

Christopher D K Herd

List of Publications by Year in descending order

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76
papers

3,756
citations

147801

31
h-index

128289

60
g-index

84
all docs

84
docs citations

84
times ranked

3081
citing authors

#	ARTICLE	IF	CITATIONS
1	Distinguishing between terrestrial and extraterrestrial organic compounds in the CM2 Aguas Zarcas carbonaceous chondrite: Implications for intrinsic organic matter. <i>Meteoritics and Planetary Science</i> , 2022, 57, 883-911.	1.6	3
2	Organic compounds in the Tarda C2 ungrouped carbonaceous chondrite: Evaluating the sources of contamination in a desert fall. <i>Meteoritics and Planetary Science</i> , 2022, 57, 850-865.	1.6	3
3	Fe-Ni sulfides in Tagish Lake: Implications for nebular and parent body conditions of formation. <i>Meteoritics and Planetary Science</i> , 2022, 57, 1267-1287.	1.6	0
4	Petrographic controls on baddeleyite occurrence in a suite of eight basaltic shergottites. <i>Meteoritics and Planetary Science</i> , 2021, 56, 1502-1530.	1.6	2
5	Aqueous Alteration on Asteroids Simplifies Soluble Organic Matter Mixtures. <i>Astrophysical Journal Letters</i> , 2021, 920, L39.	8.3	9
6	Hyperspectral imaging of drill core from the Steen River impact structure, Canada: Implications for hydrothermal activity and formation of suevite-like breccias. <i>Meteoritics and Planetary Science</i> , 2020, 55, 1564-1580.	1.6	1
7	Effects of aqueous alteration on primordial noble gases and presolar SiC in the carbonaceous chondrite Tagish Lake. <i>Meteoritics and Planetary Science</i> , 2020, 55, 1257-1280.	1.6	4
8	What Martian Meteorites Reveal About the Interior and Surface of Mars. <i>Journal of Geophysical Research E: Planets</i> , 2020, 125, e2020JE006523.	3.6	74
9	Mars 2020 Mission Overview. <i>Space Science Reviews</i> , 2020, 216, 1.	8.1	239
10	Organic contamination on the surface of meteorites as a function of space and time: A case study of the Buzzard Coulee H4 chondrite. <i>Meteoritics and Planetary Science</i> , 2020, 55, .	1.6	5
11	Hydrous olivine alteration on Mars and Earth. <i>Meteoritics and Planetary Science</i> , 2020, 55, 1011-1030.	1.6	7
12	In situ analysis of platinum group elements in equilibrated ordinary chondrite kamacite and taenite. <i>Meteoritics and Planetary Science</i> , 2020, 55, 679-702.	1.6	5
13	DISTINGUISHING BETWEEN TERRESTRIAL AND EXTRATERRESTRIAL ORGANIC COMPOUNDS IN THE CM2 AGUAS ZARCAS CARBONACEOUS CHONDRITE: IMPLICATIONS FOR INTRINSIC ORGANIC MATTER. , 2020, , .		3
14	Advanced Curation of Astromaterials for Planetary Science. <i>Space Science Reviews</i> , 2019, 215, 1.	8.1	50
15	Water abundance in the Tagish Lake meteorite from TGA and IR spectroscopy: Evaluation of aqueous alteration. <i>Meteoritics and Planetary Science</i> , 2019, 54, 1951-1972.	1.6	25
16	The Northwest Africa 8159 (NWA 8159) Martian Meteorite Part 2. Spinel-orthopyroxene intergrowths. A record of fO ₂ and crust-basalt interactions. <i>Geochimica Et Cosmochimica Acta</i> , 2019, 258, 242-257.	3.9	7
17	Best practices for the use of meteorite names in publications. <i>Meteoritics and Planetary Science</i> , 2019, 54, 1397-1400.	1.6	2
18	The potential science and engineering value of samples delivered to Earth by Mars sample return. <i>Meteoritics and Planetary Science</i> , 2019, 54, S3.	1.6	73

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19	Reflectance spectroscopy of insoluble organic matter (IOM) and carbonaceous meteorites. <i>Meteoritics and Planetary Science</i> , 2019, 54, 1051-1068.	1.6	22
20	Evidence of impact melting and post-impact decomposition of sedimentary target rocks from the Steen River impact structure, Alberta, Canada. <i>Earth and Planetary Science Letters</i> , 2019, 515, 173-186.	4.4	14
21	New insights into the heterogeneity of the Tagish Lake meteorite: Soluble organic compositions of variously altered specimens. <i>Meteoritics and Planetary Science</i> , 2019, 54, 1283-1302.	1.6	16
22	MGSâ€™TES Spectra Suggest a Basaltic Component in the Regolith of Phobos. <i>Journal of Geophysical Research E: Planets</i> , 2018, 123, 2467-2484.	3.6	14
23	Investigation of impact melt in allochthonous craterâ€™fill deposits of the Steen River impact structure, Alberta, Canada. <i>Meteoritics and Planetary Science</i> , 2018, 53, 2285-2305.	1.6	5
24	Experimental investigation into the effects of oxidation during petrogenesis of the Tissint meteorite. <i>Meteoritics and Planetary Science</i> , 2018, 53, 1341-1363.	1.6	27
25	A previously unrecognized high-temperature impactite from the Steen River impact structure, Alberta, Canada. <i>Geology</i> , 2017, 45, 291-294.	4.4	11
26	Martian low-temperature alteration materials in shock-melt pockets in Tissint: Constraints on their preservation in shergottite meteorites. <i>Geochimica Et Cosmochimica Acta</i> , 2017, 210, 228-246.	3.9	9
27	The Northwest Africa 8159 martian meteorite: Expanding the martian sample suite to the early Amazonian. <i>Geochimica Et Cosmochimica Acta</i> , 2017, 218, 1-26.	3.9	58
28	Experimental petrology of the Tissint meteorite: Redox estimates, crystallization curves, and evaluation of petrogenetic models. <i>Meteoritics and Planetary Science</i> , 2017, 52, 125-146.	1.6	28
29	Cold curation of pristine astromaterials: Insights from the Tagish Lake meteorite. <i>Meteoritics and Planetary Science</i> , 2016, 51, 499-519.	1.6	20
30	The sustainability of habitability on terrestrial planets: Insights, questions, and needed measurements from Mars for understanding the evolution of Earthâ€™like worlds. <i>Journal of Geophysical Research E: Planets</i> , 2016, 121, 1927-1961.	3.6	72
31	The Meteoritical Bulletin, No. 101. <i>Meteoritics and Planetary Science</i> , 2015, 50, 1661-1661.	1.6	20
32	The Meteoritical Bulletin, No. 102. <i>Meteoritics and Planetary Science</i> , 2015, 50, 1662-1662.	1.6	53
33	Mineralogy, petrology, and distribution of meteorites at the Whitecourt crater, Alberta, Canada. <i>Meteoritics and Planetary Science</i> , 2015, 50, 305-317.	1.6	5
34	A laser probe $^{40}\text{Ar}/^{39}\text{Ar}$ investigation of poikilitic shergottite NWA 4797: implications for the timing of shock metamorphism. <i>Geological Society Special Publication</i> , 2014, 378, 317-332.	1.3	6
35	Testing variations within the Tagish Lake meteoriteâ€™I: Mineralogy and petrology of pristine samples. <i>Meteoritics and Planetary Science</i> , 2014, 49, 473-502.	1.6	45
36	Elemental, isotopic, and structural changes in Tagish Lake insoluble organic matter produced by parent body processes. <i>Meteoritics and Planetary Science</i> , 2014, 49, 503-525.	1.6	75

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37	Soluble organic compounds in the Tagish Lake meteorite. <i>Meteoritics and Planetary Science</i> , 2014, 49, 526-549.	1.6	31
38	Reply to comment on "Geochronology of the Martian meteorite Zagami revealed by U-Pb ion probe dating of accessory minerals". <i>Earth and Planetary Science Letters</i> , 2014, 385, 218-220.	4.4	2
39	Testing variations within the Tagish Lake meteorite: Whole-rock geochemistry of pristine samples. <i>Meteoritics and Planetary Science</i> , 2014, 49, 1100-1118.	1.6	16
40	3D Nanoscale Analysis Using Focused Ion Beam Tomography of Carbonaceous Nanoglobules in Matrix Materials from the Tagish Lake Meteorite. <i>Microscopy and Microanalysis</i> , 2014, 20, 318-319.	0.4	0
41	An igneous-textured clast in the Peace River meteorite: insights into accretion and metamorphism of asteroids in the early solar system. <i>Canadian Journal of Earth Sciences</i> , 2013, 50, 14-25.	1.3	10
42	Geochronology of the Martian meteorite Zagami revealed by U-Pb ion probe dating of accessory minerals. <i>Earth and Planetary Science Letters</i> , 2013, 374, 156-163.	4.4	43
43	Petrography, mineral chemistry, and crystallization history of olivine-phyric shergottite NWA 6234: A new melt composition. <i>Meteoritics and Planetary Science</i> , 2013, 48, 854-871.	1.6	61
44	Unusual nonterrestrial proteinogenic amino acid excesses in the Tagish Lake meteorite. <i>Meteoritics and Planetary Science</i> , 2012, 47, 1347-1364.	1.6	106
45	Northwest Africa 4797: A strongly shocked ultramafic poikilitic shergottite related to compositionally intermediate Martian meteorites. <i>Meteoritics and Planetary Science</i> , 2012, 47, 1449-1474.	1.6	39
46	Tissint Martian Meteorite: A Fresh Look at the Interior, Surface, and Atmosphere of Mars. <i>Science</i> , 2012, 338, 785-788.	12.6	100
47	The Provenances of Asteroids, and Their Contributions to the Volatile Inventories of the Terrestrial Planets. <i>Science</i> , 2012, 337, 721-723.	12.6	511
48	A Reduced Organic Carbon Component in Martian Basalts. <i>Science</i> , 2012, 337, 212-215.	12.6	182
49	Origin and Evolution of Prebiotic Organic Matter As Inferred from the Tagish Lake Meteorite. <i>Science</i> , 2011, 332, 1304-1307.	12.6	189
50	Primitive olivine-phyric shergottite NWA 5789: Petrography, mineral chemistry, and cooling history imply a magma similar to Yamato 980459. <i>Meteoritics and Planetary Science</i> , 2011, 46, 116-133.	1.6	57
51	Combining meteorites and missions to explore Mars. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2011, 108, 19159-19164.	7.1	23
52	Non-basaltic asteroidal magmatism during the earliest stages of solar system evolution: A view from Antarctic achondrites Graves Nunatak 06128 and 06129. <i>Geochimica Et Cosmochimica Acta</i> , 2010, 74, 1172-1199.	3.9	59
53	Martian regolith in Elephant Moraine 79001 shock melts? Evidence from major element composition and sulfur speciation. <i>Geochimica Et Cosmochimica Acta</i> , 2010, 74, 4829-4843.	3.9	17
54	Crystallization, melt inclusion, and redox history of a Martian meteorite: Olivine-phyric shergottite Larkman Nunatak 06319. <i>Geochimica Et Cosmochimica Acta</i> , 2010, 74, 4543-4576.	3.9	89

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55	The Meteoritical Bulletin, No. 97. Meteoritics and Planetary Science, 2010, 45, 449-493.	1.6	21
56	The Whitecourt meteorite impact crater, Alberta, Canada. Meteoritics and Planetary Science, 2010, 45, 1429-1445.	1.6	26
57	The Meteoritical Bulletin, No. 98, September 2010. Meteoritics and Planetary Science, 2010, 45, 1530-1551.	1.6	13
58	Experimental study of polybaric REE partitioning between olivine, pyroxene and melt of the Yamato 980459 composition: Insights into the petrogenesis of depleted shergottites. Geochimica Et Cosmochimica Acta, 2009, 73, 3471-3492.	3.9	22
59	The behavior of Co and Ni in olivine in planetary basalts: An experimental investigation. American Mineralogist, 2009, 94, 244-255.	1.9	24
60	The Meteoritical Bulletin, No. 96, September 2009. Meteoritics and Planetary Science, 2009, 44, 1355-1397.	1.6	32
61	Isotopic and petrographic evidence for young Martian basalts. Geochimica Et Cosmochimica Acta, 2008, 72, 5819-5837.	3.9	41
62	Anatomy of a young impact event in central Alberta, Canada: Prospects for the missing Holocene impact record. Geology, 2008, 36, 955.	4.4	20
63	Basalts as Probes of Planetary Interior Redox State. Reviews in Mineralogy and Geochemistry, 2008, 68, 527-553.	4.8	72
64	19. Basalts as Probes of Planetary Interior Redox State. , 2008, , 527-554.		10
65	Dynamic crystallization of shock melts in Allan Hills 77005: Implications for melt pocket formation in Martian meteorites. Geochimica Et Cosmochimica Acta, 2007, 71, 5267-5285.	3.9	27
66	Localized shock melting in Iherzolitic shergottite Northwest Africa 1950: Comparison with Allan Hills 77005. Meteoritics and Planetary Science, 2007, 42, 63-80.	1.6	33
67	Light lithophile elements in pyroxenes of Northwest Africa (NWA) 817 and other Martian meteorites: Implications for water in Martian magmas. Geochimica Et Cosmochimica Acta, 2006, 70, 2919-2934.	3.9	21
68	Insights into the redox history of the NWA 1068/1110 martian basalt from mineral equilibria and vanadium oxybarometry. American Mineralogist, 2006, 91, 1616-1627.	1.9	64
69	Light lithophile elements in martian basalts: Evaluating the evidence for magmatic water degassing. Geochimica Et Cosmochimica Acta, 2005, 69, 2431-2440.	3.9	35
70	The behavior of Li and B during planetary basalt crystallization. American Mineralogist, 2004, 89, 832-840.	1.9	40
71	Spinel and oxygen fugacity in olivineâ€‘phyric and Iherzolitic shergottites. Meteoritics and Planetary Science, 2003, 38, 1773-1792.	1.6	85
72	The oxygen fugacity of olivineâ€‘phyric martian basalts and the components within the mantle and crust of Mars. Meteoritics and Planetary Science, 2003, 38, 1793-1805.	1.6	139

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73	Symplectites derived from metastable phases in martian basaltic meteorites. <i>American Mineralogist</i> , 2002, 87, 1351-1359.	1.9	55
74	Oxygen fugacity and geochemical variations in the martian basalts: implications for martian basalt petrogenesis and the oxidation state of the upper mantle of Mars. <i>Geochimica Et Cosmochimica Acta</i> , 2002, 66, 2025-2036.	3.9	257
75	An experimental and petrographic investigation of Elephant Moraine 79001 lithology A: Implications for its petrogenesis and the partitioning of chromium and vanadium in a martian basalt. <i>Meteoritics and Planetary Science</i> , 2002, 37, 987-1000.	1.6	22
76	Oxygen fugacity of martian basalts from electron microprobe oxygen and TEM-EELS analyses of Fe-Ti oxides. <i>American Mineralogist</i> , 2001, 86, 1015-1024.	1.9	125