Gordon Osinski

List of Publications by Year
in descending order

196 papers	5,313 citations	81839 39 h-index	114418 63 g-index
212 all docs	212 docs citations	212 times ranked	3420 citing authors

#	Article	IF	Citations
1	Impact-generated hydrothermal systems on Earth and Mars. Icarus, 2013, 224, 347-363.	1.1	219
2	The formation of peak rings in large impact craters. Science, 2016, 354, 878-882.	6.0	181
3	Impact ejecta emplacement on terrestrial planets. Earth and Planetary Science Letters, 2011, 310, 167-181.	1.8	178
4	Numerical modelling of impact melt production in porous rocks. Earth and Planetary Science Letters, 2008, 269, 530-539.	1.8	152
5	Impactâ€induced microbial endolithic habitats. Meteoritics and Planetary Science, 2002, 37, 1287-1298.	0.7	130
6	Impactâ€induced hydrothermal activity within the Haughton impact structure, arctic Canada: Generation of a transient, warm, wet oasis. Meteoritics and Planetary Science, 2001, 36, 731-745.	0.7	127
7	Global documentation of gullies with the Mars Reconnaissance Orbiter Context Camera and implications for their formation. Icarus, 2015, 252, 236-254.	1.1	125
8	Impact-generated carbonate melts: evidence from the Haughton structure, Canada. Earth and Planetary Science Letters, 2001, 194, 17-29.	1.8	116
9	SHARAD detection and characterization of subsurface water ice deposits in Utopia Planitia, Mars. Geophysical Research Letters, 2016, 43, 9484-9491.	1.5	110
10	Thermokarst lakes and ponds on Mars in the very recent (late Amazonian) past. Earth and Planetary Science Letters, 2008, 272, 382-393.	1.8	109
11	The first day of the Cenozoic. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 19342-19351.	3.3	100
12	The nature of the groundmass of surficial suevite from the Ries impact structure, Germany, and constraints on its origin. Meteoritics and Planetary Science, 2004, 39, 1655-1683.	0.7	99
13	Widespread crater-related pitted materials on Mars: Further evidence for the role of target volatiles during the impact process. Icarus, 2012, 220, 348-368.	1.1	85
14	A case study of impact-induced hydrothermal activity: The Haughton impact structure, Devon Island, Canadian High Arctic. Meteoritics and Planetary Science, 2005, 40, 1859-1877.	0.7	82
15	Impact glasses in fallout suevites from the Ries impact structure, Germany: An analytical SEM study. Meteoritics and Planetary Science, 2003, 38, 1641-1667.	0.7	80
16	Impact melt rocks from the Ries structure, Germany: an origin as impact melt flows?. Earth and Planetary Science Letters, 2004, 226, 529-543.	1.8	80
17	Midâ€sized complex crater formation in mixed crystallineâ€sedimentary targets: Insight from modeling and observation. Meteoritics and Planetary Science, 2008, 43, 1955-1977.	0.7	79
18	Geological overview and cratering model for the Haughton impact structure, Devon Island, Canadian High Arctic. Meteoritics and Planetary Science, 2005, 40, 1759-1776.	0.7	74

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19	The effect of target lithology on the products of impact melting. Meteoritics and Planetary Science, 2008, 43, 1939-1954.	0.7	74
20	Microbial colonization in impact-generated hydrothermal sulphate deposits, Haughton impact structure, and implications for sulphates on Mars. International Journal of Astrobiology, 2004, 3, 247-256.	0.9	71
21	Tectonics of complex crater formation as revealed by the Haughton impact structure, Devon Island, Canadian High Arctic. Meteoritics and Planetary Science, 2005, 40, 1813-1834.	0.7	69
22	Probing the hydrothermal system of the Chicxulub impact crater. Science Advances, 2020, 6, eaaz3053.	4.7	69
23	Interplanetary Transfer of Photosynthesis: An Experimental Demonstration of A Selective Dispersal Filter in Planetary Island Biogeography. Astrobiology, 2007, 7, 1-9.	1.5	66
24	The Impact-Cratering Process. Elements, 2012, 8, 25-30.	0.5	66
25	The preservation and degradation of filamentous bacteria and biomolecules within iron oxide deposits at Rio Tinto, Spain. Geobiology, 2011, 9, 233-249.	1.1	64
26	The Role of Meteorite Impacts in the Origin of Life. Astrobiology, 2020, 20, 1121-1149.	1.5	63
27	Hydrothermal activity associated with the Ries impact event, Germany. Geofluids, 2005, 5, 202-220.	0.3	62
28	Global distribution of lunar impact melt flows. Icarus, 2014, 239, 105-117.	1.1	61
29	The PanCam Instrument for the ExoMars Rover. Astrobiology, 2017, 17, 511-541.	1.5	55
30	Effect of volatiles and target lithology on the generation and emplacement of impact crater fill and ejecta deposits on Mars. Meteoritics and Planetary Science, 2006, 41, 1571-1586.	0.7	54
31	Igneous rocks formed by hypervelocity impact. Journal of Volcanology and Geothermal Research, 2018, 353, 25-54.	0.8	52
32	Valley formation on early Mars by subglacial and fluvial erosion. Nature Geoscience, 2020, 13, 663-668.	5.4	49
33	Topographic characterization of lunar complex craters. Geophysical Research Letters, 2013, 40, 38-42.	1.5	48
34	Impact structures: What does crater diameter mean?. , 2005, , .		47
35	Impactites of the Haughton impact structure, Devon Island, Canadian High Arctic. Meteoritics and Planetary Science, 2005, 40, 1789-1812.	0.7	46
36	An impact origin for hydrated silicates on Mars: A synthesis. Journal of Geophysical Research E: Planets, 2013, 118, 994-1012.	1.5	46

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37	The Impact Crater as a Habitat: Effects of Impact Processing of Target Materials. Astrobiology, 2003, 3, 181-191.	1.5	44
38	Evidence for a â^¼200â€“100Âka meteorite impact in the Western Desert of Egypt. Earth and Planetary Science Letters, 2007, 253, 378-388.	1.8	44
39	Toward quantification of strainâ€related mosaicity in shocked lunar and terrestrial plagioclase by inÂsitu microâ€Xâ€ray diffraction. Meteoritics and Planetary Science, 2015, 50, 1851-1862.	0.7	42
40	Effects of asteroid and comet impacts on habitats for lithophytic organisms-A synthesis. Meteoritics and Planetary Science, 2005, 40, 1901-1914.	0.7	41
41	Sulfur isotope signatures for rapid colonization of an impact crater by thermophilic microbes. Geology, 2010, 38, 271-274.	2.0	39
42	Unsupervised feature learning for autonomous rock image classification. Computers and Geosciences, 2017, 106, 10-17.	2.0	37
43	The microbeâ€“mineral environment and gypsum neogenesis in a weathered polar evaporite. Geobiology, 2010, 8, 293-308.	1.1	36
44	A heterogeneous lunar interior for hydrogen isotopes as revealed by the lunar highlands samples. Earth and Planetary Science Letters, 2017, 473, 14-23.	1.8	36
45	The Haughton-Mars Project: Overview of science investigations at the Haughton impact structure and surrounding terrains, and relevance to planetary studies. Meteoritics and Planetary Science, 2005, 40, 1755-1758.	0.7	34
46	Re-evaluating the age of the Haughton impact event. Meteoritics and Planetary Science, 2005, 40, 1777-1787.	0.7	34
47	Thermal alteration of organic matter in an impact crater and the duration of postimpact heating. Geology, 2005, 33, 373.	2.0	33
48	The Dakhleh Glass: Product of an impact airburst or cratering event in the Western Desert of Egypt?. Meteoritics and Planetary Science, 2008, 43, 2089-2107.	0.7	33
49	Shatter cones: (Mis)understood?. Science Advances, 2016, 2, e1600616.	4.7	32
50	Mineralogical alteration of artificial meteorites during atmospheric entry. The STONE-5 experiment. Planetary and Space Science, 2008, 56, 976-984.	0.9	31
51	Mineralogy of saline perennial cold springs on Axel Heiberg Island, Nunavut, Canada and implications for spring deposits on Mars. Icarus, 2013, 224, 364-381.	1.1	30
52	Stressâ€Strain Evolution During Peakâ€Ring Formation: A Case Study of the Chicxulub Impact Structure. Journal of Geophysical Research E: Planets, 2019, 124, 396-417.	1.5	30
53	New 40Ar/39Ar dating of the Clearwater Lake impact structures (QuÃ©bec, Canada) â€“ Not the binary asteroid impact it seems?. Geochimica Et Cosmochimica Acta, 2015, 148, 304-324.	1.6	29
54	Evidence for the shock melting of sulfates from the Haughton impact structure, Arctic Canada. Earth and Planetary Science Letters, 2003, 215, 357-370.	1.8	28

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55	Enigmatic tubular features in impact glass. Geology, 2014, 42, 471-474.	2.0	27
56	Organic geochemistry of impactites from the Haughton impact structure, Devon Island, Nunavut, Canada. Geochimica Et Cosmochimica Acta, 2007, 71, 1800-1819.	1.6	26
57	Impact metamorphism of CaCO₃â€bearing sandstones at the Haughton structure, Canada. Meteoritics and Planetary Science, 2007, 42, 1945-1960.	0.7	26
58	Terrestrial analogues for lunar impact melt flows. Icarus, 2017, 281, 73-89.	1.1	25
59	The CanMars Mars Sample Return analogue mission. Planetary and Space Science, 2019, 166, 110-130.	0.9	25
60	Explosive interaction of impact melt and seawater following the Chicxulub impact event. Geology, 2020, 48, 108-112.	2.0	25
61	Origin of the central magnetic anomaly at the Haughton impact structure, Canada. Earth and Planetary Science Letters, 2013, 367, 116-122.	1.8	24
62	Effect of impact velocity and acoustic fluidization on the simpleâ€toâ€complex transition of lunar craters. Journal of Geophysical Research E: Planets, 2017, 122, 800-821.	1.5	23
63	Impactâ€Induced Porosity and Microfracturing at the Chicxulub Impact Structure. Journal of Geophysical Research E: Planets, 2019, 124, 1960-1978.	1.5	23
64	Stratigraphical evidence of late Amazonian periglaciation and glaciation in the Astapus Colles region of Mars. Icarus, 2009, 202, 17-21.	1.1	22
65	Geometric Evolution of Polygonal Terrain Networks in the Canadian High Arctic: Evidence of Increasing Regularity over Time. Permafrost and Periglacial Processes, 2012, 23, 178-186.	1.5	22
66	Shock effects in plagioclase feldspar from the Mistastin Lake impact structure, Canada. Meteoritics and Planetary Science, 2015, 50, 1546-1561.	0.7	22
67	A depth versus diameter scaling relationship for the best-preserved melt-bearing complex craters on Mars. Icarus, 2018, 299, 68-83.	1.1	21
68	Hyperspectral Image Classification With Stacking Spectral Patches and Convolutional Neural Networks. IEEE Transactions on Geoscience and Remote Sensing, 2018, 56, 5975-5984.	2.7	21
69	Hydrothermal alteration associated with the Chicxulub impact crater upper peak-ring breccias. Earth and Planetary Science Letters, 2020, 547, 116425.	1.8	21
70	Intra-crater sedimentary deposits at the Haughton impact structure, Devon Island, Canadian High Arctic. Meteoritics and Planetary Science, 2005, 40, 1887-1899.	0.7	20
71	The â€œsueviteâ€•conundrum, Part 1: The Ries suevite and Sudbury Onaping Formation compared. Meteoritics and Planetary Science, 2016, 51, 2316-2333.	0.7	20
72	New morphological mapping and interpretation of ejecta deposits from Orientale Basin on the Moon. Icarus, 2018, 299, 253-271.	1.1	20

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73	Postâ€impact alteration of surficial suevites in Ries crater, Germany: Hydrothermal modification or weathering processes?. Meteoritics and Planetary Science, 2008, 43, 1827-1840.	0.7	19
74	The KeurusselkÃ impact structure, Finlandâ€"Impact origin confirmed by characterization of planar deformation features in quartz grains. Meteoritics and Planetary Science, 2010, 45, 434-446.	0.7	19
75	Shockâ€induced changes in density and porosity in shockâ€metamorphosed crystalline rocks, Haughton impact structure, Canada. Meteoritics and Planetary Science, 2011, 46, 1774-1786.	0.7	19
76	The newly confirmed Luizi impact structure, Democratic Republic of Congoâ€"Insights into central uplift formation and post-impact erosion. Geology, 2011, 39, 851-854.	2.0	19
77	Spectral reflectance properties of carbonates from terrestrial analogue environments: Implications for Mars. Planetary and Space Science, 2010, 58, 522-537.	0.9	18
78	Intra-crater glacial processes in central Utopia Planitia, Mars. Icarus, 2011, 212, 86-95.	1.1	18
79	Impact melting in sedimentary target rocks: An assessment. , 2007, , 1-18.		17
80	Electromagnetic characterization of polar ice-wedge polygons: Implications for periglacial studies on Mars and Earth. Planetary and Space Science, 2010, 58, 472-481.	0.9	17
81	Field Testing of an Integrated Surface/Subsurface Modeling Technique for Planetary Exploration. International Journal of Robotics Research, 2010, 29, 1529-1549.	5.8	17
82	A methodology for the semiâ€automatic digital image analysis of fragmental impactites. Meteoritics and Planetary Science, 2014, 49, 621-635.	0.7	17
83	Complex crater formation: Insights from combining observations of shock pressure distribution with numerical models at the West Clearwater Lake impact structure. Meteoritics and Planetary Science, 2017, 52, 1330-1350.	0.7	17
84	Characterization of the acidic cold seep emplaced jarositic Golden Deposit, NWT, Canada, as an analogue for jarosite deposition on Mars. Icarus, 2013, 224, 382-398.	1.1	16
85	Transitional impact craters on the Moon: Insight into the effect of target lithology on the impact cratering process. Meteoritics and Planetary Science, 2019, 54, 573-591.	0.7	16
86	Subglacial drainage patterns of Devon Island, Canada: detailed comparison of rivers and subglacial meltwater channels. Cryosphere, 2018, 12, 1461-1478.	1.5	16
87	Impactites of the Mistastin Lake impact structure: Insights into impact ejecta emplacement. Meteoritics and Planetary Science, 2018, 53, 2492-2518.	0.7	16
88	Impactâ€induced impoverishment and transformation of a sandstone habitat for lithophytic microorganisms. Meteoritics and Planetary Science, 2007, 42, 1985-1993.	0.7	15
89	Age of the Dakhleh impact event and implications for Middle Stone Age archeology in the Western Desert of Egypt. Earth and Planetary Science Letters, 2010, 291, 201-206.	1.8	15
90	The Basal Onaping Intrusion in the North Range: Roof rocks of the Sudbury Igneous Complex. Meteoritics and Planetary Science, 2015, 50, 1577-1594.	0.7	15

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91	Reconstructing the Geochemical Signature of Sudbury Breccia, Ontario, Canada: Implications for Its Formation and Trace Metal Content. Economic Geology, 2016, 111, 1705-1729.	1.8	15
92	Spaceborne visible and thermal infrared lithologic mapping of impact-exposed subsurface lithologies at the Haughton impact structure, Devon Island, Canadian High Arctic: Applications to Mars. Meteoritics and Planetary Science, 2005, 40, 1835-1858.	0.7	14
93	A Mission Control Architecture for robotic lunar sample return as field tested in an analogue deployment to the sudbury impact structure. Advances in Space Research, 2012, 50, 1666-1686.	1.2	14
94	Impact melt- and projectile-bearing ejecta at Barringer Crater, Arizona. Earth and Planetary Science Letters, 2015, 432, 283-292.	1.8	14
95	Using martian single and double layered ejecta craters to probe subsurface stratigraphy. Icarus, 2015, 247, 260-278.	1.1	14
96	Permeability data for impact breccias imply focussed hydrothermal fluid flow. Journal of Geochemical Exploration, 2010, 106, 171-175.	1.5	13
97	Impact-Generated Endolithic Habitat Within Crystalline Rocks of the Haughton Impact Structure, Devon Island, Canada. Astrobiology, 2014, 14, 522-533.	1.5	13
98	Diversity of basaltic lunar volcanism associated with buried impact structures: Implications for intrusive and extrusive events. Icarus, 2018, 307, 216-234.	1.1	13
99	Pantasma: Evidence for a Pleistocene circa 14Âkm diameter impact crater in Nicaragua. Meteoritics and Planetary Science, 2019, 54, 880-901.	0.7	13
100	Lidar and the mobile Scene Modeler (mSM) as scientific tools for planetary exploration. Planetary and Space Science, 2010, 58, 691-700.	0.9	12
101	Weathering of Post-Impact Hydrothermal Deposits from the Haughton Impact Structure: Implications for Microbial Colonization and Biosignature Preservation. Astrobiology, 2011, 11, 537-550.	1.5	12
102	Field testing of a rover guidance, navigation, and control architecture to support a ground-ice prospecting mission to Mars. Robotics and Autonomous Systems, 2011, 59, 472-488.	3.0	12
103	Glacier change on Axel Heiberg Island, Nunavut, Canada. Journal of Glaciology, 2011, 57, 1079-1086.	1.1	12
104	Paleomagnetic and rock magnetic study of the Mistastin Lake impact structure (Labrador, Canada): Implications for geomagnetic perturbation and shock effects. Earth and Planetary Science Letters, 2015, 417, 151-163.	1.8	12
105	Fitting the curve in ExcelÂ®: Systematic curve fitting of laboratory and remotely sensed planetary spectra. Computers and Geosciences, 2017, 100, 103-114.	2.0	12
106	Learning Spatialâ€“Spectral Features for Hyperspectral Image Classification. IEEE Transactions on Geoscience and Remote Sensing, 2018, 56, 5138-5147.	2.7	12
107	CanMars mission Science Team operational results: Implications for operations and the sample selection process for Mars Sample Return (MSR). Planetary and Space Science, 2019, 172, 43-56.	0.9	12
108	The dielectric permittivity of terrestrial ground ice formations: Considerations for planetary exploration using groundâ€penetrating radar. Journal of Geophysical Research, 2012, 117, .	3.3	11

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109	Potential for impact glass to preserve microbial metabolism. Earth and Planetary Science Letters, 2015, 430, 95-104.	1.8	11
110	Evidence for a spatially extensive hydrothermal system at the Ries impact structure, Germany. Meteoritics and Planetary Science, 2017, 52, 351-371.	0.7	11
111	The transfer of organic signatures from bedrock to sediment. Chemical Geology, 2008, 247, 242-252.	1.4	10
112	A multispectral geological study of the SchrÃ¶dinger impact basin. Canadian Journal of Earth Sciences, 2013, 50, 44-63.	0.6	10
113	Hydrothermally enhanced magnetization at the center of the Haughton impact structure?. Meteoritics and Planetary Science, 2017, 52, 2147-2165.	0.7	10
114	Formation of large-scale impact melt dikes: A case study of the Foy Offset Dike at the Sudbury impact structure, Canada. Earth and Planetary Science Letters, 2018, 495, 224-233.	1.8	10
115	Extensional tectonics of the Outer Hebrides Fault Zone, South Uist, northwest Scotland. Geological Magazine, 2001, 138, 325-344.	0.9	9
116	Organic geochemical characterization of a Miocene core sample from Haughton impact structure, Devon Island, Nunavut, Canadian High Arctic. Organic Geochemistry, 2006, 37, 688-710.	0.9	9
117	Field testing of robotic technologies to support ground ice prospecting in martian polygonal terrain. Planetary and Space Science, 2010, 58, 671-681.	0.9	9
118	Revisiting the Rochechouart impact structure, France. Meteoritics and Planetary Science, 2014, 49, 2152-2168.	0.7	9
119	Insights into complex layered ejecta emplacement and subsurface stratigraphy in Chryse Planitia, Mars, through an analysis of THEMIS brightness temperature data. Journal of Geophysical Research E: Planets, 2016, 121, 986-1015.	1.5	9
120	Natural Analogue Constraints on Europa's Nonâ€ice Surface Material. Geophysical Research Letters, 2019, 46, 5759-5767.	1.5	9
121	40Ar/39Ar systematics of melt lithologies and target rocks from the Gow Lake impact structure, Canada. Geochimica Et Cosmochimica Acta, 2020, 274, 317-332.	1.6	9
122	The effects of meteorite impacts on the availability of bioessential elements for endolithic organisms. Meteoritics and Planetary Science, 2012, 47, 1681-1691.	0.7	8
123	Application of the Brewster angle to quantify the dielectric properties of ground ice formations. Journal of Applied Geophysics, 2013, 99, 12-17.	0.9	8
124	The Pele Offset Dykes, Sudbury impact structure, Canada. Canadian Journal of Earth Sciences, 2018, 55, 230-240.	0.6	8
125	The use of GIS, mapping, and immersive technologies in the CanMars Mars Sample Return analogue mission; advantages for science interpretation and operational decision-making. Planetary and Space Science, 2019, 168, 15-26.	0.9	8
126	Preferred orientation distribution of shockâ€induced planar microstructures in quartz and feldspar. Meteoritics and Planetary Science, 2020, 55, 1082-1092.	0.7	8

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127	Shaping of the Present-Day Deep Biosphere at Chicxulub by the Impact Catastrophe That Ended the Cretaceous. Frontiers in Microbiology, 2021, 12, 668240.	1.5	8
128	Quadruple sulfur isotope biosignatures from terrestrial Mars analogue systems. Geochimica Et Cosmochimica Acta, 2021, 308, 157-172.	1.6	8
129	Preservation of Biological Markers in Clasts Within Impact Melt Breccias from the Haughton Impact Structure, Devon Island. Astrobiology, 2009, 9, 391-400.	1.5	7
130	Potential consequences of a Mid-Pleistocene impact event for the Middle Stone Age occupants of Dakhleh Oasis, Western Desert, Egypt. Quaternary International, 2009, 195, 138-149.	0.7	7
131	Co-evolution of polygonal and scalloped terrains, southwestern Utopia Planitia, Mars. Earth and Planetary Science Letters, 2014, 387, 44-54.	1.8	7
132	Microbial Diversity of Impact-Generated Habitats. Astrobiology, 2016, 16, 775-786.	1.5	7
133	Chemical variations and genetic relationships between the Hess and Foy offset dikes at the Sudbury impact structure. Meteoritics and Planetary Science, 2017, 52, 2647-2671.	0.7	7
134	Biological Characterization of Microenvironments in a Hypersaline Cold Spring Mars Analog. Frontiers in Microbiology, 2017, 8, 2527.	1.5	7
135	Ejecta deposits of Bakhuysen Crater, Mars. Icarus, 2018, 314, 175-194.	1.1	7
136	Field and laboratory validation of remote rover operations Science Team findings: The CanMars Mars Sample Return analogue mission. Planetary and Space Science, 2019, 176, 104682.	0.9	7
137	Impact Earth: A New Resource for Outreach, Teaching, and Research. Elements, 2019, 15, 70-71.	0.5	7
138	Geomorphology of Gullies at Thomas Lee Inlet, Devon Island, Canadian High Arctic. Permafrost and Periglacial Processes, 2019, 30, 19-34.	1.5	7
139	Raman study of shock features in plagioclase feldspar from the Mistastin Lake impact structure, Canada. Meteoritics and Planetary Science, 2020, 55, 1471-1490.	0.7	7
140	Early diagenesis at and below Vera Rubin ridge, Gale crater, Mars. Meteoritics and Planetary Science, 2021, 56, 1905-1932.	0.7	7
141	Hot rocks: Constraining the thermal conditions of the Mistastin Lake impact melt deposits using zircon grain microstructures. Earth and Planetary Science Letters, 2022, 584, 117523.	1.8	7
142	Application Of Organic Geochemistry To Detect Signatures Of Organic Matter In The Haughton Impact Structure. Meteoritics and Planetary Science, 2005, 40, 1879-1885.	0.7	6
143	Evidence for life in the isotopic analysis of surface sulphates in the Haughton impact structure, and potential application on Mars. International Journal of Astrobiology, 2012, 11, 93-101.	0.9	6
144	Issues of geologically-focused situational awareness in robotic planetary missions: Lessons from an analogue mission at Mistastin Lake impact structure, Labrador, Canada. Advances in Space Research, 2013, 52, 272-284.	1.2	6

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145	Chemical and oxygen isotopic properties of ordinary chondrites (H5, L6) from Oman: Signs of isotopic equilibrium during thermal metamorphism. Meteoritics and Planetary Science, 2017, 52, 2097-2112.	0.7	6
146	The oxygen isotope compositions of olivine in main group (<scp>MG</scp>) pallasites: New measurements by adopting an improved laser fluorination approach. Meteoritics and Planetary Science, 2018, 53, 1223-1237.	0.7	6
147	Formation of Complex Craters in Layered Targets With Material Anisotropy. Journal of Geophysical Research E: Planets, 2019, 124, 349-373.	1.5	6
148	Compositional Heterogeneity of Impact Melt Rocks at the Haughton Impact Structure, Canada: Implications for Planetary Processes and Remote Sensing. Journal of Geophysical Research E: Planets, 2020, 125, e2019JE006218.	1.5	6
149	MOSAIC: A Satellite Constellation to Enable Groundbreaking Mars Climate System Science and Prepare for Human Exploration. Planetary Science Journal, 2021, 2, 211.	1.5	6
150	Formation of the â€œpondsâ€• on asteroid (433) Eros by fluidization. Planetary and Space Science, 2015, 117, 106-118.	0.9	5
151	The central uplift of Elorza Crater: Insights into its geology and possible relationships to the Valles Marineris and Tharsis regions. Icarus, 2017, 284, 284-304.	1.1	5
152	Remote Predictive Mapping of the Tunnunik Impact Structure in the Canadian Arctic using Multispectral and Polarimetric SAR Data Fusion. Canadian Journal of Remote Sensing, 2018, 44, 513-531.	1.1	5
153	Petrography and geochemistry of lunar meteorites Dhofar 1673, 1983, and 1984. Meteoritics and Planetary Science, 2019, 54, 300-320.	0.7	5
154	Ocean resurge-induced impact melt dynamics on the peak-ring of the Chicxulub impact structure, Mexico. International Journal of Earth Sciences, 2021, 110, 2619-2636.	0.9	5
155	Raman study of shock effects in lunar anorthite from the Apollo missions. Meteoritics and Planetary Science, 2021, 56, 1633-1651.	0.7	5
156	A low-temperature, meteoric water-dominated origin for smectitic clay minerals in the Chicxulub impact crater upper peak ring, as inferred from their oxygen and hydrogen isotope compositions. Chemical Geology, 2022, 588, 120639.	1.4	5
157	Constraining the formation of paleolake inlet valleys across crater rims. Icarus, 2022, 378, 114945.	1.1	5
158	Field geology on the Moon: Some lessons learned from the exploration of the Haughton impact structure, Devon Island, Canadian High Arctic. Planetary and Space Science, 2010, 58, 646-657.	0.9	4
159	An orbit-based remote sensing geological assessment of the CanMars Mars Sample Return Analogue Deployment (MSRAD) landing site situated in the Henry Mountains Basin, near Hanksville, Utah. Planetary and Space Science, 2019, 173, 14-34.	0.9	4
160	Origin of the degassing pipes at the Ries impact structure and implications for impactâ€induced alteration on Mars and other planetary bodies. Meteoritics and Planetary Science, 2021, 56, 404-422.	0.7	4
161	Morphologic mapping and interpretation of ejecta deposits from Tsiolkovskiy crater. Meteoritics and Planetary Science, 2021, 56, 767.	0.7	4
162	Geomicrobiology of Impact-Altered Rocks. , 2006, , 21-40.		3

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163	A temperature-controlled sample stage for in situ micro-X-ray diffraction: Application to Mars analog mirabilite-bearing perennial cold spring precipitate mineralogy. American Mineralogist, 2014, 99, 943-947.	0.9	3
164	Hyperspectral mapping of alteration assemblages within a hydrothermal vug at the Haughton impact structure, Canada. Meteoritics and Planetary Science, 2016, 51, 2274-2292.	0.7	3
165	Geochemical and oxygen isotope perspective of a new R chondrite Dhofar 1671: Affinity with ordinary chondrites. Meteoritics and Planetary Science, 2017, 52, 1991-2003.	0.7	3
166	Utility and applications of rover science autonomy capabilities: Outcomes from a high-fidelity analogue mission simulation. Planetary and Space Science, 2019, 170, 52-60.	0.9	3
167	Polarimetric SAR Signatures for Characterizing Geological Units in the Canadian Arctic. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2019, 12, 4406-4414.	2.3	3
168	TEMMI, a Three-dimensional Exploration Multispectral Microscope Imager for planetary exploration missions. Planetary and Space Science, 2019, 165, 57-74.	0.9	3
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