

Shoshana Z Weider

List of Publications by Year in descending order

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Version: 2024-02-01

24
papers

2,147
citations

331538
21
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642610
23
g-index

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all docs

24
docs citations

24
times ranked

1267
citing authors

#	ARTICLE	IF	CITATIONS
1	The Major-Element Composition of Mercury's Surface from MESSENGER X-ray Spectrometry. Science, 2011, 333, 1847-1850.	6.0	386
2	Evidence for Water Ice Near Mercury's North Pole from MESSENGER Neutron Spectrometer Measurements. Science, 2013, 339, 292-296.	6.0	173
3	Evidence for geochemical terranes on Mercury: Global mapping of major elements with MESSENGER's X-Ray Spectrometer. Earth and Planetary Science Letters, 2015, 416, 109-120.	1.8	167
4	Major-element abundances on the surface of Mercury: Results from the MESSENGER Gamma-Ray Spectrometer. Journal of Geophysical Research, 2012, 117, .	3.3	146
5	Chemical heterogeneity on Mercury's surface revealed by the MESSENGER X-Ray Spectrometer. Journal of Geophysical Research, 2012, 117, .	3.3	144
6	The redox state, FeO content, and origin of sulfur-rich magmas on Mercury. Journal of Geophysical Research E: Planets, 2013, 118, 138-146.	1.5	112
7	Mercury's Weather-Beaten Surface: Understanding Mercury in the Context of Lunar and Asteroidal Space Weathering Studies. Space Science Reviews, 2014, 181, 121-214.	3.7	108
8	Variations in the abundance of iron on Mercury's surface from MESSENGER X-Ray Spectrometer observations. Icarus, 2014, 235, 170-186.	1.1	93
9	Variations in the abundances of potassium and thorium on the surface of Mercury: Results from the MESSENGER Gamma-Ray Spectrometer. Journal of Geophysical Research, 2012, 117, .	3.3	85
10	Enhanced sodium abundance in Mercury's north polar region revealed by the MESSENGER Gamma-Ray Spectrometer. Icarus, 2014, 228, 86-95.	1.1	85
11	Magnesium-rich crustal compositions on Mercury: Implications for magmatism from petrologic modeling. Journal of Geophysical Research, 2012, 117, .	3.3	83
12	Geochemistry, mineralogy, and petrology of boninitic and komatiitic rocks on the mercurian surface: Insights into the mercurian mantle. Icarus, 2017, 285, 155-168.	1.1	79
13	Geochemical terranes of Mercury's northern hemisphere as revealed by MESSENGER neutron measurements. Icarus, 2015, 253, 346-363.	1.1	74
14	Chlorine on the surface of Mercury: MESSENGER gamma-ray measurements and implications for the planet's formation and evolution. Icarus, 2015, 257, 417-427.	1.1	66
15	Constraints on the abundance of carbon in near-surface materials on Mercury: Results from the MESSENGER Gamma-Ray Spectrometer. Planetary and Space Science, 2015, 108, 98-107.	0.9	57
16	Evidence from MESSENGER for sulfur- and carbon-driven explosive volcanism on Mercury. Geophysical Research Letters, 2016, 43, 3653-3661.	1.5	57
17	Paleomagnetic determination of emplacement temperatures of pyroclastic deposits: an under-utilized tool. Bulletin of Volcanology, 2010, 72, 309-330.	1.1	52
18	MESSENGER detection of electron-induced X-ray fluorescence from Mercury's surface. Journal of Geophysical Research, 2012, 117, .	3.3	46

#	ARTICLE	IF	CITATIONS
19	Individual lava flow thicknesses in Oceanus Procellarum and Mare Serenitatis determined from Clementine multispectral data. Icarus, 2010, 209, 323-336.	1.1	39
20	The Surface Composition of Mercury. Elements, 2019, 15, 33-38.	0.5	28
21	Global major-element maps of Mercury from four years of MESSENGER X-Ray Spectrometer observations. Icarus, 2020, 345, 113716.	1.1	27
22	The Geochemical and Mineralogical Diversity of Mercury. , 2018, , 176-190.		21
23	Planetary X-ray fluorescence analogue laboratory experiments and an elemental abundance algorithm for C1XS. Planetary and Space Science, 2011, 59, 1393-1407.	0.9	17
24	Science Goals and Mission Concept for a Landed Investigation of Mercury. Planetary Science Journal, 2022, 3, 68.	1.5	2