Wendy M Calvin

List of Publications by Year in Descending Order

60 papers	3,489 citations	29 h-index	59 g-index
70 ext. papers	3,881 ext. citations	5.4 avg, IF	4.86 L-index

#	Paper	IF	Citations
60	Mapping Potentially Acid Generating Material on Abandoned Mine Lands Using Remotely Piloted Aerial Systems. *Minerals (Basel, Switzerland)*, **2021**, 11, 365	2.4	0
59	The Mars Orbiter for Resources, Ices, and Environments (MORIE) Science Goals and Instrument Trades in Radar, Imaging, and Spectroscopy. *Planetary Science Journal*, **2021**, 2, 76	2.9	1
58	The Holy Grail: A road map for unlocking the climate record stored within Mars□polar layered deposits. *Planetary and Space Science*, **2020**, 184, 104841	2	15
57	Petrographic and spectral study of hydrothermal mineralization in drill core from Hawaii: A potential analog to alteration in the martian subsurface. *American Mineralogist*, **2020**, 105, 1297-1305	2.9	1
56	Characterizing low-temperature aqueous alteration of Mars-analog basalts from Mauna Kea at multiple scales. *American Mineralogist*, **2020**, 105, 1306-1316	2.9	1
55	Four-fold increase in solar forcing on snow in western U.S. burned forests since 1999. *Nature Communications*, **2019**, 10, 2026	17.4	33
54	Quantifying Iron Concentration in Local and Synthetic Acid Mine Drainage: A New Technique Using Handheld Field Spectrometers. *Mine Water and the Environment*, **2017**, 36, 299-309	2.4	9
53	Interannual and seasonal changes in the south seasonal polar cap of Mars: Observations from MY 28-31 using MARCI. *Icarus*, **2017**, 292, 144-153	3.8	14
52	Mapping acidic mine waste with seasonal airborne hyperspectral imagery at varying spatial scales. *Environmental Earth Sciences*, **2017**, 76, 1	2.9	14
51	Mass balance of Mars□residual south polar cap from CTX images and other data. *Icarus*, **2016**, 268, 118-130	3.8	20
50	Martian north polar cap summer water cycle. *Icarus*, **2016**, 277, 401-415	3.8	24
49	Mapping alteration in geothermal drill core using a field portable spectroradiometer. *Geothermics*, **2016**, 61, 12-23	4.3	22
48	Utilizing HyspIRI Prototype Data for Geological Exploration Applications: A Southern California Case Study. *Geosciences (Switzerland)*, **2016**, 6, 11	2.7	7
47	Discovery of alunite in cross crater, terra sirenum, mars: evidence for acidic, sulfurous waters. *American Mineralogist*, **2016**, 101, 1527-1542	2.9	39
46	High concentrations of manganese and sulfur in deposits on Murray Ridge, Endeavour Crater, Mars. *American Mineralogist*, **2016**, 101, 1389-1405	2.9	40
45	Interannual and seasonal changes in the north polar ice deposits of Mars: Observations from MY 29□31 using MARCI. *Icarus*, **2015**, 251, 181-190	3.8	16
44	Remote sensing of geothermal-related minerals for resource exploration in Nevada. *Geothermics*, **2015**, 53, 517-526	4.3	30

43	Geothermal exploration using imaging spectrometer data over Fish Lake Valley, Nevada. *Remote Sensing of Environment*, **2014**, 140, 509-518	13.2	21
42	Time scales of erosion and deposition recorded in the residual south polar cap of Mars. *Icarus*, **2013**, 225, 923-932	3.8	14
41	Compact Reconnaissance Imaging Spectrometer for Mars (CRISM) north polar springtime recession mapping: First 3 Mars years of observations. *Journal of Geophysical Research*, **2012**, 117, n/a-n/a		31
40	Mapping alteration minerals at prospect, outcrop and drill core scales using imaging spectrometry. *International Journal of Remote Sensing*, **2012**, 33, 1780-1798	3.1	54
39	Characteristics, distribution, origin, and significance of opaline silica observed by the Spirit rover in Gusev crater, Mars. *Journal of Geophysical Research*, **2011**, 116,		123
38	Effect of Reduced Spatial Resolution on Mineral Mapping Using Imaging Spectrometry Examples Using Hyperspectral Infrared Imager (HyspIRI)-Simulated Data. *Remote Sensing*, **2011**, 3, 1584-1602	5	24
37	Compact Reconnaissance Imaging Spectrometer for Mars (CRISM) south polar mapping: First Mars year of observations. *Journal of Geophysical Research*, **2010**, 115,		43
36	Visible and near-infrared multispectral analysis of geochemically measured rock fragments at the Opportunity landing site in Meridiani Planum. *Journal of Geophysical Research*, **2010**, 115,		7
35	MARCI and MOC observations of the atmosphere and surface cap in the north polar region of Mars. *Icarus*, **2010**, 208, 61-81	3.8	46
34	Mineral mapping in the Pyramid Lake basin: Hydrothermal alteration, chemical precipitates and geothermal energy potential. *Remote Sensing of Environment*, **2010**, 114, 2297-2304	13.2	61
33	Residual south polar cap of Mars: Stratigraphy, history, and implications of recent changes. *Icarus*, **2009**, 203, 352-375	3.8	41
32	Mineralogy of Juventae Chasma: Sulfates in the light-toned mounds, mafic minerals in the bedrock, and hydrated silica and hydroxylated ferric sulfate on the plateau. *Journal of Geophysical Research*, **2009**, 114,		119
31	Orbital identification of carbonate-bearing rocks on Mars. *Science*, **2008**, 322, 1828-32	33.3	470
30	Climate, weather, and north polar observations from the Mars Reconnaissance Orbiter Mars Color Imager. *Icarus*, **2008**, 194, 501-512	3.8	46
29	Summer season variability of the north residual cap of Mars as observed by the Mars Global Surveyor Thermal Emission Spectrometer (MGS-TES). *Planetary and Space Science*, **2008**, 56, 212-226	2	18
28	Context Camera Investigation on board the Mars Reconnaissance Orbiter. *Journal of Geophysical Research*, **2007**, 112,		779
27	Spectral properties of Lake Superior banded iron formation: application to Martian hematite deposits. *Astrobiology*, **2006**, 6, 563-80	3.7	4
26	Geothermal exploration with Hymap hyperspectral data at Brady Desert Peak, Nevada. *Remote Sensing of Environment*, **2006**, 104, 313-324	13.2	24

25	Surface mineral mapping at Steamboat Springs, Nevada, USA, with multi-wavelength thermal infrared images. *Remote Sensing of Environment*, **2005**, 99, 140-158	13.2	105
24	Hydration state of the Martian coarse-grained hematite exposures: Implications for their origin and evolution. *Journal of Geophysical Research*, **2004**, 109,		12
23	SEBASS hyperspectral thermal infrared data: surface emissivity measurement and mineral mapping. *Remote Sensing of Environment*, **2003**, 85, 48-63	13.2	122
22	Reflectance of Antarctica from 3 to 5 Eh: discrimination of surface snow and cloud properties. *Annals of Glaciology*, **2002**, 34, 121-126	2.5	1
21	Condensed O[TINF]2[/TINF] on Europa and Callisto. *Astronomical Journal*, **2002**, 124, 3400-3403	4.9	78
20	Could Mars be dark and altered?. *Geophysical Research Letters*, **1998**, 25, 1597-1600	4.9	14
19	Ices on the Satellites of Jupiter, Saturn, and Uranus. *Astrophysics and Space Science Library*, **1998**, 579-606	3	31
18	Remote sensing communities break the ice at Flagstaff Workshop. *Eos*, **1997**, 78, 392	1.5	2
17	Spectral characteristics of iron-bearing phyllosilicates: Comparison to Orgueil (CI1), Murchison and Murray (CM2). *Meteoritics and Planetary Science*, **1997**, 32, 693-701	2.8	53
16	Variation of the 3-Eh absorption feature on Mars: Observations over eastern Valles Marineris by the Mariner 6 infrared spectrometer. *Journal of Geophysical Research*, **1997**, 102, 9097-9107		28
15	New Composite Spectra of Mars, 0.4 5.7 Eh. *Icarus*, **1997**, 130, 449-460	3.8	75
14	Latitudinal Distribution of O2on Ganymede: Observations with the Hubble Space Telescope. *Icarus*, **1997**, 130, 505-516	3.8	37
13	O2 on Ganymede: Spectral characteristics and plasma formation mechanisms. *Geophysical Research Letters*, **1996**, 23, 673-676	4.9	80
12	Detection and monitoring of H2O and CO2 ice clouds on Mars. *Journal of Geophysical Research*, **1996**, 101, 9227-9237		28
11	Spectra of the icy Galilean satellites from 0.2 to 5Eh: A compilation, new observations, and a recent summary. *Journal of Geophysical Research*, **1995**, 100, 19041		90
10	Charge-coupled device spectra of the Galilean satellites: Molecular oxygen on Ganymede. *Journal of Geophysical Research*, **1995**, 100, 19049		144
9	Hydrous carbonates on Mars?: Evidence from Mariner 6/7 infrared spectrometer and ground-based telescopic spectra. *Journal of Geophysical Research*, **1994**, 99, 14659		69
8	Spatial variability in the seasonal south polar cap of Mars. *Journal of Geophysical Research*, **1994**, 99, 21143		29

7	Spectral Distinctions between the Leading and Trailing Hemispheres of Callisto: New Observations. *Icarus*, **1993**, 104, 69-78	3.8	31
6	Modeling the reflectance spectrum of Callisto 0.25 to 4.1 □m. *Icarus*, **1991**, 89, 305-317	3.8	53
5	Additions and corrections to the absorption coefficients of CO2 Ice: Applications to the Martian south polar cap. *Journal of Geophysical Research*, **1990**, 95, 14743		23
4	A model of diffuse radar scattering from Martian surface rocks. *Icarus*, **1988**, 76, 513-524	3.8	7
3	Imaging Spectrometry: Spectral Resolution And Analytical Identification Of Spectral Features **1987**,		4
2	Frontier Observatory for Research in Geothermal Energy: Phase 1 Topical Report West Flank of Coso, CA		4
1	The U. S. Geological Survey, Digital Spectral Library: Version 1 (0.2 to 3.0um). *US Geological Survey Open-File Report*,		156