

# Carle Pieters

## List of Publications by Year in descending order

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Version: 2024-02-01

48  
papers

5,193  
citations

134610

34  
h-index

242451

47  
g-index

48  
all docs

48  
docs citations

48  
times ranked

2878  
citing authors

#	ARTICLE	IF	CITATIONS
1	Volatile interactions with the lunar surface. <i>Chemie Der Erde</i> , 2022, 82, 125858.	0.8	26
2	Replenishment of Near-Surface Water Ice by Impacts Into Ceres' Volatile-Rich Crust: Observations by Dawn's Gamma Ray and Neutron Detector. <i>Geophysical Research Letters</i> , 2021, 48, e2021GL094223.	1.5	2
3	Cross-Over Infrared Spectroscopy: A New Tool for the Remote Determination of Olivine Composition. <i>Geophysical Research Letters</i> , 2020, 47, e2020GL089151.	1.5	5
4	The Character of South Pole-Aitken Basin: Patterns of Surface and Subsurface Composition. <i>Journal of Geophysical Research E: Planets</i> , 2018, 123, 729-747.	1.5	83
5	Mineralogy and temperature of crater Haulani on Ceres. <i>Meteoritics and Planetary Science</i> , 2018, 53, 1902-1924.	0.7	21
6	Geologic constraints on the origin of red organic-rich material on Ceres. <i>Meteoritics and Planetary Science</i> , 2018, 53, 1983-1998.	0.7	34
7	Localized aliphatic organic material on the surface of Ceres. <i>Science</i> , 2017, 355, 719-722.	6.0	152
8	Spectral analysis of Ahuna Mons from Dawn mission's visible-infrared spectrometer. <i>Geophysical Research Letters</i> , 2017, 44, 97-104.	1.5	74
9	Spectrophotometric properties of dwarf planet Ceres from the VIR spectrometer on board the Dawn mission. <i>Astronomy and Astrophysics</i> , 2017, 598, A130.	2.1	69
10	Cryogenic flow features on Ceres: Implications for crater-related cryovolcanism. <i>Geophysical Research Letters</i> , 2016, 43, 11,994.	1.5	48
11	Dawn arrives at Ceres: Exploration of a small, volatile-rich world. <i>Science</i> , 2016, 353, 1008-1010.	6.0	178
12	Distribution of phyllosilicates on the surface of Ceres. <i>Science</i> , 2016, 353, .	6.0	159
13	Complexities in pyroxene compositions derived from absorption band centers: Examples from Apollo samples, <scp>HED</scp> meteorites, synthetic pure pyroxenes, and remote sensing data. <i>Meteoritics and Planetary Science</i> , 2016, 51, 207-234.	0.7	32
14	Bright carbonate deposits as evidence of aqueous alteration on (1) Ceres. <i>Nature</i> , 2016, 536, 54-57.	13.7	240
15	Sublimation in bright spots on (1) Ceres. <i>Nature</i> , 2015, 528, 237-240.	13.7	116
16	Ammoniated phyllosilicates with a likely outer Solar System origin on (1) Ceres. <i>Nature</i> , 2015, 528, 241-244.	13.7	276
17	The distribution of Mg-spinel across the Moon and constraints on crustal origin. <i>American Mineralogist</i> , 2014, 99, 1893-1910.	0.9	70
18	Visible to near-infrared optical properties of pure synthetic olivine across the olivine solid solution. <i>American Mineralogist</i> , 2014, 99, 467-478.	0.9	30

#	ARTICLE	IF	CITATIONS
19	Lunar opposition effect as inferred from Chandrayaan-1 M <sup>3</sup> data. <i>Journal of Geophysical Research E: Planets</i> , 2013, 118, 1221-1232.	1.5	18
20	Dawn completes its mission at 4 Vesta. <i>Meteoritics and Planetary Science</i> , 2013, 48, 2076-2089.	0.7	54
21	Vesta, vestoids, and the HED meteorites: Interconnections and differences based on <i>Dawn</i> Framing Camera observations. <i>Journal of Geophysical Research E: Planets</i> , 2013, 118, 1991-2003.	1.5	11
22	Distinctive space weathering on Vesta from regolith mixing processes. <i>Nature</i> , 2012, 491, 79-82.	13.7	120
23	Dark material on Vesta from the infall of carbonaceous volatile-rich material. <i>Nature</i> , 2012, 491, 83-86.	13.7	151
24	Pitted Terrain on Vesta and Implications for the Presence of Volatiles. <i>Science</i> , 2012, 338, 246-249.	6.0	91
25	DETECTION OF WIDESPREAD HYDRATED MATERIALS ON VESTA BY THE VIR IMAGING SPECTROMETER ON BOARD THE <i>DAWN</i> MISSION. <i>Astrophysical Journal Letters</i> , 2012, 758, L36.	3.0	117
26	Vesta's Shape and Morphology. <i>Science</i> , 2012, 336, 687-690.	6.0	222
27	Spectroscopic Characterization of Mineralogy and Its Diversity Across Vesta. <i>Science</i> , 2012, 336, 697-700.	6.0	240
28	Color and Albedo Heterogeneity of Vesta from Dawn. <i>Science</i> , 2012, 336, 700-704.	6.0	166
29	Goldschmidt crater and the Moon's north polar region: Results from the Moon Mineralogy Mapper (M <sup>3</sup> ). <i>Journal of Geophysical Research</i> , 2011, 116, .	3.3	28
30	Sources and physical processes responsible for OH/H <sub>2</sub> O in the lunar soil as revealed by the Moon Mineralogy Mapper (M <sup>3</sup> ). <i>Journal of Geophysical Research</i> , 2011, 116, .	3.3	121
31	A wavelength-dependent visible and infrared spectrophotometric function for the Moon based on ROLO data. <i>Journal of Geophysical Research</i> , 2011, 116, .	3.3	33
32	Compositional variability of the Marius Hills volcanic complex from the Moon Mineralogy Mapper (M <sup>3</sup> ). <i>Journal of Geophysical Research</i> , 2011, 116, .	3.3	52
33	Mg-spinel lithology: A new rock type on the lunar farside. <i>Journal of Geophysical Research</i> , 2011, 116, .	3.3	115
34	Measuring moonlight: An overview of the spatial properties, lunar coverage, selenolocation, and related Level 1B products of the Moon Mineralogy Mapper. <i>Journal of Geophysical Research</i> , 2011, 116, .	3.3	111
35	A photometric function for analysis of lunar images in the visual and infrared based on Moon Mineralogy Mapper observations. <i>Journal of Geophysical Research</i> , 2011, 116, .	3.3	38
36	Compositional diversity at Theophilus Crater: Understanding the geological context of Mg-spinel bearing central peaks. <i>Geophysical Research Letters</i> , 2011, 38, n/a-n/a.	1.5	57

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37	Mineralogical and chemical characterization of lunar highland soils: Insights into the space weathering of soils on airless bodies. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	90
38	Long-Lived Volcanism on the Lunar Farside Revealed by SELENE Terrain Camera. <i>Science</i> , 2009, 323, 905-908.	6.0	133
39	Character and Spatial Distribution of OH/H <sub>2</sub> O on the Surface of the Moon Seen by M <sup>3</sup> on Chandrayaan-1. <i>Science</i> , 2009, 326, 568-572.	6.0	622
40	Lunar surface agglutinates: Mapping composition anomalies. <i>Solar System Research</i> , 2007, 41, 177-185.	0.3	16
41	Multispectral polarimetry as a tool to investigate texture and chemistry of lunar regolith particles. <i>Icarus</i> , 2007, 187, 406-416.	1.1	36
42	Lunar soil characterization consortium analyses: Pyroxene and maturity estimates derived from Clementine image data. <i>Icarus</i> , 2006, 184, 83-101.	1.1	76
43	Systematic global mixing and melting in lunar soil evolution. <i>Geophysical Research Letters</i> , 2003, 30, .	1.5	36
44	Asteroid Space Weathering and Regolith Evolution. , 2002, , 585-600.		141
45	Rock types of South Pole-Aitken basin and extent of basaltic volcanism. <i>Journal of Geophysical Research</i> , 2001, 106, 28001-28022.	3.3	174
46	Meteorite and Asteroid Reflectance Spectroscopy: Clues to Early Solar System Processes. <i>Annual Review of Earth and Planetary Sciences</i> , 1994, 22, 457-497.	4.6	84
47	A Sharper View of Impact Craters from Clementine Data. <i>Science</i> , 1994, 266, 1844-1848.	6.0	137
48	Optical effects of space weathering: The role of the finest fraction. <i>Journal of Geophysical Research</i> , 1993, 98, 20817-20824.	3.3	288