R B Anderson

List of Publications by Year
in descending order

39 papers	5,086 citations	136950 32 h-index	330143 37 g-index
42 all docs	42 docs citations	42 times ranked	2984 citing authors

#	Article	IF	Citations
1	Post-landing major element quantification using SuperCam laser induced breakdown spectroscopy. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2022, 188, 106347.	2.9	40
2	Overview of the Morphology and Chemistry of Diagenetic Features in the Clayâ€Rich Glen Torridon Unit of Gale Crater, Mars. Journal of Geophysical Research E: Planets, 2022, 127, .	3.6	17
3	The SuperCam Instrument Suite on the Mars 2020 Rover: Science Objectives and Mast-Unit Description. Space Science Reviews, 2021, 217, 1.	8.1	131
4	Quantification of manganese for ChemCam Mars and laboratory spectra using a multivariate model. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2021, 181, 106223.	2.9	16
5	Stratigraphic Relationships in Jezero Crater, Mars: Constraints on the Timing of Fluvialâ€Lacustrine Activity From Orbital Observations. Journal of Geophysical Research E: Planets, 2021, 126, e2021JE006840.	3.6	20
6	Improving ChemCam LIBS long-distance elemental compositions using empirical abundance trends. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2021, 182, 106247.	2.9	16
7	The mineral diversity of Jezero crater: Evidence for possible lacustrine carbonates on Mars. Icarus, 2020, 339, 113526.	2.5	166
8	Photogeologic Map of the Perseverance Rover Field Site in Jezero Crater Constructed by the Mars 2020 Science Team. Space Science Reviews, 2020, 216, 1.	8.1	67
9	Laser-Induced Breakdown Spectroscopy. , 2019, , 168-190.		0
10	Shaler: <i>inÂsitu</i> analysis of a fluvial sedimentary deposit on Mars. Sedimentology, 2018, 65, 96-122.	3.1	59
11	Martian Eolian Dust Probed by ChemCam. Geophysical Research Letters, 2018, 45, 10,968.	4.0	40
12	Complex bedding geometry in the upper portion of Aeolis Mons, Gale crater, Mars. Icarus, 2018, 314, 246-264.	2.5	20
13	Recalibration of the Mars Science Laboratory ChemCam instrument with an expanded geochemical database. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2017, 129, 64-85.	2.9	137
14	Diagenetic silica enrichment and lateâ€stage groundwater activity in Gale crater, Mars. Geophysical Research Letters, 2017, 44, 4716-4724.	4.0	87
15	Improved accuracy in quantitative laser-induced breakdown spectroscopy using sub-models. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2017, 129, 49-57.	2.9	71
16	Basaltâ€"trachybasalt samples in Gale Crater, Mars. Meteoritics and Planetary Science, 2017, 52, 2931-2410.	1.6	34
17	The Mars Science Laboratory <i>Curiosity</i> rover Mastcam instruments: Preflight and inâ€flight calibration, validation, and data archiving. Earth and Space Science, 2017, 4, 396-452.	2.6	113
18	Composition of conglomerates analyzed by the Curiosity rover: Implications for Gale Crater crust and sediment sources. Journal of Geophysical Research E: Planets, 2016, 121, 353-387.	3.6	53

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19	The potassic sedimentary rocks in Gale Crater, Mars, as seen by ChemCam on board <i>Curiosity</i>. Journal of Geophysical Research E: Planets, 2016, 121, 784-804.	3.6	67
20	ChemCam activities and discoveries during the nominal mission of the Mars Science Laboratory in Gale crater, Mars. Journal of Analytical Atomic Spectrometry, 2016, 31, 863-889.	3.0	134
21	Chemical variations in Yellowknife Bay formation sedimentary rocks analyzed by ChemCam on board the Curiosity rover on Mars. Journal of Geophysical Research E: Planets, 2015, 120, 452-482.	3.6	51
22	Understanding the signature of rock coatings in laser-induced breakdown spectroscopy data. Icarus, 2015, 249, 62-73.	2.5	49
23	ChemCam results from the Shaler outcrop in Gale crater, Mars. Icarus, 2015, 249, 2-21.	2.5	52
24	High manganese concentrations in rocks at Gale crater, Mars. Geophysical Research Letters, 2014, 41, 5755-5763.	4.0	81
25	Trace element geochemistry (Li, Ba, Sr, and Rb) using <i>Curiosity</i>'s ChemCam: Early results for Gale crater from Bradbury Landing Site to Rocknest. Journal of Geophysical Research E: Planets, 2014, 119, 255-285.	3.6	86
26	A Habitable Fluvio-Lacustrine Environment at Yellowknife Bay, Gale Crater, Mars. Science, 2014, 343, 1242777.	12.6	687
27	Mineralogy of a Mudstone at Yellowknife Bay, Gale Crater, Mars. Science, 2014, 343, 1243480.	12.6	508
28	Calcium sulfate veins characterized by ChemCam/Curiosity at Gale crater, Mars. Journal of Geophysical Research E: Planets, 2014, 119, 1991-2016.	3.6	214
29	Chemistry and texture of the rocks at Rocknest, Gale Crater: Evidence for sedimentary origin and diagenetic alteration. Journal of Geophysical Research E: Planets, 2014, 119, 2109-2131.	3.6	48
30	Chemistry of fractureâ€filling raised ridges in Yellowknife Bay, Gale Crater: Window into past aqueous activity and habitability on Mars. Journal of Geophysical Research E: Planets, 2014, 119, 2398-2415.	3.6	70
31	X-ray Diffraction Results from Mars Science Laboratory: Mineralogy of Rocknest at Gale Crater. Science, 2013, 341, 1238932.	12.6	327
32	Curiosity at Gale Crater, Mars: Characterization and Analysis of the Rocknest Sand Shadow. Science, 2013, 341, 1239505.	12.6	280
33	Volatile, Isotope, and Organic Analysis of Martian Fines with the Mars Curiosity Rover. Science, 2013, 341, 1238937.	12.6	367
34	Martian Fluvial Conglomerates at Gale Crater. Science, 2013, 340, 1068-1072.	12.6	326
35	The Petrochemistry of Jake_M: A Martian Mugearite. Science, 2013, 341, 1239463.	12.6	134
36	Soil Diversity and Hydration as Observed by ChemCam at Gale Crater, Mars. Science, 2013, 341, 1238670.	12.6	215

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37	Clustering and training set selection methods for improving the accuracy of quantitative laser induced breakdown spectroscopy. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2012, 70, 24-32.	2.9	41
38	The influence of multivariate analysis methods and target grain size on the accuracy of remote quantitative chemical analysis of rocks using laser induced breakdown spectroscopy. Icarus, 2011, 215, 608-627.	2.5	81
39	Geologic mapping and characterization of Gale Crater and implications for its potential as a Mars Science Laboratory landing site. Mars the International Journal of Mars Science and Exploration, 0, 5, 76-128.	0.8	181