

# Bradley L Jolliff

## List of Publications by Year in descending order

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81  
papers

6,098  
citations

70961

41  
h-index

69108

77  
g-index

81  
all docs

81  
docs citations

81  
times ranked

3512  
citing authors

#	ARTICLE	IF	CITATIONS
1	High temperature evaporation and isotopic fractionation of K and Cu. <i>Geochimica Et Cosmochimica Acta</i> , 2022, 316, 1-20.	1.6	7
2	Analysis and experimental investigation of Apollo sample 12032,366â€”18, a chemically evolved basalt from the Moon. <i>Meteoritics and Planetary Science</i> , 2022, 57, 794-816.	0.7	9
3	Radiative Transfer Modeling of Changâ€”e-4 Spectroscopic Observations and Interpretation of the South Pole-Aitken Compositional Anomaly. <i>Astrophysical Journal Letters</i> , 2022, 931, L24.	3.0	4
4	Ages of lunar impact breccias: Limits for timing of the Imbrium impact. <i>Chemie Der Erde</i> , 2021, 81, 125683.	0.8	12
5	Possible Nonâ€”Mare Lithologies in the Regolith at the Changâ€”e-5 Landing Site: Evidence From Remote Sensing Data. <i>Journal of Geophysical Research E: Planets</i> , 2021, 126, e2020JE006797.	1.5	10
6	Amorphization of S, Clâ€”Salts Induced by Martian Dust Activities. <i>Journal of Geophysical Research E: Planets</i> , 2020, 125, e2020JE006701.	1.5	8
7	Chlorine Release From Common Chlorides by Martian Dust Activity. <i>Journal of Geophysical Research E: Planets</i> , 2020, 125, e2019JE006283.	1.5	14
8	Potassium isotopic composition of the Moon. <i>Geochimica Et Cosmochimica Acta</i> , 2020, 280, 263-280.	1.6	40
9	The scientific legacy of the Apollo program. <i>Physics Today</i> , 2019, 72, 44-50.	0.3	8
10	Subsurface Cl-bearing salts as potential contributors to recurring slope lineae (RSL) on Mars. <i>Icarus</i> , 2019, 333, 464-480.	1.1	24
11	Mars Exploration Rover Opportunity. , 2019, , 285-328.		5
12	Petrogenesis of lunar impact melt rock meteorite Oued Awlitis 001. <i>Meteoritics and Planetary Science</i> , 2019, 54, 2167-2188.	0.7	6
13	Exploring the variability of argon loss in Apollo 17 impact melt rock 77135 using highâ€”spatial resolution <sup>40</sup> Ar/ <sup>39</sup> Ar geochronology. <i>Meteoritics and Planetary Science</i> , 2019, 54, 721-739.	0.7	4
14	Spinel assemblages in lunar meteorites Graves Nunataks 06157 and Dhofar 1528: Implications for impact melting and equilibration in the Moon's upper mantle. <i>Meteoritics and Planetary Science</i> , 2019, 54, 379-394.	0.7	8
15	Diverse Lithologies and Alteration Events on the Rim of Noachianâ€”Aged Endeavour Crater, Meridiani Planum, Mars: In Situ Compositional Evidence. <i>Journal of Geophysical Research E: Planets</i> , 2018, 123, 1255-1306.	1.5	28
16	Mineralogy and chemistry of Ti-bearing lunar soils: Effects on reflectance spectra and remote sensing observations. <i>Icarus</i> , 2018, 306, 243-255.	1.1	9
17	Presolar silicates in the matrix and fine-grained rims around chondrules in primitive CO3.0 chondrites: Evidence for pre-accretionary aqueous alteration of the rims in the solar nebula. <i>Geochimica Et Cosmochimica Acta</i> , 2018, 221, 379-405.	1.6	44
18	A Systematic Method for Classifying and Grouping Late Noachian and Early Hesperian Rock Targets Analyzed by the Mars Exploration Rover Opportunity at Endeavour Crater, Mars. <i>Journal of Geophysical Research E: Planets</i> , 2018, 123, 2980-3004.	1.5	3

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19	Lunar mare TiO <sub>2</sub> abundances estimated from UV/Vis reflectance. <i>Icarus</i> , 2017, 296, 216-238.	1.1	127
20	Setting constraints on the nature and origin of the two major hydrous sulfates on Mars: Monohydrated and polyhydrated sulfates. <i>Journal of Geophysical Research E: Planets</i> , 2016, 121, 678-694.	1.5	40
21	Esperance: Multiple episodes of aqueous alteration involving fracture fills and coatings at Matijevic Hill, Mars. <i>American Mineralogist</i> , 2016, 101, 1515-1526.	0.9	19
22	Refining lunar impact chronology through high spatial resolution <sup>40</sup> Ar/ <sup>39</sup> Ar dating of impact melts. <i>Science Advances</i> , 2015, 1, e1400050.	4.7	20
23	Understanding the Raman spectral features of phyllosilicates. <i>Journal of Raman Spectroscopy</i> , 2015, 46, 829-845.	1.2	135
24	Correlated compositional and mineralogical investigations at the Chang'e-3 landing site. <i>Nature Communications</i> , 2015, 6, 8880.	5.8	88
25	Raman imaging of extraterrestrial materials. <i>Planetary and Space Science</i> , 2015, 112, 23-34.	0.9	43
26	Silica polymorphs in lunar granite: Implications for granite petrogenesis on the Moon. <i>American Mineralogist</i> , 2015, 100, 1533-1543.	0.9	32
27	Petrography and composition of Martian regolith breccia meteorite Northwest Africa 7475. <i>Meteoritics and Planetary Science</i> , 2015, 50, 326-352.	0.7	100
28	The petrogenesis of impact basin melt rocks in lunar meteorite Shi-161. <i>American Mineralogist</i> , 2014, 99, 1626-1647.	0.9	11
29	Thorite in an Apollo 12 granite fragment and age determination using the electron microprobe. <i>Geochimica Et Cosmochimica Acta</i> , 2014, 135, 307-320.	1.6	18
30	LRO observations of morphology and surface roughness of volcanic cones and lobate lava flows in the Marius Hills. <i>Journal of Geophysical Research E: Planets</i> , 2013, 118, 615-634.	1.5	57
31	Petrology and geochemistry of lunar granite 12032,366-19 and implications for lunar granite petrogenesis. <i>American Mineralogist</i> , 2013, 98, 1697-1713.	0.9	40
32	Comparative zircon U-Pb geochronology of impact melt breccias from Apollo 12 and lunar meteorite SaU 169, and implications for the age of the Imbrium impact. <i>Earth and Planetary Science Letters</i> , 2012, 319-320, 277-286.	1.8	77
33	Non-mare silicic volcanism on the lunar farside at Compton-Belkovich. <i>Nature Geoscience</i> , 2011, 4, 566-571.	5.4	114
34	The Mairan domes: Silicic volcanic constructs on the Moon. <i>Geophysical Research Letters</i> , 2011, 38, n/a-n/a.	1.5	70
35	Apollo 12 revisited. <i>Geochimica Et Cosmochimica Acta</i> , 2011, 75, 1540-1573.	1.6	40
36	Fluorine and chlorine abundances in lunar apatite: Implications for heterogeneous distributions of magmatic volatiles in the lunar interior. <i>Geochimica Et Cosmochimica Acta</i> , 2011, 75, 5073-5093.	1.6	140

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37	Mineralogy and geochemistry of four lunar soils by laser-Raman study. <i>Icarus</i> , 2011, 211, 101-113.	1.1	44
38	A systematic spectroscopic study of four Apollo lunar soils. <i>Journal of Earth Science (Wuhan, China)</i> , 2011, 22, 578-585.	1.1	5
39	Detection of structurally bound hydroxyl in fluorapatite from Apollo Mare basalt 15058,128 using TOF-SIMS. <i>American Mineralogist</i> , 2010, 95, 1141-1150.	0.9	116
40	Phase transition pathways of the hydrates of magnesium sulfate in the temperature range 50Â°C to 5Â°C: Implication for sulfates on Mars. <i>Journal of Geophysical Research</i> , 2009, 114, .	3.3	44
41	Compositional and lithological diversity among brecciated lunar meteorites of intermediate iron concentration. <i>Meteoritics and Planetary Science</i> , 2009, 44, 1287-1322.	0.7	90
42	Searching for high alumina mare basalts using Clementine UVVIS and Lunar Prospector GRS data: Mare Fecunditatis and Mare Imbrium. <i>Icarus</i> , 2008, 198, 7-18.	1.1	20
43	The crystal chemistry of whitlockite and merrillite and the dehydrogenation of whitlockite to merrillite. <i>American Mineralogist</i> , 2008, 93, 1300-1305.	0.9	65
44	Distinguishing highâ€alumina mare basalts using Clementine UVVIS and Lunar Prospector GRS data: Mare Moscoviense and Mare Nectaris. <i>Journal of Geophysical Research</i> , 2008, 113, .	3.3	41
45	Evidence of phyllosilicates in Woolly Patch, an altered rock encountered at West Spur, Columbia Hills, by the Spirit rover in Gusev crater, Mars. <i>Journal of Geophysical Research</i> , 2006, 111, n/a-n/a.	3.3	40
46	Sulfates on Mars: A systematic Raman spectroscopic study of hydration states of magnesium sulfates. <i>Geochimica Et Cosmochimica Acta</i> , 2006, 70, 6118-6135.	1.6	175
47	Extracting olivine (Foâ€Fa) compositions from Raman spectral peak positions. <i>Geochimica Et Cosmochimica Acta</i> , 2006, 70, 6201-6222.	1.6	215
48	The geochemistry and provenance of Apollo 16 mafic glasses. <i>Geochimica Et Cosmochimica Acta</i> , 2006, 70, 6050-6067.	1.6	41
49	<sup>40</sup> Ar/ <sup>39</sup> Ar dating of Apollo 12 regolith: Implications for the age of Copernicus and the source of nonmare materials. <i>Geochimica Et Cosmochimica Acta</i> , 2006, 70, 6016-6031.	1.6	32
50	Feldspathic lunar meteorites Pecora Escarpment 02007 and Dhofar 489: Contamination of the surface of the lunar highlands by post-basin impacts. <i>Geochimica Et Cosmochimica Acta</i> , 2006, 70, 5935-5956.	1.6	47
51	Crystal chemistry of lunar merrillite and comparison to other meteoritic and planetary suites of whitlockite and merrillite. <i>American Mineralogist</i> , 2006, 91, 1583-1595.	0.9	104
52	3. The Constitution and Structure of the Lunar Interior. , 2006, , 221-364.		51
53	The atomic arrangement of merrillite from the Fra Mauro Formation, Apollo 14 lunar mission: The first structure of merrillite from the Moon. <i>American Mineralogist</i> , 2006, 91, 1547-1552.	0.9	45
54	Water alteration of rocks and soils on Mars at the Spirit rover site in Gusev crater. <i>Nature</i> , 2005, 436, 66-69.	13.7	240

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55	Petrography and geochemistry of the LaPaz Icefield basaltic lunar meteorite and source crater pairing with Northwest Africa 032. <i>Meteoritics and Planetary Science</i> , 2005, 40, 1073-1101.	0.7	65
56	Raman spectroscopy of Fe-Ti-Cr-oxides, case study: Martian meteorite EETA79001. <i>American Mineralogist</i> , 2004, 89, 665-680.	0.9	180
57	Lunar surface geochemistry: Global concentrations of Th, K, and FeO as derived from lunar prospector and Clementine data. <i>Geochimica Et Cosmochimica Acta</i> , 2004, 68, 3791-3805.	1.6	158
58	A revised algorithm for calculating TiO <sub>2</sub> from Clementine UVVIS data: A synthesis of rock, soil, and remotely sensed TiO <sub>2</sub> concentrations. <i>Journal of Geophysical Research</i> , 2003, 108, n/a-n/a.	3.3	122
59	Feldspathic lunar meteorites and their implications for compositional remote sensing of the lunar surface and the composition of the lunar crust. <i>Geochimica Et Cosmochimica Acta</i> , 2003, 67, 4895-4923.	1.6	208
60	Northwest Africa 773: lunar mare breccia with a shallow-formed olivine-cumulate component, inferred very-low-Ti (VLT) heritage, and a KREEP connection. <i>Geochimica Et Cosmochimica Acta</i> , 2003, 67, 4857-4879.	1.6	59
61	Apollo 17 landing site: Topography, photometric corrections, and heterogeneity of the surrounding highland massifs. <i>Journal of Geophysical Research</i> , 2002, 107, 20-1-20-30.	3.3	35
62	Major lunar crustal terranes: Surface expressions and crust-mantle origins. <i>Journal of Geophysical Research</i> , 2000, 105, 4197-4216.	3.3	719
63	Lunar iron and titanium abundance algorithms based on final processing of Clementine ultraviolet-visible images. <i>Journal of Geophysical Research</i> , 2000, 105, 20297-20305.	3.3	503
64	The materials of the lunar Procellarum KREEP Terrane: A synthesis of data from geomorphological mapping, remote sensing, and sample analyses. <i>Journal of Geophysical Research</i> , 2000, 105, 20403-20415.	3.3	85
65	Effects of sterilizing doses of gamma radiation on Mars analog rocks and minerals. <i>Journal of Geophysical Research</i> , 1999, 104, 27043-27066.	3.3	15
66	Raman spectroscopic characterization of a highly weathered basalt: Igneous mineralogy, alteration products, and a microorganism. <i>Journal of Geophysical Research</i> , 1999, 104, 27067-27077.	3.3	38
67	Raman spectroscopic characterization of a Martian SNC meteorite: Zagami. <i>Journal of Geophysical Research</i> , 1999, 104, 8509-8519.	3.3	62
68	Clementine UVVIS multispectral data and the Apollo 17 landing site: What can we tell and how well?. <i>Journal of Geophysical Research</i> , 1999, 104, 14123-14148.	3.3	48
69	Geochemistry and petrology of lunar meteorite Queen Alexandra Range 94281, a mixed mare and highland regolith breccia, with special emphasis on very low-titanium mafic components. <i>Meteoritics and Planetary Science</i> , 1998, 33, 581-601.	0.7	28
70	The case for an Imbrium origin of the Apollo thorium-rich impact melt breccias. <i>Meteoritics and Planetary Science</i> , 1998, 33, 959-975.	0.7	118
71	Large-Scale Separation of K-frac and REEP-frac in the Source Regions of Apollo Impact-Melt Breccias, and a Revised Estimate of the KREEP Composition. <i>International Geology Review</i> , 1998, 40, 916-935.	1.1	57
72	Clementine images of the lunar sample-return stations: Refinement of FeO and TiO <sub>2</sub> mapping techniques. <i>Journal of Geophysical Research</i> , 1997, 102, 16319-16325.	3.3	194

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73	Raman spectroscopy for mineral identification and quantification for in situ planetary surface analysis: A point count method. <i>Journal of Geophysical Research</i> , 1997, 102, 19293-19306.	3.3	129
74	Trace element zoning and incipient metamictization in a lunar zircon; application of three microprobe techniques. <i>American Mineralogist</i> , 1996, 81, 902-912.	0.9	71
75	Lithologic distribution and geologic history of the Apollo 17 site: The record in soils and small rock particles from the highland massifs. <i>Meteoritics and Planetary Science</i> , 1996, 31, 116-145.	0.7	49
76	Lunar meteorite Queen Alexandra Range 93069 and the iron concentration of the lunar highlands surface. <i>Meteoritics and Planetary Science</i> , 1996, 31, 909-924.	0.7	45
77	Geochemical comparison of four cores from the Manson impact structure. , 1996, , .		3
78	A simulated geochemical rover mission to the Taurus-Littrow valley of the Moon. <i>Journal of Geophysical Research</i> , 1995, 100, 14403.	3.3	19
79	Raman spectroscopy as a method for mineral identification on lunar robotic exploration missions. <i>Journal of Geophysical Research</i> , 1995, 100, 21189.	3.3	94
80	Partitioning in REE-saturating minerals: Theory, experiment, and modelling of whitlockite, apatite, and evolution of lunar residual magmas. <i>Geochimica Et Cosmochimica Acta</i> , 1993, 57, 4069-4094.	1.6	119
81	A ferroan region of the lunar highlands as recorded in meteorites MAC88104 and MAC88105. <i>Geochimica Et Cosmochimica Acta</i> , 1991, 55, 3051-3071.	1.6	46