# Andrew R Thomson

List of Publications by Year
in descending order



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|---|---|---|---|
| 27 papers | 1,036 citations | 567281 15 h-index | 610901 24 g-index |
| 27 all docs | 27 docs citations | 27 times ranked | 1168 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Slab melting as a barrier to deep carbon subduction. Nature, 2016, 529, 76-79. | 27.8 | 343 |
| 2 | Origin of sub-lithospheric diamonds from the Juina-5 kimberlite (Brazil): constraints from carbon isotopes and inclusion compositions. Contributions To Mineralogy and Petrology, 2014, 168, 1. | 3.1 | 87 |
| 3 | The Distribution of Olivine Compositions in Icelandic Basalts and Picrites. Journal of Petrology, 2013, 54, 745-768. | 2.8 | 85 |
| 4 | The stability of hydrous silicates in Earth's lower mantle: Experimental constraints from the systems MgOâ€“SiO2â€“H2O and MgOâ€“Al2O3â€“SiO2â€“H2O. Chemical Geology, 2015, 418, 16-29. | 3.3 | 77 |
| 5 | The melting curve of Ni to 1 Mbar. Earth and Planetary Science Letters, 2014, 408, 226-236. | 4.4 | 55 |
| 6 | Stable isotope evidence for crustal recycling as recorded by superdeep diamonds. Earth and Planetary Science Letters, 2015, 432, 374-380. | 4.4 | 54 |
| 7 | Seismic velocities of CaSiO3 perovskite can explain LLSVPs in Earthâ€™s lower mantle. Nature, 2019, 572, 643-647. | 27.8 | 52 |
| 8 | Constraining the internal variability of the stable isotopes of carbon and nitrogen within mantle diamonds. Chemical Geology, 2014, 366, 14-23. | 3.3 | 48 |
| 9 | Trace element composition of silicate inclusions in sub-lithospheric diamonds from the Juina-5 kimberlite: Evidence for diamond growth from slab melts. Lithos, 2016, 265, 108-124. | 1.4 | 34 |
| 10 | Experimental determination of melting in the systems enstatite-magnesite and magnesite-calcite from 15 to 80 GPa. American Mineralogist, 2014, 99, 1544-1554. | 1.9 | 23 |
| 11 | Evaluating the Formation Pressure of Diamondâ€Hosted Majoritic Garnets: A Machine Learning Majorite Barometer. Journal of Geophysical Research: Solid Earth, 2021, 126, e2020JB020604. | 3.4 | 23 |
| 12 | Experimental constraints on melting temperatures in the MgOâ€“SiO2 system at lower mantle pressures. Earth and Planetary Science Letters, 2017, 472, 186-196. | 4.4 | 22 |
| 13 | Metastable structural transformations and pressure-induced amorphization in natural (Mg,Fe)<sub>2</sub>SiO<sub>4</sub>olivine under static compression: A Raman spectroscopic study. American Mineralogist, 2016, 101, 1642-1650. | 1.9 | 20 |
| 14 | Geochemistry of Silicate and Oxide Inclusions in Sublithospheric Diamonds. Reviews in Mineralogy and Geochemistry, 2022, 88, 393-450. | 4.8 | 20 |
| 15 | Experimental elasticity of Earthâ€™s deep mantle. Nature Reviews Earth & Environment, 2020, 1, 455-469. | 29.7 | 17 |
| 16 | Diamonds and the Mantle Geodynamics of Carbon. , 2019, , 89-128. | | 16 |
| 17 | The phase diagrams of KCaF3 and NaMgF3 by ab initio simulations. Physics and Chemistry of Minerals, 2018, 45, 311-322. | 0.8 | 15 |
| 18 | CO2-Rich Melts in Earth. , 2019, , 129-162. | | 10 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | The phase diagram of NiSi under the conditions of small planetary interiors. Physics of the Earth and Planetary Interiors, 2016, 261, 196-206. | 1.9 | 8 |
| 20 | High-temperature equation of state of vanadium. High Pressure Research, 2016, 36, 16-22. | 1.2 | 7 |
| 21 | Deep Earth carbon reactions through time and space. American Mineralogist, 2020, 105, 22-27. | 1.9 | 5 |
| 22 | The miscibility of calcium silicate perovskite and bridgmanite: A single perovskite solid solution in hot, iron-rich regions. Earth and Planetary Science Letters, 2021, 566, 116973. | 4.4 | 5 |
| 23 | Comment on â€œDiscovery of davemaoite, CaSiO <sub>3</sub> -perovskite, as a mineral from the lower mantleâ€. Science, 2022, 376, eabo0882. | 12.6 | 4 |
| 24 | Diamonds from the lower mantle?. American Mineralogist, 2017, 102, 929-930. | 1.9 | 3 |
| 25 | The equation of state of thePmmnphase of NiSi. Journal of Applied Crystallography, 2015, 48, 1914-1920. | 4.5 | 2 |
| 26 | Peritectic Melting of Mica in Faultâ€Related Pseudotachylite Melts and Potassium Mass Balance as an Indicator of Fluidâ€Absent Source Conditions.. Geochemistry, Geophysics, Geosystems, 2021, 22, e2020GC009217. | 2.5 | 1 |
| 27 | The speciation, distribution, transport, and impact of volatile elements in the Earth's interior. Chemical Geology, 2018, 478, 1. | 3.3 | 0 |