine Gardens landslide and Mill's Creek debris fan, Fox Glacier Valley. p. 49 In: Kamp, P.J.J.; Pittari, A. (eds) *Abstract volume: Geosciences 2019, 24-27 November 2019, Hamilton*. Wellington, N.Z.: Geoscience Society of New Zealand. Geoscience Society of New Zealand miscellaneous publication 155A
- Denys, P.H.; Hreinsdottir, S.; Bell, R.; Hannah, J.; Pearson, C.F. 2019** The challenges of seismically induced vertical land motion on tide gauge records and coastal hazard. abstract G51A-04 In: *AGU Fall Meeting, San Francisco, 9-13 December 2019*. [Washington, D.C.]: American Geophysical Union.

- Djeffal, A.; Pecher, I.A.; Kaipio, J.; Singh, S.; Crutchley, G.J. 2019** Gas hydrates characterization in the southern Hikurangi margin using full waveform inversion. In: Beggs, M. (convener) *AAPG Asia Pacific Region Geosciences Technology Workshop: gas hydrates - from potential geohazard to carbon-efficient fuel?* Tulsa, Okla.: AAPG.
- Doonan, W.; Fang, V.; Kennedy, J.V.; Auguié, B. 2019** 'Cool black' materials. abstract T77 In: *AMN9, 10-14 February 2019, Te Papa, Wellington, New Zealand: [abstracts]*. Wellington, N.Z.: MacDiarmid Institute for Advanced Materials and Nanotechnology.
- Ducrocq, C.; Geirsson, H.; Árnadóttir, T.; Juncu, D.; Drouin, V.; Hreinsdóttir, S.; Blanck, H.; Kristjánsson, B.R.; Gunnarsson, G.; Ófeigsson, B.G. 2019** The 2017-2018 uplift episode in the Hengill volcanic system, SW Iceland. abstract EGU2019-14683 In: *European Geosciences Union General Assembly 2019, Vienna, Austria, 7-12 April 2019*. Goettingen, Germany: Copernicus Gesellschaft. Geophysical research abstracts 21
- Dunant, A.; Bebbington, M.; Davies, T. 2019** Complex natural disaster system, a multi-hazard impact assessment methodology. p. 27 In: Christophersen, A.; Bailey, L.; Cavana, R.Y. *Risk and Decision-Making Conference 2019: how different aspects of risk underpin responsible and culturally-appropriate decision-making, 13-14 November 2019, Rutherford House, Wellington, New Zealand*. Lower Hutt, N.Z.: GNS Science. GNS Science miscellaneous series 133
- Dunn, C.E.; Christie, A.B. 2019** Biogeochemical exploration: orientation surveys in New Zealand. p. 267-269 In: Sims, D. (chair) *PACRIM 2019, 3-5 April 2019, Auckland, New Zealand*. Carlton, Vic.: Australasian Institute of Mining and Metallurgy. Publication series / Australasian Institute of Mining and Metallurgy 1/2019
- Durance, P.M.J.; Hill, M.P.; Turnbull, R.E.; Morgenstern, R.; Rattenbury, M.S.; Smillie, R.W. 2019** Understanding the mineral potential for critical elements in New Zealand: the case for nickel and cobalt. p. 275-279 In: Sims, D. (chair) *PACRIM 2019, 3-5 April 2019, Auckland, New Zealand*. Carlton, Vic.: Australasian Institute of Mining and Metallurgy. Publication series / Australasian Institute of Mining and Metallurgy 1/2019
- Duvall, A.R.; Harbert, S.A.; Upton, P.; Tucker, G.E.; Flowers, R.M.; Collett, C. 2019** Faulting, uplift, and river capture dictate drainage patterns in New Zealand's Marlborough Fault System. EP31C-2298 In: *AGU Fall Meeting, San Francisco, 9-13 December 2019*. [Washington, D.C.]: American Geophysical Union.
- Dvorak, K.; Kominz, M.A.; Crundwell, M.P. 2019** Epeirogenic uplift of the Canterbury Basin, South Island, New Zealand. abstract T13F-0256 In: *AGU Fall Meeting, San Francisco, 9-13 December 2019*. [Washington, D.C.]: American Geophysical Union.
- Eaves, S.; Mackintosh, A.; Pedro, J.; Bostock, H.; Ryan, M.; Norton, K.; Hayward, B.; Anderson, B.; He, F.; Jones, R.S.; Lorrey, A.; Newnham, R.; Scott, G.H.; Tims, S.; Vandergoes, M.J. 2019** Coupled atmosphere-ocean temperature changes in southwest Pacific during the Antarctic Cold Reversal. p. 56 In: Kamp, P.J.J.; Pittari, A. (eds) *Abstract volume: Geosciences 2019, 24-27 November 2019, Hamilton*. Wellington, N.Z.: Geoscience Society of New Zealand. Geoscience Society of New Zealand miscellaneous publication 155A

- Eaves, S.; Mackintosh, A.; Pedro, J.; Ryan, M.; Norton, K.; Bostock, H.; Hayward, B.; Anderson, B.; Jones, R.; Lorrey, A.; Newnham, R.; Scott, G.H.; Tims, S.; Vandergoes, M.J. 2019** Coupled atmosphere-ocean temperature changes in southwest Pacific during the Antarctic Cold Reversal. abstract O-4020 In: *INQUA 2019, Dublin, Ireland: 20th Congress of the International Union for Quaternary Research (INQUA)*.
- Eberhart-Phillips, D.; Upton, P.; Reyners, M.E.; Fry, B.; Bourguignon, S.; Warren-Smith, E. 2019** Imaging seismic structure of the southern South Island, New Zealand, reveals the influence of terranes on tectonic deformation. abstract T44B-08 In: *AGU Fall Meeting, San Francisco, 9-13 December 2019*. [Washington, D.C.]: American Geophysical Union.
- Eijsink, A.; Ikari, M.; Wallace, L.M.; Saffer, D.; Barnes, P.; Pecher, I.A.; Petronotis, K.; LeVay, L. 2019** Frictional behavior of sediment inputs to the Hikurangi subduction margin (New Zealand) at plate-rate and slow slip velocities. abstract EGU2019-1084 In: *European Geosciences Union General Assembly 2019, Vienna, Austria, 7-12 April 2019*. Goettingen, Germany: Copernicus Gesellschaft. Geophysical research abstracts 21
- Ellis, S.M.; Illsley-Kemp, F.; Villamor, P.; Savage, M.; Kilgour, G.N.; Barker, S.; Hamling, I.J.; Dempsey, D.; Bannister, S. 2019** Mechanical interactions between rifting, silicic mush, and intrusion of melt bodies in the Taupo Volcanic Zone. p. 58 In: Kamp, P.J.J.; Pittari, A. (eds) *Abstract volume: Geosciences 2019, 24-27 November 2019, Hamilton*. Wellington, N.Z.: Geoscience Society of New Zealand. Geoscience Society of New Zealand miscellaneous publication 155A
- Ellis, S.M.; Sun, T.; Beall, A.; Boulton, C.; Saffer, D.; Fagereng, A.; Wallace, L.M.; Davidson, S.; Ghisetti, F.; Barnes, P.; Morgan, J.; Barker, D.H.N.; Buiter, S.; Williams, C.A. 2019** The Hikurangi subduction zone, the blind (wo)men, and the elephant: numerical experiments to explore interactions between rheology, stress, and fluid pressure through space and time. p. 57 In: Kamp, P.J.J.; Pittari, A. (eds) *Abstract volume: Geosciences 2019, 24-27 November 2019, Hamilton*. Wellington, N.Z.: Geoscience Society of New Zealand. Geoscience Society of New Zealand miscellaneous publication 155A
- Epstein, G.S.; Bebout, G.E.; Christenson, B.W.; Sumino, H.; Wada, I.; Hilton, D.R. 2019** Tracking volatiles cycling at the Hikurangi subduction margin, New Zealand: an integrated geologic, petrologic and isotopic approach. abstract T32C-08 In: *AGU Fall Meeting, San Francisco, 9-13 December 2019*. [Washington, D.C.]: American Geophysical Union.
- Fagereng, A.; Ellis, S.M.; Diener, J.F.A.; Remitti, F.; Leah, H.R.; Tulley, C.; Beall, A.; James, S.; Ujie, K. 2019** The role of fluids at the boundaries of the subduction thrust seismogenic zone: what do the rocks tell us? abstract T42C-04 In: *AGU Fall Meeting, San Francisco, 9-13 December 2019*. [Washington, D.C.]: American Geophysical Union.
- Fagereng, Å.; Beall, A.; Ellis, S.M. 2019** Fault zone heterogeneity, viscosity contrasts, and fault slip behaviour. abstract EGU2019-5781 In: *European Geosciences Union General Assembly 2019, Vienna, Austria, 7-12 April 2019*. Goettingen, Germany: Copernicus Gesellschaft. Geophysical research abstracts 21
- Fang, F.; Futter, R.J.; Hutchinson, E.; Kennedy, J.V. 2019** Metal oxide nanostructures synthesised by arc discharge method and their thermal conductive performance in nanofluids. p. 94 In: *MMPD 2019: the 2nd International Symposium on Materials, Manufacturing Processes and Devices, 15-17 February 2019, Auckland, New Zealand*. [Auckland, N.Z.]: University of Auckland.

- Fang, F.; Rogers, J.J.; Murmu, P.P.; Kennedy, J.V.; Koo, A. 2019** Metal oxide composites synthesised by arc discharge. abstract C3 In: *AMN9, 10-14 February 2019, Te Papa, Wellington, New Zealand: [abstracts]*. Wellington, N.Z.: MacDiarmid Institute for Advanced Materials and Nanotechnology.
- Fee, D.; Toney, L.D.; Matoza, R.S.; Sanderson, R.W.; Haney, M.M.; Lyons, J.J.; Iezzi, A.M.; Kim, K.; De Angelis, S.; Moreno, A.D.; Jolly, A.D. 2019** A framework for improved infrasound back-projection on local and regional scales. abstract S41E-0577 In: *AGU Fall Meeting, San Francisco, 9-13 December 2019*. [Washington, D.C.]: American Geophysical Union.
- Fletcher, S.M.; Steinkamp, K.; Brailsford, G.; Smale, D.; Buxton, Z.; Sperlich, P.; Keller, E.D.; Baisden, W.T.; Spaan, B.; Stephens, B.; Moore, S. 2019** National scale carbon dioxide inverse modelling: a New Zealand case study. abstract EGU2019-4527-1 In: *European Geosciences Union General Assembly 2019, Vienna, Austria, 7-12 April 2019*. Goettingen, Germany: Copernicus Gesellschaft. Geophysical research abstracts 21
- Fry, B.; Warren-Smith, E.; Peng, Z.; Ghosh, A.; Gosselin, J. 2019** Seismic reflectivity as a proxy for megathrust pore-fluid pressures: mapping megathrust pore fluids in space and time with ambient seismic noise. abstract T53D-08 In: *AGU Fall Meeting, San Francisco, 9-13 December 2019*. [Washington, D.C.]: American Geophysical Union.
- Gamboa, D.; Barnes, P.; Bell, R.; Moore, G.; Mountjoy, J.; Paganoni, M.; Clennel, M.; Cook, A.; McNamara, D.D.; Underwood, M.; Rabinowitz, H.; Noda, A.; Meneghini, F.; Kutterolf, S.; Hashimoto, Y.; de Oliveira, C.; Pecher, I.A.; Wallace, L.M.; Saffer, D.M. 2019** Revisiting the giant Ruatoria Debris Flow on the Hikurangi Margin, New Zealand: results from IODP Expeditions 372 and 375, Site U1520. abstract EGU2019-5534 In: *European Geosciences Union General Assembly 2019, Vienna, Austria, 7-12 April 2019*. Goettingen, Germany: Copernicus Gesellschaft. Geophysical research abstracts 21
- Gard, H.J.L.; Lee, D. 2019** A new species of fossil *Scutus* Montfort, 1810 (Gastropoda) from New Zealand. p. 68 In: Kamp, P.J.J.; Pittari, A. (eds) *Abstract volume: Geosciences 2019, 24-27 November 2019, Hamilton*. Wellington, N.Z.: Geoscience Society of New Zealand. Geoscience Society of New Zealand miscellaneous publication 155A
- Gase, A.; Bangs, N.L.; Van Avendonk, H.J.; Luckie, T.; Barker, D.H.N.; Bassett, D.; Jacobs, K.M.; Okaya, D.A.; Henrys, S.A.; Kodaira, S.; Fujie, G.; Yamamoto, Y.; Arnulf, A.F.; Wallace, L.M.; Saffer, D.M. 2019** Subduction of rough seafloor facilitates sediment underplating beneath a low velocity prism. abstract T51F-0353 In: *AGU Fall Meeting, San Francisco, 9-13 December 2019*. [Washington, D.C.]: American Geophysical Union.
- Gerstenberger, M.C. 2019** Application and uptake of time-dependent hazard assessment in New Zealand. abstract B5-002 In: *International Conference in Commemoration of 20th Anniversary of the 1999 Chi-Chi Earthquake, 2019: Sustainable and Seismic-Safe Society, September 15-19, Taipei, Taiwan*. Taipei, Taiwan: National Center for Research on Earthquake Engineering (NCREE); National Applied Research Laboratories (Narlabs).
- Gianni, C.; Cox, S.C.; Montomoli, C.; Casale, S.; Simonetti, M.; Läufer, A.; Musumeci, G.; Salvatore, M.C. 2019** The Convoy Range mapping project, Victoria land, Antarctica. abstract A254 In: *ISAES 2019: XIII International Symposium on Antarctic Earth Sciences, 22-26 July 2019, Songdo Convensia, Incheon, South Korea: abstract list - poster (Mon/Tue)*. Incheon, Republic of Korea: ISAES.

- Gill, J.B.; Hoernle, K.; Hauff, F.; Timm, C.; Todd, E.; Portnyagin, M.; Werner, R. 2019** Effects of backarc basins on the geochemical evolution of oceanic arcs. abstract V51G-0205 In: *AGU Fall Meeting, San Francisco, 9-13 December 2019*. [Washington, D.C.]: American Geophysical Union.
- Gilmer, G.; Riesselman, C.; Yoo, K.-C.; Kim, S.; Lee, J.I.; Kyung, M.; Parker, R.; Levy, R.H.; Rosenheim, B.; Turnbull, J.C.; McKay, R.; Jacobsen, G. 2019** Early Holocene ocean and atmosphere interaction in Moubray Bay, Antarctica. p. [157] In: *ICP13 abstract book: 13th International Conference on Paleoceanography, 2-6 September 2019, Sydney, Australia*. Sydney, N.S.W.: ICP13 Conference Secretariat.
- Gilmer, G.; Riesselman, C.; Yoo, K.-C.; Lee, J.; Lee, M.; Parker, R.; Levy, R.H.; Rosenheim, B.; Campbell, J.; McKay, R.; Jacobsen, G. 2019** Early Holocene sea-ice changes in the northwestern Ross Sea. abstract A426 In: *ISAES 2019: XIII International Symposium on Antarctic Earth Sciences, 22-26 July 2019, Songdo Convensia, Incheon, South Korea: abstract list - oral*. Incheon, Republic of Korea: ISAES.
- Ginnane, C.; Turnbull, J.C.; Rosenheim, B.; Vanturelli, R.; Reeve, S.; Thompson, J.; Zondervan, A. 2019** Ramped pyrolysis radiocarbon dating at the Rafter Radiocarbon Laboratory. p. 69 In: Kamp, P.J.J.; Pittari, A. (eds) *Abstract volume: Geosciences 2019, 24-27 November 2019, Hamilton*. Wellington, N.Z.: Geoscience Society of New Zealand. Geoscience Society of New Zealand miscellaneous publication 155A
- Godfrey, H.J.; Rapley, C.M.J.; Banks, M.P.; Dohig, R.K.; Fromont, A.; Gledhill, K.R.; Helliwell, M.; Legenky, A.; McClintock, J.D.B.; O'Hagan, S.; Potaka, G.; Presow, K.M.; Pritchard-Thorsen, R.; Tate, R.; Thomas-Long, A.; Watson, E.; Wright, K.R.; Wylie-Cheer, B.; Zirk, C. 2019** Introducing the National Geohazards Monitoring Centre Te Puna Morearea i te Ru. p. 160 In: Kamp, P.J.J.; Pittari, A. (eds) *Abstract volume: Geosciences 2019, 24-27 November 2019, Hamilton*. Wellington, N.Z.: Geoscience Society of New Zealand. Geoscience Society of New Zealand miscellaneous publication 155A
- Grant, G.; Naish, T.R.; Dunbar, G.; Stocchi, P.; Kominz, M.; Kamp, P.; Tapia, C.; McKay, R.; Levy, R.H.; Patterson, M. 2019** Antarctic-driven Pliocene global sea-level variability. abstract A302 In: *ISAES 2019: XIII International Symposium on Antarctic Earth Sciences, 22-26 July 2019, Songdo Convensia, Incheon, South Korea: abstract list - oral*. Incheon, Republic of Korea: ISAES.
- Grant, G.; Naish, T.R.; Levy, R.H.; Gasson, E.; Patterson, M.O.; McKay, R.M.; Stocchi, P.; Kamp, P.J.J.; Kominz, M.A. 2019** An extended *PlioSeaNZ* continuous shallow marine record of sea-level change (3.3-1.7 Ma). abstract PPA23A-03 In: *AGU Fall Meeting, San Francisco, 9-13 December 2019*. [Washington, D.C.]: American Geophysical Union.
- Grant, G.; Naish, T.R.; Patterson, M.; McKay, R.; Stocchi, P.; Kamp, P. 2019** Orbital coherency of the benthic $\delta^{18}O$ stack and extended *PlioSeaNZ* shallow marine sea level record (3.3-1.7 Ma). p. [34] In: *ICP13 abstract book: 13th International Conference on Paleoceanography, 2-6 September 2019, Sydney, Australia*. Sydney, N.S.W.: ICP13 Conference Secretariat.
- Gregg, P.M.; Zhan, Y.; Le Mével, H.; Miller, C.A. 2019** Linking thermomechanical models with geophysical observations to assess magma reservoir evolution at Laguna del Maule, Chile (Invited). abstract V13A-01 In: *AGU Fall Meeting, San Francisco, 9-13 December 2019*. [Washington, D.C.]: American Geophysical Union.

- Greve, A.; Zerbst, L.; Kars, M.; Morgan, J.; Fagereng, A.; Hashimoto, Y.; Kanamatsu, T.; Wallace, L.M.; Saffer, D.; Petronotis, K. 2019** Constraining strain in soft sediments at the deformation front of the Hikurangi subduction margin (New Zealand) using magnetic fabric analyses. abstract EGU2019-12601 In: *European Geosciences Union General Assembly 2019, Vienna, Austria, 7-12 April 2019*. Goettingen, Germany: Copernicus Gesellschaft. Geophysical research abstracts 21
- Griffin, A.G.; Morgans, H.E.G.; Bland, K.J.; Strogon, D.P. 2019** From subsurface to outcrop: a deep-water turbidite analogue case study from the East Coast Basin, New Zealand. p. 72 In: Kamp, P.J.J.; Pittari, A. (eds) *Abstract volume: Geosciences 2019, 24-27 November 2019, Hamilton*. Wellington, N.Z.: Geoscience Society of New Zealand. Geoscience Society of New Zealand miscellaneous publication 155A
- Griffin, J.; Stirling, M.W.; van den Berg, E.; Barrell, D.J.A.; Nicolls, R.; Todd, E.; Wang, N. 2019** Paleoseismology of the Hyde Fault and implications for episodic fault activity in the Otago range and basin province. p. 71 In: Kamp, P.J.J.; Pittari, A. (eds) *Abstract volume: Geosciences 2019, 24-27 November 2019, Hamilton*. Wellington, N.Z.: Geoscience Society of New Zealand. Geoscience Society of New Zealand miscellaneous publication 155A
- Gupta, P.S.; Fang, F.; Murmu, P.P.; Leveneur, J.; Fiedler, H.; Loho, T.; Kennedy, J.V. 2019** Decorative black coatings on metallic surfaces by ion beam engineering. p. 89 In: *MaD2019: future-proofing New Zealand's manufacturing and design economy, 20-21 May 2019, Cordis, Auckland*. Manufacturing and Design NZ.
- Gupta, P.S.; Fang, F.; Rubanov, S.; Loho, T.; Koo, A.; Fiedler, H.; Leveneur, J.; Murmu, P.P.; Markwitz, A.; Kennedy, J.V. 2019** Black coatings on titanium surfaces based on multi-layered carbon coating synthesis by carbon implantation. abstract T35 In: *AMN9, 10-14 February 2019, Te Papa, Wellington, New Zealand: [abstracts]*. Wellington, N.Z.: MacDiarmid Institute for Advanced Materials and Nanotechnology.
- Gupta, P.S.; Williams, G.V.M.; Markwitz, A.; Chong, S.V. 2019** Magnetic and magnetotransport study of cobalt nanostructures in diamond-like carbon thin films made by low energy ion implantation. abstract M45 In: *AMN9, 10-14 February 2019, Te Papa, Wellington, New Zealand: [abstracts]*. Wellington, N.Z.: MacDiarmid Institute for Advanced Materials and Nanotechnology.
- Gusman, A.R.; Sheehan, A.; Satake, K. 2019** Tsunami forecasting with assimilation of tsunami data on dense arrays: the 2009 Dusky Sound, New Zealand, tsunami. p. 73 In: Kamp, P.J.J.; Pittari, A. (eds) *Abstract volume: Geosciences 2019, 24-27 November 2019, Hamilton*. Wellington, N.Z.: Geoscience Society of New Zealand. Geoscience Society of New Zealand miscellaneous publication 155A
- Gusman, A.R.; Wang, X.; Hamling, I.J.; Power, W.L. 2019** Source model for the tsunami within Palu Bay during the 2018 Palu earthquake in Indonesia. abstract IUGG19-3858 In: *27th IUGG General Assembly, July 8-18 Juillet 2019, Montréal, Canada*. Prague: C-IN.
- Gusyevev, M.A.; Denda, M.; Kikumori Y.; Morgenstern U.; Akata N.; Hirabayashi K.; Toyota M.; Tsujimura M.; Yamanaka T.; Sakakibara K.; Stewart M.K. 2019** Combining environmental tritium and modelling of hydrologic systems on large scale for decision making and climate change and land-use assessment. p. 200 In: *NZ Hydrological Society Conference 3-6 December 2019, Rotorua, NZ: poster abstracts*. [Wellington, N.Z.]: New Zealand Hydrological Society.

- Hall, C.; Wilson, G.; Gorman, A.; Van Haastrecht, L.; Dagg, B. 2019** Initial results of the 2018 Kamb Ice Stream gravity survey on the Siple Coast, Ross Ice Shelf. p. 32 In: *Our future in focus: New Zealand Antarctic Science Conference 2019, 17-19 June 2019 Christchurch Town Hall*. Christchurch, N.Z.: New Zealand Antarctic Research Institute.
- Hamel, J.E.; Miller, C.N.; Marshall, J.S.; McKinney, E.; White, C.J.; Zohbe, N.M.; Litchfield, N.J. 2019** Marine terrace evidence for two paleo-earthquake uplift events along the southern Hawkes Bay coastline, North Island, New Zealand. abstract T51H-0393 In: *AGU Fall Meeting, San Francisco, 9-13 December 2019*. [Washington, D.C.]: American Geophysical Union.
- Hamling, I.J.; Wright, T.J.; Hreinsdottir, S.; Wallace, L.M. 2019** In search of New Zealand's hidden faults: towards a high resolution velocity field from InSAR and GPS observations. abstract G33A-02 In: *AGU Fall Meeting, San Francisco, 9-13 December 2019*. [Washington, D.C.]: American Geophysical Union.
- Hatem, A.E.; Dolan, J.F.; Zinke, R.W.; Van Dissen, R.J.; McGuire, C.; Rhodes, E.; Brown, N. 2019** High-resolution Holocene to late Pleistocene records of paleoseismology and incremental slip rates along Conway segment of Hope fault, South Island, New Zealand: towards a dated path of earthquake slip through time. abstract T31G-0358 In: *AGU Fall Meeting, San Francisco, 9-13 December 2019*. [Washington, D.C.]: American Geophysical Union.
- Head, M.; Hickey, J.; Gottsmann, J.; Fournier, N. 2019** Maxwell vs Standard Linear Solid: spatiotemporal volcano deformation patterns in a 3D temperature-dependent viscoelastic regime. abstract V13D-0206 In: *AGU Fall Meeting, San Francisco, 9-13 December 2019*. [Washington, D.C.]: American Geophysical Union.
- Hearn, E.H.; Williams, C.A. 2019** Anticipating postseismic deformation from the Ridgecrest earthquake sequence based on finite-element computations, SCEC community models and findings from past Mojave earthquakes. abstract S31G-0502 In: *AGU Fall Meeting, San Francisco, 9-13 December 2019*. [Washington, D.C.]: American Geophysical Union.
- Heise, W.; Caldwell, T.G.; Bertrand, E.A.; Ogawa, Y.; Yoshimura, R.; Ichihara, H.; Bennie, S.L.; Seki, K.; Saito, Z.; Matsunaga, Y.; Suzuki, Y.; Kishita, T.; Kinoshita, Y. 2019** Imaging the plate coupling at the Hikurangi subduction margin, New Zealand. p. 78 In: Kamp, P.J.J.; Pittari, A. (eds) *Abstract volume: Geosciences 2019, 24-27 November 2019, Hamilton*. Wellington, N.Z.: Geoscience Society of New Zealand. Geoscience Society of New Zealand miscellaneous publication 155A
- Hemmings, B.; Knowling, M.J. 2019** On regional groundwater models as tools for informing management: an example of effective and efficient decision-support modelling (Wairarapa Valley; NZ). p. 79 In: *NZ Hydrological Society Conference 3-6 December 2019, Rotorua, NZ: oral abstracts*. [Wellington, N.Z.]: New Zealand Hydrological Society.
- Henrys, S.A.; Eberhart-Phillips, D.; Bassett, D.; Sutherland, R.; Okaya, D.; Savage, M.; Evanzia, D.; Stern, T.; Sato, H.; Mochizuki, K.; Iwasaki, T.; Kurashimo, E.; Seward, A.; Wech, A. 2019** Upper-plate heterogeneity along the southern Hikurangi margin, New Zealand. p. 79 In: Kamp, P.J.J.; Pittari, A. (eds) *Abstract volume: Geosciences 2019, 24-27 November 2019, Hamilton*. Wellington, N.Z.: Geoscience Society of New Zealand. Geoscience Society of New Zealand miscellaneous publication 155A

- Herath, P.; Stern, T.A.; Savage, M.K.; Bassett, D.; Henrys, S.A. 2019** Shear wave velocity structure along Hikurangi forearc from converted waves. p. 80 In: Kamp, P.J.J.; Pittari, A. (eds) *Abstract volume: Geosciences 2019, 24-27 November 2019, Hamilton*. Wellington, N.Z.: Geoscience Society of New Zealand. Geoscience Society of New Zealand miscellaneous publication 155A
- Hernández-Almeida, A.; Boltovskoy, D.; Cortese, G. 2019** A new radiolarian transfer function for the Pacific Ocean: assessing potential, limitations and application to the fossil record. p. [350] In: *ICP13 abstract book: 13th International Conference on Paleoceanography, 2-6 September 2019, Sydney, Australia*. Sydney, N.S.W.: ICP13 Conference Secretariat.
- Hill, M.P.; Christie, A.B.; Durance, P.M.J.; Martin, A.P.; Morgenstern, R.; Turnbull, R.E.; Smillie, R.W. 2019** An update on new mineral potential modelling of onshore Zealandia. p. 280-286 In: Sims, D. (chair) *PACRIM 2019, 3-5 April 2019, Auckland, New Zealand*. Carlton, Vic.: Australasian Institute of Mining and Metallurgy. Publication series / Australasian Institute of Mining and Metallurgy 1/2019
- Hill, M.P.; Ellis, S.M.; Little, T. 2019** Geological mapping from aerial surveys using LiDAR from an onboard-piloted aircraft survey and digital surface models from a remotely piloted aerial system. p. 81 In: Kamp, P.J.J.; Pittari, A. (eds) *Abstract volume: Geosciences 2019, 24-27 November 2019, Hamilton*. Wellington, N.Z.: Geoscience Society of New Zealand. Geoscience Society of New Zealand miscellaneous publication 155A
- Hill, M.P.; Kaiser, A.E. 2019** 3D geological modelling of the Upper Hutt basins to provide an understanding of local ground shaking hazard. p. 82 In: Kamp, P.J.J.; Pittari, A. (eds) *Abstract volume: Geosciences 2019, 24-27 November 2019, Hamilton*. Wellington, N.Z.: Geoscience Society of New Zealand. Geoscience Society of New Zealand miscellaneous publication 155A
- Hillman, J.I.T.; Crutchley, G.J. 2019** Distribution of faulting and gas hydrates in the southern Hikurangi Margin. In: Beggs, M. (convener) *AAPG Asia Pacific Region Geosciences Technology Workshop: gas hydrates - from potential geohazard to carbon-efficient fuel?* Tulsa, Okla.: AAPG.
- Hillman, J.I.T.; Kroeger, K.F.; Crutchley, G.J.; Watson, S.; Davy, B.W.; Mountjoy, J.; Solomon, E. 2019** Characterising fluid flow processes associated with faults, gas hydrate systems and cold seep locations in the southern Hikurangi margin. p. 84 In: Kamp, P.J.J.; Pittari, A. (eds) *Abstract volume: Geosciences 2019, 24-27 November 2019, Hamilton*. Wellington, N.Z.: Geoscience Society of New Zealand. Geoscience Society of New Zealand miscellaneous publication 155A
- Hirai, Y.; Tamura, Y.; Hoernle, K.; Timm, C.; Hauff, F.; Werner, R.; Hanyu, T.; Vaglarov, B.; Chang, Q.; Miyazaki, T.; Kimura, J.-I. 2019** Interaction between mafic magma and lithospheric mantle: evidence from the geochemistry of olivines and olivine-hosted melt inclusions in lavas from Kibblewhite Volcano, Kermadec arc. abstract EGU2019-6913 In: *European Geosciences Union General Assembly 2019, Vienna, Austria, 7-12 April 2019*. Goettingen, Germany: Copernicus Gesellschaft. Geophysical research abstracts 21
- Hochmuth, K.; Gohl, K.; Sauermilch, I.; Whittaker, J.; Leitchenkov, G.; De Santis, L.; Uenzelmann-Neben, G.; Davy, B.W. 2019** A suite of paleobathymetric grids of the Cenozoic Southern Ocean - a key to understanding the interlinked evolution of ocean circulation patterns and the Antarctic ice sheets. abstract A181 In: *ISAES 2019: XIII International Symposium on Antarctic Earth Sciences, 22-26 July 2019, Songdo Convensia, Incheon, South Korea: abstract list - oral*. Incheon, Republic of Korea: ISAES.

- Hoernle, K.; Timm, C.; Hauff, F.; Tappenden, V.; Werner, R.; Jolis, E.M.; Mortimer, N.; Weaver, S.; Riefstahl, F.; Gohl, K. 2019** St. Helena type HIMU plume involved in Zealandia-Antarctica breakup. abstract 1371 In: *Goldschmidt 2019 abstracts*. Cambridge, U.K.: White Iron Conferences Limited.
- Hoffmann, J.; Gorman, A.; Crutchley, G.J.; Micallef, A.; Mountjoy, J.; Avers, T. 2019** Pockmark formation and modification processes on the Canterbury Shelf, New Zealand. abstract EGU2019-12820 In: *European Geosciences Union General Assembly 2019, Vienna, Austria, 7-12 April 2019*. Goettingen, Germany: Copernicus Gesellschaft. Geophysical research abstracts 21
- Holden, C. 2019** It's Our Fault research programme: building earthquake resilience for the Wellington region (New Zealand). abstract NH24A-01 In: *AGU Fall Meeting, San Francisco, 9-13 December 2019*. [Washington, D.C.]: American Geophysical Union.
- Holden, C.; Sklodowska, A.; Gueguen, P. 2019** Testing advanced seismological methods towards a better understanding of the built environment response to earthquakes in New Zealand. abstract S32B-06 In: *AGU Fall Meeting, San Francisco, 9-13 December 2019*. [Washington, D.C.]: American Geophysical Union.
- Hollis, C.J.; Crouch, E.M.; Kennedy, E.M.; Shepherd, C.L. 2019** Beyond 2°C: lessons from Early Paleogene Zealandia. p. 87 In: Kamp, P.J.J.; Pittari, A. (eds) *Abstract volume: Geosciences 2019, 24-27 November 2019, Hamilton*. Wellington, N.Z.: Geoscience Society of New Zealand. Geoscience Society of New Zealand miscellaneous publication 155A
- Hollis, C.J.; Crouch, E.M.; Reichgelt, T.; Kennedy, E.M.; Greenwood, D.R.; Naafs, B.D.; Inglis, G.N.; Pancost, R.; Raine, J.I. 2019** Deciphering Southwest Pacific Eocene temperature proxy mismatches. abstract PP31E-1679 In: *AGU Fall Meeting, San Francisco, 9-13 December 2019*. [Washington, D.C.]: American Geophysical Union.
- Hollis, C.J.; Crouch, E.M.; Reichgelt, T.; Kennedy, E.M.; Prebble, J.G.; Greenwood, D.R.; Naafs, B.D.A.; Inglis, G.N.; Pancost, R.D.; Raine, J.I. 2019** Deciphering southwest Pacific Eocene temperature proxy mismatches. p. 88 In: Kamp, P.J.J.; Pittari, A. (eds) *Abstract volume: Geosciences 2019, 24-27 November 2019, Hamilton*. Wellington, N.Z.: Geoscience Society of New Zealand. Geoscience Society of New Zealand miscellaneous publication 155A
- Hollis, C.J.; Kozdon, R.; Zachos, J.; Inglis, G.; Evans, D.; Hines, B.R.; Strong, C.P.; Morgans, H.E.G.; Shepherd, C.L.; Crouch, E.M.; Prebble, J.G. 2019** Sea surface temperature in the early Paleogene SW Pacific. p. [350] In: *ICP13 abstract book: 13th International Conference on Paleoceanography, 2-6 September 2019, Sydney, Australia*. Sydney, N.S.W.: ICP13 Conference Secretariat.
- Holt, K.; Barrell, D.J.A.; Bostock, H.; Lorrey, A.; Newnham, R.; Augustinus, P.; Eaves, S.; Lowe, D.; McGlone, M.; Rees, A.; Ryan, M.; Vandergoes, M.J.; Wilmshurst, J. 2019** Climate and environmental change in New Zealand between 35-15 ka - a contribution to SHeMax. abstract O-3145 In: *INQUA 2019, Dublin, Ireland: 20th Congress of the International Union for Quaternary Research (INQUA)*.
- Hopkins, J.L.; Timm, C.; McGee, L.E.; Millet, M.-A.; Hauff, F.; Wilson, C.J.N.; Leonard, G.S. 2019** Coupled eruptions in the Auckland Volcanic Field: are we understanding the threat to our city? p. 93 In: Kamp, P.J.J.; Pittari, A. (eds) *Abstract volume: Geosciences 2019, 24-27 November 2019, Hamilton*. Wellington, N.Z.: Geoscience Society of New Zealand. Geoscience Society of New Zealand miscellaneous publication 155A

- Horspool, N.A.; Elwood, K.; Johnston, D.M. 2019** Estimating human casualty risk in earthquakes. p. 27 In: Christophersen, A.; Bailey, L.; Cavana, R.Y. *Risk and Decision-Making Conference 2019: how different aspects of risk underpin responsible and culturally-appropriate decision-making, 13-14 November 2019, Rutherford House, Wellington, New Zealand*. Lower Hutt, N.Z.: GNS Science. GNS Science miscellaneous series 133
- Howarth, J.D.; Barth, N.; Fitzsimons, S.; Richards-Dinger, K.; Clark, K.J.; Cochran, U.A.; Langridge, R.M.; Berryman, K.R.; Sutherland, R. 2019** Geometry causes temporal clustering of great earthquakes on a transform plate boundary fault. p. 94 In: Kamp, P.J.J.; Pittari, A. (eds) *Abstract volume: Geosciences 2019, 24-27 November 2019, Hamilton*. Wellington, N.Z.: Geoscience Society of New Zealand. Geoscience Society of New Zealand miscellaneous publication 155A
- Howarth, J.D.; Barth, N.C.; Fitzsimons, S.; Richards-Dinger, K.B.; Biasi, G.P.; Clark, K.J.; Cochran, U.A.; Langridge, R.M.; Berryman, K.R.; Sutherland, R. 2019** Paleoseismology and simulations reveal geometry controls the temporal clustering of great earthquakes on the Alpine Fault, New Zealand. abstract T12B-05 In: *AGU Fall Meeting, San Francisco, 9-13 December 2019*. [Washington, D.C.]: American Geophysical Union.
- Howell, A.; Nissen, E.; Clark, K.J.; Kearse, J.; Villamor, P.; Stahl, T.; Jones, K.E. 2019** 3D co-seismic offsets during the 2016 MW 7.8 Kaikoura earthquake (New Zealand) from aerial photogrammetry. abstract EGU2019-11886 In: *European Geosciences Union General Assembly 2019, Vienna, Austria, 7-12 April 2019*. Goettingen, Germany: Copernicus Gesellschaft. Geophysical research abstracts 21
- Howell, A.; Nissen, E.; Stahl, T.A.; Clark, K.J.; Kearse, J.; Villamor, P.; Van Dissen, R.J.; Jones, K.E.; Langridge, R.M. 2019** 3D surface displacements during the 2016 MW 7.8 Kaikoura (New Zealand) earthquake from photogrammetry-derived point clouds. abstract T41H-0357 In: *AGU Fall Meeting, San Francisco, 9-13 December 2019*. [Washington, D.C.]: American Geophysical Union.
- Hudson-Doyle, E.; Paton, D.; Johnston, D.M.; Smith, R. 2019** Communicating model uncertainty: developing decision-relevant science for the natural hazards. p. 28 In: Christophersen, A.; Bailey, L.; Cavana, R.Y. *Risk and Decision-Making Conference 2019: how different aspects of risk underpin responsible and culturally-appropriate decision-making, 13-14 November 2019, Rutherford House, Wellington, New Zealand*. Lower Hutt, N.Z.: GNS Science. GNS Science miscellaneous series 133
- Humphris, S.E.; Bluszlajn, J.; de Ronde, C.E.J.; Höfig, T.W.; Cai, Y.; Jamieson, J.W.; Martin, A.; Nozaki, T.; Reyes, A.G.; Roberts, S.; Schlicht, L.; Zhang, C. 2019** Variations in REE and Sr isotope compositions of altered rocks from magmatic- and seawater-influenced hydrothermal systems at Brothers volcano, Kermadec Arc, New Zealand (IODP Expedition 376). abstract V33E-0232 In: *AGU Fall Meeting, San Francisco, 9-13 December 2019*. [Washington, D.C.]: American Geophysical Union.
- Illsley-Kemp, F.; Barker, S.J.; Wilson, C.J.N.; Savage, M.K.; Rowe, M.C.; Bannister, S. 2019** The mantle driving force behind Earth's most productive silicic volcanic system. abstract EGU2019-11428 In: *European Geosciences Union General Assembly 2019, Vienna, Austria, 7-12 April 2019*. Goettingen, Germany: Copernicus Gesellschaft. Geophysical research abstracts 21

- Inchin, P.A.; Snively, J.B.; Kaneko, Y.; Zettergren, M.D. 2019** Atmosphere and ionosphere responses to infrasonic acoustic waves driven by the 2016 Kaikoura earthquake. p. 2-3 In: *CEDAR 2019, Eldorado Hotel, Santa Fe, New Mexico: MLT, coupling, instrumentation and techniques poster session, Tuesday June 18, 2019.* [CEDAR Science Steering Committee].
- Inchin, P.A.; Snively, J.B.; Zettergren, M.D.; Kaneko, Y.; Komjathy, A.; Verkhoglyadova, O. 2019** Simulation of ionospheric responses driven by acoustic and gravity waves following inland earthquakes. 1 p. In: *Beacon Satellite Symposium 2019.* Olsztyn: University of Warmia and Mazury.
- Ingham, M.; Mukhtar, K.; Divett, T.; Rodger, C.; Heise, W.; Bertrand, E.A. 2019** Validating thin-sheet models of New Zealand with magnetotelluric data. abstract A19P-259 In: *27th IUGG General Assembly, July 8-18 Juillet 2019, Montréal, Canada.* Prague: C-IN.
- Inglis, G.N.; Lunt, D.J.; Hollis, C.J.; Tierney, J.E.; Huber, M.; Cramwinckel, M. 2019** A climate 'atlas' for the EECO, PETM and latest Paleocene. abstract PP24C-02 In: *AGU Fall Meeting, San Francisco, 9-13 December 2019.* [Washington, D.C.]: American Geophysical Union.
- Jacobs, K.M.; Savage, M.K. 2019** Velocity changes in Cook Strait following the 2016 Kaikoura earthquake. p. 98 In: Kamp, P.J.J.; Pittari, A. (eds) *Abstract volume: Geosciences 2019, 24-27 November 2019, Hamilton.* Wellington, N.Z.: Geoscience Society of New Zealand. Geoscience Society of New Zealand miscellaneous publication 155A
- Ito, Y.; Uemura, M.; Webb, S.C.; Mochizuki, K.; Henrys, S.A. 2019** Ambient noise field and temporal changes in seismic interferograms at sea bottom inferred from ocean-bottom seismic and pressure arrays. Abstract S21A-04 In: *AGU Fall Meeting, San Francisco, 9-13 December 2019.* [Washington, D.C.]: American Geophysical Union.
- Johnson, K.; McKay, R.; Jiménez-Espejo, F.; Bertler, N.A.N.; Albot, A.; Riesselman, C.; Horgan, H.; Crosta, X.; Dunbar, R.; Escuita, C. 2019** Holocene drivers of biogenic bloom events linked to extratropical teleconnections, offshore Adélie Land, East Antarctica. abstract A290 In: *ISAES 2019: XIII International Symposium on Antarctic Earth Sciences, 22-26 July 2019, Songdo Convensia, Incheon, South Korea: abstract list - oral.* Incheon, Republic of Korea: ISAES.
- Johnson, K.M.; McKay, R.; Bertler, N.A.N.; Jiménez-Espejo, F.; Albot, A.; Riesselman, C.; Horgan, H.; Crosta, X.; Dunbar, R.; Escutia, C. 2019** Holocene ice-ocean interactions in the Ross Sea and Adélie Land Regions. p. [162] In: *ICP13 abstract book: 13th International Conference on Paleoceanography, 2-6 September 2019, Sydney, Australia.* Sydney, N.S.W.: ICP13 Conference Secretariat.
- Johnson, P.J.; Morgenstern, U.; Moore, C.R.; Cameron, S.G. 2019** Te Whakaheke o te Wai: improving understanding of groundwater flow pathways in New Zealand. p. 90 In: *NZ Hydrological Society Conference 3-6 December 2019, Rotorua, NZ: oral abstracts.* [Wellington, N.Z.]: New Zealand Hydrological Society.
- Jolly, G.E. 2019** Science advice for decision-making: a personal perspective. p. 29 In: Christophersen, A.; Bailey, L.; Cavana, R.Y. *Risk and Decision-Making Conference 2019: how different aspects of risk underpin responsible and culturally-appropriate decision-making, 13-14 November 2019, Rutherford House, Wellington, New Zealand.* Lower Hutt, N.Z.: GNS Science. GNS Science miscellaneous series 133

- Jovane, L.; Florindo, F.; Acton, G.; Ohneiser, C.; Sagnotti, L.; Strada, E.; Verosub, K.L.; Wilson, G.S.; Iacoviello, F.; Levy, R.H.; Passchier, S. 2019** Miocene glacial dynamics recorded by variations in magnetic properties in the ANDRILL-2A drill core. abstract EGU2019-5081 In: *European Geosciences Union General Assembly 2019, Vienna, Austria, 7-12 April 2019*. Goettingen, Germany: Copernicus Gesellschaft. Geophysical research abstracts 21
- Kaneko, Y. 2019** Accelerating foreshocks of crustal earthquakes controlled by frictional heterogeneities. p. 41 In: *Workshop: Numerical Modeling of Earthquake Motions: waves and ruptures: June 30 - July 4, 2019*. Bratislava: Comenius University of Bratislava.
- Kaneko, Y. 2019** Accelerating foreshocks of crustal earthquakes controlled by frictional heterogeneities. abstract B2-001 In: *International Conference in Commemoration of 20th Anniversary of the 1999 Chi-Chi Earthquake, 2019: Sustainable and Seismic-Safe Society, September 15-19, Taipei, Taiwan*. Taipei, Taiwan: National Center for Research on Earthquake Engineering (NCEE); National Applied Research Laboratories (Narlabs).
- Kaneko, Y. 2019** Accelerating foreshocks of crustal earthquakes controlled by frictional heterogeneities. p. [62] In: Chen, J.; Niemeijer, A.; Hangx, S.; Spiers, C. *GEOPROC 2019: earthquake and faulting mechanics, 3-5 July 2019 Utrecht, Netherlands: book of abstracts*. [Utrecht, Netherlands]: Organizing Committee.
- Kaneko, Y.; Ando, R.; Kears, J. 2019** Dynamic rupture simulations of the 2016 Kaikoura (New Zealand) Earthquake. p. [146] In: Chen, J.; Niemeijer, A.; Hangx, S.; Spiers, C. *GEOPROC 2019: earthquake and faulting mechanics, 3-5 July 2019 Utrecht, Netherlands: book of abstracts*. [Utrecht, Netherlands]: Organizing Committee.
- Kaneko, Y.; Ito, Y.; Chow, B.; Wallace, L.M.; Tape, C. 2019** Ultra-long duration of seismic ground motion arising from a thick, low velocity sedimentary wedge. p. 42 In: *Workshop: Numerical Modeling of Earthquake Motions: waves and ruptures: June 30 - July 4, 2019*. Bratislava: Comenius University of Bratislava.
- Kaneko, Y.; Kears, J.; Little, T.; Van Dissen, R.J. 2019** Curved slickenlines preserve direction of rupture propagation. abstract A3-013 In: *International Conference in Commemoration of 20th Anniversary of the 1999 Chi-Chi Earthquake, 2019: Sustainable and Seismic-Safe Society, September 15-19, Taipei, Taiwan*. Taipei, Taiwan: National Center for Research on Earthquake Engineering (NCEE); National Applied Research Laboratories (Narlabs).
- Kaneko, Y.; Sims, N.E.; Holtkamp, S.G.; Tape, C. 2019** Accelerating foreshocks of crustal earthquakes controlled by frictional heterogeneities. abstract S21F-0571 In: *AGU Fall Meeting, San Francisco, 9-13 December 2019*. [Washington, D.C.]: American Geophysical Union.
- Kaspari, S.; Pittenger, D.; Jenk, T.; Morgenstern, U.; Schwikowski, M.; Buening, N.H.; Stott, L.D. 2019** Twentieth century black carbon and dust deposition on South Cascade Glacier, Washington State, USA as reconstructed from a 158 m long ice core. abstract C13B-06 In: *AGU Fall Meeting, San Francisco, 9-13 December 2019*. [Washington, D.C.]: American Geophysical Union.
- Katakami, S.; Kaneko, Y.; Ito, Y. 2019** Enhanced dynamic triggering of a shallow slow slip event in the Nankai subduction zone due to the overlying sedimentary wedge. abstract T43H-0431 In: *AGU Fall Meeting, San Francisco, 9-13 December 2019*. [Washington, D.C.]: American Geophysical Union.

- Kaviyarasu, K.; Siddhardha, B.; Kennedy, J.V.; Maaza, M. 2019** Photodynamic inactivation of *Staphylococcus aureus* and *Pseudomonas aeruginosa* biofilms using biologically synthesized silver nanoparticles surfaced decorated with Methylene Blue. p. 1181 In: *5th International Conference on Nanoscience and Nanotechnology, 28 – 30 January 2019: abstracts*. Kattankulathur, India: SRM Institute of Science and Technology.
- Kawamura, Y.; Matsumoto, S.; Okada, T.; Matsuno, M.; Iio, Y.; Sato, T.; Bannister, S.; Savage, M.; Thurber, C.; Sibson, R. 2019** Characteristic of fault from in the focal area of the 2016 Mw7.8 Kaikoura earthquake inferred from high precision aftershock distribution. p. 105 In: Kamp, P.J.J.; Pittari, A. (eds) *Abstract volume: Geosciences 2019, 24-27 November 2019, Hamilton*. Wellington, N.Z.: Geoscience Society of New Zealand. Geoscience Society of New Zealand miscellaneous publication 155A
- Kearse, J.; Kaneko, Y. 2019** Historical surface rupture observations confirm relationship between curved slickenlines and the direction of rupture propagation. p. 106 In: Kamp, P.J.J.; Pittari, A. (eds) *Abstract volume: Geosciences 2019, 24-27 November 2019, Hamilton*. Wellington, N.Z.: Geoscience Society of New Zealand. Geoscience Society of New Zealand miscellaneous publication 155A
- Kearse, J.; Kaneko, Y.; Van Dissen, R.J.; Little, T.A. 2019** Historic surface rupture observations confirm relationship between curved slickenlines and the direction of rupture propagation. abstract T12B-04 In: *AGU Fall Meeting, San Francisco, 9-13 December 2019*. [Washington, D.C.]: American Geophysical Union.
- Kearse, J.R.; Kaneko, Y.; Little, T.A.; Van Dissen, R.J. 2019** Curved fault striations preserve the direction of dynamic rupture propagation. p. 44 In: *Workshop: Numerical Modeling of Earthquake Motions: waves and ruptures: June 30 - July 4, 2019*. Bratislava: Comenius University of Bratislava.
- Keller, E.D.; Christophersen, A.; Golledge, N.R.; Hanea, A.; Bertler, N.A.N.; McKay, R.; Levy, R.H. 2019** Modelling ice sheet retreat with Bayesian networks. p. 21 In: Christophersen, A.; Bailey, L.; Cavana, R.Y. *Risk and Decision-Making Conference 2019: how different aspects of risk underpin responsible and culturally-appropriate decision-making, 13-14 November 2019, Rutherford House, Wellington, New Zealand*. Lower Hutt, N.Z.: GNS Science. GNS Science miscellaneous series 133
- Keller, E.D.; Levy, R.H.; Golledge, N.R.; Christophersen, A. 2019** Using Bayesian networks to evaluate hazards from sea-level rise in the southwest Pacific Islands. p. 44 In: Christophersen, A.; Bailey, L.; Cavana, R.Y. *Risk and Decision-Making Conference 2019: how different aspects of risk underpin responsible and culturally-appropriate decision-making, 13-14 November 2019, Rutherford House, Wellington, New Zealand*. Lower Hutt, N.Z.: GNS Science. GNS Science miscellaneous series 133
- Keller, E.D.; Turnbull, J.C.; Mikaloff-Fletcher, S.; Kvale, K.; Moy, C. 2019** Examining the Southern Ocean carbon sink in a warming world. p. [7] In: *ICP13 abstract book: 13th International Conference on Paleoceanography, 2-6 September 2019, Sydney, Australia*. Sydney, N.S.W.: ICP13 Conference Secretariat.

- Kellett, R.L.; Caratori Tontini, F.; Turner, G.; Bromley, C.J. 2019** Geophysical properties of rocks from the Hauraki Goldfield (New Zealand), supporting continued mineral exploration. p. 145-148 In: Sims, D. (chair) *PACRIM 2019, 3-5 April 2019, Auckland, New Zealand*. Carlton, Vic.: Australasian Institute of Mining and Metallurgy. Publication series / Australasian Institute of Mining and Metallurgy 1/2019
- Kennedy, B.; Villeneuve, M.; Hilderman, R.; Farquhar, A.; Heap, M.; Mordensky, S.; Kilgour, G.N.; Jolly, A.D.; Christenson, B.W. 2019** A conduit filled with hydrothermal breccia and self-closing cracks reconstructed from ballistics from Whakaari (White Island). p. 107 In: Kamp, P.J.J.; Pittari, A. (eds) *Abstract volume: Geosciences 2019, 24-27 November 2019, Hamilton*. Wellington, N.Z.: Geoscience Society of New Zealand. Geoscience Society of New Zealand miscellaneous publication 155A
- Kennedy, J.V. 2019** Nanomaterials for electric vehicle charging. p. 5 In: *5th International Conference on Nanoscience and Nanotechnology, 28 – 30 January 2019: abstracts*. Kattankulathur, India: SRM Institute of Science and Technology.
- Kennedy, J.V. 2019** Nanostructured metal oxide composite materials for infrared reflective energy efficient cool coatings. p. 20 In: Grace, A.N.; Velmurugan, V.; Kannadasan, D.; Jacob, G.; Vimala, R.; Palla, P.; Sellappan, R.; Krishnamoorthi, C.; Sahu, N.K.; Sathyanarayanan, P.; Sakthi Swarrup, J.; Mangaiyarkarasi, R.; Mahajan, A.; Swati, G. (eds) *Conference proceedings of ICNAN'19: 2nd International Conference on Nanoscience and Nanotechnology, 29th November - 1st December*. Vellore: Vellore Institute of Technology.
- Kennedy, J.V.; Murmu, P.P.; Kumar, P.; Hippalgaonkar, K.; Ramanathi, G. 2019** Thermoelectric properties of isovalent ion doped bismuth telluride films. abstract C34 In: *AMN9, 10-14 February 2019, Te Papa, Wellington, New Zealand: [abstracts]*. Wellington, N.Z.: MacDiarmid Institute for Advanced Materials and Nanotechnology.
- Kereszturi, G.; Schaefer, L.; Miller, C.A.; Pullanagari, R.; Mead, S. 2019** Mapping hydrothermal alteration on composite volcanoes using airborne hyperspectral imaging - Case study of Mt Ruapehu (New Zealand). abstract IUGG19-1890 In: *27th IUGG General Assembly, July 8-18 Juillet 2019, Montréal, Canada*. Prague: C-IN.
- Kereszturi, G.; Schaefer, L.; Pullanagari, R.; Miller, C.A.; Mead, S. 2019** Hyperspectral remote sensing as a tool for mapping hydrothermal alteration on volcanoes – a case study of Mt Ruapehu (New Zealand). abstract EGU2019-4572 In: *European Geosciences Union General Assembly 2019, Vienna, Austria, 7-12 April 2019*. Goettingen, Germany: Copernicus Gesellschaft. Geophysical research abstracts 21
- Kilgour, G.N.; Hamling, I.J. 2019** Are chilled basaltic magmas more susceptible to earthquake triggering? Evidence from the 2015 Ambrym, Vanuatu dyke intrusion. abstract V11B-02 In: *AGU Fall Meeting, San Francisco, 9-13 December 2019*. [Washington, D.C.]: American Geophysical Union.
- Kilgour, G.N.; Mandon, C.; Conway, C.; Saunders, K. 2019** Short and long timescales of magmatic processes at Whakaari/White Island. p. 108 In: Kamp, P.J.J.; Pittari, A. (eds) *Abstract volume: Geosciences 2019, 24-27 November 2019, Hamilton*. Wellington, N.Z.: Geoscience Society of New Zealand. Geoscience Society of New Zealand miscellaneous publication 155A

- King, D.; Newnham, R.; Gehrels, R.; Clark, K.J.; Rees, A. 2019** Reconstructing sea-level rise from New Zealand's subsiding coastlines. p. 109 In: Kamp, P.J.J.; Pittari, A. (eds) *Abstract volume: Geosciences 2019, 24-27 November 2019, Hamilton*. Wellington, N.Z.: Geoscience Society of New Zealand. Geoscience Society of New Zealand miscellaneous publication 155A
- Kortink, M.; Savage, M.; Okada, T.; Matsumoto, S.; Iio, Y.; Jacobs, K.M. 2019** Effect of the Kaikoura earthquake on stress in and around the ruptured region: a noise cross correlation approach. p. 111 In: Kamp, P.J.J.; Pittari, A. (eds) *Abstract volume: Geosciences 2019, 24-27 November 2019, Hamilton*. Wellington, N.Z.: Geoscience Society of New Zealand. Geoscience Society of New Zealand miscellaneous publication 155A
- Kroeger, K.F.; Crutchley, G.J.; Kellett, R.L.; Barnes, P.M. 2019** 3D gas hydrate petroleum systems modelling at the New Zealand Hikurangi subduction margin. In: Beggs, M. (convener) *AAPG Asia Pacific Region Geosciences Technology Workshop: gas hydrates - from potential geohazard to carbon-efficient fuel?* Tulsa, Okla.: AAPG.
- Kroeger, K.F.; Seebeck, H.; Thrasher, G.P.; Arnot, M.J.; Bull, S.; Viskovic, G.P.D. 2019** The southern Taranaki Basin in four dimensions: structural and sedimentological change and rapid petroleum system evolution. p. 112 In: Kamp, P.J.J.; Pittari, A. (eds) *Abstract volume: Geosciences 2019, 24-27 November 2019, Hamilton*. Wellington, N.Z.: Geoscience Society of New Zealand. Geoscience Society of New Zealand miscellaneous publication 155A
- Langridge R.M.; Nicol, A.; Van Dissen, R.J.; Pettinga, J.; Stirling, M.W.; Barrell, D.J.A.; Clark, K.J.; Little, T.; Williams, J.; Stahl, T.; Pedley, K.; Kearse, J.; Litchfield, N.J.; Gerstenberger, M.C.; Goded, T. 2019** Paleoseismicity of 2016 Mw 7.8 Kaikoura Earthquake faults: what have we learnt and implications for the New Zealand seismic Hazard model? paper 20-24 In: *2019 GSA Cordilleran Section 115th Annual Meeting, 15-17 May 2019, Portland, Oregon USA*. Boulder, Colo.: Geological Society of America. Abstracts with programs / Geological Society of America 51(4)
- Law, S.; Boyce, A.; Bromley, G.; Kilgour, G.N.; Saunders, K. 2019** What can basalts tell us about the evolution of a rifted continental arc? abstract 1842 In: *Goldschmidt 2019 abstracts*. Cambridge, U.K.: White Iron Conferences Limited.
- Lawrence, T.; Strachan, L.; Lee, J.M.; Hill, M.P.; Davy, B.W.; Howe, T.; Twort, E. 2019** Defining the basal unconformity of the Waitemata-Northland Basin offshore and onshore. p. 113 In: Kamp, P.J.J.; Pittari, A. (eds) *Abstract volume: Geosciences 2019, 24-27 November 2019, Hamilton*. Wellington, N.Z.: Geoscience Society of New Zealand. Geoscience Society of New Zealand miscellaneous publication 155A
- Lee, M.K.; Yoo, K.-C.; Lee, J.I.; Ohneiser, C.; Bollen, M.; Levy, R.H.; Yoon, H.I. 2019** Paleooceanographic changes during the past one million years in the Central Basin, northwestern Ross Sea. abstract A297 In: *ISAES 2019: XIII International Symposium on Antarctic Earth Sciences, 22-26 July 2019, Songdo Convensia, Incheon, South Korea: abstract list - poster (Mon/Tue)*. Incheon, Republic of Korea: ISAES.
- Leonard, G.S.; Townsend, D.B.; Wilson, C. 2019** The volcanic geology of Taupo Volcanic Zone: 1:120,000 scale map and bulletin. p. 114 In: Kamp, P.J.J.; Pittari, A. (eds) *Abstract volume: Geosciences 2019, 24-27 November 2019, Hamilton*. Wellington, N.Z.: Geoscience Society of New Zealand. Geoscience Society of New Zealand miscellaneous publication 155A

- Leveueur, J.; Kennedy, J.V.; Davidson, R. 2019** In-line thin film deposition and functionalisation of industrial surfaces. p. 43 In: *MaD2019: future-proofing New Zealand's manufacturing and design economy, 20-21 May 2019, Cordis, Auckland*. Manufacturing and Design NZ.
- Leveueur, J.; Morel, J.; Archer, R.; Loho, T.; Kennedy, J.V. 2019** Reducing frozen dairy product adhesion by controlling the surface properties of stainless steel. abstract M99 In: *AMN9, 10-14 February 2019, Te Papa, Wellington, New Zealand: [abstracts]*. Wellington, N.Z.: MacDiarmid Institute for Advanced Materials and Nanotechnology.
- Leveueur, J.; Trompetter, W.J.; Kennedy, J.V.; Chong, S.; Hunze, A.; Sharma, V.; Long, L.; Kim, S.; Covic, G. 2019** Tailoring the properties of soft magnetic composite: example of inroad inductive power transfer. p. 129 In: *MaD2019: future-proofing New Zealand's manufacturing and design economy, 20-21 May 2019, Cordis, Auckland*. Manufacturing and Design NZ.
- Levy, R.H.; Naish, T.R.; Chorley, H.; Keller, E.D.; Golledge, N.R.; McKay, R.; Meyers, S. 2019** Climate thresholds, marine ice sheet expansion, and the role of sea ice across the Miocene Climate Transition. abstract A262 In: *ISAES 2019: XIII International Symposium on Antarctic Earth Sciences, 22-26 July 2019, Songdo Convensia, Incheon, South Korea: abstract list - oral*. Incheon, Republic of Korea: ISAES.
- Lin, J.C.; Hutyra, L.; Mitchell, L.; Loughner, C.; Stein, A.F.; Lusk, K.; Gately, C.; Wofsy, S.C.; Mallia, D.V.; Cohen, R.C.; Davis, K.J.; Duren, R.M.; Miller, C.E.; Karion, A.; Kelling, R.F.; Kim, J.; Miles, N.; Guha, A.; Newman, S.; Rice, A.L.; Richardson, S.; Sargent, M.R.; Turnbull, J.C.; Verhulst, K.R.; Weiss, R.F. 2019** The CO₂ urban synthesis and analysis ("CO₂-USA") project: results and deliverables (Invited). abstract A54D-01 In: *AGU Fall Meeting, San Francisco, 9-13 December 2019*. [Washington, D.C.]: American Geophysical Union.
- Lindsay, D.; Hamling, I.J.; Townend, J. 2019** Geodetic investigation of triggered slip near Secretary Island, Puysegur subduction zone, New Zealand. abstract G43B-0752 In: *AGU Fall Meeting, San Francisco, 9-13 December 2019*. [Washington, D.C.]: American Geophysical Union.
- Lindsay, J.M.; Leonard, G.S. 2019** Ten years of determining volcanic risk in Auckland. abstract IUGG19-0908 In: *27th IUGG General Assembly, July 8-18 Juillet 2019, Montréal, Canada*. Prague: C-IN.
- Lipiejko, N.; Whittaker, C.N.; Lane, E.; Power, W.L. 2019** Analytical modelling of tsunamis generated by underwater volcanic eruptions. p. 119 In: Kamp, P.J.J.; Pittari, A. (eds) *Abstract volume: Geosciences 2019, 24-27 November 2019, Hamilton*. Wellington, N.Z.: Geoscience Society of New Zealand. Geoscience Society of New Zealand miscellaneous publication 155A
- Litchfield, N.J.; Clark, K.J.; Marshall, J.; Cochran, U.A.; Hamel, J.; McKinney, E.; Miller, C.; Morgenstern, R.; Mountjoy, J.; Mueller, C.; Palmer, A.; White, C.; Zohbe, N. 2019** Paleoearthquakes recorded by marine terraces in the northern and central Hikurangi Margin. p. 120 In: Kamp, P.J.J.; Pittari, A. (eds) *Abstract volume: Geosciences 2019, 24-27 November 2019, Hamilton*. Wellington, N.Z.: Geoscience Society of New Zealand. Geoscience Society of New Zealand miscellaneous publication 155A
- Little, T.; Morris, P.; Hill, M.P.; Kearse, J.; Van Dissen, R.J.; Manousakis, J.; Zekkos, D.; Lawson, S. 2019** Co-seismic structural evolution of large-magnitude strike-slip ground ruptures ("mole tracks"). p. 121 In: Kamp, P.J.J.; Pittari, A. (eds) *Abstract volume: Geosciences 2019, 24-27 November 2019, Hamilton*. Wellington, N.Z.: Geoscience Society of New Zealand. Geoscience Society of New Zealand miscellaneous publication 155A

- Lormand, C.; Zellmer, G.F.; Kilgour, G.N.; Nemeth, K.; Palmer, A.; Sakamoto, N.; Yurimoto, H.; Kuritani, T.; Iizuka, Y.; Moebis, A. 2019** Slow ascent of unusually hot intermediate magmas triggering Strombolian to Plinian eruptions. abstract IUGG19-4938 In: *27th IUGG General Assembly, July 8-18 Juillet 2019, Montréal, Canada*. Prague: C-IN.
- Lormand, C.; Zellmer, G.F.; Nemeth, K.; Kilgour, G.N.; Mead, S.; Palmer, A.S.; Sakamoto, N.; Yurimoto, H.; Moebis, A. 2019** Weka trainable segmentation plugin in ImageJ: a semi-automatic tool applied to crystal size distributions of microlites in volcanic rocks. abstract IUGG19-4938 In: *27th IUGG General Assembly, July 8-18 Juillet 2019, Montréal, Canada*. Prague: C-IN.
- Lorrey, A.; Bostock, H.; Eaves, S.; Holt, K.; Moy, C.; Prebble, J.G.; Rees, A.; Augustinus, P.; Cortese, G.; Dowling, L.; Keller, E.D.; Lowe, D.; McGlone, M.; Newnham, R.; Palmer, J.; Ryan, M.; Van den Bos, V.; Vandergoes, M.J.; Woolley, J.-M.; Wilmshurst, J. 2019** New Zealand climate and environmental change through the Holocene: a review. abstract P-4492 In: *INQUA 2019, Dublin, Ireland: 20th Congress of the International Union for Quaternary Research (INQUA)*.
- Lowry, D. 2019** Developments and challenges in paleo-ice sheet modelling to constrain past sea level. p. 123 In: Kamp, P.J.J.; Pittari, A. (eds) *Abstract volume: Geosciences 2019, 24-27 November 2019, Hamilton*. Wellington, N.Z.: Geoscience Society of New Zealand. Geoscience Society of New Zealand miscellaneous publication 155A
- Luckie, T.; Gase, A.; Jacobs, K.M.; Henrys, S.A.; Okaya, D.A.; Van Avendonk, H.J.; Bangs, N.L.; Barker, D.H.N.; Bassett, D.; Kodaira, S.; Arai, R.; Fujie, G.; Yamamoto, Y. 2019** Initial wide-angle seismic results from the Seismogenesis at Hikurangi Integrated Research Experiment (SHIRE), North Island, New Zealand. abstract T41J-0264 In: *AGU Fall Meeting, San Francisco, 9-13 December 2019*. [Washington, D.C.]: American Geophysical Union.
- Mac Manus, D.H.; Rodger, C.J.; Dalzell, M.; Divett, T.; Petersen, T. 2019** GIC modelling and mitigation of New Zealand's electrical transmission network during extreme geomagnetic storms. In: *16th European Space Weather Week, 18-22 November 2019, Liege, Belgium*. Brussels: Solar-Terrestrial Centre of Excellence.
- Macnaughtan, M.; Pecher, I.A.; Strachan, L.; Crutchley, G.J.; TAN1808 ShipBoard Crew 2019** Possible controls on BSR distribution and character in the Pegasus Basin, New Zealand. In: Beggs, M. (convener) *AAPG Asia Pacific Region Geosciences Technology Workshop: gas hydrates - from potential geohazard to carbon-efficient fuel?* Tulsa, Okla.: AAPG.
- Maher, S.; Matoza, R.S.; De Groot-Hedlin, C.D.; Jolly, A.D.; Gee, K.; Fee, D. 2019** Investigating the effect of nonlinear acoustic propagation on infrasound-based volume flux estimates at Yasur Volcano, Vanuatu. abstract V23F-0277 In: *AGU Fall Meeting, San Francisco, 9-13 December 2019*. [Washington, D.C.]: American Geophysical Union.
- Martin, A.; Jamieson, J.W.; de Ronde, C.E.J.; Humphris, S.E.; Höfig, T.W.; Roberts, S.; Cai, Y.; Nozaki, T.; Zhang, C.; Schlicht, L.; Reyes, A.G.; MacLeod, C.J. 2019** Magmatic versus seawater-dominated hydrothermal alteration: evidence from deep-sea drilling at Brothers volcano, Kermadec arc, New Zealand. abstract V33E-0226 In: *AGU Fall Meeting, San Francisco, 9-13 December 2019*. [Washington, D.C.]: American Geophysical Union.

- Martin, A.P.; Alibone, A.H.; Blakemore, H.; Blundell, C.C.; Cox, S.C.; Craw, D.; Doyle, S.; Kellett, R.L.; MacKenzie, D.J.; Mortimer, N.; Ritchie, T.; Sahoo, T.R.; Smith Lyttle, B.; Stephens, S. 2019** The new 1:50 000 scale GIS dataset and map of the Hyde-Macraes Shear Zone, Otago, New Zealand: a progress report. p. 127 In: Kamp, P.J.J.; Pittari, A. (eds) *Abstract volume: Geosciences 2019, 24-27 November 2019, Hamilton*. Wellington, N.Z.: Geoscience Society of New Zealand. Geoscience Society of New Zealand miscellaneous publication 155A
- Martin, A.P.; Cooper, A.; Price, R.; Kyle, P.; Gamble, J. 2019** Petrogenetic models for the evolution of alkalic magmas in the Erebus volcanic province, Antarctica. abstract A248 In: *ISAES 2019: XIII International Symposium on Antarctic Earth Sciences, 22-26 July 2019, Songdo Convensia, Incheon, South Korea: abstract list - poster (Mon/Tue)*. Incheon, Republic of Korea: ISAES.
- Martin, A.P.; Smellie, J.; Cooper, A.; Townsend, D.B. 2019** An uncommonly well-exposed Miocene caldera interior at Mason Spur, Antarctica: unusual trachytic spatterrich lapilli tuff facies amid evidence for voluminous eruptions. abstract A247 In: *ISAES 2019: XIII International Symposium on Antarctic Earth Sciences, 22-26 July 2019, Songdo Convensia, Incheon, South Korea: abstract list - oral*. Incheon, Republic of Korea: ISAES.
- Martin, A.P.; Smellie, J.; Townsend, D.B. 2019** Climatic records in volcanic rocks: glaciovolcanology from the southwest Ross Sea, Antarctica. p. 49 In: *Our future in focus: New Zealand Antarctic Science Conference 2019, 17-19 June 2019 Christchurch Town Hall*. Christchurch, N.Z.: New Zealand Antarctic Research Institute.
- Martin, A.P.; Turnbull, R.E.; Rattenbury, M.S.; Strong, D.T.; Christie, A.B.; Rogers, K.M.; Gazley, M.F.; Smillie, R.W. 2019** Regional-scale multi-element in soil baseline surveys over prospective mineral camps in New Zealand. p. 287-289 In: Sims, D. (chair) *PACRIM 2019, 3-5 April 2019, Auckland, New Zealand*. Carlton, Vic.: Australasian Institute of Mining and Metallurgy. Publication series / Australasian Institute of Mining and Metallurgy 1/2019
- Massey, C.I.; Brideau, M.-A. 2019** Torlesse greywacke comprises about 19% of New Zealand's rock mass at/near the surface. abstract NH53A-06 In: *AGU Fall Meeting, San Francisco, 9-13 December 2019*. [Washington, D.C.]: American Geophysical Union.
- Massiot, C.; Mackintosh, I.M.; Kolandaivelu, K.P.; Farough, A.; Reyes, A.G.; de Ronde, C.E.J.; Humphris, S.E.; Höfig, T.W. 2019** First downhole and core-based petrophysical and hydrological measurements in a submarine volcano: Brothers volcano, Kermadec arc. abstract V33E-0236 In: *AGU Fall Meeting, San Francisco, 9-13 December 2019*. [Washington, D.C.]: American Geophysical Union.
- Mather, B.; Seton, M.; Mortimer, N.; Müller, D. 2019** The role of stagnant slabs at the transition zone on widespread volcanism in eastern Australia and Zealandia. abstract DI33B-0038 In: *AGU Fall Meeting, San Francisco, 9-13 December 2019*. [Washington, D.C.]: American Geophysical Union.
- Matsumoto, S.; Kawamura, Y.; Okada, T.; Matsuno, M.; Iio, Y.; Sibson, R.; Suzuki, M.; Bannister, S.; Savage, M. 2019** Detection of S-wave reflectors beneath aftershock area of the 2016 Kaikoura earthquake. p. 128 In: Kamp, P.J.J.; Pittari, A. (eds) *Abstract volume: Geosciences 2019, 24-27 November 2019, Hamilton*. Wellington, N.Z.: Geoscience Society of New Zealand. Geoscience Society of New Zealand miscellaneous publication 155A

- Matsuno, M.; Okada, T.; Matsumoto, S.; Kawamura, Y.; Iio, Y.; Sato, T.; Bannister, S.; Ristau, J.; Savage, M.; Thurber, C.; Sibson, R. 2019** Stress tensor inversion in focal area of the 2016 Mw7.8 Kaikoura earthquake, New Zealand. p. 129 In: Kamp, P.J.J.; Pittari, A. (eds) *Abstract volume: Geosciences 2019, 24-27 November 2019, Hamilton*. Wellington, N.Z.: Geoscience Society of New Zealand. Geoscience Society of New Zealand miscellaneous publication 155A
- Mauriohooho, K.; Wilson, C.; Leonard, G.S.; Chambefort, I.; Rosenberg, M.D. 2019** A window into magmatic time (340-25 ka): how magma systems reorganised between supereruptions in the north Taupo area. p. 130 In: Kamp, P.J.J.; Pittari, A. (eds) *Abstract volume: Geosciences 2019, 24-27 November 2019, Hamilton*. Wellington, N.Z.: Geoscience Society of New Zealand. Geoscience Society of New Zealand miscellaneous publication 155A
- McDermott, J.; Rouxel, O.J.; Stucker, V.K.; de Ronde, C.E.J.; Massiot, C. 2019** Insights into the controls on acid sulfate fluid geochemistry at arc and back arc systems from Brothers volcano (Invited). abstract V32B-07 In: *AGU Fall Meeting, San Francisco, 9-13 December 2019*. [Washington, D.C.]: American Geophysical Union.
- McDermott, J.M.; Rouxel, O.; Schlicht, L.E.M.; Bach, W.; Stucker, V.K.; de Ronde, C.E.J.; Massiot, C.; Scientists E3 2019** Geochemistry of deep subseafloor hydrothermal fluids at Brothers Volcano. abstract 2207 In: *Goldschmidt 2019 abstracts*. Cambridge, U.K.: White Iron Conferences Limited.
- McKay, R.M.; Johnson, K.M.; Newton, K.; Anya, A.B.; Bendle, J.A.; Jimenez, F.J.; Etourneau, J.; Crosta, X.; Riesselman, C.R.; Horgan, H.J.; Bertler, N.A.N.; Escutia, C.; Dunbar, R.B. 2019** A sub-decadal record of East Antarctic biological productivity, and ocean-ice interactions over the Holocene from an ultra-expanded continental shelf sediment drift (invited). abstract PP11D-1419 In: *AGU Fall Meeting, San Francisco, 9-13 December 2019*. [Washington, D.C.]: American Geophysical Union.
- McNamara, D.D.; Milicich, S.D.; Massiot, C.; Villamor, P.; McLean, K.; Sepulveda, F.; Ries, W.F. 2019** Tectonic controls on Taupo Volcanic Zone geothermal expression. p. [36] In: *The Tectonic Studies Group Annual General Meeting, 14-16 January, 2019, University of Bergen*.
- McSporran, A.; Jenkins, S.; Wilson, T.; Stewart, C.; Leonard, G.S.; Cevuard, S.; Garaebiti, E.; Campbell, G.; Dellow, G.D.; Kilgour, G.N.; Rowe, M. 2019** Impact of tephra fall to buildings on Ambae Island, Vanuatu from the 2017-2018 eruption period of Manaro Voui volcano, Ambae Island, Vanuatu. p. 133 In: Kamp, P.J.J.; Pittari, A. (eds) *Abstract volume: Geosciences 2019, 24-27 November 2019, Hamilton*. Wellington, N.Z.: Geoscience Society of New Zealand. Geoscience Society of New Zealand miscellaneous publication 155A
- Mead, S.; Kereszturi, G.; Miller, C.A.; Schaefer, L. 2019** Combining slope stability and mass flow models to forecast debris avalanche hazard at Mt. Ruapehu. p. 134 In: Kamp, P.J.J.; Pittari, A. (eds) *Abstract volume: Geosciences 2019, 24-27 November 2019, Hamilton*. Wellington, N.Z.: Geoscience Society of New Zealand. Geoscience Society of New Zealand miscellaneous publication 155A
- Mikaloff-Fletcher, S.; Brailsford, G.; Harvey, M.; Keller, E.D.; Sperlich, P.; Turnbull, J.C. 2019** Greenhouse gases and the need for integrated services to support climate mitigation. abstract EGU2019-4837-1 In: *European Geosciences Union General Assembly 2019, Vienna, Austria, 7-12 April 2019*. Goettingen, Germany: Copernicus Gesellschaft. Geophysical research abstracts 21

- Miller, C.A.; Kereszturi, G.; Lauren, S.; Fournier, D.; Mead, S. 2019** Mapping surface and volumetric alteration of Mt Ruapehu from aeromagnetic data inversion and hyperspectral imaging. abstract IUGG19-3850 In: *27th IUGG General Assembly, July 8-18 Juillet 2019, Montréal, Canada*. Prague: C-IN.
- Miller, C.A.; Shields, S.; Tikoff, B. 2019** Active and dormant magma bodies within a single silicic volcanic field. abstract V11p-411 In: *27th IUGG General Assembly, July 8-18 Juillet 2019, Montréal, Canada*. Prague: C-IN.
- Miller, C.N.; Hamel, J.E.; Marshall, J.S.; McKinney, E.; White, C.J.; Zohbe, N.M.; Litchfield, N.J.; Clark, K.J. 2019** Field investigation of Holocene earthquake uplifted paleo-shorelines at Clifton and Ocean Beach, southern Hawkes Bay, North Island, New Zealand. abstract 329681 In: *2019 GSA Cordilleran Section 115th Annual Meeting, 15-17 May 2019, Portland, Oregon USA*. Boulder, Colo.: Geological Society of America. Abstracts with programs / Geological Society of America 51(4)
- Moore, C.R.; Doherty, J. 2019** Is steady state model calibration sufficient? abstract 508 In: *NCGRT/IAH Australasian Groundwater Conference 2019*. Adelaide, S.A.: National Centre for Groundwater Research and Training.
- Moreau, M.; Hadfield, J.; Hughey, J.; Sanders, F.; Lapworth, D.J.; White, D.; Civil, W. 2019** A baseline assessment of emerging organic contaminants in New Zealand groundwater. p. 630 In: Hernández, J.J.G.; Navarro, B.A. (eds) *Groundwater management and governance: coping with uncertainty: proceedings of IAH 2019. 46th Annual Congress of the International Association of Hydrogeologists, Málaga (Spain), September 22-27, 2019*. Barcelona: Asociación Internacional de Hidrogeólogos.
- Moreau, M.; White, P.A.; Mourot, F.; Rawlinson, Z.J.; King, J. 2019** New Zealand aquifers digital map. p. 109-110 In: *NZ Hydrological Society Conference 3-6 December 2019, Rotorua, NZ: oral abstracts*. [Wellington, N.Z.]: New Zealand Hydrological Society.
- Morgenstern, U. 2019** Understanding groundwater processes in New Zealand aquifers. abstract 127 In: *NCGRT/IAH Australasian Groundwater Conference 2019*. Adelaide, S.A.: National Centre for Groundwater Research and Training.
- Morgenstern, U.; Davidson, P.; Townsend, D.B.; Stewart, M.K. 2019** Groundwater storage that feeds the Wairau River and streams in the Wairau Plain. p. 111 In: *NZ Hydrological Society Conference 3-6 December 2019, Rotorua, NZ: oral abstracts*. [Wellington, N.Z.]: New Zealand Hydrological Society.
- Morris, P.; Little, T.A.; Hill, M.P.; Van Dissen, R.J.; Kears, J.; Petherick, L.; Hemphill-Haley, M.; Norton, K.; Manousakis, J.; Zekkos, D. 2019** Three-dimensional con-seismic accommodation of ~9 M of displacement through a "mole-track" structure in a strike-slip earthquake. p. 140 In: Kamp, P.J.J.; Pittari, A. (eds) *Abstract volume: Geosciences 2019, 24-27 November 2019, Hamilton*. Wellington, N.Z.: Geoscience Society of New Zealand. Geoscience Society of New Zealand miscellaneous publication 155A
- Mortimer, N.; Smith Lyttle, B.; Black, J. 2019** Simplifying complexity: a tectonic map of Zealandia/Te Riu-a-Maui. p. 141 In: Kamp, P.J.J.; Pittari, A. (eds) *Abstract volume: Geosciences 2019, 24-27 November 2019, Hamilton*. Wellington, N.Z.: Geoscience Society of New Zealand. Geoscience Society of New Zealand miscellaneous publication 155A

- Mourot, F. 2019** Farm nutrient losses to groundwater in the West Matukituki Valley, Lake Wanaka catchment (Otago region, New Zealand). p. 200-201 In: Kronvang, B.; Fraters, D.; Kovar, K. (compilers) *International Interdisciplinary Conference on Land Use and Water Quality: agriculture and the environment: Aarhus, Denmark 3-6 June 2019: volume of abstracts*. Aarhus: Aarhus University.
- Mourot, F.; Fraser, J. 2019** Farm nutrient losses to groundwater in the west Matukutuki Valley, Lake Wanaka catchment. p. 213-214 In: *NZ Hydrological Society Conference 3-6 December 2019, Rotorua, NZ: poster abstracts*. [Wellington, N.Z.]: New Zealand Hydrological Society.
- Mourot, F.; Westerhoff, R.S.; Macdonald, N.; Cameron, S.G. 2019** Better spatial characterisation of evapotranspiration and rainfall recharge estimates to groundwater using remote sensing multispectral techniques at lysimeter sites. p. 112-113 In: *NZ Hydrological Society Conference 3-6 December 2019, Rotorua, NZ: oral abstracts*. [Wellington, N.Z.]: New Zealand Hydrological Society.
- Mueller, C.; Wang, X.; Lukovic, B.; Gusman, A.R.; Burbidge, D.R.; Power, W.L. 2019** Software engineering for multi-scenario modelling and machine learning in tsunami science: do we need it? p. 143 In: Kamp, P.J.J.; Pittari, A. (eds) *Abstract volume: Geosciences 2019, 24-27 November 2019, Hamilton*. Wellington, N.Z.: Geoscience Society of New Zealand. Geoscience Society of New Zealand miscellaneous publication 155A
- Mulia, I.; Gusman, A.R.; Williamson, A.; Satake, K. 2019** An efficient design of offshore tsunameter networks in southern Java, Indonesia. abstract IUGG19-0620 In: *27th IUGG General Assembly, July 8-18 Juillet 2019, Montréal, Canada*. Prague: C-IN.
- Mulia, I.E.; Gusman, A.R.; Satake, K. 2019** Potential application of a deep learning algorithm in tsunami inundation forecasting. abstract NH33A-04 In: *AGU Fall Meeting, San Francisco, 9-13 December 2019*. [Washington, D.C.]: American Geophysical Union.
- Murmu, P.P.; Kennedy, J.V.; Chong, S.V.; Leveneur, J.; Storey, J.; Rubanov, S.; Ramanath, G. 2019** Improvement of thermoelectric power factor in nanostructured n-type bismuth antimony telluride thin films. abstract M93 In: *AMN9, 10-14 February 2019, Te Papa, Wellington, New Zealand: [abstracts]*. Wellington, N.Z.: MacDiarmid Institute for Advanced Materials and Nanotechnology.
- Murmu, P.P.; Kennedy, J.V.; Kumar, P.; Hippalgaonkar, K.; Ramanath, G. 2019** Multifold enhancements in thermoelectric properties of bismuth telluride films through sulfur ion implantation. In: *ICMAT: 10th International Conference on Materials for Advanced Technologies, 23-28 June 2019, Singapore*. Singapore: [Materials Research Society of Singapore].
- Nichols, J.E.; Heusser, L.E.; Bellman, D.W.; Massa, C.; Moy, C.M.; Peteet, D.M.; Vandergoes, M.J. 2019** California drought in spatial and temporal context. abstract PP31D-1658 In: *AGU Fall Meeting, San Francisco, 9-13 December 2019*. [Washington, D.C.]: American Geophysical Union.

- Nodder, S.; Howarth, J.D.; Orpin, A.; Turnbull, J.C.; Mountjoy, J.; Gibbs, M.; Leduc, D.; Maier, K.; Bilewitch, J.; Brown, J.; Bury, S.; Delgado, J.; Deppeler, S.; Frontin-Rollet, G.; Hulston, D.; Olsen, G.; Sabadel, A. 2019** Quantification of organic carbon transfer to the deep-sea by the Kaikoura earthquake turbidity current. p. 148 In: Kamp, P.J.J.; Pittari, A. (eds) *Abstract volume: Geosciences 2019, 24-27 November 2019, Hamilton*. Wellington, N.Z.: Geoscience Society of New Zealand. Geoscience Society of New Zealand miscellaneous publication 155A
- Olliva, S.J.C.; Ebinger, C.J.; Rivalta, E.; Wauthier, C.; Williams, C.A.; Currie, C.A. 2019** State-of-stress and stress rotations: quantifying the role of surface topography and subsurface density contrasts in magmatic rift zones (Eastern Rift, Africa). abstract T31B-06 In: *AGU Fall Meeting, San Francisco, 9-13 December 2019*. [Washington, D.C.]: American Geophysical Union.
- Oluwunmi, P.; Pecher, I.A.; Archer, R.; Reagan, M.; Moridis, G.; Crutchley, G.J.; Stewart, L.C.; Bowden, D.; Rowden, A. 2019** Possible inflow of fluid at the seafloor following gas production from methane hydrates: Numerical simulation studies. In: Beggs, M. (convener) *AAPG Asia Pacific Region Geosciences Technology Workshop: gas hydrates - from potential geohazard to carbon-efficient fuel?* Tulsa, Okla.: AAPG.
- Orsi, A.; Landais, A.; Stenni, B.; Werner, M.; Bertler, N.A.N. 2019** Ice core proxies for past circulation changes. abstract C06p-021 In: *27th IUGG General Assembly, July 8-18 Juillet 2019, Montréal, Canada*. Prague: C-IN.
- Palmer, M.; Scott, J.; Pearson, G.; Luo, Y.; Turnbull, R.E.; Reid, M. 2019** *In situ* split stream Sm-Nd dating and trace element analysis of scheelite via LA-ICPMS. abstract 2556 In: *Goldschmidt 2019 abstracts*. Cambridge, U.K.: White Iron Conferences Limited.
- Pancost, R.D.; Taylor, K.W.; Hollis, C.J. 2019** Unravelling carbon cycle change in the aftermath of the K/Pg boundary event. O55; doi: [10.3997/2214-4609.201903043](https://doi.org/10.3997/2214-4609.201903043) In: *29th International Meeting on Organic Geochemistry (IMOG), 1-6 September 2019, Gothenburg, Sweden*. European Association of Organic Geochemists.
- Pappa, F.; Ebbing, J.; Ferraccioli, F.; van der Wal, W.; Martin, A.P. 2019** The lithospheric density structure of the Antarctic continent from integrated 3D gravity and petrological modelling. abstract S23G-0722 In: *AGU Fall Meeting, San Francisco, 9-13 December 2019*. [Washington, D.C.]: American Geophysical Union.
- Park, I.; Jolly, A.D.; Lokmer, I.; Kennedy, B. 2019** A study of very long period volcanic earthquakes at Whakaari/White Island, New Zealand. p. 151 In: Kamp, P.J.J.; Pittari, A. (eds) *Abstract volume: Geosciences 2019, 24-27 November 2019, Hamilton*. Wellington, N.Z.: Geoscience Society of New Zealand. Geoscience Society of New Zealand miscellaneous publication 155A
- Park, I.; Jolly, A.D.; Lokmer, I.; Kennedy, B. 2019** Long-term variations in very long period earthquakes associated with volcanic activity at White Island, New Zealand. abstract V03p-433 In: *27th IUGG General Assembly, July 8-18 Juillet 2019, Montréal, Canada*. Prague: C-IN.
- Pearson, A.; Hartland, A.; Hellstron, J.C.; Fox, B.R.S.; Ward, B.; Vandergoes, M.J. 2019** New Zealand, the natural laboratory: using fluorescence, cave dripwater monitoring and speleothem archives to investigate climatic impacts on soil C export through the past 14 Kyr. abstract B23A-04 In: *AGU Fall Meeting, San Francisco, 9-13 December 2019*. [Washington, D.C.]: American Geophysical Union.

- Pearson, A.R.; Hartland, A.; Hellstrom, J.; Fox, B.R.S.; Vandergoes, M.J.; Ward, B.M.; Drysdale, R.N. 2019** New Zealand, the natural laboratory: using speleothem fluorescence to investigate soil dom export in a pre-human continent. p. 152 In: Kamp, P.J.J.; Pittari, A. (eds) *Abstract volume: Geosciences 2019, 24-27 November 2019, Hamilton*. Wellington, N.Z.: Geoscience Society of New Zealand. Geoscience Society of New Zealand miscellaneous publication 155A
- Pecher, I.A.; Crutchley, G.J.; Oluwunmi, P.; Coffin, R.; Heeschen, K.; Cook, A.; Barnes, P.; LeVay, L.; Wallace, L.M.; Saffer, D.; Petronotis, K.; Expedition 372 Scientists; Expedition 375 Scientists 2019** The gas hydrate petroleum system of the northern Hikurangi Margin, New Zealand. In: Beggs, M. (convener) *AAPG Asia Pacific Region Geosciences Technology Workshop: gas hydrates - from potential geohazard to carbon-efficient fuel?* Tulsa, Okla.: AAPG.
- Pecher, I.A.; Davy, B.W.; Hillman, J.I.T.; Stott, L.; Coffin, R.; Prestage, A.; Rose, P.; Bialas, J. 2019** Seafloor pockmarks on the Chatham Rise: their possible link to glacial cycles and the subducted Hikurangi Plateau: an overview on current hypothesis. p. 153 In: Kamp, P.J.J.; Pittari, A. (eds) *Abstract volume: Geosciences 2019, 24-27 November 2019, Hamilton*. Wellington, N.Z.: Geoscience Society of New Zealand. Geoscience Society of New Zealand miscellaneous publication 155A
- Peters, C.; Hesseler, V.; Koschinsky, A.; Bach, W.; Stucker, V.K.; Strauss, H. 2019** Sulfur cycling at the Kermadec Arc revealed by sulfur isotopes. abstract 2637 In: *Goldschmidt 2019 abstracts*. Cambridge, U.K.: White Iron Conferences Limited.
- Porter, D.F.; Tinto, K.J.; Bell, R.E.; Elieff, S.; Locke, C.D.; Caratori Tontini, F.; Brady, N. 2019** Aerogravity in Antarctica: a multi-instrument, multi-platform comparison of capabilities. abstract G33B-0689 In: *AGU Fall Meeting, San Francisco, 9-13 December 2019*. [Washington, D.C.]: American Geophysical Union.
- Potter, S.H. 2019** Why do people respond in different ways to warnings about natural hazards? p. 47 In: Christophersen, A.; Bailey, L.; Cavana, R.Y. *Risk and Decision-Making Conference 2019: how different aspects of risk underpin responsible and culturally-appropriate decision-making, 13-14 November 2019, Rutherford House, Wellington, New Zealand*. Lower Hutt, N.Z.: GNS Science. GNS Science miscellaneous series 133
- Power, W.L.; Gusman, A.R.; Wang, X.; Burbidge, D.R.; Lukovic, B.; Black, J. 2019** Tsunami hazards of the Ross Sea, Antarctica. p. 160 In: Kamp, P.J.J.; Pittari, A. (eds) *Abstract volume: Geosciences 2019, 24-27 November 2019, Hamilton*. Wellington, N.Z.: Geoscience Society of New Zealand. Geoscience Society of New Zealand miscellaneous publication 155A
- Pradel, G.J.; Pecher, I.A.; Strachan, L.J.; Crutchley, G.J.; Kroeger, K.F. 2019** Analysis of fluid flow systems and links to potential gas hydrate deposits in the northern Taranaki Basin, New Zealand. In: Beggs, M. (convener) *AAPG Asia Pacific Region Geosciences Technology Workshop: gas hydrates - from potential geohazard to carbon-efficient fuel?* Tulsa, Okla.: AAPG.
- Pure, L.; Wilson, C.; Townsend, D.B.; Leonard, G.S.; Calvert, A.; Cole, R.; Conway, C.; Gamble, J. 2019** New perspectives from mapping and high-resolution $^{40}\text{Ar}/^{39}\text{Ar}$ dating of Tongariro Volcano, New Zealand: implications for stratovolcano lifecycles and glacio-volcanic interactions. p. 218 In: Kamp, P.J.J.; Pittari, A. (eds) *Abstract volume: Geosciences 2019, 24-27 November 2019, Hamilton*. Wellington, N.Z.: Geoscience Society of New Zealand. Geoscience Society of New Zealand miscellaneous publication 155A

- Rae, A.J. 2019** Understanding geothermal resources in the Taiwanese orogeny: insights from the Southern Alps of New Zealand. abstract 8-Rae_GNS In: *1st Philippine International Geothermal Conference October 2-3, 2019, Marquis Events Place, Bonifacio Global City, Philippines*. Bonifacio Global City: National Geothermal Association of the Philippines.
- Rajanayaka, C.; Elliot, S.; Yang, J.; Shankar, U.; White, J.T.; Kees, L.; Hadfield, J. 2019** Simple integrated surface water-groundwater contaminant transport model. p. 129-130 In: *NZ Hydrological Society Conference 3-6 December 2019, Rotorua, NZ: oral abstracts*. [Wellington, N.Z.]: New Zealand Hydrological Society.
- Rapley, C.M.J.; Godfrey, H.J.; Banks, M.P.; Dohig, R.K.; Fromont, A.; Helliwell, M.; Legenkyy, A.; McClintock, J.D.B.; O'Hagan, S.; Potaka, G.; Presow, K.M.; Pritchard-Thorsen, R.; Tate, R.; Thomas-Long, A.; Watson, E.; Wright, K.R.; Wylie-Cheer, B.; Zirk, C. 2019** The National Geohazards Monitoring Centre: operations and event responses. p. 162 In: Kamp, P.J.J.; Pittari, A. (eds) *Abstract volume: Geosciences 2019, 24-27 November 2019, Hamilton*. Wellington, N.Z.: Geoscience Society of New Zealand. Geoscience Society of New Zealand miscellaneous publication 155A
- Rattenbury, M.S. 2019** Increasing accessibility and interoperability of New Zealand geoscience information for mineral exploration. p. 293-296 In: Sims, D. (chair) *PACRIM 2019, 3-5 April 2019, Auckland, New Zealand*. Carlton, Vic.: Australasian Institute of Mining and Metallurgy. Publication series / Australasian Institute of Mining and Metallurgy 1/2019
- Reeves, R.R.; Mroczek, E.K.; Sanders, F.; Brakenrig, T. 2019** Mangawhai groundwater quality: unravelling the salt water intrusion and low-temperature geothermal puzzle. p. 131-132 In: *NZ Hydrological Society Conference 3-6 December 2019, Rotorua, NZ: oral abstracts*. [Wellington, N.Z.]: New Zealand Hydrological Society.
- Reifstahl, F.; Gohl, K.; Davy, B.W.; Hoernle, K.; Mortimer, N.; Werner, R.; Timm, C.; Hochmuth, K. 2019** The evolution of the southern Chatham Rise margin: Cretaceous rifting and initialisation of seafloor spreading between Zealandia and Antarctica. abstract EGU2019-3287 In: *European Geosciences Union General Assembly 2019, Vienna, Austria, 7-12 April 2019*. Goettingen, Germany: Copernicus Gesellschaft. Geophysical research abstracts 21
- Reyes, A.G.; Christenson, B.W. 2019** Magmatic-hydrothermal ore-metal mineralization in the Taupo Volcanic Zone (TVZ), New Zealand. abstract 2816 In: *Goldschmidt 2019 abstracts*. Cambridge, U.K.: White Iron Conferences Limited.
- Rhoades, D.A.; Christophersen, A. 2019** Compensation of a medium-term earthquake forecasting model for time-lag with application to central New Zealand. abstract IUGG19-0887 In: *27th IUGG General Assembly, July 8-18 Juillet 2019, Montréal, Canada*. Prague: C-IN.
- Rhodes, E.; Elliott, J.; Moore, J.; Wilkinson, M.; Dolan, J.; Zinke, R.; Hatem, A.; Van Dissen, R.J. 2019** Relating spatial and temporal fault complexity to landscape development: comparing the Mw7.8 Kaikoura earthquake of 2016 to past behaviour of the Marlborough Fault System, New Zealand. abstract EGU2019-6570 In: *European Geosciences Union General Assembly 2019, Vienna, Austria, 7-12 April 2019*. Goettingen, Germany: Copernicus Gesellschaft. Geophysical research abstracts 21
- Rhodes, E.; Ivester, A.; Dolan, J.F.; Van Dissen, R.J.; Little, T. 2019** Novel approaches to improve robustness of K-feldspar IRSL age estimates of sediment from active tectonic contexts. abstract T41H-0350 In: *AGU Fall Meeting, San Francisco, 9-13 December 2019*. [Washington, D.C.]: American Geophysical Union.

- Ries, W.F.; Archibald, G.C.; Jones, K.E.; Massey, C.I.; Glade, T. 2019** Calculating cascading and cumulative error at multiple scales for landslide runout modelling and hazard zonation. abstract EGU2019-7076 In: *European Geosciences Union General Assembly 2019, Vienna, Austria, 7-12 April 2019*. Goettingen, Germany: Copernicus Gesellschaft. Geophysical research abstracts 21
- Rigo, M.; Onoue, T.; Tanner, L.H.; Lucas, S.G.; Godfrey, L.; Katz, M.E.; Zaffani, M.; Grice, K.; Cesar, J.; Yamashita, D.; Maron, M.; Tackett, L.; Campbell, H.J.; Tateo, F.; Concheri, G.; Agnini, C.; Chiari, M.; Bertinelli, A. 2019** Chaotic late Triassic carbon and the overlooked extinction at the Norian-Rhaetian boundary. abstract B41H-2479 In: *AGU Fall Meeting, San Francisco, 9-13 December 2019*. [Washington, D.C.]: American Geophysical Union.
- Rissmann, C.W.F.; Pearson, L.K.; Beyer, M.; Couldrey, M.A.; Lindsay, J.; Martin, A.P.; Baisden, W.T.; Clough, T.J.; Horton, T.W.; Webster-Brown, J.G. 2019** A hydrochemically guided landscape classification system for modelling spatial variation in multiple water quality indices: process-attribute mapping. p. 166 In: Kamp, P.J.J.; Pittari, A. (eds) *Abstract volume: Geosciences 2019, 24-27 November 2019, Hamilton*. Wellington, N.Z.: Geoscience Society of New Zealand. Geoscience Society of New Zealand miscellaneous publication 155A
- Rodger, C.; Cliverd, M.A.; Martin, I.; Dalzell, M.; Brundell, J.B.; Mac Manus, D.H.; Divett, T.; Thomson, N.R.; Petersen, T.; Obana, Y. 2019** Geomagnetically induced currents and harmonic distortion: looking system wide for evidence of stress. abstract IUGG19-0434 In: *27th IUGG General Assembly, July 8-18 Juillet 2019, Montréal, Canada*. Prague: C-IN.
- Rogers, K.M.; Turnbull, R.E.; Martin, A.P.; Rattenbury, M.S.; Jeanpert, J.; Rakowski, D.; Zhang, Y.; Liu, Z. 2019** Digging into the human and geological impacts recorded by geochemical and isotopic fingerprints in soils from New Zealand and Loyalty Islands. p. 105-106 In: *ICEO & SI 2019: International Conference on Earth Observations and Societal Impacts, 23-26 June, Tainan, Taiwan: program guide*. Tainan City, Taiwan: National Cheng Kung University.
- Rogers, K.M.; van der Raaij, R.W.; Morgenstern, U. 2019** Quantifying actual denitrification in groundwater systems. p. 211-212 In: *NZ Hydrological Society Conference 3-6 December 2019, Rotorua, NZ: poster abstracts*. [Wellington, N.Z.]: New Zealand Hydrological Society.
- Rotella, M.; Wilson, C.; Leonard, G.S.; Lube, G. 2019** The ECLIPSE programme: reducing uncertainty around future unrest and eruption in the central Taupo Volcanic Zone. p. 170 In: Kamp, P.J.J.; Pittari, A. (eds) *Abstract volume: Geosciences 2019, 24-27 November 2019, Hamilton*. Wellington, N.Z.: Geoscience Society of New Zealand. Geoscience Society of New Zealand miscellaneous publication 155A
- Rotich, E.; Handler, M.; Naeher, S.; Selby, D.; Hollis, C.J.; Sykes, R. 2019** Re-Os depositional age and geochemistry of the late Paleocene Waipawa Formation, New Zealand. abstract 2886 In: *Goldschmidt 2019 abstracts*. Cambridge, U.K.: White Iron Conferences Limited.
- Rutter, H.; Cox, S.C. 2019** Lessons learnt in shallow groundwater monitoring in urban areas: the Christchurch experience. abstract 329 In: *NCGRT/IAH Australasian Groundwater Conference 2019*. Adelaide, S.A.: National Centre for Groundwater Research and Training.
- Ryan, M.; Newnham, R.; Dunbar, G.; Vandergoes, M.J.; Neil, H.; Steph, S.; Alloway, B.; Bostock, H.; Sabaa, A.; Hayward, B.; Prebble, J.G.; Heusser, L.; Scott, G.H.; Rees, A.; Tiedemann, R.; Li, X. 2019** Vegetation and climate reconstruction from marine cores east and west of South Island, New Zealand, during past interglacials. abstract P-4499 In: *INQUA 2019, Dublin, Ireland: 20th Congress of the International Union for Quaternary Research (INQUA)*.

- Saffer, D.M.; Wallace, L.M.; Araki, E.; Kopf, A. 2019** Recurring and triggered slow slip events near the trench along the Nankai subduction thrust documented by offshore borehole observatories (Invited). abstract T54D-02 In: *AGU Fall Meeting, San Francisco, 9-13 December 2019*. [Washington, D.C.]: American Geophysical Union.
- Sagar, M.W.; Higgs, K.E.; Strogon, D.P.; Browne, G.H.; Bland, K.J.; Seward, D. 2019** Sediment provenance adjacent to the Australian-Pacific plate boundary: preliminary results from the Murchison Basin. p. 173 In: Kamp, P.J.J.; Pittari, A. (eds) *Abstract volume: Geosciences 2019, 24-27 November 2019, Hamilton*. Wellington, N.Z.: Geoscience Society of New Zealand. Geoscience Society of New Zealand miscellaneous publication 155A
- Sahoo, T.R.; Browne, G.H.; Nicol, A. 2019** Influence of pre-existing basement fabric on the formation of rift fault systems in the Great South Basin. p. 174 In: Kamp, P.J.J.; Pittari, A. (eds) *Abstract volume: Geosciences 2019, 24-27 November 2019, Hamilton*. Wellington, N.Z.: Geoscience Society of New Zealand. Geoscience Society of New Zealand miscellaneous publication 155A
- Sangiorgi, F.; Wubben, E.; Browne, I.M.; Shevenell, A.; Dodd, J.P.; Prebble, J.G.; Seki, O.; Ash, J.; Griffin, B.; Esper, O.; Harwood, D.M.; Bijl, P.; Mckay, R.M.; De Santis, L.; Kulhanek, D.K. 2019** Ocean properties and Antarctic cryosphere dynamics during the early and middle Miocene: results from the IODP Expedition 374 (Ross Sea). abstract PP21B-1602 In: *AGU Fall Meeting, San Francisco, 9-13 December 2019*. [Washington, D.C.]: American Geophysical Union.
- Sarris, T.S.; Close, M.E.; Moore, C.R. 2019** Denitrification parameter uncertainty under uncertain redox conditions. abstract 274 In: *NCGRT/IAH Australasian Groundwater Conference 2019*. Adelaide, S.A.: National Centre for Groundwater Research and Training.
- Savran, W.; Rhoades, D.A.; Marzocchi, W.; Michael, A.; Jackson, D.; Werner, M. 2019** Evaluating simulation-based earthquake forecasts with examples from UCERF3-ETAS. abstract S14p-128 In: *27th IUGG General Assembly, July 8-18 Juillet 2019, Montréal, Canada*. Prague: C-IN.
- Savran, W.H.; Maechling, P.J.; Werner, M.J.; Schorlemmer, D.; Rhoades, D.A.; Marzocchi, W.; Yu, J.; Jordan, T. 2019** The collaboratory for the study of earthquake predictability version 2 (CSEP2): testing forecasts that generate synthetic earthquake catalogs. abstract EGU2019-12445 In: *European Geosciences Union General Assembly 2019, Vienna, Austria, 7-12 April 2019*. Goettingen, Germany: Copernicus Gesellschaft. Geophysical research abstracts 21
- Savran, W.H.; Milner, K.R.; Jordan, T.H.; Field, E.H.; Michael, A.J.; Rhoades, D.A.; Jackson, D.D.; Werner, M.J. 2019** Pseudo-prospective evaluation of aftershock forecasts during the Ridgecrest sequence. abstract S31G-0512 In: *AGU Fall Meeting, San Francisco, 9-13 December 2019*. [Washington, D.C.]: American Geophysical Union.
- Schaefer, L.; Kereszturi, G.; Kennedy, B.; Douglas, A.; Miller, C.A. 2019** Large-scale volcano geotechnical mapping combining hyperspectral imagery and physical rock properties. abstract IUGG19-3419 In: *27th IUGG General Assembly, July 8-18 Juillet 2019, Montréal, Canada*. Prague: C-IN.

- Scheele, F.R.; Wilson, T.; Becker, J.S.; Horspool, N.A. 2019** Modelling post-disaster habitability, human displacement and population needs. p. 45 In: Christophersen, A.; Bailey, L.; Cavana, R.Y. *Risk and Decision-Making Conference 2019: how different aspects of risk underpin responsible and culturally-appropriate decision-making, 13-14 November 2019, Rutherford House, Wellington, New Zealand*. Lower Hutt, N.Z.: GNS Science. GNS Science miscellaneous series 133
- Scheu, B.; Montanaro, C.; Cronin, S.J.; Kennedy, B.; Scott, B.J.; Dingwell, D.B. 2019** The role of lithology in steam-driven eruptions and its effect on energy partitioning and crater morphology. abstract V43G-0180 In: *AGU Fall Meeting, San Francisco, 9-13 December 2019*. [Washington, D.C.]: American Geophysical Union.
- Schorlemmer, D.; Hirata, N.; Cotton, F.; Gerstenberger, M.C.; Marzocchi, W.; Werner, M.; Wiemer, S.; Jordan, T.; Beutin, T.; Jackson, D.; Maechling, P.; Mak, S.; Nanjo, K.; Ogata, Y.; Rhoades, D.A.; Strader, A.; Tsuruoka, H.; Weatherill, G.; Zhuang, J.; Savran, W. 2019** Increasing earthquake forecast testability: CSEP future developments. abstract EGU2019-10357-1 In: *European Geosciences Union General Assembly 2019, Vienna, Austria, 7-12 April 2019*. Goettingen, Germany: Copernicus Gesellschaft. Geophysical research abstracts 21
- Schorlemmer, D.; Rhoades, D.A. 2019** How well constrained is earthquake hazard in low-seismicity regions? abstract IUGG19-0608 In: *27th IUGG General Assembly, July 8-18 Juillet 2019, Montréal, Canada*. Prague: C-IN.
- Schwartz, J.J.; Ringwood, M.; Turnbull, R.E.; Tulloch, A.J. 2019** Lower-plate controls on magmatic tempos in the Zealandia cordillera. abstract 214-3 In: *2019 GSA Annual Meeting in Phoenix, Arizona, USA - 2019*. Boulder, Colo.: Geological Society of America. Abstracts with programs / Geological Society of America 51(5)
- Schäfer, F.; Jousset, P.; Hinderer, J.; Brehme, M.; Erbas, K.; Jolly, A.D.; Männel, B.; Portier, N.; Rosat, S.; Schöne, T.; Schröder, S.; Voigt, C.; Warburton, R.; Güntner, A. 2019** Continuous high resolution gravity measurements at a geothermal field in northern Iceland. abstract EGU2019-16472 In: *European Geosciences Union General Assembly 2019, Vienna, Austria, 7-12 April 2019*. Goettingen, Germany: Copernicus Gesellschaft. Geophysical research abstracts 21
- Scully, A.; McNamara, D.D.; Piazzolo, S.; Chambefort, I. 2019** Microstructural and physiochemical processes influencing fracture sealing in geothermal systems. p. [112] In: *The Tectonic Studies Group Annual General Meeting, 14-16 January, 2019, University of Bergen*.
- Seebeck, H.; Thrasher, G.P.; Viskovic, G.P.D. 2019** Inversion history of the northern Tasman Ridge, Taranaki Basin, New Zealand: implications for petroleum migration and accumulation. p. 179 In: Kamp, P.J.J.; Pittari, A. (eds) *Abstract volume: Geosciences 2019, 24-27 November 2019, Hamilton*. Wellington, N.Z.: Geoscience Society of New Zealand. Geoscience Society of New Zealand miscellaneous publication 155A
- Shen, Y.; Whittaker, C.N.; Lane, E.M.; White, J.D.L.; Power, W.L.; Nomikou, P. 2019** Experimental studies of tsunamis generated by submarine volcanic eruptions. p. 72 In: *New Zealand Coastal Society - Te Hunga Takutai o Aotearoa annual conference: Life on the edge - Mataora kei runga i te Tapatai, November 12th - 15th in Murihiku - Invercargill*. [Auckland, N.Z.]: New Zealand Coastal Society.

- Shevenell, A.; Gulick, S.; Naish, T.R.; Leventer, A.; Williams, T.; van De Flierdt, T.; Warny, S.; Armand, L.; Levy, R.H.; Aitken, A.; Uenzelmann-Neben, G.; McKay, R.; Stoner, J.; Biddle, J.; Thompson, A. 2019** East Antarctic Ice Sheet evolution and paleoclimate of the Aurora Subglacial Basin since the Late Cretaceous: proposed geologic drilling on the Sabrina Coast continental shelf. abstract A404 In: *ISAES 2019: XIII International Symposium on Antarctic Earth Sciences, 22-26 July 2019, Songdo Convensia, Incheon, South Korea: abstract list - oral*. Incheon, Republic of Korea: ISAES.
- Sigmundsson, F.; Gudmundsson, M.T.; Vogfjord, K.; Ofeigsson, B.G.; Einarsson, P.; Parks, M.; Halldorsson, S.A.; Jonsdottir, K.; Geirsson, H.; Hooper, A.; Hreinsdottir, S. 2019** Lessons learned from monitoring and studies of recent Icelandic eruptions: precursors, eruption dynamics and timescales. abstract IUGG19-1799 In: *27th IUGG General Assembly, July 8-18 Juillet 2019, Montréal, Canada*. Prague: C-IN.
- Simons, B.; Cronin, S.; Eccles, J.; Bebbington, M.; Jolly, A.D. 2019** Spatiotemporal variations in eruption style, magnitude and vent morphology at Yasur Volcano, Vanuatu: insights into the conduit system. p. 184 In: Kamp, P.J.J.; Pittari, A. (eds) *Abstract volume: Geosciences 2019, 24-27 November 2019, Hamilton*. Wellington, N.Z.: Geoscience Society of New Zealand. Geoscience Society of New Zealand miscellaneous publication 155A
- Simons, B.; Jolly, A.D.; Cronin, S.; Eccles, J. 2019** Spatiotemporal relationship between two closely-spaced Strombolian-style vents, Yasur, Vanuatu. p. 183 In: Kamp, P.J.J.; Pittari, A. (eds) *Abstract volume: Geosciences 2019, 24-27 November 2019, Hamilton*. Wellington, N.Z.: Geoscience Society of New Zealand. Geoscience Society of New Zealand miscellaneous publication 155A
- Simpson, M.P. 2019** Alteration in epithermal Au-Ag and geothermal systems in New Zealand: insights for mineral exploration. p. 149-153 In: Sims, D. (chair) *PACRIM 2019, 3-5 April 2019, Auckland, New Zealand*. Carlton, Vic.: Australasian Institute of Mining and Metallurgy. Publication series / Australasian Institute of Mining and Metallurgy 1/2019
- Smillie, R.W.; Christie, A.B.; Durance, P.M.J.; Hill, M.P.; Martin, A.P.; Mortimer, N.; Rattenbury, M.S. 2019** The mineral systems of the Zealandia continent: 500 million years and counting. p. 297-299 In: Sims, D. (chair) *PACRIM 2019, 3-5 April 2019, Auckland, New Zealand*. Carlton, Vic.: Australasian Institute of Mining and Metallurgy. Publication series / Australasian Institute of Mining and Metallurgy 1/2019
- Smith, J.R.; Leveneur, J.; Fang, F.; Kennedy, J.V. 2019** Intelligent surfaces for energy intensive processing industry. p. 46 In: *MMPD 2019: the 2nd International Symposium on Materials, Manufacturing Processes and Devices, 15-17 February 2019, Auckland, New Zealand*. [Auckland, N.Z.]: University of Auckland.
- Stahl, T.; Kearse, J.; Howell, A.; Clark, K.J.; Nicol, A.; Pettinga, J.R.; Villamor, P.; Amos, C.B. 2019** Extreme surface rupture complexity and fault kinematics revealed by differential photogrammetry of the Kaikoura, New Zealand earthquake. abstract 162-3 In: *2019 GSA Annual Meeting in Phoenix, Arizona, USA - 2019*. Boulder, Colo.: Geological Society of America. Abstracts with programs / Geological Society of America 51(5)

- Stenger, R.; Friedel, M.J.; Wilson, S.R.; Rivas, A.; Clague, J.C.; Fuller, R.; Wöhling, T.; Miller, B.; Barkle, G.F.; Journeaux, P.; Eger, A.; Lilburne, L.; McDowell, R.W.; Morgenstern, U.; Kusabs, I.; Woodward, S.J.R. 2019** Critical Pathways: Unravelling sub-catchment scale nitrogen delivery to waterways. p. 98 In: Kronvang, B.; Fraters, D.; Kovar, K. (compilers) *International Interdisciplinary Conference on Land Use and Water Quality: agriculture and the environment: Aarhus, Denmark 3-6 June 2019: volume of abstracts*. Aarhus: Aarhus University.
- Stevens, D.; McNeill, L.C.; Henstock, T.; Bell, R.E.; Bangs, N.L.; Avendonk, H.J.; Crutchley, G.J.; Henrys, S.A.; Barker, D.H.N.; Bassett, D. 2019** Variations in structure on the southern Hikurangi subduction zone. abstract T51F-0359 In: *AGU Fall Meeting, San Francisco, 9-13 December 2019*. [Washington, D.C.]: American Geophysical Union.
- Stewart, M.K.; Aitchison-Earl, P. 2019** Denitrification imprint on nitrate in oxygenated groundwater. p. 158-159 In: *NZ Hydrological Society Conference 3-6 December 2019, Rotorua, NZ: oral abstracts*. [Wellington, N.Z.]: New Zealand Hydrological Society.
- Stewart, M.K.; van der Raaij, R.W.; Scott, L.; Etheridge, Z. 2019** Update on carbon dating of Christchurch groundwater. p. 156-157 In: *NZ Hydrological Society Conference 3-6 December 2019, Rotorua, NZ: oral abstracts*. [Wellington, N.Z.]: New Zealand Hydrological Society.
- Strogen, D.P.; Seebeck, H.C.; Bland, K.J.; Hines, B.R. 2019** Zealandia-wide palinspastic paleogeography from the mid-Cretaceous to Pliocene. p. 190 In: Kamp, P.J.J.; Pittari, A. (eds) *Abstract volume: Geosciences 2019, 24-27 November 2019, Hamilton*. Wellington, N.Z.: Geoscience Society of New Zealand. Geoscience Society of New Zealand miscellaneous publication 155A
- Stucker, V.K.; de Ronde, C.E.J. 2019** Hydrothermal fluid chemistry at Brothers submarine arc volcano. p. 218 In: Sims, D. (chair) *PACRIM 2019, 3-5 April 2019, Auckland, New Zealand*. Carlton, Vic.: Australasian Institute of Mining and Metallurgy. Publication series / Australasian Institute of Mining and Metallurgy 1/2019
- Sturkell, E.C.; Geirsson, H.; Sigmundsson, F.; Ofeigsson, B.; Guðmundsson, G.; Einarsson, P.; Hreinsdóttir, S.; Pálsson, F. 2019** The magma induced deformation cycle at the Grímsvötn volcano, Iceland. abstract V52C-08 In: *AGU Fall Meeting, San Francisco, 9-13 December 2019*. [Washington, D.C.]: American Geophysical Union.
- Sullivan, N.B.; Meyers, S.R.; Levy, R.H.; Sadler, P.; Crampton, J.S.; Mckay, R.M. 2019** Astronomical forcing of the Antarctic Ice Sheet and strategies for integrating proxy data into regional chronostratigraphic frameworks generated by constrained optimization (CONOP). abstract PP44A-08 In: *AGU Fall Meeting, San Francisco, 9-13 December 2019*. [Washington, D.C.]: American Geophysical Union.
- Sun, T.; Saffer, D.M.; Ellis, S.M. 2019** Generation of sediment under-consolidation and low seismic V_p in subduction forearcs: the role of megathrust geometry in modulating tectonic loading. abstract T51F-0344 In: *AGU Fall Meeting, San Francisco, 9-13 December 2019*. [Washington, D.C.]: American Geophysical Union.
- Suschke, K.; Gupta, P.S.; Williams, G.V.M.; Hübner, R.; Kennedy, J.V.; Markwitz, A. 2019** Near-surface cobalt implantation into amorphous carbon films: observation of complex magnetic nanostructures and multiple magnetic phases. abstract C90 In: *AMN9, 10-14 February 2019, Te Papa, Wellington, New Zealand: [abstracts]*. Wellington, N.Z.: MacDiarmid Institute for Advanced Materials and Nanotechnology.

- Sykes, R. 2019** Chemometric classification of terrestrial oil families in Taranaki Basin, New Zealand: higher plant trends and migration contamination effects. abstract 90349 In: *AAPG Hedberg Conference: the evolution of petroleum systems analysis: changing of the guard from late mature experts to peak generating staff, March 4-6, 2019, Houston, Texas: abstracts*. AAPG.
- Sykes, R.; Johansen, P.-E. 2019** Retardation of diamondoid generation and isomerisation in coals and implications for calibrating maturities of coal-sourced oils. P159; [doi: 10.3997/2214-4609.201902889](https://doi.org/10.3997/2214-4609.201902889) In: *29th International Meeting on Organic Geochemistry (IMOG), 1-6 September 2019, Gothenburg, Sweden*. European Association of Organic Geochemists.
- Tallon, J.L.; Storey, J.G.; Kennedy, J.V. 2019** The long road to room temperature superconductivity - basically there, but... abstract C43 In: *AMN9, 10-14 February 2019, Te Papa, Wellington, New Zealand: [abstracts]*. Wellington, N.Z.: MacDiarmid Institute for Advanced Materials and Nanotechnology.
- Tapuke, S.H.; Kenney, C.; Johnston, D.M.; Proctor, J.; Wilson, C.J.N.; Leonard, G.S.; Smith, B. 2019** Mapping waiata koroua (traditional prose) and purakau (stories) of volcanic unrest of the Tarawera Eruption, 1886; and its relevance to contemporary natural hazards preparedness and response (Invited). abstract PA44B-01 In: *AGU Fall Meeting, San Francisco, 9-13 December 2019*. [Washington, D.C.]: American Geophysical Union.
- Terezow, M.; Gard, H.J.L. 2019** Nga korero mai i nga wa o mua: stories form a distant past revealed by the National Paleontological Collection. p. 197 In: Kamp, P.J.J.; Pittari, A. (eds) *Abstract volume: Geosciences 2019, 24-27 November 2019, Hamilton*. Wellington, N.Z.: Geoscience Society of New Zealand. Geoscience Society of New Zealand miscellaneous publication 155A
- Thomas, K.-L.; Wilson, T.; Crowley, K.; Hughes, M.; Jack, H.; King, D.; Lane, E.; Johnston, D.M.; Leonard, G.S. 2019** Diverse participation to co-develop a community-based tsunami risk assessment for the Chatham Islands, Aotearoa New Zealand. p. 41 In: Christophersen, A.; Bailey, L.; Cavana, R.Y. *Risk and Decision-Making Conference 2019: how different aspects of risk underpin responsible and culturally-appropriate decision-making, 13-14 November 2019, Rutherford House, Wellington, New Zealand*. Lower Hutt, N.Z.: GNS Science. GNS Science miscellaneous series 133
- Timm, C.; Hannington, M.; Portnyagin, M.; De Ronde, C.E.J.; Leybourne, M.; Arculus, R.J. 2019** GoldTrace: tracking the origin of precious metals in seafloor arc lavas. p. 219-222 In: Sims, D. (chair) *PACRIM 2019, 3-5 April 2019, Auckland, New Zealand*. Carlton, Vic.: Australasian Institute of Mining and Metallurgy. Publication series / Australasian Institute of Mining and Metallurgy 1/2019
- Timm, C.; Portnyagin, M.; de Ronde, C.E.J.; Hannington, M.; Hoernle, K.; Arculus, R. 2019** Tracking the source of Cu, Ag and Au in intraoceanic Kermadec arc glasses, SW Pacific. abstract 3378 In: *Goldschmidt 2019 abstracts*. Cambridge, U.K.: White Iron Conferences Limited.
- Timm, C.; de Ronde, C.E.J.; Hoernle, K.; Cousens, B.; Wartho, J.-A.; Hauff, F.; Caratori Tontini, F. 2019** Colville and Kermadec Ridge age and geochemistry: new insights into the proto-Kermadec Arc petrogenesis and arc splitting, SW Pacific. abstract 3377 In: *Goldschmidt 2019 abstracts*. Cambridge, U.K.: White Iron Conferences Limited.

- Tinto, K.J.; Bell, R.E.; Padman, L.; Springer, S.R.; Siddoway, C.S.; Fricker, H.A.; Porter, D.F.; Das, I.; Mosbeux, C.; Caratori Tontini, F.; Black, J. 2019** New insights into Ross Ice Shelf stability over broad timescales from high-resolution ROSETTA-Ice survey (Invited). abstract C13A-01 In: *AGU Fall Meeting, San Francisco, 9-13 December 2019*. [Washington, D.C.]: American Geophysical Union.
- Toews, M.W.; Hemmings, B. 2019** A surface water network method for generalising streams and rapid groundwater model development. p. 166-167 In: *NZ Hydrological Society Conference 3-6 December 2019, Rotorua, NZ: oral abstracts*. [Wellington, N.Z.]: New Zealand Hydrological Society.
- Trompetter, W.J.; Leveneur, J.; Kennedy, J.V.; McCurdy, M. 2019** Development of NZ natural magnetic minerals for inroad charging systems. p. 95 In: *MMPD 2019: the 2nd International Symposium on Materials, Manufacturing Processes and Devices, 15-17 February 2019, Auckland, New Zealand*. [Auckland, N.Z.]: University of Auckland.
- Truax, O.; Riesselman, C.; Wilson, G.; Parker, R.; Lee, J.I.; Yoo, K.-C.; Levy, R.H. 2019** Holocene paleoceanographic evolution at the Ross Sea-Southern Ocean interface. p. 55 In: *Our future in focus: New Zealand Antarctic Science Conference 2019, 17-19 June 2019 Christchurch Town Hall*. Christchurch, N.Z.: New Zealand Antarctic Research Institute.
- Truax, O.; Riesselman, C.; Wilson, G.; Parker, R.; Yoo, K.-C.; Lee, J.I.; Levy, R.H. 2019** Holocene paleoceanographic evolution at the Ross Sea - Southern Ocean interface. abstract A238 In: *ISAES 2019: XIII International Symposium on Antarctic Earth Sciences, 22-26 July 2019, Songdo Convensia, Incheon, South Korea: abstract list - poster (Wed/Thu)*. Incheon, Republic of Korea: ISAES.
- Tschritter, C.; Westerhoff, R.S. 2019** Update on the development of the new groundwater research programme at GNS Science. p. 168 In: *NZ Hydrological Society Conference 3-6 December 2019, Rotorua, NZ: oral abstracts*. [Wellington, N.Z.]: New Zealand Hydrological Society.
- Turco, F.; Gorman, A.; Crutchley, G.J. 2019** Gas hydrate characterization on New Zealand's southern Hikurangi margin: Glendhu and Honeycomb ridges. In: Beggs, M. (convener) *AAPG Asia Pacific Region Geosciences Technology Workshop: gas hydrates - from potential geohazard to carbon-efficient fuel?* Tulsa, Okla.: AAPG.
- Turnbull, R.E.; Hill, M.P.; Morgenstern, R.; Rosenberg, M.D. 2019** Lithium mineral potential modelling in the Taupo Volcanic Zone. p. 83 In: Kamp, P.J.J.; Pittari, A. (eds) *Abstract volume: Geosciences 2019, 24-27 November 2019, Hamilton*. Wellington, N.Z.: Geoscience Society of New Zealand. Geoscience Society of New Zealand miscellaneous publication 155A
- Turnbull, R.E.; Martin, A.P.; Rogers, K.M.; Rattenbury, M.S. 2019** The geochemical fingerprints of human impact on urban Dunedin soils. p. 203 In: Kamp, P.J.J.; Pittari, A. (eds) *Abstract volume: Geosciences 2019, 24-27 November 2019, Hamilton*. Wellington, N.Z.: Geoscience Society of New Zealand. Geoscience Society of New Zealand miscellaneous publication 155A
- Upton, P.; Craw, D.; Reyners, M.E.; Eberhart-Phillips, D. 2019** Regional crustal structure, fluid and metal transport pathways of Otago illuminated by geophysics. p. 260-262 In: Sims, D. (chair) *PACRIM 2019, 3-5 April 2019, Auckland, New Zealand*. Carlton, Vic.: Australasian Institute of Mining and Metallurgy. Publication series / Australasian Institute of Mining and Metallurgy 1/2019

- Upton, P.; Howarth, J.D.; Koons, P.O.; Roy, S.G.; Song, B.R.; Croissant, T.; Hilton, R.G. 2019** What controls slope angles adjacent to the Alpine Fault, New Zealand: strength, anisotropy, tectonics or a combination? abstract EP22A-05 In: *AGU Fall Meeting, San Francisco, 9-13 December 2019*. [Washington, D.C.]: American Geophysical Union.
- Upton, P.; Koons, P.; Richmond, N.; Roy, S. 2019** The Failure Earth Response Model (FERM): a unifying framework to explore dynamic tectonic landscapes. abstract EGU2019-11223 In: *European Geosciences Union General Assembly 2019, Vienna, Austria, 7-12 April 2019*. Goettingen, Germany: Copernicus Gesellschaft. Geophysical research abstracts 21
- Upton, P.; Massey, C.I.; Brideau, M.-A. 2019** Topographic stresses and shear stress an indicator of slopes prone to seismic failure. abstract EP51F-2178 In: *AGU Fall Meeting, San Francisco, 9-13 December 2019*. [Washington, D.C.]: American Geophysical Union.
- van den Berg, E.; Stirling, M.W.; Barrell, D.J.A. 2019** Paleoseismology of the NW Cardrona Fault, Central Otago. p. 207 In: Kamp, P.J.J.; Pittari, A. (eds) *Abstract volume: Geosciences 2019, 24-27 November 2019, Hamilton*. Wellington, N.Z.: Geoscience Society of New Zealand. Geoscience Society of New Zealand miscellaneous publication 155A
- van der Raaij, R.W.; Trompeter, V. 2019** Creating a groundwater isoscape for New Zealand. p. 171 In: *NZ Hydrological Society Conference 3-6 December 2019, Rotorua, NZ: oral abstracts*. [Wellington, N.Z.]: New Zealand Hydrological Society.
- Van Dissen, R.J.; Abbott, E.R.; Zinke, R.; Ninis, D.; Dolan, J.F.; Little, T.A.; Rhodes, E.J.; Litchfield, N.J.; Hatem, A.E. 2019** Millennial-scale slip rate variations on major strike-slip faults in central New Zealand and examples of potential resulting impacts on hazard estimation. p. 208 In: Kamp, P.J.J.; Pittari, A. (eds) *Abstract volume: Geosciences 2019, 24-27 November 2019, Hamilton*. Wellington, N.Z.: Geoscience Society of New Zealand. Geoscience Society of New Zealand miscellaneous publication 155A
- Vega Mercado, F.; Wallace, L.M.; Williams, C.A.; D'Anastasio, E.; Mueller, C. 2019** Slow slip through a machine learning lens. p. 209 In: Kamp, P.J.J.; Pittari, A. (eds) *Abstract volume: Geosciences 2019, 24-27 November 2019, Hamilton*. Wellington, N.Z.: Geoscience Society of New Zealand. Geoscience Society of New Zealand miscellaneous publication 155A
- Vermeer, J.; Quigley, M.; Duffy, B.G.; Langridge, R.M.; Kohn, B.P. 2019** Landscape response to a developing plate boundary fault: Hope-Kelly-Alpine Fault interaction zone, South Island, New Zealand. abstract EP31C-2299 In: *AGU Fall Meeting, San Francisco, 9-13 December 2019*. [Washington, D.C.]: American Geophysical Union.
- Viens, L.; Van Houtte, C. 2019** Improving the precision of seismic monitoring studies with deep learning. abstract S54A-01 In: *AGU Fall Meeting, San Francisco, 9-13 December 2019*. [Washington, D.C.]: American Geophysical Union.
- Wald, D.J.; Quidoriano, V.; Jaiswal, K.; Dewey, J.W.; Spence, R.; Musson, R.; Goded, T. 2019** The future of macroseismic intensity assignments at the U.S. Geological Survey. In: *SSA Annual Meeting announcement, Seismological Society of America technical sessions, 23-26 April 2019, Seattle, Washington*. Albany, Calif.: Seismological Society of America.

- Wang, W.; Savage, M.; Fry, B.; Stern, T.; Hung, S.-H.; Luo, Y.; Lin, P.-Y.P.; Yang, H.-Y.; Kuo, B.-Y. 2019** Studies of seismic velocities in subduction zones from continuous OBS data. p. 211 In: Kamp, P.J.J.; Pittari, A. (eds) *Abstract volume: Geosciences 2019, 24-27 November 2019, Hamilton*. Wellington, N.Z.: Geoscience Society of New Zealand. Geoscience Society of New Zealand miscellaneous publication 155A
- Wang, X.; Holden, C.; Power, W.L.; Mountjoy, J.; Liu, Y. 2019** Seiche effects in Lake Tekapo New Zealand in an MW8.2 Alpine Fault earthquake. p. 212 In: Kamp, P.J.J.; Pittari, A. (eds) *Abstract volume: Geosciences 2019, 24-27 November 2019, Hamilton*. Wellington, N.Z.: Geoscience Society of New Zealand. Geoscience Society of New Zealand miscellaneous publication 155A
- Warren-Smith, E.; Fry, B.; Wallace, L.M.; Bannister, S.; Woods, K.; Mochizuki, K. 2019** Microseismic evidence for episodic fluid release from subducting oceanic crust associated with slow slip in the Northern Hikurangi. abstract T51F-0354 In: *AGU Fall Meeting, San Francisco, 9-13 December 2019*. [Washington, D.C.]: American Geophysical Union.
- Warren-Smith, E.; Townend, J.; Chamberlain, C. 2019** Comparing and contrasting the 9th June and 12th August 2019 M5.5 Fiordland earthquakes: preliminary insights from Dwarfs. p. 213 In: Kamp, P.J.J.; Pittari, A. (eds) *Abstract volume: Geosciences 2019, 24-27 November 2019, Hamilton*. Wellington, N.Z.: Geoscience Society of New Zealand. Geoscience Society of New Zealand miscellaneous publication 155A
- Werner, M.; Marzocchi, W.; Rhoades, D.A.; Savran, W. 2019** Evaluating simulation-based earthquake forecasts. abstract EGU2019-17733 In: *European Geosciences Union General Assembly 2019, Vienna, Austria, 7-12 April 2019*. Goettingen, Germany: Copernicus Gesellschaft. Geophysical research abstracts 21
- Werner, M.; Savran, W.; Maechling, P.; Jordan, T.; Schorlemmer, D.; Rhoades, D.A.; Marzocchi, W.; Yu, J. 2019** An Update on the Collaboratory for the Study of Earthquake Predictability (CSEP). p. 232 In: *Southern California Earthquake Center Annual Meeting 2019: Proceedings volume XXIX, September 7-11, 2019*. Los Angeles, Calif.: Southern California Earthquake Center.
- Werner, M.J.; Savran, W.H.; Rhoades, D.A.; Marzocchi, W.; Jackson, D.D.; Michael, A.J.; Maechling, P.J. 2019** Evaluating simulation-based earthquake forecasts with examples from UCERF3-ETAS. abstract S13D-0464 In: *AGU Fall Meeting, San Francisco, 9-13 December 2019*. [Washington, D.C.]: American Geophysical Union.
- Westerhoff, R.S.; Rawlinson, Z.J.; Kerr, T. 2019** Nationwide estimates of renewable and non-renewable groundwater volumes in New Zealand. p. 176-177 In: *NZ Hydrological Society Conference 3-6 December 2019, Rotorua, NZ: oral abstracts*. [Wellington, N.Z.]: New Zealand Hydrological Society.
- Westerhoff, R.S.; van der Raaij, R.W.; Hemmings, B.; Toews, M.W.; Johnson, P.J.; Zammit, C. 2019** Update on groundwater mapping, monitoring and modelling activities in the New Zealand water model. p. 178 In: *NZ Hydrological Society Conference 3-6 December 2019, Rotorua, NZ: oral abstracts*. [Wellington, N.Z.]: New Zealand Hydrological Society.
- White, P.A.; Davidson, P.; Tschirter, C. 2019** Coastal aquifer systems: facies and groundwater flow. p. 178 In: *NZ Hydrological Society Conference 3-6 December 2019, Rotorua, NZ: oral abstracts*. [Wellington, N.Z.]: New Zealand Hydrological Society.

- White, P.A.; Green, M. 2019** Remarkable record of rainfall recharge at Kaharoa, 2005 to 2019. p. 240 In: *NZ Hydrological Society Conference 3-6 December 2019, Rotorua, NZ: poster abstracts*. [Wellington, N.Z.]: New Zealand Hydrological Society.
- Williams, C.A.; Wallace, L.M.; Bartlow, N.; Haines, A.J. 2019** Development of a slow slip catalog for the Hikurangi subduction margin, New Zealand. p. 232 In: *Southern California Earthquake Center Annual Meeting 2019: Proceedings volume XXIX, September 7-11, 2019*. Los Angeles, Calif.: Southern California Earthquake Center.
- Williams, C.A.; Wallace, L.M.; Bartlow, N.M.; Haines, A.J. 2019** Developing a catalog of slow slip events at the Hikurangi subduction margin, New Zealand. abstract S12B-06 In: *AGU Fall Meeting, San Francisco, 9-13 December 2019*. [Washington, D.C.]: American Geophysical Union.
- Williams, G.V.M.; Kennedy, J.V.; Rubanov, S. 2019** Low energy dual implantation of Ni and Fe into SiO₂ and the formation of Ni_{1-x}Fe_x nanoparticles. abstract T61 In: *AMN9, 10-14 February 2019, Te Papa, Wellington, New Zealand: [abstracts]*. Wellington, N.Z.: MacDiarmid Institute for Advanced Materials and Nanotechnology.
- Williams, J.H.; Wilson, T.M.; Wotherspoon, L.; Hughes, M.; Horspool, N.A.; Lane, E.; Paulik, R. 2019** Tsunami vulnerability of critical infrastructure: development and application of functions for infrastructure impact assessment. abstract NH43D-0958 In: *AGU Fall Meeting, San Francisco, 9-13 December 2019*. [Washington, D.C.]: American Geophysical Union.
- Wilson, C.; Chambefort, I.; Leonard, G.S.; Mauriohooho, K.; Milicich, S.D.; Rosenberg, M.D.; Rowland, J.V.; Villamor, P. 2019** Contrasting evolutionary histories of the Taupo-Reporoa Basin and Western Taupo Rift. p. 219 In: Kamp, P.J.J.; Pittari, A. (eds) *Abstract volume: Geosciences 2019, 24-27 November 2019, Hamilton*. Wellington, N.Z.: Geoscience Society of New Zealand. Geoscience Society of New Zealand miscellaneous publication 155A
- Wilson, G.; Hulbe, C.; Horgan, H.; Levy, R.H.; Gorman, A. 2019** Anatomy of the grounding line of the West Antarctic Ice Sheet at the Kamb Ice Stream. p. 26 In: *Our future in focus: New Zealand Antarctic Science Conference 2019, 17-19 June 2019 Christchurch Town Hall*. Christchurch, N.Z.: New Zealand Antarctic Research Institute.
- Woelz, S.; Watson, S.J.; Mueller, C. 2019** Automatically identifying submarine landslide scars on multibeam data: an attempt. p. 220 In: Kamp, P.J.J.; Pittari, A. (eds) *Abstract volume: Geosciences 2019, 24-27 November 2019, Hamilton*. Wellington, N.Z.: Geoscience Society of New Zealand. Geoscience Society of New Zealand miscellaneous publication 155A
- Woods, K.; Wallace, L.M.; Savage, M.; Webb, S.; Chadwell, D.; Ito, Y.; Mochizuki, K.; Williams, C.A.; Hamling, I.J. 2019** A time-dependent inversion of onshore GNSS time series data for the March - May 2019 slow slip event at the Hikurangi subduction zone. p. 221 In: Kamp, P.J.J.; Pittari, A. (eds) *Abstract volume: Geosciences 2019, 24-27 November 2019, Hamilton*. Wellington, N.Z.: Geoscience Society of New Zealand. Geoscience Society of New Zealand miscellaneous publication 155A
- Yeo, S.; Cox, S.C.; Mager, S. 2019** Hydrochemistry of groundwater in Dunedin, New Zealand. p. 243-244 In: *NZ Hydrological Society Conference 3-6 December 2019, Rotorua, NZ: poster abstracts*. [Wellington, N.Z.]: New Zealand Hydrological Society.

Zammit, C.; Westerhoff, R.S.; Lilburne, L.; Griffiths, J. 2019 Update on the New Zealand water model-hydrology project. p. 185-186 In: *NZ Hydrological Society Conference 3-6 December 2019, Rotorua, NZ: oral abstracts*. [Wellington, N.Z.]: New Zealand Hydrological Society.

Zarour, H.; Palmer, A.S.; Begg, J.G. 2019 Effective representation of the geology in groundwater models of stratified heterogeneous aquifer systems: an example from the lower Manawatu catchment. p. 187-188 In: *NZ Hydrological Society Conference 3-6 December 2019, Rotorua, NZ: oral abstracts*. [Wellington, N.Z.]: New Zealand Hydrological Society.

Zerbst, L.; Greve, A.; Mortimer, N.; Campbell, M.; Rosenbaum, G. 2019 Paleomagnetic field tests on rock samples from the Murihiku Terrane, Southland, New Zealand. abstract EGU2019-14376 In: *European Geosciences Union General Assembly 2019, Vienna, Austria, 7-12 April 2019*. Goettingen, Germany: Copernicus Gesellschaft. Geophysical research abstracts 21

[Top of the Document](#)