Scott M Mclennan

List of Publications by Year
in descending order

209	32,576	4146	4228
papers	citations	87 h-index	174 g-index

218	218	218	14804
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	The geochemical evolution of the continental crust. Reviews of Geophysics, 1995, 33, 241.	23.0	3,475
2	Relationships between the trace element composition of sedimentary rocks and upper continental crust. Geochemistry, Geophysics, Geosystems, 2001, 2, .	2.5	1,537
3	Geochemical approaches to sedimentation, provenance, and tectonics. Special Paper of the Geological Society of America, 1993, , 21-40.	0.5	1,289
4	Weathering and Global Denudation. Journal of Geology, 1993, 101, 295-303.	1.4	1,098
5	Chapter 7. RARE EARTH ELEMENTS IN SEDIMENTARY ROCKS: INFLUENCE OF PROVENANCE AND SEDIMENTARY PROCESSES. , 1989, , 169-200.		1,040
6	Geochemical and Ndî—¸Sr isotopic composition of deep-sea turbidites: Crustal evolution and plate tectonic associations. Geochimica Et Cosmochimica Acta, 1990, 54, 2015-2050.	3.9	936
7	In Situ Evidence for an Ancient Aqueous Environment at Meridiani Planum, Mars. Science, 2004, 306, 1709-1714.	12.6	845
8	A Habitable Fluvio-Lacustrine Environment at Yellowknife Bay, Gale Crater, Mars. Science, 2014, 343, 1242777.	12.6	687
9	Sedimentary Rocks and Crustal Evolution: Tectonic Setting and Secular Trends. Journal of Geology, 1991, 99, 1-21.	1.4	677
10	Effects of Chemical Weathering and Sorting on the Petrogenesis of Siliciclastic Sediments, with Implications for Provenance Studies. Journal of Geology, 1996, 104, 525-542.	1.4	588
11	Mineralogy of a Mudstone at Yellowknife Bay, Gale Crater, Mars. Science, 2014, 343, 1243480.	12.6	508
12	The Opportunity Rover's Athena Science Investigation at Meridiani Planum, Mars. Science, 2004, 306, 1698-1703.	12.6	507
13	Provenance and diagenesis of the evaporite-bearing Burns formation, Meridiani Planum, Mars. Earth and Planetary Science Letters, 2005, 240, 95-121.	4.4	506
14	Stratigraphy and sedimentology of a dry to wet eolian depositional system, Burns formation, Meridiani Planum, Mars. Earth and Planetary Science Letters, 2005, 240, 11-72.	4.4	496
15	Marsâ€™ Surface Radiation Environment Measured with the Mars Science Laboratoryâ€™s Curiosity Rover. Science, 2014, 343, 1244797.	12.6	475
16	Deposition, exhumation, and paleoclimate of an ancient lake deposit, Gale crater, Mars. Science, 2015, 350, aac7575.	12.6	471
17	Geochemistry of loess, continental crustal composition and crustal model ages. Geochimica Et Cosmochimica Acta, 1983, 47, 1897-1905.	3.9	461
18	The Spirit Rover's Athena Science Investigation at Gusev Crater, Mars. Science, 2004, 305, 794-799.	12.6	404

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19	Detection of Silica-Rich Deposits on Mars. Science, 2008, 320, 1063-1067.	12.6	399
20	Volatile, Isotope, and Organic Analysis of Martian Fines with the Mars Curiosity Rover. Science, 2013, 341, 1238937.	12.6	367
21	Chemistry and mineralogy of outcrops at Meridiani Planum. Earth and Planetary Science Letters, 2005, 240, 73-94.	4.4	349
22	An integrated view of the chemistry and mineralogy of martian soils. Nature, 2005, 436, 49-54.	27.8	348
23	X-ray Diffraction Results from Mars Science Laboratory: Mineralogy of Rocknest at Gale Crater. Science, 2013, 341, 1238932.	12.6	327
24	Abundance and Isotopic Composition of Gases in the Martian Atmosphere from the Curiosity Rover. Science, 2013, 341, 263-266.	12.6	327
25	Martian Fluvial Conglomerates at Gale Crater. Science, 2013, 340, 1068-1072.	12.6	326
26	Volatile and Organic Compositions of Sedimentary Rocks in Yellowknife Bay, Gale Crater, Mars. Science, 2014, 343, 1245267.	12.6	323
27	Rare earth element-thorium correlations in sedimentary rocks, and the composition of the continental crust. Geochimica Et Cosmochimica Acta, 1980, 44, 1833-1839.	3.9	309
28	Curiosity at Gale Crater, Mars: Characterization and Analysis of the Rocknest Sand Shadow. Science, 2013, 341, 1239505.	12.6	280
29	Initial results from the InSight mission on Mars. Nature Geoscience, 2020, 13, 183-189.	12.9	274
30	Geochemistry of Archean shales from the Pilbara Supergroup, Western Australia. Geochimica Et Cosmochimica Acta, 1983, 47, 1211-1222.	3.9	266
31	Early Proterozoic crustal evolution: Geochemical and NdPb isotopic evidence from metasedimentary rocks, southwestern North America. Geochimica Et Cosmochimica Acta, 1995, 59, 1153-1177.	3.9	249
32	Elemental Geochemistry of Sedimentary Rocks at Yellowknife Bay, Gale Crater, Mars. Science, 2014, 343, 1244734.	12.6	246
33	Water alteration of rocks and soils on Mars at the Spirit rover site in Gusev crater. Nature, 2005, 436, 66-69.	27.8	240
34	Overview of the Spirit Mars Exploration Rover Mission to Gusev Crater: Landing site to Backstay Rock in the Columbia Hills. Journal of Geophysical Research, 2006, 111, n/a-n/a.	3.3	238
35	Geochemical Constraints on the Growth of the Continental Crust. Journal of Geology, 1982, 90, 347-361.	1.4	231
36	Geochemical modeling of evaporation processes on Mars: Insight from the sedimentary record at Meridiani Planum. Earth and Planetary Science Letters, 2005, 240, 122-148.	4.4	226

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37	In Situ Radiometric and Exposure Age Dating of the Martian Surface. Science, 2014, 343, 1247166.	12.6	224
38	Water Activity and the Challenge for Life on Early Mars. Science, 2008, 320, 1204-1207.	12.6	222
39	Geochemistry and provenance of the Middle Ordovician Austin Glen Member (Normanskill Formation) and the Taconian Orogeny in New England. Sedimentology, 1998, 45, 635-655.	3.1	216
40	Soil Diversity and Hydration as Observed by ChemCam at Gale Crater, Mars. Science, 2013, 341, 1238670.	12.6	215
41	Redox stratification of an ancient lake in Gale crater, Mars. Science, 2017, 356, .	12.6	209
42	Acid-sulfate weathering of synthetic Martian basalt: The acid fog model revisited. Journal of Geophysical Research, 2004, 109, .	3.3	199
43	Large ion lithophile elements in rocks from high-pressure granulite facies terrains. Geochimica Et Cosmochimica Acta, 1985, 49, 1645-1655.	3.9	198
44	Rare earth element geochemistry and the â€œtetradâ€•effect. Geochimica Et Cosmochimica Acta, 1994, 58, 2025-2033.	3.9	193
45	Two Years at Meridiani Planum: Results from the Opportunity Rover. Science, 2006, 313, 1403-1407.	12.6	188
46	Geochemical evolution of Archean shales from South Africa. I. The Swaziland and Pongola Supergroups. Precambrian Research, 1983, 22, 93-124.	2.7	180
47	Ancient Impact and Aqueous Processes at Endeavour Crater, Mars. Science, 2012, 336, 570-576.	12.6	176
48	Ancient Aqueous Environments at Endeavour Crater, Mars. Science, 2014, 343, 1248097.	12.6	176
49	Th and U in sedimentary rocks: crustal evolution and sedimentary recycling. Nature, 1980, 285, 621-624.	27.8	173
50	In situ and experimental evidence for acidic weathering of rocks and soils on Mars. Journal of Geophysical Research, 2006, 111, n/a-n/a.	3.3	169
51	The SuperCam Instrument Suite on the NASA Mars 2020 Rover: Body Unit and Combined System Tests. Space Science Reviews, 2021, 217, 4.	8.1	160
52	Rare earth element patterns in Archean high-grade metasediments and their tectonic significance. Geochimica Et Cosmochimica Acta, 1986, 50, 2267-2279.	3.9	156
53	Soils of Eagle Crater and Meridiani Planum at the Opportunity Rover Landing Site. Science, 2004, 306, 1723-1726.	12.6	153
54	Pancam Multispectral Imaging Results from the Spirit Rover at Gusev Crater. Science, 2004, 305, 800-806.	12.6	153

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55	Overview of the Opportunity Mars Exploration Rover Mission to Meridiani Planum: Eagle Crater to Purgatory Ripple. Journal of Geophysical Research, 2006, 111, n/a-n/a.	3.3	149
56	Sulfur on Mars. Elements, 2010, 6, 107-112.	0.5	148
57	Evidence from Opportunity's Microscopic Imager for Water on Meridiani Planum. Science, 2004, 306, 1727-1730.	12.6	146
58	Samarium/neodymium elemental and isotopic systematics in sedimentary rocks. Geochimica Et Cosmochimica Acta, 1992, 56, 887-898.	3.9	142
59	Exploration of Victoria Crater by the Mars Rover Opportunity. Science, 2009, 324, 1058-1061.	12.6	141
60	Gusev crater: Wind-related features and processes observed by the Mars Exploration Rover Spirit. Journal of Geophysical Research, 2006, 111, n/a-n/a.	3.3	140
61	A â^¼3.5ÂGa record of water-limited, acidic weathering conditions on Mars. Earth and Planetary Science Letters, 2007, 260, 432-443.	4.4	140
62	Thickness and structure of the martian crust from InSight seismic data. Science, 2021, 373, 438-443.	12.6	140
63	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
64	Pancam Multispectral Imaging Results from the Opportunity Rover at Meridiani Planum. Science, 2004, 306, 1703-1709.	12.6	135
65	The Petrochemistry of Jake_M: A Martian Mugearite. Science, 2013, 341, 1239463.	12.6	134
66	The SuperCam Instrument Suite on the Mars 2020 Rover: Science Objectives and Mast-Unit Description. Space Science Reviews, 2021, 217, 1.	8.1	131
67	Textures of the Soils and Rocks at Gusev Crater from Spirit's Microscopic Imager. Science, 2004, 305, 824-826.	12.6	130
68	Rare earth element mobility associated with uranium mineralisation. Nature, 1979, 282, 247-250.	27.8	121
69	An astrobiological perspective on Meridiani Planum. Earth and Planetary Science Letters, 2005, 240, 179-189.	4.4	113
70	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.	3.6	113
71	Resetting of neodymium isotopes and redistribution of REEs during sedimentary processes: The Early Proterozoic Chelmsford Formation, Sudbury Basin, Ontario, Canada. Geochimica Et Cosmochimica Acta, 1994, 58, 931-941.	3.9	112
72	Geochemistry of Archean metasedimentary rocks from West Greenland. Geochimica Et Cosmochimica Acta, 1984, 48, 1-13.	3.9	110

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73	Oxidation of manganese in an ancient aquifer, Kimberley formation, Gale crater, Mars. Geophysical Research Letters, 2016, 43, 7398-7407.	4.0	110
74	Sedimentary silica on Mars. Geology, 2003, 31, 315.	4.4	109
75	Chemical divides and evaporite assemblages on Mars. Earth and Planetary Science Letters, 2006, 241, 21-31.	4.4	108
76	Lightâ€toned salty soils and coexisting Siâ€rich species discovered by the Mars Exploration Rover Spirit in Columbia Hills. Journal of Geophysical Research, 2008, 113, .	3.3	108
77	Rare earth element redistribution and its effects on the neodymium isotope system in the austin Glen Member of the Normanskill Formation, New York, USA. Geochimica Et Cosmochimica Acta, 1994, 58, 5245-5253.	3.9	107
78	Mineralogy of the light-toned outcrop at Meridiani Planum as seen by the Miniature Thermal Emission Spectrometer and implications for its formation. Journal of Geophysical Research, 2006, 111, n/a-n/a.	3.3	107
79	Opportunity Mars Rover mission: Overview and selected results from Purgatory ripple to traverses to Endeavour crater. Journal of Geophysical Research, 2011, 116, .	3.3	106
80	Upper mantle structure of Mars from InSight seismic data. Science, 2021, 373, 434-438.	12.6	105
81	Geochemical Reservoirs and Timing of Sulfur Cycling on Mars. Space Science Reviews, 2013, 174, 251-300.	8.1	103
82	Spirit Mars Rover Mission to the Columbia Hills, Gusev Crater: Mission overview and selected results from the Cumberland Ridge to Home Plate. Journal of Geophysical Research, 2008, 113, .	3.3	99
83	Heat Flow and the Chemical Composition of Continental Crust. Journal of Geology, 1996, 104, 369-377.	1.4	96
84	Detrital Zircon Geochronology of Taconian and Acadian Foreland Sedimentary Rocks in New England. Journal of Sedimentary Research, 2001, 71, 305-317.	1.6	96
85	Wind-Related Processes Detected by the Spirit Rover at Gusev Crater, Mars. Science, 2004, 305, 810-813.	12.6	94
86	Mars Sedimentary Geology: Key Concepts and Outstanding Questions. Astrobiology, 2011, 11, 77-87.	3.0	93
87	Rare earth elements in Huronian (Lower Proterozoic) sedimentary rocks: Composition and evolution of the post-Kenoran upper crust. Geochimica Et Cosmochimica Acta, 1979, 43, 375-388.	3.9	92
88	Pb isotope compositions of modern deep sea turbidites. Earth and Planetary Science Letters, 2001, 184, 489-503.	4.4	91
89	Trace element geochemistry (Li, Ba, Sr, and Rb) using Curiosity'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
90	Perseverance rover reveals an ancient delta-lake system and flood deposits at Jezero crater, Mars. Science, 2021, 374, 711-717.	12.6	86

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91	Effects of sedimentary sorting on neodymium isotopes in deep-sea turbidites. Nature, 1989, 337, 547-549.	27.8	83
92	Chemical relationships among irghizites, zhamanshinites, Australasian tektites and Henbury impact glasses. Geochimica Et Cosmochimica Acta, 1979, 43, 1551-1565.	3.9	76
93	Production of hydrogen peroxide in Martian and lunar soils. Earth and Planetary Science Letters, 2007, 255, 41-52.	4.4	73
94	Fe oxidation processes at Meridiani Planum and implications for secondary Fe mineralogy on Mars. Journal of Geophysical Research, 2008, 113, .	3.3	73
95	Constraints on abundance, composition, and nature of Xâ€ray amorphous components of soils and rocks at Gale crater, Mars. Journal of Geophysical Research E: Planets, 2014, 119, 2640-2657.	3.6	73
96	The potential science and engineering value of samples delivered to Earth by Mars sample return. Meteoritics and Planetary Science, 2019, 54, S3.	1.6	73
97	Geochemistry of the Archean Yellowknife Supergroup. Geochimica Et Cosmochimica Acta, 1981, 45, 1111-1129.	3.9	71
98	Improved accuracy in quantitative laser-induced breakdown spectroscopy using sub-models. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2017, 129, 49-57.	2.9	71
99	Mineralogic controls on REE mobility during black-shale diagenesis. Journal of Sedimentary Research, 1999, 69, 1071-1082.	1.6	67
100	The potassic sedimentary rocks in Gale Crater, Mars, as seen by ChemCam on board Curiosity. Journal of Geophysical Research E: Planets, 2016, 121, 784-804.	3.6	67
101	Geochemical and Nd/Pb Isotopic Evidence for the Provenance of the Early Proterozoic Virginia Formation, Minnesota. Implications for the Tectonic Setting of the Animikie Basin. Journal of Geology, 1995, 103, 147-168.	1.4	66
102	Martian surface heat production and crustal heat flow from Mars Odyssey Gamma-Ray spectrometry. Geophysical Research Letters, 2011, 38, n/a-n/a.	4.0	66
103	Nickel on Mars: Constraints on meteoritic material at the surface. Journal of Geophysical Research, 2006, 111, n/a-n/a.	3.3	65
104	Sulfur-bearing phases detected by evolved gas analysis of the Rocknest aeolian deposit, Gale Crater, Mars. Journal of Geophysical Research E: Planets, 2014, 119, 373-393.	3.6	65
105	Sorting out compositional trends in sedimentary rocks of the Bradbury group (Aeolis Palus), Gale crater, Mars. Journal of Geophysical Research E: Planets, 2017, 122, 295-328.	3.6	64
106	Chapter 79 The significance of the rare earths in geochemistry and cosmochemistry. Fundamental Theories of Physics, 1988, 11, 485-578.	0.3	62
107	The sedimentary rock cycle of Mars. , 2008, , 541-577.		61
108	Recycling of the continental crust. Pure and Applied Geophysics, 1988, 128, 683-724.	1.9	60

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109	The Sedimentary Cycle on Early Mars. Annual Review of Earth and Planetary Sciences, 2019, 47, 91-118.	11.0	59
110	A petrographic approach for evaluating trace-element mobility in a black shale. Journal of Sedimentary Research, 1998, 68, 970-980.	1.6	58
111	PIXL: Planetary Instrument for X-Ray Lithochemistry. Space Science Reviews, 2020, 216, 1.	8.1	58
112	Veneers, rinds, and fracture fills: Relatively late alteration of sedimentary rocks at Meridiani Planum, Mars. Journal of Geophysical Research, 2008, 113, .	3.3	57
113	Continental freeboard, sedimentation rates and growth of continental crust. Nature, 1983, 306, 169-172.	27.8	56
114	Visible and near-infrared multispectral analysis of rocks at Meridiani Planum, Mars, by the Mars Exploration Rover Opportunity. Journal of Geophysical Research, 2007, 112, .	3.3	56
115	High concentrations of manganese and sulfur in deposits on Murray Ridge, Endeavour Crater, Mars. American Mineralogist, 2016, 101, 1389-1405.	1.9	55
116	Nd and Pb isotopic evidence for provenance and post-depositional alteration of the Paleoproterozoic Huronian Supergroup, Canada. Precambrian Research, 2000, 102, 263-278.	2.7	53
117	Crustal heat production and the thermal evolution of Mars. Geophysical Research Letters, 2001, 28, 4019-4022.	4.0	53
118	Variations in K/Th on Mars. Journal of Geophysical Research, 2007, 112, .	3.3	53
119	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
120	Large sulfur isotope fractionations in Martian sediments at Gale crater. Nature Geoscience, 2017, 10, 658-662.	12.9	53
121	Experimental epithermal alteration of synthetic Los Angeles meteorite: Implications for the origin of Martian soils and identification of hydrothermal sites on Mars. Journal of Geophysical Research, 2005, 110, .	3.3	52
122	Chemical alteration of fine-grained sedimentary rocks at Gale crater. Icarus, 2019, 321, 619-631.	2.5	52
123	A lower crustal origin for massif-type anorthosites. Nature, 1984, 311, 372-374.	27.8	50
124	The geochemistry of the carbonate-rich Espanola Formation (Huronian) with emphasis on the rare earth elements. Canadian Journal of Earth Sciences, 1979, 16, 230-239.	1.3	48
125	Classification scheme for sedimentary and igneous rocks in Gale crater, Mars. Icarus, 2017, 284, 1-17.	2.5	46
126	InSight Constraints on the Global Character of the Martian Crust. Journal of Geophysical Research E: Planets, 2022, 127, .	3.6	45

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127	chemical composition of martian soil and rocks: Complex mixing and sedimentary transport. Geophysical Research Letters, 2000, 27, 1335-1338.	4.0	44
128	Chemically striking regions on Mars and Stealth revisited. Journal of Geophysical Research, 2009, 114, .	3.3	43
129	On the geochemical evolution of sedimentary rocks. Chemical Geology, 1982, 37, 335-350.	3.3	40
130	Post-landing major element quantification using SuperCam laser induced breakdown spectroscopy. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2022, 188, 106347.	2.9	40
131	Largeâ€ion lithophile element fractionation during the early differentiation of Mars and the composition of the martian primitive mantle. Meteoritics and Planetary Science, 2003, 38, 895-904.	1.6	39
132	Surface processes recorded by rocks and soils on Meridiani Planum, Mars: Microscopic Imager observations during Opportunity's first three extended missions. Journal of Geophysical Research, 2008, 113, .	3.3	39
133	Smectite deposits in Marathon Valley, Endeavour Crater, Mars, identified using CRISM hyperspectral reflectance data. Geophysical Research Letters, 2016, 43, 4885-4892.	4.0	39
134	Geochemical standards for sedimentary rocks: Trace-element data for U.S.G.S. standards SCo-1, MAG-1 and SGR-1. Chemical Geology, 1980, 29, 333-343.	3.3	38
135	Hematite spherules at Meridiani: Results from MI, Miniâ€TES, and Pancam. Journal of Geophysical Research, 2008, 113, .	3.3	38
136	Physicochemical properties of concentrated Martian surface waters. Journal of Geophysical Research, 2011, 116, .	3.3	35
137	Sulfates hydrating bulk soil in the Martian low and middle latitudes. Geophysical Research Letters, 2014, 41, 7987-7996.	4.0	35
138	Sediments and Soils: Chemistry and Abundances. AGU Reference Shelf, 0, , 8-19.	0.6	33
139	Stability and fate of ferrihydrite during episodes of water/rock interactions on early Mars: An experimental approach. Journal of Geophysical Research E: Planets, 2017, 122, 358-382.	3.6	33
140	Archaean Sedimentary Rocks and Their Relation to the Composition of the Archaean Continental Crust. , 1984, , 47-72.		33
141	Mars Reconnaissance Orbiter and Opportunity observations of the Burns formation: Crater hopping at Meridiani Planum. Journal of Geophysical Research E: Planets, 2015, 120, 429-451.	3.6	30
142	K and Cl concentrations on the Martian surface determined by the Mars Odyssey Gamma Ray Spectrometer: Implications for bulk halogen abundances in Mars. Geophysical Research Letters, 2010, 37, .	4.0	29
143	Bedrock formation at Meridiani Planum. Nature, 2006, 443, E1-E2.	27.8	28
144	Mars Odyssey Gamma Ray Spectrometer elemental abundances and apparent relative surface age: Implications for Martian crustal evolution. Journal of Geophysical Research, 2007, 112, .	3.3	28

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145	Photochemical controls on chlorine and bromine geochemistry at the Martian surface. Earth and Planetary Science Letters, 2018, 497, 102-112.	4.4	28
146	Chapter 21 The Rare Earth Element Evidence in Precambrian Sedimentary Rocks: Implications for Crustal Evolution. Neoproterozoic-Cambrian Tectonics, Global Change and Evolution: A Focus on South Western Gondwana, 1981, 4, 527-548.	0.2	27
147	Mixing relationships and the effects of secondary alteration in the Wishstone and Watchtower Classes of Husband Hill, Gusev Crater, Mars. Journal of Geophysical Research, 2006, 111, n/a-n/a.	3.3	27
148	Application of the Pitzer ion interaction model to isopiestic data for the Fe2(SO4)3â€“H2SO4â€“H2O system at 298.15 and 323.15K. Geochimica Et Cosmochimica Acta, 2007, 71, 2680-2698.	3.9	27
149	The Spirit Rover's Athena Science Investigation at Gusev Crater, Mars. Science, 2004, 305, 794-799.	12.6	27
150	The chemical composition of the Archaean crust. Geological Society Special Publication, 1986, 24, 173-178.	1.3	25
151	The CanMars Mars Sample Return analogue mission. Planetary and Space Science, 2019, 166, 110-130.	1.7	25
152	Experimental constraints on the evaporation of partially oxidized acid-sulfate waters at the martian surface. Geochimica Et Cosmochimica Acta, 2009, 73, 1205-1222.	3.9	24
153	The Taconian orogeny in southern New England: Nd-isotope evidence against addition of juvenile components. Canadian Journal of Earth Sciences, 1996, 33, 1612-1627.	1.3	23
154	Xâ€Ray Amorphous Components in Sedimentary Rocks of Gale Crater, Mars: Evidence for Ancient Formation and Longâ€Lived Aqueous Activity. Journal of Geophysical Research E: Planets, 2021, 126, e2020JE006782.	3.6	22
155	Late Diagenetic Redistribution of Uranium and Disturbance of the U-Pb Whole Rock Isotope System in a Black Shale. Journal of Sedimentary Research, 2000, 70, 1234-1245.	1.6	20
156	Extraformational sediment recycling on Mars. , 2020, 16, 1508-1537.		20
157	Geochemistry of Early Proterozoic sedimentary rocks and the Archean/Proterozoic boundary. Memoir of the Geological Society of America, 1983, , 119-132.	0.5	19
158	Geochemistry of Sedimentary Processes on Mars. , 2012, , 119-138.		19
159	Discordant Kâ€Ar and young exposure dates for the Windjana sandstone, Kimberley, Gale Crater, Mars. Journal of Geophysical Research E: Planets, 2016, 121, 2176-2192.	3.6	19
160	Crustal evolution: Comments on â€œThe Archean-Proterozoic transition: Evidence from the geochemistry of metasedimentary rocks from Guyana and Montanaâ€•by A. K. Gibbs, C. W. Montgomery, P. A. O'day and E. A. Erslev. Geochimica Et Cosmochimica Acta, 1988, 52, 785-787.	3.9	18
161	Humidity-induced phase transitions of ferric sulfate minerals studied by in situ and ex situ X-ray diffraction. American Mineralogist, 2009, 94, 1629-1637.	1.9	18
162	Geochemical application of spark-source mass spectrography. Chemical Geology, 1983, 39, 273-280.	3.3	16

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163	Geochemical constraints on the presence of clay minerals in the Burns formation, Meridiani Planum, Mars. Icarus, 2017, 281, 137-150.	2.5	16
164	Scale and timing of Rare Earth Element redistribution in the Taconian foreland of New England. Sedimentology, 2004, 51, 885-897.	3.1	14
165	Chlorine Release From Common Chlorides by Martian Dust Activity. Journal of Geophysical Research E: Planets, 2020, 125, e2019JE006283.	3.6	14
166	Lead isotopes as a provenance tool for quartz: Examples from plutons and quartzite, northeastern Minnesota, USA. Geochimica Et Cosmochimica Acta, 1994, 58, 4455-4464.	3.9	13
167	Regional and grain size influences on the geochemistry of soil at Gusev crater, Mars. Journal of Geophysical Research, 2010, 115, .	3.3	13
168	Chemical Composition and Element Distribution in the Earth's Crust. , 2003, , 697-719.		13
169	Does martian soil release reactive halogens to the atmosphere?. Icarus, 2013, 226, 1438-1446.	2.5	12
170	Provenance of Amazon Fan muds: constraints from Nd and Pb isotopes. , 0, , .		12
171	Asteroids and andesites. Nature, 2009, 459, E1-E1.	27.8	11
172	The potential science and engineering value of samples delivered to Earth by Mars sample return. Meteoritics and Planetary Science, 2019, 54, 667-671.	1.6	11
173	Evidence for Water at Meridiani. Elements, 2006, 2, 163-167.	0.5	10
174	Implications of observed primary lithologies. , 2008, , 501-518.		10
175	Electrochemical Synthesis of Nitro-Chitosan and Its Performance in Chromium Removal. Coatings, 2013, 3, 140-152.	2.6	10
176	Reevaluation of Perchlorate in Gale Crater Rocks Suggests Geologically Recent Perchlorate Addition. Journal of Geophysical Research E: Planets, 2020, 125, e2019JE006156.	3.6	10
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