Mariek E Schmidt

List of Publications by Year
in descending order

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47 papers	6,232 citations	117453 34 h-index	214527 47 g-index
49 all docs	49 docs citations	49 times ranked	3381 citing authors

#	Article	IF	Citations
1	Formation of Tridymite and Evidence for a Hydrothermal History at Gale Crater, Mars. Journal of Geophysical Research E: Planets, 2021, 126, e2020JE006569.	1.5	21
2	Multiphase Volatilization of Halogens at the Soilâ€Atmosphere Interface on Mars. Journal of Geophysical Research E: Planets, 2021, 126, e2021JE006929.	1.5	7
3	Elemental Composition and Chemical Evolution of Geologic Materials in Gale Crater, Mars: APXS Results From Bradbury Landing to the Vera Rubin Ridge. Journal of Geophysical Research E: Planets, 2020, 125, e2020JE006536.	1.5	33
4	APXSâ€Derived Compositional Characteristics of Vera Rubin Ridge and Murray Formation, Gale Crater, Mars: Geochemical Implications for the Origin of the Ridge. Journal of Geophysical Research E: Planets, 2020, 125, e2019JE006319.	1.5	31
5	Particle Induced X-ray Emission spectrometry (PIXE) of Hawaiian volcanics: An analogue study to evaluate the APXS field analysis of geologic materials on Mars. Icarus, 2020, 345, 113708.	1.1	9
6	Dusty Rocks in Gale Crater: Assessing Areal Coverage and Separating Dust and Rock Contributions in APXS Analyses. Journal of Geophysical Research E: Planets, 2018, 123, 1649-1673.	1.5	25
7	The Medusae Fossae Formation as the single largest source of dust on Mars. Nature Communications, 2018, 9, 2867.	5.8	29
8	APXSâ€derived chemistry of the Bagnold dune sands: Comparisons with Gale Crater soils and the global Martian average. Journal of Geophysical Research E: Planets, 2017, 122, 2623-2643.	1.5	62
9	Redox stratification of an ancient lake in Gale crater, Mars. Science, 2017, 356, .	6.0	209
10	Zinc and germanium in the sedimentary rocks of Gale Crater on Mars indicate hydrothermal enrichment followed by diagenetic fractionation. Journal of Geophysical Research E: Planets, 2017, 122, 1747-1772.	1.5	42
11	Potassiumâ€rich sandstones within the Gale impact crater, Mars: The APXS perspective. Journal of Geophysical Research E: Planets, 2016, 121, 1981-2003.	1.5	51
12	Mineralogy, provenance, and diagenesis of a potassic basaltic sandstone on Mars: CheMin Xâ€ray diffraction of the Windjana sample (Kimberley area, Gale Crater). Journal of Geophysical Research E: Planets, 2016, 121, 75-106.	1.5	159
13	A global Mars dust composition refined by the Alphaâ€Particle Xâ€ray Spectrometer in Gale Crater. Geophysical Research Letters, 2016, 43, 67-75.	1.5	95
14	Megacrystic pyroxene basalts sample deep crustal gabbroic cumulates beneath the Mount Taylor volcanic field, New Mexico. Journal of Volcanology and Geothermal Research, 2016, 316, 1-11.	0.8	4
15	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.	1.5	51
16	Understanding the signature of rock coatings in laser-induced breakdown spectroscopy data. Icarus, 2015, 249, 62-73.	1.1	49
17	High manganese concentrations in rocks at Gale crater, Mars. Geophysical Research Letters, 2014, 41, 5755-5763.	1.5	81
18	Volatile and Organic Compositions of Sedimentary Rocks in Yellowknife Bay, Gale Crater, Mars. Science, 2014, 343, 1245267.	6.0	323

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19	A Habitable Fluvio-Lacustrine Environment at Yellowknife Bay, Gale Crater, Mars. Science, 2014, 343, 1242777.	6.0	687
20	Mineralogy of a Mudstone at Yellowknife Bay, Gale Crater, Mars. Science, 2014, 343, 1243480.	6.0	508
21	Elemental Geochemistry of Sedimentary Rocks at Yellowknife Bay, Gale Crater, Mars. Science, 2014, 343, 1244734.	6.0	246
22	Overview of the Mars Science Laboratory mission: Bradbury Landing to Yellowknife Bay and beyond. Journal of Geophysical Research E: Planets, 2014, 119, 1134-1161.	1.5	104
23	Geochemical diversity in first rocks examined by the Curiosity Rover in Gale Crater: Evidence for and significance of an alkali and volatileâ€rich igneous source. Journal of Geophysical Research E: Planets, 2014, 119, 64-81.	1.5	113
24	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.	1.5	48
25	Igneous mineralogy at Bradbury Rise: The first ChemCam campaign at Gale crater. Journal of Geophysical Research E: Planets, 2014, 119, 30-46.	1.5	114
26	X-ray Diffraction Results from Mars Science Laboratory: Mineralogy of Rocknest at Gale Crater. Science, 2013, 341, 1238932.	6.0	327
27	Curiosity at Gale Crater, Mars: Characterization and Analysis of the Rocknest Sand Shadow. Science, 2013, 341, 1239505.	6.0	280
28	Re and Os isotopes of the central Oregon Cascades and along the arc indicate variable homogenization and mafic growth in the deep crust. Geochimica Et Cosmochimica Acta, 2013, 109, 345-364.	1.6	10
29	Volatile, Isotope, and Organic Analysis of Martian Fines with the Mars Curiosity Rover. Science, 2013, 341, 1238937.	6.0	367
30	The primary fO2 of basalts examined by the Spirit rover in Gusev Crater, Mars: Evidence for multiple redox states in the martian interior. Earth and Planetary Science Letters, 2013, 384, 198-208.	1.8	28
31	Martian Fluvial Conglomerates at Gale Crater. Science, 2013, 340, 1068-1072.	6.0	326
32	The Petrochemistry of Jake_M: A Martian Mugearite. Science, 2013, 341, 1239463.	6.0	134
33	Soil Diversity and Hydration as Observed by ChemCam at Gale Crater, Mars. Science, 2013, 341, 1238670.	6.0	215
34	MAHLI at the Rocknest sand shadow: Science and scienceâ€enabling activities. Journal of Geophysical Research E: Planets, 2013, 118, 2338-2360.	1.5	67
35	Deep Mafic Roots to Arc Volcanoes: Mafic Recharge and Differentiation of Basaltic Andesite at North Sister Volcano, Oregon Cascades. Journal of Petrology, 2011, 52, 603-641.	1.1	28
36	The evolution of a heterogeneous Martian mantle: Clues from K, P, Ti, Cr, and Ni variations in Gusev basalts and shergottite meteorites. Earth and Planetary Science Letters, 2010, 296, 67-77.	1.8	27

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37	The evolution of North Sister: A volcano shaped by extension and ice in the central Oregon Cascade Arc. Bulletin of the Geological Society of America, 2009, 121, 643-662.	1.6	32
38	Hydrothermal processes at Gusev Crater: An evaluation of Paso Robles class soils. Journal of Geophysical Research, 2008, 113, .	3.3	129
39	Structure and stratigraphy of Home Plate from the Spirit Mars Exploration Rover. Journal of Geophysical Research, 2008, 113, .	3.3	81
40	Hydrothermal origin of halogens at Home Plate, Gusev Crater. Journal of Geophysical Research, 2008, 113, .	3.3	71
41	Structure, stratigraphy, and origin of Husband Hill, Columbia Hills, Gusev Crater, Mars. Journal of Geophysical Research, 2008, 113, .	3.3	44
42	Segmentation of the Cascade Arc as indicated by Sr and Nd isotopic variation among diverse primitive basalts. Earth and Planetary Science Letters, 2008, 266, 166-181.	1.8	94
43	Geochemical properties of rocks and soils in Gusev Crater, Mars: Results of the Alpha Particle Xâ€Ray Spectrometer from Cumberland Ridge to Home Plate. Journal of Geophysical Research, 2008, 113, .	3.3	162
44	Iron mineralogy and aqueous alteration from Husband Hill through Home Plate at Gusev Crater, Mars: Results from the MÃ¶ssbauer instrument on the Spirit Mars Exploration Rover. Journal of Geophysical Research, 2008, 113, .	3.3	162
45	Pyroclastic Activity at Home Plate in Gusev Crater, Mars. Science, 2007, 316, 738-742.	6.0	174
46	Alkaline volcanic rocks from the Columbia Hills, Gusev crater, Mars. Journal of Geophysical Research, 2006, 111, .	3.3	148
47	MÃ¶ssbauer mineralogy of rock, soil, and dust at Meridiani Planum, Mars: Opportunity's journey across sulfate-rich outcrop, basaltic sand and dust, and hematite lag deposits. Journal of Geophysical Research, 2006, 111, n/a-n/a.	3.3	225