

# Steven Micklethwaite

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/930721/publications.pdf>

Version: 2024-02-01

37  
papers

2,213  
citations

331670

21  
h-index

345221

36  
g-index

39  
all docs

39  
docs citations

39  
times ranked

2617  
citing authors

| #  | ARTICLE  | IF  | CITATIONS |
|----|--|-----|-----------|
| 1  | Formation of Mg-carbonates and Mg-hydroxides via calcite replacement controlled by fluid pressure. <i>Contributions To Mineralogy and Petrology</i> , 2021, 176, 1.  | 3.1 | 8         |
| 2  | Reactivation of Magma Pathways: Insights From Field Observations, Geochronology, Geomechanical Tests, and Numerical Models. <i>Journal of Geophysical Research: Solid Earth</i> , 2021, 126, e2020JB021477.      | 3.4 | 8         |
| 3  | Scale matters: The influence of structural inheritance on fracture patterns. <i>Journal of Structural Geology</i> , 2020, 130, 103896.   | 2.3 | 16        |
| 4  | Aseismic Refinement of Orogenic Gold Systems. <i>Economic Geology</i> , 2020, 115, 33-50.  | 3.8 | 38        |
| 5  | Ore shoots in folded and fractured rocks “ Insights from 3D modelling of the Fosterville gold deposit (Victoria, Australia). <i>Ore Geology Reviews</i> , 2020, 118, 103272.                                     | 2.7 | 3         |
| 6  | Dyke apertures record stress accumulation during sustained volcanism. <i>Scientific Reports</i> , 2020, 10, 17335.   | 3.3 | 10        |
| 7  | Magma production along the Lord Howe Seamount Chain, northern Zealandia. <i>Geological Magazine</i> , 2019, 156, 1605-1617.  | 1.5 | 11        |
| 8  | Review of drones, photogrammetry and emerging sensor technology for the study of dykes: Best practises and future potential. <i>Journal of Volcanology and Geothermal Research</i> , 2019, 373, 148-166.         | 2.1 | 64        |
| 9  | Extraction of high-resolution structural orientations from digital data: A Bayesian approach. <i>Journal of Structural Geology</i> , 2019, 122, 106-115.   | 2.3 | 19        |
| 10 | The influence of basement faults on local extension directions: Insights from potential field geophysics and field observations. <i>Basin Research</i> , 2019, 31, 782-807.                                      | 2.7 | 13        |
| 11 | Interpreting geology from geophysics in poly-deformed and mineralised terranes; the Otago Schist and the Hyde-Macraes Shear Zone. <i>New Zealand Journal of Geology, and Geophysics</i> , 2019, 62, 550-572.     | 1.8 | 6         |
| 12 | Evidence for dyke-parallel shear during syn-intrusion fracturing. <i>Earth and Planetary Science Letters</i> , 2019, 507, 119-130.   | 4.4 | 17        |
| 13 | Regional volcanism of northern Zealandia: post-Gondwana break-up magmatism on an extended, submerged continent. <i>Geological Society Special Publication</i> , 2018, 463, 199-226.                              | 1.3 | 39        |
| 14 | Changes in Crystallinity and Tracer-Isotope Distribution of Goethite during Fe(II)-Accelerated Recrystallization. <i>ACS Earth and Space Chemistry</i> , 2018, 2, 1271-1282.                                     | 2.7 | 28        |
| 15 | Magma Plumbing Systems: A Geophysical Perspective. <i>Journal of Petrology</i> , 2018, 59, 1217-1251.  | 2.8 | 134       |
| 16 | Geophysical and geological characterisation of dredge locations from RV Southern Surveyor voyage ss2012_v06 (ECOSATI): hotspot activity in northern Zealandia. <i>ASEG Extended Abstracts</i> , 2018, 2018, 1-8. | 0.1 | 0         |
| 17 | Evidence for Two Stages of Mineralization in West Africa’s Largest Gold Deposit: Obuasi, Ghana. <i>Economic Geology</i> , 2017, 112, 3-22.   | 3.8 | 55        |
| 18 | An interactive image segmentation method for lithological boundary detection: A rapid mapping tool for geologists. <i>Computers and Geosciences</i> , 2017, 100, 27-40.  | 4.2 | 35        |

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 19 | Rapid, semi-automatic fracture and contact mapping for point clouds, images and geophysical data. <i>Solid Earth</i> , 2017, 8, 1241-1253.  | 2.8 | 129       |
| 20 | The golden ark: arsenopyrite crystal plasticity and the retention of gold through high strain and metamorphism. <i>Terra Nova</i> , 2016, 28, 181-187.  | 2.1 | 28        |
| 21 | Nanoscale gold clusters in arsenopyrite controlled by growth rate not concentration: Evidence from atom probe microscopy. <i>American Mineralogist</i> , 2016, 101, 1916-1919.  | 1.9 | 94        |
| 22 | Melanesian back-arc basin and arc development: Constraints from the eastern Coral Sea. <i>Gondwana Research</i> , 2016, 39, 77-95.  | 6.0 | 34        |
| 23 | High Spatial Resolution Mapping of Dykes Using Unmanned Aerial Vehicle (UAV) Photogrammetry: New Insights On Emplacement Processes. <i>Acta Geologica Sinica</i> , 2016, 90, 52-53.   | 1.4 | 12        |
| 24 | An Elevated Perspective: Dyke-Related Fracture Networks Analysed with Uav Photogrammetry. <i>Acta Geologica Sinica</i> , 2016, 90, 54-55.   | 1.4 | 6         |
| 25 | Gold remobilisation and formation of high grade ore shoots driven by dissolution-reprecipitation replacement and Ni substitution into auriferous arsenopyrite. <i>Geochimica Et Cosmochimica Acta</i> , 2016, 178, 143-159. | 3.9 | 146       |
| 26 | Quantified, multi-scale X-ray fluorescence element mapping using the Maia detector array: application to mineral deposit studies. <i>Mineralium Deposita</i> , 2015, 50, 665-674.   | 4.1 | 48        |
| 27 | Insights into the mechanics of en-Åchelon sigmoidal vein formation using ultra-high resolution photogrammetry and computed tomography. <i>Journal of Structural Geology</i> , 2015, 77, 27-44.                              | 2.3 | 21        |
| 28 | Distinguishing between local versus regional extension as a control on orogenic gold mineralisation: The new 2.4Moz Castle Hill Camp, WA. <i>Precambrian Research</i> , 2015, 269, 242-260.                                 | 2.7 | 1         |
| 29 | The where and how of faults, fluids and permeability " insights from fault stepovers, scaling properties and gold mineralisation. <i>Geofluids</i> , 2015, 15, 240-251.   | 0.7 | 65        |
| 30 | Semi-automatic mapping of geological Structures using UAV-based photogrammetric data: An image analysis approach. <i>Computers and Geosciences</i> , 2014, 69, 22-32.   | 4.2 | 205       |
| 31 | Ground-based and UAV-Based photogrammetry: A multi-scale, high-resolution mapping tool for structural geology and paleoseismology. <i>Journal of Structural Geology</i> , 2014, 69, 163-178.                                | 2.3 | 529       |
| 32 | A Geological Structure Mapping Tool using Photogrammetric Data. <i>ASEG Extended Abstracts</i> , 2013, 2013, 1-4.   | 0.1 | 8         |
| 33 | Active fault and shear processes and their implications for mineral deposit formation and discovery. <i>Journal of Structural Geology</i> , 2010, 32, 151-165.  | 2.3 | 94        |
| 34 | Mechanisms of faulting and permeability enhancement during epithermal mineralisation: Cracow goldfield, Australia. <i>Journal of Structural Geology</i> , 2009, 31, 288-300.  | 2.3 | 43        |
| 35 | Damage and permeability around faults: Implications for mineralization. <i>Geology</i> , 2007, 35, 903.   | 4.4 | 50        |
| 36 | Progressive fault triggering and fluid flow in aftershock domains: Examples from mineralized Archaean fault systems. <i>Earth and Planetary Science Letters</i> , 2006, 250, 318-330.                                       | 4.4 | 68        |

| #  | ARTICLE  | IF  | CITATIONS |
|----|--|-----|-----------|
| 37 | Fault-segment rupture, aftershock-zone fluid flow, and mineralization. <i>Geology</i> , 2004, 32, 813. | 4.4 | 124       |