

Wyn Williams

List of Publications by Year in descending order

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Version: 2024-02-01

39
papers

1,363
citations

361413
20
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37
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43
all docs

43
docs citations

43
times ranked

1360
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----------|
| 1 | Bending and Collapse: Magnetic Recording Fidelity of Magnetofossils From Micromagnetic Simulation. <i>Journal of Geophysical Research: Solid Earth</i> , 2022, 127, . | 3.4 | 4 |
| 2 | Understanding Nonideal Paleointensity Recording in Igneous Rocks: Insights From Aging Experiments on Lava Samples and the Causes and Consequences of “Fragile” Curvature in Arai Plots. <i>Geochemistry, Geophysics, Geosystems</i> , 2021, 22, . | 2.5 | 15 |
| 3 | Models of Maghemization: Observational Evidence in Support of a Magnetic Unstable Zone. <i>Geochemistry, Geophysics, Geosystems</i> , 2021, 22, e2020GC009504. | 2.5 | 2 |
| 4 | Estimating the Effect of Cooling Rate on the Acquisition of Magnetic Remanence. <i>Geophysical Research Letters</i> , 2021, 48, e2021GL095284. | 4.0 | 4 |
| 5 | Thermomagnetic recording fidelity of nanometer-sized iron and implications for planetary magnetism. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 1984-1991. | 7.1 | 21 |
| 6 | From Nano to Micro: Evolution of Magnetic Domain Structures in Multidomain Magnetite. <i>Geochemistry, Geophysics, Geosystems</i> , 2019, 20, 2907-2918. | 2.5 | 20 |
| 7 | Secondary magnetite in ancient zircon precludes analysis of a Hadean geodynamo. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 407-412. | 7.1 | 24 |
| 8 | MERRILL: Micromagnetic Earth Related Robust Interpreted Language Laboratory. <i>Geochemistry, Geophysics, Geosystems</i> , 2018, 19, 1080-1106. | 2.5 | 47 |
| 9 | The magnetic structure and palaeomagnetic recording fidelity of sub-micron greigite (Fe ₃ S ₄). <i>Earth and Planetary Science Letters</i> , 2018, 483, 76-89. | 4.4 | 15 |
| 10 | Magnetic vortex effects on first-order reversal curve (FORC) diagrams for greigite dispersions. <i>Earth and Planetary Science Letters</i> , 2018, 501, 103-111. | 4.4 | 21 |
| 11 | Magnetic Vortex States in Small Octahedral Particles of Intermediate Titanomagnetite. <i>Geochemistry, Geophysics, Geosystems</i> , 2018, 19, 3071-3083. | 2.5 | 5 |
| 12 | Stability of equidimensional pseudo“single-domain magnetite over billion-year timescales. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, 10356-10360. | 7.1 | 58 |
| 13 | Resolving the Origin of Pseudo“Single Domain Magnetic Behavior. <i>Journal of Geophysical Research: Solid Earth</i> , 2017, 122, 9534-9558. | 3.4 | 145 |
| 14 | Direct visualization of the thermomagnetic behavior of pseudo“single-domain magnetite particles. <i>Science Advances</i> , 2016, 2, e1501801. | 10.3 | 52 |
| 15 | Multi-scale three-dimensional characterization of iron particles in dusty olivine: Implications for paleomagnetism of chondritic meteorites. <i>American Mineralogist</i> , 2016, 101, 2070-2084. | 1.9 | 35 |
| 16 | Direct observation of the thermal demagnetization of magnetic vortex structures in nonideal magnetite recorders. <i>Geophysical Research Letters</i> , 2016, 43, 8426-8434. | 4.0 | 31 |
| 17 | Effect of maghemization on the magnetic properties of nonstoichiometric pseudo“single“domain magnetite particles. <i>Geochemistry, Geophysics, Geosystems</i> , 2015, 16, 2969-2979. | 2.5 | 12 |
| 18 | Critical single-domain grain sizes in elongated iron particles: implications for meteoritic and lunar magnetism. <i>Geophysical Journal International</i> , 2015, 202, 578-583. | 2.4 | 31 |

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|----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----------|
| 19 | Effects of the core-shell structure on the magnetic properties of partially oxidized magnetite grains: Experimental and micromagnetic investigations. <i>Geochemistry, Geophysics, Geosystems</i> , 2014, 15, 2021-2038. | 2.5 | 31 |
| 20 | Observing thermomagnetic stability of nonideal magnetite particles: Good paleomagnetic recorders?. <i>Geophysical Research Letters</i> , 2014, 41, 7041-7047. | 4.0 | 26 |
| 21 | Magnetic characterization of synthetic titanomagnetites: Quantifying the recording fidelity of ideal synthetic analogs. <i>Geochemistry, Geophysics, Geosystems</i> , 2014, 15, 161-175. | 2.5 | 11 |
| 22 | Paleomagnetic recording fidelity of nonideal magnetic systems. <i>Geochemistry, Geophysics, Geosystems</i> , 2014, 15, 2254-2261. | 2.5 | 6 |
| 23 | Correlating biodegradation to magnetization in oil bearing sedimentary rocks. <i>Geochimica Et Cosmochimica Acta</i> , 2013, 112, 146-165. | 3.9 | 25 |
| 24 | Critical single domain grain sizes in chains of interacting greigite particles: Implications for magnetosome crystals. <i>Geochemistry, Geophysics, Geosystems</i> , 2013, 14, 5430-5441. | 2.5 | 19 |
| 25 | A strong angular dependence of magnetic properties of magnetosome chains: Implications for rock magnetism and paleomagnetism. <i>Geochemistry, Geophysics, Geosystems</i> , 2013, 14, 3887-3907. | 2.5 | 34 |
| 26 | A micromagnetic investigation of magnetite grains in the form of Platonic polyhedra with surface roughness. <i>Geochemistry, Geophysics, Geosystems</i> , 2011, 12, n/a-n/a. | 2.5 | 11 |
| 27 | Room- and low-temperature magnetic properties of 2-D magnetite particle arrays. <i>Geophysical Journal International</i> , 2011, 185, 167-180. | 2.4 | 8 |
| 28 | Critical superparamagnetic/single-domain grain sizes in interacting magnetite particles: implications for magnetosome crystals. <i>Journal of the Royal Society Interface</i> , 2009, 6, 1207-1212. | 3.4 | 122 |
| 29 | Nanofabrication of two-dimensional arrays of magnetite particles for fundamental rock magnetic studies. <i>Journal of Geophysical Research</i> , 2009, 114, . | 3.3 | 14 |
| 30 | Very high resolution etching of magnetic nanostructures in organic gases. <i>Microelectronic Engineering</i> , 2008, 85, 988-991. | 2.4 | 12 |
| 31 | Controlled cobalt doping of magnetosomes in vivo. <i>Nature Nanotechnology</i> , 2008, 3, 158-162. | 31.5 | 142 |
| 32 | Low-temperature viscous magnetization of multidomain magnetite: Evidence for disaccommodation contribution. <i>Journal of Magnetism and Magnetic Materials</i> , 2006, 307, 113-119. | 2.3 | 10 |
| 33 | Influence of magnetostatic interactions on first-order-reversal-curve (FORC) diagrams: a micromagnetic approach. <i>Geophysical Journal International</i> , 2004, 158, 888-897. | 2.4 | 106 |
| 34 | Micromagnetic modeling of first-order reversal curve (FORC) diagrams for single-domain and pseudo-single-domain magnetite. <i>Earth and Planetary Science Letters</i> , 2003, 213, 375-390. | 4.4 | 49 |
| 35 | Magnetic force microscopy imaging of domain walls in magnetite. <i>Geophysical Journal International</i> , 1992, 111, 417-423. | 2.4 | 36 |
| 36 | Some effects of grain shape and varying external magnetic fields on the magnetic structure of small grains of magnetite. <i>Physics of the Earth and Planetary Interiors</i> , 1990, 65, 1-14. | 1.9 | 44 |

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|----|------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 37 | Note on temperature dependence of exchange constant in magnetite. Geophysical Research Letters, 1988, 15, 184-187. | 4.0 | 77 |
| 38 | Thermal cleaning of viscous magnetic moments. Geophysical Research Letters, 1988, 15, 1089-1092. | 4.0 | 17 |
| 39 | Cooling rate effects in the magnetization of single-domain grains.. Journal of Geomagnetism and Geoelectricity, 1988, 40, 729-737. | 0.9 | 21 |