Catherine M Weitz

List of Publications by Year
in descending order

63	4,677	136950	144013
papers	citations	32 h-index	57 g-index

67	67	67	2561
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Degradation at theInSightLanding Site,Homestead Hollow, Mars: Constraints From Rock Heights and Shapes. Earth and Space Science, 2022, 9, .	2.6	3
2	CRISMâ€Based High Spatial Resolution Thermal Inertia Mapping Along Curiosity's Traverses in Gale Crater. Journal of Geophysical Research E: Planets, 2022, 127, .	3.6	11
3	Orbital Observations of a Marker Horizon at Gale Crater. Journal of Geophysical Research E: Planets, 2022, 127, .	3.6	5
4	In Situ and Orbital Stratigraphic Characterization of the InSight Landing Siteâ€”A Type Example of a Regolithâ€Covered Lava Plain on Mars. Journal of Geophysical Research E: Planets, 2022, 127, .	3.6	17
5	The Aeolian Environment in Glen Torridon, Gale Crater, Mars. Journal of Geophysical Research E: Planets, 2022, 127, .	3.6	14
6	The Physical Properties and Geochemistry of Grains on Aeolian Bedforms at Gale Crater, Mars. Journal of Geophysical Research E: Planets, 2022, 127, .	3.6	9
7	Vortexâ€Dominated Aeolian Activity at InSight's Landing Site, Part 2: Local Meteorology, Transport Dynamics, and Model Analysis. Journal of Geophysical Research E: Planets, 2021, 126, e2020JE006514.	3.6	19
8	Vortexâ€Dominated Aeolian Activity at InSight's Landing Site, Part 1: Multiâ€Instrument Observations, Analysis, and Implications. Journal of Geophysical Research E: Planets, 2021, 126, e2020JE006757.	3.6	23
9	Crater Morphometry on the Mafic Floor Unit at Jezero Crater, Mars: Comparisons to a Known Basaltic Lava Plain at the InSight Landing Site. Geophysical Research Letters, 2020, 47, e2020GL089607.	4.0	11
10	Comparison of InSightHomesteadHollow to Hollows at the Spirit Landing Site. Journal of Geophysical Research E: Planets, 2020, 125, e2020JE006435.	3.6	10
11	An Impact Crater Origin for the InSight Landing Site at Homestead Hollow, Mars: Implications for Near Surface Stratigraphy, Surface Processes, and Erosion Rates. Journal of Geophysical Research E: Planets, 2020, 125, e2019JE006333.	3.6	24
12	Degradation of Homestead Hollow at the InSight Landing Site Based on the Distribution and Properties of Local Deposits. Journal of Geophysical Research E: Planets, 2020, 125, e2019JE006350.	3.6	20
13	Geology of the InSight landing site on Mars. Nature Communications, 2020, 11, 1014.	12.8	107
14	Implementing New Feature Extraction Techniques for Characterization of Complex Mineral Signatures of Salty Regions on Mars. , 2020, , .		0
15	Formation of clays, ferrihydrite, and possible salts in Hydrae Chasma, Mars. Icarus, 2019, 319, 392-406.	2.5	8
16	GEOLOGY OF THE INSIGHT LANDING SITE, MARS. , 2019, , .		2
17	AN IMPACT ORIGIN FOR HOMESTEAD HOLLOW, THE LANDING LOCATION OF THE INSIGHT LANDER ON MARS. , 2019, , .		4
18	SURFACE ALTERATION FROM LANDING INSIGHT ON MARS AND ITS IMPLICATIONS FOR SHALLOW REGOLITH STRUCTURE. , 2019, , .		5

#	Article	IF	Citations
19	MODIFICATION OF HOMESTEAD HOLLOW AT THE INSIGHT LANDING SITE. , 2019, , .		1
20	Sand Mineralogy Within the Bagnold Dunes, Gale Crater, as Observed In Situ and From Orbit. Geophysical Research Letters, 2018, 45, 9488-9497.	4.0	52
21	Morphologic Diversity of Martian Ripples: Implications for Largeâ€Ripple Formation. Geophysical Research Letters, 2018, 45, 10,229.	4.0	59
22	The Bagnold Dunes in Southern Summer: Active Sediment Transport on Mars Observed by the Curiosity Rover. Geophysical Research Letters, 2018, 45, 8853-8863.	4.0	50
23	Sand Grain Sizes and Shapes in Eolian Bedforms at Gale Crater, Mars. Geophysical Research Letters, 2018, 45, 9471-9479.	4.0	71
24	Evidence for impact melt sheets in lunar highland smooth plains and implications for polar landing sites. Icarus, 2018, 314, 294-298.	2.5	3
25	Investigation of Lunar Spinels at Sinus Aestuum. Journal of Geophysical Research E: Planets, 2017, 122, 2013-2033.	3.6	11
26	Stratigraphy and formation of clays, sulfates, and hydrated silica within a depression in Coprates Catena, Mars. Journal of Geophysical Research E: Planets, 2016, 121, 805-835.	3.6	16
27	Groundwater flow induced collapse and flooding in Noctis Labyrinthus, Mars. Planetary and Space Science, 2016, 124, 1-14.	1.7	18
28	Mineralogy, morphology and stratigraphy of the light-toned interior layered deposits at Juventae Chasma. Icarus, 2015, 251, 315-331.	2.5	23
29	Mixtures of clays and sulfates within deposits in western Melas Chasma, Mars. Icarus, 2015, 251, 291-314.	2.5	53
30	Reconstructing the aqueous history within the southwestern Melas basin, Mars: Clues from stratigraphic and morphometric analyses of fans. Icarus, 2014, 242, 19-37.	2.5	38
31	Fresh exposures of hydrous Feâ€bearing amorphous silicates on Mars. Geophysical Research Letters, 2014, 41, 8744-8751.	4.0	21
32	Gypsum, opal, and fluvial channels within a trough of Noctis Labyrinthus, Mars: Implications for aqueous activity during the Late Hesperian to Amazonian. Planetary and Space Science, 2013, 87, 130-145.	1.7	42
33	Geologic relationships between gray hematite, sulfates, and clays in Capri Chasma. Journal of Geophysical Research, 2012, 117, .	3.3	31
34	Most Mars minerals in a nutshell: Various alteration phases formed in a single environment in Noctis Labyrinthus. Journal of Geophysical Research, 2012, 117, .	3.3	74
35	Diverse mineralogies in two troughs of Noctis Labyrinthus, Mars. Geology, 2011, 39, 899-902.	4.4	63
36	The High Resolution Imaging Science Experiment (HiRISE) during MROâ€™s Primary Science Phase (PSP). Icarus, 2010, 205, 2-37.	2.5	153

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37	Mineralogy and chemistry of cobbles at Meridiani Planum, Mars, investigated by the Mars Exploration Rover Opportunity. Journal of Geophysical Research, 2010, 115, .	3.3	14
38	Visible and nearâ€infrared multispectral analysis of geochemically measured rock fragments at the Opportunity landing site in Meridiani Planum. Journal of Geophysical Research, 2010, 115, .	3.3	7
39	Mineralogy of Juventae Chasma: Sulfates in the lightâ€toned mounds, mafic minerals in the bedrock, and hydrated silica and hydroxylated ferric sulfate on the plateau. Journal of Geophysical Research, 2009, 114, .	3.3	156
40	Sublacustrine depositional fans in southwest Melas Chasma. Journal of Geophysical Research, 2009, 114, .	3.3	68
41	Gray hematite distribution and formation in Ophir and Candor chasmata. Journal of Geophysical Research, 2008, 113, .	3.3	24
42	Soil sedimentology at Gusev Crater from Columbia Memorial Station to Winter Haven. Journal of Geophysical Research, 2008, 113, .	3.3	21
43	Meteorites on Mars observed with the Mars Exploration Rovers. Journal of Geophysical Research, 2008, 113, .	3.3	75
44	Hematite spherules at Meridiani: Results from MI, Miniâ€TES, and Pancam. Journal of Geophysical Research, 2008, 113, .	3.3	38
45	Lightâ€toned strata and inverted channels adjacent to Juventae and Ganges chasmata, Mars. Geophysical Research Letters, 2008, 35, .	4.0	49
46	Surface processes recorded by rocks and soils on Meridiani Planum, Mars: Microscopic Imager observations during Opportunity's first three extended missions. Journal of Geophysical Research, 2008, 113, .	3.3	39
47	Opaline silica in young deposits on Mars. Geology, 2008, 36, 847.	4.4	303
48	Morphology, chemistry, and spectral properties of Hawaiian rock coatings and implications for Mars. Journal of Geophysical Research, 2007, 112, .	3.3	76
49	Mars Reconnaissance Orbiter's High Resolution Imaging Science Experiment (HiRISE). Journal of Geophysical Research, 2007, 112, .	3.3	1,253
50	Soil grain analyses at Meridiani Planum, Mars. Journal of Geophysical Research, 2006, 111, n/a-n/a.	3.3	75
51	Erosion rates at the Mars Exploration Rover landing sites and long-term climate change on Mars. Journal of Geophysical Research, 2006, 111, n/a-n/a.	3.3	215
52	Formation of a terraced fan deposit in Coprates Catena, Mars. Icarus, 2006, 184, 436-451.	2.5	33
53	Aeolian processes at the Mars Exploration Rover Meridiani Planum landing site. Nature, 2005, 436, 58-61.	27.8	233
54	Wind-Related Processes Detected by the Spirit Rover at Gusev Crater, Mars. Science, 2004, 305, 810-813.	12.6	94

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55	Soils of Eagle Crater and Meridiani Planum at the Opportunity Rover Landing Site. Science, 2004, 306, 1723-1726.	12.6	153
56	Evidence from Opportunity's Microscopic Imager for Water on Meridiani Planum. Science, 2004, 306, 1727-1730.	12.6	146
57	Pancam Multispectral Imaging Results from the Opportunity Rover at Meridiani Planum. Science, 2004, 306, 1703-1709.	12.6	135
58	Surficial Deposits at Gusev Crater Along Spirit Rover Traverses. Science, 2004, 305, 807-810.	12.6	82
59	Geology of the Melas Chasma landing site for the Mars Exploration Rover mission. Journal of Geophysical Research, 2003, 108, .	3.3	35
60	Selection of the Mars Exploration Rover landing sites. Journal of Geophysical Research, 2003, 108, .	3.3	155
61	Theoretical modeling of eruption plumes on Mars under current and past climates. Journal of Geophysical Research, 2001, 106, 20547-20562.	3.3	17
62	Lunar regional dark mantle deposits: Geologic, multispectral, and modeling studies. Journal of Geophysical Research, 1998, 103, 22725-22759.	3.3	98
63	Mars Exploration Rover Pancam multispectral imaging of rocks, soils, and dust at Gusev crater and Meridiani Planum. , 0, , 281-314.		11