

# Jessica M Warren

## List of Publications by Year in descending order

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Version: 2024-02-01

48  
papers

2,674  
citations

172443

29  
h-index

189881

50  
g-index

50  
all docs

50  
docs citations

50  
times ranked

2014  
citing authors

| #  | ARTICLE  | IF  | CITATIONS |
|----|--|-----|-----------|
| 1  | Grain size sensitive deformation mechanisms in naturally deformed peridotites. <i>Earth and Planetary Science Letters</i> , 2006, 248, 438-450.  | 4.4 | 299       |
| 2  | Global variations in abyssal peridotite compositions. <i>Lithos</i> , 2016, 248-251, 193-219.  | 1.4 | 276       |
| 3  | Abyssal peridotites reveal the near-chondritic Fe isotopic composition of the Earth. <i>Earth and Planetary Science Letters</i> , 2013, 365, 63-76.  | 4.4 | 149       |
| 4  | Mantle Melting, Melt Transport, and Delivery Beneath a Slow-Spreading Ridge: The Paleo-MAR from 23°15'N to 23°45'N. <i>Journal of Petrology</i> , 2010, 51, 425-467.   | 2.8 | 133       |
| 5  | An assessment of upper mantle heterogeneity based on abyssal peridotite isotopic compositions. <i>Journal of Geophysical Research</i> , 2009, 114, .   | 3.3 | 113       |
| 6  | Pyroxenes as tracers of mantle water variations. <i>Journal of Geophysical Research: Solid Earth</i> , 2014, 119, 1851-1881.   | 3.4 | 107       |
| 7  | <sup>186</sup> Os- <sup>187</sup> Os and highly siderophile element abundance systematics of the mantle revealed by abyssal peridotites and Os-rich alloys. <i>Geochimica Et Cosmochimica Acta</i> , 2017, 200, 232-254. | 3.9 | 104       |
| 8  | Microstructural and Rheological Evolution of a Mantle Shear Zone. <i>Journal of Petrology</i> , 2010, 51, 43-53.   | 2.8 | 100       |
| 9  | Evolution of olivine lattice preferred orientation during simple shear in the mantle. <i>Earth and Planetary Science Letters</i> , 2008, 272, 501-512.   | 4.4 | 94        |
| 10 | Correlation of seismic and petrologic thermometers suggests deep thermal anomalies beneath hotspots. <i>Earth and Planetary Science Letters</i> , 2007, 264, 308-316.  | 4.4 | 82        |
| 11 | Cryptic Variations in Abyssal Peridotite Compositions: Evidence for Shallow-level Melt Infiltration in the Oceanic Lithosphere. <i>Journal of Petrology</i> , 2010, 51, 395-423.   | 2.8 | 79        |
| 12 | Mantle Sulfides and their Role in Re-Os and Pb Isotope Geochronology. <i>Reviews in Mineralogy and Geochemistry</i> , 2016, 81, 579-649.   | 4.8 | 70        |
| 13 | Pyroxenites from the Southwest Indian Ridge, 9-16°S: Cumulates from Incremental Melt Fractions Produced at the Top of a Cold Melting Regime. <i>Journal of Petrology</i> , 2007, 48, 647-660.                            | 2.8 | 68        |
| 14 | Lead and osmium isotopic constraints on the oceanic mantle from single abyssal peridotite sulfides. <i>Earth and Planetary Science Letters</i> , 2012, 359-360, 279-293.   | 4.4 | 58        |
| 15 | Quantifying the effect of pyroxene on deformation of peridotite in a natural shear zone. <i>Journal of Geophysical Research: Solid Earth</i> , 2015, 120, 2717-2738.   | 3.4 | 58        |
| 16 | Forearc Peridotites from Tonga Record Heterogeneous Oxidation of the Mantle following Subduction Initiation. <i>Journal of Petrology</i> , 2017, 58, 1755-1780.  | 2.8 | 57        |
| 17 | Evidence for chemically heterogeneous Arctic mantle beneath the Gakkel Ridge. <i>Geochimica Et Cosmochimica Acta</i> , 2016, 174, 291-312.   | 3.9 | 51        |
| 18 | Revisiting the electron microprobe method of spinel-olivine-orthopyroxene oxybarometry applied to spinel peridotites. <i>American Mineralogist</i> , 2017, 102, 421-435.   | 1.9 | 51        |

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|----|---|------|-----------|
| 19 | Size effects resolve discrepancies in 40 years of work on low-temperature plasticity in olivine. <i>Science Advances</i> , 2017, 3, e1701338.   | 10.3 | 51        |
| 20 | Peridotites and basalts reveal broad congruence between two independent records of mantle fO <sub>2</sub> despite local redox heterogeneity. <i>Earth and Planetary Science Letters</i> , 2018, 494, 172-189.   | 4.4  | 50        |
| 21 | The influence of water and LPO on the initiation and evolution of mantle shear zones. <i>Earth and Planetary Science Letters</i> , 2013, 375, 222-233.  | 4.4  | 47        |
| 22 | Fracture-mediated deep seawater flow and mantle hydration on oceanic transform faults. <i>Earth and Planetary Science Letters</i> , 2020, 532, 115988.  | 4.4  | 46        |
| 23 | Testing constitutive equations for brittle-ductile deformation associated with faulting in granitic rock. <i>Journal of Geophysical Research: Solid Earth</i> , 2017, 122, 6269-6293.   | 3.4  | 44        |
| 24 | The influence of deformation history on the interpretation of seismic anisotropy. <i>Geochemistry, Geophysics, Geosystems</i> , 2012, 13, .   | 2.5  | 41        |
| 25 | Evaluation of transtension and transpression within contractional fault steps: Comparing kinematic and mechanical models to field data. <i>Journal of Structural Geology</i> , 2014, 60, 55-69.   | 2.3  | 41        |
| 26 | Viscous anisotropy of textured olivine aggregates, Part 1: Measurement of the magnitude and evolution of anisotropy. <i>Earth and Planetary Science Letters</i> , 2016, 445, 92-103.  | 4.4  | 31        |
| 27 | Olivine anisotropy suggests Gutenberg discontinuity is not the base of the lithosphere. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, 10503-10506.  | 7.1  | 30        |
| 28 | New SIMS reference materials for measuring water in upper mantle minerals. <i>American Mineralogist</i> , 2017, 102, 537-547.   | 1.9  | 30        |
| 29 | Intermediate-Depth Earthquakes Controlled by Incoming Plate Hydration Along Bending-Related Faults. <i>Geophysical Research Letters</i> , 2019, 46, 3688-3697.  | 4.0  | 30        |
| 30 | Effect of latent heat of freezing on crustal generation at low spreading rates. <i>Geochemistry, Geophysics, Geosystems</i> , 2014, 15, 3161-3174.  | 2.5  | 28        |
| 31 | Comparison of thermal modeling, microstructural analysis, and Ti-in-quartz thermobarometry to constrain the thermal history of a cooling pluton during deformation in the Mount Diablo Quadrangle, CA. <i>Geochemistry, Geophysics, Geosystems</i> , 2017, 18, 1270-1297. | 2.5  | 27        |
| 32 | Mantle deformation and noble gases: Helium and neon in oceanic mylonites. <i>Chemical Geology</i> , 2009, 266, 10-18.   | 3.3  | 26        |
| 33 | Oceanic transform fault seismicity and slip mode influenced by seawater infiltration. <i>Nature Geoscience</i> , 2021, 14, 606-611.   | 12.9 | 26        |
| 34 | Dislocation interactions during low-temperature plasticity of olivine and their impact on the evolution of lithospheric strength. <i>Earth and Planetary Science Letters</i> , 2020, 543, 116349.   | 4.4  | 24        |
| 35 | Evidence for a Deep Hydrologic Cycle on Oceanic Transform Faults. <i>Journal of Geophysical Research: Solid Earth</i> , 2020, 125, e2019JB017751.   | 3.4  | 23        |
| 36 | A review of mechanisms generating seismic anisotropy in the upper mantle. <i>Physics of the Earth and Planetary Interiors</i> , 2021, 313, 106662.  | 1.9  | 16        |

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|----|--|-----|-----------|
| 37 | Hydrothermal alteration of seafloor peridotites does not influence oxygen fugacity recorded by spinel oxybarometry. <i>Geology</i> , 2016, 44, 535-538.  | 4.4 | 15        |
| 38 | Evolution of the Josephine Peridotite Shear Zones: 2. Influences on Olivine CPO Evolution. <i>Journal of Geophysical Research: Solid Earth</i> , 2019, 124, 12763-12781.                           | 3.4 | 15        |
| 39 | Helium distribution in a mantle shear zone from the Josephine Peridotite. <i>Earth and Planetary Science Letters</i> , 2012, 359-360, 162-172.   | 4.4 | 13        |
| 40 | In-situ Pb isotopic analysis of sulfides in abyssal peridotites: New insights into heterogeneity and evolution of the oceanic upper mantle. <i>Geology</i> , 2014, 42, 159-162.                    | 4.4 | 12        |
| 41 | Melt addition to mid-ocean ridge peridotites increases spinel Cr# with no significant effect on recorded oxygen fugacity. <i>Earth and Planetary Science Letters</i> , 2021, 566, 116951.          | 4.4 | 12        |
| 42 | Crustal shortening, exhumation, and strain localization in a collisional orogen: The Bajo Pequeño Shear Zone, Sierra de Pie de Palo, Argentina. <i>Tectonics</i> , 2014, 33, 1277-1303.            | 2.8 | 11        |
| 43 | Viscous anisotropy of textured olivine aggregates: 2. Micromechanical model. <i>Journal of Geophysical Research: Solid Earth</i> , 2016, 121, 7137-7160.   | 3.4 | 10        |
| 44 | Using geologic structures to constrain constitutive laws not accessible in the laboratory. <i>Journal of Structural Geology</i> , 2019, 125, 55-63.  | 2.3 | 7         |
| 45 | Evolution of the Josephine Peridotite Shear Zones: 1. Compositional Variation and Shear Initiation. <i>Geochemistry, Geophysics, Geosystems</i> , 2019, 20, 5765-5785.                             | 2.5 | 7         |
| 46 | The potential for aqueous fluid-rock and silicate melt-rock interactions to re-equilibrate hydrogen in peridotite nominally anhydrous minerals. <i>American Mineralogist</i> , 2021, 106, 701-714. | 1.9 | 4         |
| 47 | High temperature hydrothermal alteration and amphibole formation in Gakkel Ridge abyssal peridotites. <i>Lithos</i> , 2021, 392-393, 106107.   | 1.4 | 3         |
| 48 | In situ measurements of lead and other trace elements in abyssal peridotite sulfides. <i>American Mineralogist</i> , 2019, 104, 190-206.   | 1.9 | 2         |