Nicolas Mangold

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/2405013/publications.pdf

Version: 2024-02-01

183 papers	19,463 citations	10389 72 h-index	11308 136 g-index
187 all docs	187 docs citations	187 times ranked	6064 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	Bedrock Geochemistry and Alteration History of the Clayâ€Bearing Glen Torridon Region of Gale Crater, Mars. Journal of Geophysical Research E: Planets, 2022, 127, .	3.6	17
3	Xâ€Ray Amorphous Sulfurâ€Bearing Phases in Sedimentary Rocks of Gale Crater, Mars. Journal of Geophysical Research E: Planets, 2022, 127, .	3.6	10
4	From Lake to River: Documenting an Environmental Transition Across the Jura/Knockfarril Hill Members Boundary in the Glen Torridon Region of Gale Crater (Mars). Journal of Geophysical Research E: Planets, 2022, 127, .	3.6	19
5	Reconstructing the infilling history within Robert Sharp crater, Mars: Insights from morphology and stratigraphy. Icarus, 2021, 358, 114223.	2.5	4
6	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
7	Intermittent warmth on young Mars. Nature Geoscience, 2021, 14, 112-113.	12.9	2
8	The SuperCam Instrument Suite on the Mars 2020 Rover: Science Objectives and Mast-Unit Description. Space Science Reviews, 2021, 217, 1.	8.1	131
9	Voluminous Silica Precipitated from Martian Waters during Late-stage Aqueous Alteration. Planetary Science Journal, 2021, 2, 65.	3.6	13
10	Alternating wet and dry depositional environments recorded in the stratigraphy of Mount Sharp at Gale crater, Mars. Geology, 2021, 49, 842-846.	4.4	33
11	Evidence for fluvial and glacial activities within impact craters that excavated into a Noachian volcanic dome on Mars. Icarus, 2021, 361, 114397.	2.5	3
12	Early diagenesis at and below Vera Rubin ridge, Gale crater, Mars. Meteoritics and Planetary Science, 2021, 56, 1905-1932.	1.6	7
13	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
14	Perseverance rover reveals an ancient delta-lake system and flood deposits at Jezero crater, Mars. Science, 2021, 374, 711-717.	12.6	86
15	Long-Distance 3D Reconstructions Using Photogrammetry with Curiosityâ€™s ChemCam Remote Micro-Imager in Gale Crater (Mars). Remote Sensing, 2021, 13, 4068.	4.0	5
16	Evidence for thermal-stress-induced rockfalls on Mars impact crater slopes. Icarus, 2020, 342, 113503.	2.5	27
17	Refining the age, emplacement and alteration scenarios of the olivine-rich unit in the Nili Fossae region, Mars. Icarus, 2020, 336, 113436.	2.5	59
18	Particular H 2 O dissolution mechanism in ironâ€rich melt: Application to martian basaltic melt genesis. Journal of Raman Spectroscopy, 2020, 51, 493-507.	2.5	8

#	Article	IF	Citations
19	3D digital outcrop model reconstruction of the Kimberley outcrop (Gale crater, Mars) and its integration into Virtual Reality for simulated geological analysis. Planetary and Space Science, 2020, 182, 104808.	1.7	27
20	Extraformational sediment recycling on Mars. , 2020, 16, 1508-1537.		20
21	Boulder Fall Activity in the Jezero Crater, Mars. Geophysical Research Letters, 2020, 47, e2020GL090362.	4.0	4
22	Analyses of Highâ€Iron Sedimentary Bedrock and Diagenetic Features Observed With ChemCam at Vera Rubin Ridge, Gale Crater, Mars: Calibration and Characterization. Journal of Geophysical Research E: Planets, 2020, 125, e2019JE006314.	3.6	30
23	Evidence for a Diagenetic Origin of Vera Rubin Ridge, Gale Crater, Mars: Summary and Synthesis of Curiosity's Exploration Campaign. Journal of Geophysical Research E: Planets, 2020, 125, e2020JE006527.	3.6	69
24	Diagenesis of Vera Rubin Ridge, Gale Crater, Mars, From Mastcam Multispectral Images. Journal of Geophysical Research E: Planets, 2020, 125, e2019JE006322.	3.6	33
25	Iron Mobility During Diagenesis at Vera Rubin Ridge, Gale Crater, Mars. Journal of Geophysical Research E: Planets, 2020, 125, e2019JE006299.	3.6	30
26	Boron and Lithium in Calcium Sulfate Veins: Tracking Precipitation of Diagenetic Materials in Vera Rubin Ridge, Gale Crater. Journal of Geophysical Research E: Planets, 2020, 125, e2019JE006301.	3.6	8
27	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
28	Fluvial Regimes, Morphometry, and Age of Jezero Crater Paleolake Inlet Valleys and Their Exobiological Significance for the 2020 Rover Mission Landing Site. Astrobiology, 2020, 20, 994-1013.	3.0	46
29	Structural analysis of sulfate vein networks in Gale crater (Mars). Journal of Structural Geology, 2020, 137, 104083.	2.3	10
30	Estimated Minimum Life Span of the Jezero Fluvial Delta (Mars). Astrobiology, 2020, 20, 977-993.	3.0	20
31	Origin and composition of three heterolithic boulder- and cobble-bearing deposits overlying the Murray and Stimson formations, Gale Crater, Mars. Icarus, 2020, 350, 113897.	2.5	11
32	Waterâ€Ice Exposing Scarps Within the Northern Midlatitude Craters on Mars. Geophysical Research Letters, 2020, 47, e2020GL089057.	4.0	9
33	The Chemostratigraphy of the Murray Formation and Role of Diagenesis at Vera Rubin Ridge in Gale Crater, Mars, as Observed by the ChemCam Instrument. Journal of Geophysical Research E: Planets, 2020, 125, e2019JE006320.	3.6	41
34	Toward the geological significance of hydrated silica detected by near infrared spectroscopy on Mars based on terrestrial reference samples. Icarus, 2020, 347, 113706.	2.5	14
35	Grain Size Variations in the Murray Formation: Stratigraphic Evidence for Changing Depositional Environments in Gale Crater, Mars. Journal of Geophysical Research E: Planets, 2020, 125, e2019JE006230.	3.6	29
36	Mars Science Laboratory Observations of Chloride Salts in Gale Crater, Mars. Geophysical Research Letters, 2019, 46, 10754-10763.	4.0	52

#	Article	IF	Citations
37	An interval of high salinity in ancient Gale crater lake on Mars. Nature Geoscience, 2019, 12, 889-895.	12.9	105
38	New Constraints on Early Mars Weathering Conditions From an Experimental Approach on Crust Simulants. Journal of Geophysical Research E: Planets, 2019, 124, 1783-1801.	3.6	9
39	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
40	The Hydrology of Mars Including a Potential Cryosphere. , 2019, , 185-246.		7
41	Copper enrichments in the Kimberley formation in Gale crater, Mars: Evidence for a Cu deposit at the source. Icarus, 2019, 321, 736-751.	2.5	23
42	Chemical alteration of fine-grained sedimentary rocks at Gale crater. Icarus, 2019, 321, 619-631.	2.5	52
43	Using ChemCam LIBS data to constrain grain size in rocks on Mars: Proof of concept and application to rocks at Yellowknife Bay and Pahrump Hills, Gale crater. Icarus, 2019, 321, 82-98.	2.5	37
44	Investigating the role of anhydrous oxidative weathering on sedimentary rocks in the Transantarctic Mountains and implications for the modern weathering of sedimentary lithologies on Mars. Icarus, 2019, 319, 669-684.	2.5	8
45	Formation of clay minerals on Mars: Insights from long-term experimental weathering of olivine. Icarus, 2018, 311, 210-223.	2.5	17
46	Chemical variability in mineralized veins observed by ChemCam on the lower slopes of Mount Sharp in Gale crater, Mars. Icarus, 2018, 311, 69-86.	2.5	34
47	Shaler: inÂsitu analysis of a fluvial sedimentary deposit on Mars. Sedimentology, 2018, 65, 96-122.	3.1	59
48	Desiccation cracks provide evidence of lake drying on Mars, Sutton Island member, Murray formation, Gale Crater. Geology, 2018, 46, 515-518.	4.4	71
49	Martian Eolian Dust Probed by ChemCam. Geophysical Research Letters, 2018, 45, 10,968.	4.0	40
50	In Situ Analysis of Opal in Gale Crater, Mars. Journal of Geophysical Research E: Planets, 2018, 123, 1955-1972.	3.6	36
51	Clay mineral diversity and abundance in sedimentary rocks of Gale crater, Mars. Science Advances, 2018, 4, eaar3330.	10.3	150
52	Quantification of water content by laser induced breakdown spectroscopy on Mars. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2017, 130, 82-100.	2.9	65
53	Classification of igneous rocks analyzed by ChemCam at Gale crater, Mars. Icarus, 2017, 288, 265-283.	2.5	96
54	Near infrared signature of opal and chalcedony as a proxy for their structure and formation conditions. European Journal of Mineralogy, 2017, 29, 409-421.	1.3	24

#	Article	IF	Citations
55	Diagenetic silica enrichment and lateâ€stage groundwater activity in Gale crater, Mars. Geophysical Research Letters, 2017, 44, 4716-4724.	4.0	87
56	Centimeter to decimeter hollow concretions and voids in Gale Crater sediments, Mars. Icarus, 2017, 289, 144-156.	2.5	12
57	Alkali trace elements in Gale crater, Mars, with ChemCam: Calibration update and geological implications. Journal of Geophysical Research E: Planets, 2017, 122, 650-679.	3.6	48
58	Classification scheme for sedimentary and igneous rocks in Gale crater, Mars. Icarus, 2017, 284, 1-17.	2.5	46
59	Fluidized-sediment pipes in Gale crater, Mars, and possible Earth analogs. Geology, 2017, 45, 7-10.	4.4	18
60	Chemistry of diagenetic features analyzed by ChemCam at Pahrump Hills, Gale crater, Mars. Icarus, 2017, 281, 121-136.	2.5	90
61	Oxidation of manganese in an ancient aquifer, Kimberley formation, Gale crater, Mars. Geophysical Research Letters, 2016, 43, 7398-7407.	4.0	110
62	Observation of >â€‰5â€‰wt % zinc at the Kimberley outcrop, Gale crater, Mars. Journal of Geophysical Research E: Planets, 2016, 121, 338-352.	3.6	32
63	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
64	Magmatic complexity on early Mars as seen through a combination of orbital, in-situ and meteorite data. Lithos, 2016, 254-255, 36-52.	1.4	66
65	Mineralogical record of the redox conditions on early Mars. Icarus, 2016, 271, 67-75.	2.5	23
66	Hydration state of calcium sulfates in Gale crater, Mars: Identification of bassanite veins. Earth and Planetary Science Letters, 2016, 452, 197-205.	4.4	103
67	Fluids during diagenesis and sulfate vein formation in sediments at Gale crater, Mars. Meteoritics and Planetary Science, 2016, 51, 2175-2202.	1.6	50
68	Sequence and relative timing of large lakes in Gale crater (Mars) after the formation of Mount Sharp. Journal of Geophysical Research E: Planets, 2016, 121, 472-496.	3.6	72
69	Mars: a small terrestrial planet. Astronomy and Astrophysics Review, 2016, 24, 1.	25.5	22
70	The sustainability of habitability on terrestrial planets: Insights, questions, and needed measurements from Mars for understanding the evolution of Earthâ€like worlds. Journal of Geophysical Research E: Planets, 2016, 121, 1927-1961.	3.6	72
71	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
72	A sedimentary origin for intercrater plains north of the Hellas basin: Implications for climate conditions and erosion rates on early Mars. Journal of Geophysical Research E: Planets, 2016, 121, 2239-2267.	3.6	25

#	Article	IF	Citations
73	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
74	Diagenesis and clay mineral formation at Gale Crater, Mars. Journal of Geophysical Research E: Planets, 2015, 120, 1-19.	3.6	72
75	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
76	Quantifying geological processes on Marsâ€"Results of the high resolution stereo camera (HRSC) on Mars express. Planetary and Space Science, 2015, 112, 53-97.	1.7	63
77	Hydrogen detection with ChemCam at Gale crater. Icarus, 2015, 249, 43-61.	2.5	58
78	First detection of fluorine on Mars: Implications for Gale Crater's geochemistry. Geophysical Research Letters, 2015, 42, 1020-1028.	4.0	107
79	In situ evidence for continental crust on early Mars. Nature Geoscience, 2015, 8, 605-609.	12.9	233
80	Deposition, exhumation, and paleoclimate of an ancient lake deposit, Gale crater, Mars. Science, 2015, 350, aac7575.	12.6	471
81	Widespread surface weathering on early Mars: A case for a warmer and wetter climate. Icarus, 2015, 248, 373-382.	2.5	151
82	Gale crater and impact processes â€“ Curiosityâ€™s first 364 Sols on Mars. Icarus, 2015, 249, 108-128.	2.5	37
83	Compositions of coarse and fine particles in martian soils at gale: A window into the production of soils. Icarus, 2015, 249, 22-42.	2.5	64
84	The ChemCam Remote Micro-Imager at Gale crater: Review of the first year of operations on Mars. Icarus, 2015, 249, 93-107.	2.5	95
85	Understanding the signature of rock coatings in laser-induced breakdown spectroscopy data. Icarus, 2015, 249, 62-73.	2.5	49
86	ChemCam results from the Shaler outcrop in Gale crater, Mars. Icarus, 2015, 249, 2-21.	2.5	52
87	High manganese concentrations in rocks at Gale crater, Mars. Geophysical Research Letters, 2014, 41, 5755-5763.	4.0	81
88	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
89	Comprehensive analysis of glaciated martian crater Greg. Icarus, 2014, 228, 96-120.	2.5	35
90	Weathering of olivine under CO2 atmosphere: A martian perspective. Geochimica Et Cosmochimica Acta, 2014, 135, 170-189.	3.9	30

#	Article	IF	Citations
91	Volatile and Organic Compositions of Sedimentary Rocks in Yellowknife Bay, Gale Crater, Mars. Science, 2014, 343, 1245267.	12.6	323
92	A Habitable Fluvio-Lacustrine Environment at Yellowknife Bay, Gale Crater, Mars. Science, 2014, 343, 1242777.	12.6	687
93	Mineralogy of a Mudstone at Yellowknife Bay, Gale Crater, Mars. Science, 2014, 343, 1243480.	12.6	508
94	Elemental Geochemistry of Sedimentary Rocks at Yellowknife Bay, Gale Crater, Mars. Science, 2014, 343, 1244734.	12.6	246
95	Calcium sulfate veins characterized by ChemCam/Curiosity at Gale crater, Mars. Journal of Geophysical Research E: Planets, 2014, 119, 1991-2016.	3.6	214
96	Terrain physical properties derived from orbital data and the first 360 sols of Mars Science Laboratory Curiosity rover observations in Gale Crater. Journal of Geophysical Research E: Planets, 2014, 119, 1322-1344.	3.6	43
97	The rock abrasion record at Gale Crater: Mars Science Laboratory results from Bradbury Landing to Rocknest. Journal of Geophysical Research E: Planets, 2014, 119, 1374-1389.	3.6	46
98	Diagenetic origin of nodules in the Sheepbed member, Yellowknife Bay formation, Gale crater, Mars. Journal of Geophysical Research E: Planets, 2014, 119, 1637-1664.	3.6	80
99	Overview of the Mars Science Laboratory mission: Bradbury Landing to Yellowknife Bay and beyond. Journal of Geophysical Research E: Planets, 2014, 119, 1134-1161.	3.6	104
100	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
101	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
102	The timing of alluvial activity in Gale crater, Mars. Geophysical Research Letters, 2014, 41, 1142-1149.	4.0	88
103	Igneous mineralogy at Bradbury Rise: The first ChemCam campaign at Gale crater. Journal of Geophysical Research E: Planets, 2014, 119, 30-46.	3.6	114
104	Evidence for Amazonian mid-latitude glaciation on Mars from impact crater asymmetry. Icarus, 2013, 225, 413-423.	2.5	10
105	X-ray Diffraction Results from Mars Science Laboratory: Mineralogy of Rocknest at Gale Crater. Science, 2013, 341, 1238932.	12.6	327
106	Curiosity at Gale Crater, Mars: Characterization and Analysis of the Rocknest Sand Shadow. Science, 2013, 341, 1239505.	12.6	280
107	Abundance and Isotopic Composition of Gases in the Martian Atmosphere from the Curiosity Rover. Science, 2013, 341, 263-266.	12.6	327
108	Volatile, Isotope, and Organic Analysis of Martian Fines with the Mars Curiosity Rover. Science, 2013, 341, 1238937.	12.6	367

#	Article	IF	Citations
109	Isotope Ratios of H, C, and O in CO ₂ and H ₂ O of the Martian Atmosphere. Science, 2013, 341, 260-263.	12.6	241
110	Geochemical Consequences of Widespread Clay Mineral Formation in Marsâ€™ Ancient Crust. Space Science Reviews, 2013, 174, 329-364.	8.1	108
111	Quantitative Assessments of the Martian Hydrosphere. Space Science Reviews, 2013, 174, 155-212.	8.1	88
112	Outflow channels with deltaic deposits in Ismenius Lacus, Mars. Icarus, 2013, 226, 385-401.	2.5	59
113	Martian Fluvial Conglomerates at Gale Crater. Science, 2013, 340, 1068-1072.	12.6	326
114	3D morphometry of valley networks on Mars from HRSC/MEX DEMs: Implications for climatic evolution through time. Journal of Geophysical Research E: Planets, 2013, 118, 1873-1894.	3.6	27
115	The Petrochemistry of Jake_M: A Martian Mugearite. Science, 2013, 341, 1239463.	12.6	134
116	Soil Diversity and Hydration as Observed by ChemCam at Gale Crater, Mars. Science, 2013, 341, 1238670.	12.6	215
117	Characteristics of pebbleâ€•and cobbleâ€•sized clasts along the Curiosity rover traverse from Bradbury Landing to Rocknest. Journal of Geophysical Research E: Planets, 2013, 118, 2361-2380.	3.6	44
118	Hydrous minerals on Mars as seen by the CRISM and OMEGA imaging spectrometers: Updated global view. Journal of Geophysical Research E: Planets, 2013, 118, 831-858.	3.6	420
119	The ChemCam Instrument Suite on the Mars Science Laboratory (MSL) Rover: Body Unit and Combined System Tests. Space Science Reviews, 2012, 170, 167-227.	8.1	429
120	The ChemCam Instrument Suite on the Mars Science Laboratory (MSL) Rover: Science Objectives and Mast Unit Description. Space Science Reviews, 2012, 170, 95-166.	8.1	372
121	Late Hesperian aqueous alteration at Majuro crater, Mars. Planetary and Space Science, 2012, 72, 18-30.	1.7	52
122	Chronology of deposition and alteration in the Mawrth Vallis region, Mars. Planetary and Space Science, 2012, 72, 31-43.	1.7	65
123	The origin and timing of fluvial activity at Eberswalde crater, Mars. Icarus, 2012, 220, 530-551.	2.5	89
124	Evaluating the role of sulfide-weathering in the formation of sulfates or carbonates on Mars. Geochimica Et Cosmochimica Acta, 2012, 90, 47-63.	3.9	62
125	A chronology of early Mars climatic evolution from impact crater degradation. Journal of Geophysical Research, 2012, 117, .	3.3	115
126	Most Mars minerals in a nutshell: Various alteration phases formed in a single environment in Noctis Labyrinthus. Journal of Geophysical Research, 2012, 117, .	3.3	74

#	Article	IF	Citations
127	Characterization of hydrated silicate-bearing outcrops in Tyrrhena Terra, Mars: Implications to the alteration history of Mars. Icarus, 2012, 219, 476-497.	2.5	42
128	Fluvial landforms on fresh impact ejecta on Mars. Planetary and Space Science, 2012, 62, 69-85.	1.7	49
129	Quantitative Assessments of the Martian Hydrosphere. Space Sciences Series of ISSI, 2012, , 155-212.	0.0	0
130	Geochemical Consequences of Widespread Clay Mineral Formation in Marsâ€™ Ancient Crust. Space Sciences Series of ISSI, 2012, , 329-364.	0.0	0
131	Ice sublimation as a geomorphic process: A planetary perspective. Geomorphology, 2011, 126, 1-17.	2.6	70
132	Segregation of olivine grains in volcanic sands in Iceland and implications for Mars. Earth and Planetary Science Letters, 2011, 310, 233-243.	4.4	49
133	Diverse mineralogies in two troughs of Noctis Labyrinthus, Mars. Geology, 2011, 39, 899-902.	4.4	63
134	Evidence for weathering on early Mars from a comparison with terrestrial weathering profiles. Icarus, 2011, 216, 257-268.	2.5	59
135	Volcanic sands of Iceland â€•Diverse origins of aeolian sand deposits revealed at Dyngjusandur and Lambahraun. Earth Surface Processes and Landforms, 2011, 36, 1789-1808.	2.5	50
136	Stratigraphy, mineralogy, and origin of layered deposits inside Terby crater, Mars. Icarus, 2011, 211, 273-304.	2.5	131
137	Ismenius Cavus, Mars: A deep paleolake with phyllosilicate deposits. Planetary and Space Science, 2010, 58, 941-946.	1.7	44
138	Stratigraphy in the Mawrth Vallis region through OMEGA, HRSC color imagery and DTM. Icarus, 2010, 205, 396-418.	2.5	146
139	A Late Amazonian alteration layer related to local volcanism on Mars. Icarus, 2010, 207, 265-276.	2.5	39
140	Characterization of fluvial activity in Parana Valles using different age-dating techniques. Icarus, 2010, 207, 686-698.	2.5	26
141	Sinuous gullies on Mars: Frequency, distribution, and implications for flow properties. Journal of Geophysical Research, 2010, 115, .	3.3	118
142	Mineralogy of recent volcanic plains in the Tharsis region, Mars, and implications for platy-ridged flow composition. Earth and Planetary Science Letters, 2010, 294, 440-450.	4.4	42
143	Noachianâ€“Hesperian geologic history of the Echus Chasma and Kasei Valles system on Mars: New data and interpretations. Earth and Planetary Science Letters, 2010, 294, 256-271.	4.4	79
144	Shape, rheology and emplacement times of small martian shield volcanoes. Journal of Volcanology and Geothermal Research, 2009, 185, 47-68.	2.1	33

#	Article	IF	Citations
145	Quantitative compositional analysis of martian mafic regions using the MEx/OMEGA reflectance data. Icarus, 2009, 201, 84-101.	2.5	109
146	Contribution of Mars Odyssey GRS at Central Elysium Planitia. Icarus, 2009, 200, 19-29.	2.5	28
147	The volcanic history of central Elysium Planitia: Implications for martian magmatism. Icarus, 2009, 204, 418-442.	2.5	157
148	Fluvial morphology of Naktong Vallis, Mars: A late activity with multiple processes. Planetary and Space Science, 2009, 57, 982-999.	1.7	26
149	Composition, Morphology, and Stratigraphy of Noachian Crust around the Isidis basin. Journal of Geophysical Research, 2009, 114, .	3.3	144
150	Spectral and geological study of the sulfate-rich region of West Candor Chasma, Mars. Icarus, 2008, 194, 519-543.	2.5	130
151	Formation and evolution of the chaotic terrains by subsidence and magmatism: Hydraotes Chaos, Mars. Icarus, 2008, 194, 487-500.	2.5	73
152	Geomorphic study of fluvial landforms on the northern Valles Marineris plateau, Mars. Journal of Geophysical Research, 2008, 113, .	3.3	65
153	Topography of valley networks on Mars from Mars Express High Resolution Stereo Camera digital elevation models. Journal of Geophysical Research, 2008, 113, .	3.3	46
154	Abundance of minerals in the phyllosilicate-rich units on Mars. Astronomy and Astrophysics, 2008, 487, L41-L44.	5.1	123
155	Coupled Ferric Oxides and Sulfates on the Martian Surface. Science, 2007, 317, 1206-1210.	12.6	161
156	Phyllosilicates in the Mawrth Vallis region of Mars. Journal of Geophysical Research, 2007, 112, .	3.3	153
157	Mineralogy of the Nili Fossae region with OMEGA/Mars Express data: 2. Aqueous alteration of the crust. Journal of Geophysical Research, 2007, 112, .	3.3	154
158	Martian perched craters and large ejecta volume: Evidence for episodes of deflation in the northern lowlands. Meteoritics and Planetary Science, 2006, 41, 1647-1658.	1.6	36
159	Orientation and distribution of recent gullies in the southern hemisphere of Mars: Observations from High Resolution Stereo Camera/Mars Express (HRSC/MEX) and Mars Orbiter Camera/Mars Global Surveyor (MOC/MGS) data. Journal of Geophysical Research, 2006, 111, .	3.3	120
160	Detailed study of an hydrological system of valleys, a delta and lakes in the Southwest Thaumasia region, Mars. Icarus, 2006, 180, 75-87.	2.5	76
161	The role of the wind-transported dust in slope streaks activity: Evidence from the HRSC data. Icarus, 2006, 183, 30-45.	2.5	56
162	New observations of Warrego Valles, Mars: Evidence for precipitation and surface runoff. Planetary and Space Science, 2006, 54, 219-242.	1.7	128

#	Article	IF	Citations
163	High latitude patterned grounds on Mars: Classification, distribution and climatic control. Icarus, 2005, 174, 336-359.	2.5	228
164	Phyllosilicates on Mars and implications for early martian climate. Nature, 2005, 438, 623-627.	27.8	825
165	Mars Surface Diversity as Revealed by the OMEGA/Mars Express Observations. Science, 2005, 307, 1576-1581.	12.6	842
166	Olivine and Pyroxene Diversity in the Crust of Mars. Science, 2005, 307, 1594-1597.	12.6	348
167	Sulfates in Martian Layered Terrains: The OMEGA/Mars Express View. Science, 2005, 307, 1587-1591.	12.6	867
168	Thermal properties of lobate ejecta in Syrtis Major, Mars: Implications for the mechanisms of formation. Journal of Geophysical Research, 2005, 110, .	3.3	32
169	Fluvial and lacustrine activity on layered deposits in Melas Chasma, Valles Marineris, Mars. Journal of Geophysical Research, 2005, 110, .	3.3	102
170	Evidence for Precipitation on Mars from Dendritic Valleys in the Valles Marineris Area. Science, 2004, 305, 78-81.	12.6	237
171	Perennial water ice identified in the south polar cap of Mars. Nature, 2004, 428, 627-630.	27.8	279
172	Ages of Valles Marineris (Mars) landslides and implications for canyon history. Icarus, 2004, 172, 555-572.	2.5	88
173	Spatial relationships between patterned ground and ground ice detected by the Neutron Spectrometer on Mars. Journal of Geophysical Research, 2004, 109, .	3.3	74
174	Geomorphic analysis of lobate debris aprons on Mars at Mars Orbiter Camera scale: Evidence for ice sublimation initiated by fractures. Journal of Geophysical Research, 2003, 108, .	3.3	162
175	Debris flows over sand dunes on Mars: Evidence for liquid water. Journal of Geophysical Research, 2003, 108, .	3.3	133
176	A new view of dark Martian regions from geomorphic and spectroscopic analysis of Syrtis Major. Astronomy and Astrophysics, 2003, 412, L19-L23.	5.1	13
177	Formation of Recent Martian Debris Flows by Melting of Near-Surface Ground Ice at High Obliquity. Science, 2002, 295, 110-113.	12.6	368
178	Evidence of liquid water in recent debris avalanche on Mars. Geophysical Research Letters, 2002, 29, 60-1.	4.0	14
179	Experimental and theoretical deformation of iceâ€“rock mixtures: Implications on rheology and ice content of Martian permafrost. Planetary and Space Science, 2002, 50, 385-401.	1.7	73
180	Topographic analysis of features related to ice on Mars. Geophysical Research Letters, 2001, 28, 407-410.	4.0	73

#	Article	IF	Citations
181	Chronology of compressional deformation on Mars: evidence for a single and global origin. Planetary and Space Science, 2000, 48, 1201-1211.	1.7	44
182	Wrinkle ridges of Mars: structural analysis and evidence for shallow deformation controlled by ice-rich dÃ©collements. Planetary and Space Science, 1998, 46, 345-356.	1.7	78
183	Active ground patterns near Mars' equator in the Glen Torridon region of Gale Crater. Journal of Geophysical Research E: Planets, 0, , .	3.6	3