David A Kring

List of Publications by Year
in descending order

92 papers	6,838 citations	66343 42 h-index	62596 80 g-index
92 all docs	92 docs citations	92 times ranked	4279 citing authors

#	Article	IF	Citations
1	Evidence of Carboniferous arc magmatism preserved in the Chicxulub impact structure. Bulletin of the Geological Society of America, 2022, 134, 241-260.	3.3	12
2	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.	3.3	5
3	Borehole Seismic Observations From the Chicxulub Impact Drilling: Implications for Seismic Reflectivity and Impact Damage. Geochemistry, Geophysics, Geosystems, 2022, 23, .	2.5	1
4	Numerical modeling of the formation of Shackleton crater at the lunar south pole. Icarus, 2021, 354, 113992.	2.5	9
5	Microbial Sulfur Isotope Fractionation in the Chicxulub Hydrothermal System. Astrobiology, 2021, 21, 103-114.	3.0	18
6	Globally distributed iridium layer preserved within the Chicxulub impact structure. Science Advances, 2021, 7, .	10.3	47
7	Human-assisted Sample Return Mission at the SchrÃ¶dinger Basin, Lunar Far Side, Using a New Geologic Map and Rover Traverses. Planetary Science Journal, 2021, 2, 51.	3.6	4
8	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.	1.8	5
9	Framework for Coordinated Efforts in the Exploration of Volatiles in the South Polar Region of the Moon. Planetary Science Journal, 2021, 2, 103.	3.6	22
10	Shaping of the Present-Day Deep Biosphere at Chicxulub by the Impact Catastrophe That Ended the Cretaceous. Frontiers in Microbiology, 2021, 12, 668240.	3.5	8
11	Prominent volcanic source of volatiles in the south polar region of the Moon. Advances in Space Research, 2021, 68, 4691-4701.	2.6	8
12	Shock impedance amplified impact deformation of zircon in granitic rocks from the Chicxulub impact crater. Earth and Planetary Science Letters, 2021, 575, 117201.	4.4	15
13	Hydrogen Production from Alteration of Chicxulub Crater Impact Breccias: Potential Energy Source for a Subsurface Microbial Ecosystem. Astrobiology, 2021, 21, 1547-1564.	3.0	4
14	Winding down the Chicxulub impact: The transition between impact and normal marine sedimentation near ground zero. Marine Geology, 2020, 430, 106368.	2.1	15
15	The Habitat of the Nascent Chicxulub Crater. AGU Advances, 2020, 1, e2020AV000208.	5.4	12
16	Hydrothermal alteration associated with the Chicxulub impact crater upper peak-ring breccias. Earth and Planetary Science Letters, 2020, 547, 116425.	4.4	21
17	Highâ€resolution microstructural and compositional analyses of shock deformed apatite from the peak ring of the Chicxulub impact crater. Meteoritics and Planetary Science, 2020, 55, .	1.6	17
18	Lunar south pole boulders and boulder tracks: Implications for crew and rover traverses. Icarus, 2020, 348, 113850.	2.5	20

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19	Probing the hydrothermal system of the Chicxulub impact crater. Science Advances, 2020, 6, eaaz3053.	10.3	69
20	Geologic context and potential EVA targets at the lunar south pole. Advances in Space Research, 2020, 66, 1247-1264.	2.6	22
21	Geochemistry, geochronology and petrogenesis of Maya Block granitoids and dykes from the Chicxulub Impact Crater, Gulf of MÃ©xico: Implications for the assembly of Pangea. Gondwana Research, 2020, 82, 128-150.	6.0	26
22	Using Boulder Tracks as a Tool to Understand the Bearing Capacity of Permanently Shadowed Regions of the Moon. Journal of Geophysical Research E: Planets, 2020, 125, e2019JE006157.	3.6	24
23	The isotopic composition of volatiles in the unique Bench Crater carbonaceous chondrite impactor found in the Apollo 12 regolith. Earth and Planetary Science Letters, 2020, 540, 116265.	4.4	14
24	Science on the lunar surface facilitated by low latency telerobotics from a Lunar Orbital Platform - Gateway. Acta Astronautica, 2019, 154, 195-203.	3.2	36
25	U-Pb memory behavior in Chicxulub's peak ring â€" Applying U-Pb depth profiling to shocked zircon. Chemical Geology, 2019, 525, 356-367.	3.3	15
26	Terrestrial-like zircon in a clast from an Apollo 14 breccia. Earth and Planetary Science Letters, 2019, 510, 173-185.	4.4	56
27	Analysis of Lunar Boulder Tracks: Implications for Trafficability of Pyroclastic Deposits. Journal of Geophysical Research E: Planets, 2019, 124, 1296-1314.	3.6	21
28	Traverses for the ISECG-GER design reference mission for humans on the lunar surface. Advances in Space Research, 2019, 63, 692-727.	2.6	14
29	Uâ€"Thâ€"Pb systematics in zircon and apatite from the Chicxulub impact crater, YucatÃ¡n, Mexico. Geological Magazine, 2018, 155, 1330-1350.	1.5	9
30	Rock fluidization during peak-ring formation of large impact structures. Nature, 2018, 562, 511-518.	27.8	74
31	Rapid recovery of life at ground zero of the end-Cretaceous mass extinction. Nature, 2018, 558, 288-291.	27.8	123
32	Extraordinary rocks from the peak ring of the Chicxulub impact crater: P-wave velocity, density, and porosity measurements from IODP/ICDP Expedition 364. Earth and Planetary Science Letters, 2018, 495, 1-11.	4.4	65
33	Lunar volcanism produced a transient atmosphere around the ancient Moon. Earth and Planetary Science Letters, 2017, 478, 175-178.	4.4	101
34	Chicxulub and the Exploration of Large Peak-Ring Impact Craters through Scientific Drilling. GSA Today, 2017, , 4-8.	2.0	17
35	Analyses of robotic traverses and sample sites in the SchrÃ¶dinger basin for the HERACLES human-assisted sample return mission concept. Advances in Space Research, 2016, 58, 1050-1065.	2.6	20
36	Recent shallow moonquake and impact-triggered boulder falls on the Moon: New insights from the SchrÃ¶dinger basin. Journal of Geophysical Research E: Planets, 2016, 121, 147-179.	3.6	57

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37	An asteroidal origin for water in the Moon. Nature Communications, 2016, 7, 11684.	12.8	68
38	The formation of peak rings in large impact craters. Science, 2016, 354, 878-882.	12.6	181
39	Peak-ring structure and kinematics from a multi-disciplinary study of the SchrÃ¶dinger impact basin. Nature Communications, 2016, 7, 13161.	12.8	38
40	The Moon: An Archive of Small Body Migration in the Solar System. Earth, Moon and Planets, 2016, 118, 133-158.	0.6	60
41	Identifying the geologic context of Apollo 17 impact melt breccias. Earth and Planetary Science Letters, 2016, 436, 64-70.	4.4	24
42	Scaling of basin-sized impacts and the influence of target temperature. Special Paper of the Geological Society of America, 2015, , 99-113.	0.5	15
43	Identification of magnetite in lunar regolith breccia 60016: Evidence for oxidized conditions at the lunar surface. Meteoritics and Planetary Science, 2015, 50, 1157-1172.	1.6	22
44	Robotic traverse and sample return strategies for a lunar farside mission to the SchrÃ¶dinger basin. Advances in Space Research, 2015, 55, 1241-1254.	2.6	36
45	Potential sample sites for South Poleâ€"Aitken basin impact melt within the SchrÃ¶dinger basin. Earth and Planetary Science Letters, 2015, 427, 31-36.	4.4	16
46	Petrography, geochronology and source terrain characteristics of lunar meteorites Dhofar 925, 961 and Sayh al Uhaymir 449. Geochimica Et Cosmochimica Acta, 2014, 144, 299-325.	3.9	25
47	⁴⁰ Ar/ ³⁹ Ar ages of impacts involving ordinary chondrite meteorites. Geological Society Special Publication, 2014, 378, 333-347.	1.3	59
48	High-priority lunar landing sites for in situ and sample return studies of polar volatiles. Planetary and Space Science, 2014, 101, 149-161.	1.7	36
49	Widespread mixing and burial of Earthâ€™s Hadean crust by asteroid impacts. Nature, 2014, 511, 578-582.	27.8	187
50	Differentiation of the South Poleâ€"Aitken basin impact melt sheet: Implications for lunar exploration. Journal of Geophysical Research E: Planets, 2014, 119, 1110-1133.	3.6	89
51	A lunar L2-Farside exploration and science mission concept with the Orion Multi-Purpose Crew Vehicle and a teleoperated lander/rover. Advances in Space Research, 2013, 52, 306-320.	2.6	59
52	Spectral and photogeologic mapping of SchrÃ¶dinger Basin and implications for post-South Pole-Aitken impact deep subsurface stratigraphy. Icarus, 2013, 223, 131-148.	2.5	68
53	Gullies and landslides on the Moon: Evidence for dryâ€granular flows. Journal of Geophysical Research E: Planets, 2013, 118, 206-223.	3.6	68
54	Numerical modeling of the formation and structure of the Orientale impact basin. Journal of Geophysical Research E: Planets, 2013, 118, 963-979.	3.6	67

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55	Identification and characterization of science-rich landing sites for lunar lander missions using integrated remote sensing observations. Advances in Space Research, 2012, 50, 1647-1665.	2.6	23
56	Direct Detection of Projectile Relics from the End of the Lunar Basinâ€“Forming Epoch. Science, 2012, 336, 1426-1429.	12.6	88
57	Constraining the size of the South Pole-Aitken basin impact. Icarus, 2012, 220, 730-743.	2.5	131
58	The onset of the lunar cataclysm as recorded in its ancient crater populations. Earth and Planetary Science Letters, 2012, 325-326, 27-38.	4.4	103
59	Estimating transient crater size using the crustal annular bulge: Insights from numerical modeling of lunar basinâ€scale impacts. Geophysical Research Letters, 2012, 39, .	4.0	40
60	A sawtooth-like timeline for the first billion years of lunar bombardment. Earth and Planetary Science Letters, 2012, 355-356, 144-151.	4.4	217
61	H/L chondrite LaPaz Icefield 031047 â€“ A feather of Icarus?. Geochimica Et Cosmochimica Acta, 2011, 75, 6140-6159.	3.9	31
62	Calibrating several key lunar stratigraphic units representing 4 b.y. of lunar history within SchrÃ¶dinger basin. , 2011, , .		14
63	The Chicxulub Asteroid Impact and Mass Extinction at the Cretaceous-Paleogene Boundary. Science, 2010, 327, 1214-1218.	12.6	1,140
64	The Ar-Ar age and petrology of Miller Range 05029: Evidence for a large impact in the very early solar system. Meteoritics and Planetary Science, 2010, 45, 1868-1888.	1.6	19
65	Impact-generated hydrothermal systems capable of forming phyllosilicates on Noachian Mars. Geology, 2009, 37, 1091-1094.	4.4	129
66	⁴⁰Arâ€³⁹Ar ages of Hâ€chondrite impact melt breccias. Meteoritics and Planetary Science, 2009, 44, 747-762.	1.6	44
67	Osmium isotope and highly siderophile element systematics of lunar impact melt breccias: Implications for the late accretion history of the Moon and Earth. Geochimica Et Cosmochimica Acta, 2008, 72, 3022-3042.	3.9	102
68	The Chicxulub impact event and its environmental consequences at the Cretaceousâ€“Tertiary boundary. Palaeogeography, Palaeoclimatology, Palaeoecology, 2007, 255, 4-21.	2.3	189
69	Numerical modeling of impactâ€induced hydrothermal activity at the Chicxulub crater. Meteoritics and Planetary Science, 2007, 42, 93-112.	1.6	94
70	Lacustrine Fossil Preservation in Acidic Environments: Implications of Experimental and Field Studies for the Cretaceousâ€“Paleogene Boundary Acid Rain Trauma. Palaios, 2005, 20, 376-389.	1.3	10
71	Stable isotope record of post-impact fluid activity in the core of the Yaxcopoil-1 borehole, Chicxulub impact structure, Mexico. , 2005, , .		7
72	Hypervelocity collisions into continental crust composed of sediments and an underlying crystalline basement: comparing the Ries (âˆ¼24 km) and Chicxulub (âˆ¼180 km) impact craters. Chemie Der Erde, 2005, 65, 1-46.	2.0	59

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73	Impact-induced hydrothermal activity on early Mars. Journal of Geophysical Research, 2005, 110, .	3.3	222
74	Numerical modeling of an impact-induced hydrothermal system at the Sudbury crater. Journal of Geophysical Research, 2004, 109, .	3.3	79
75	Ignition threshold for impact-generated fires. Journal of Geophysical Research, 2004, 109, .	3.3	19
76	Impact lithologies and their emplacement in the Chicxulub impact crater: Initial results from the Chicxulub Scientific Drilling Project, Yaxcopoil, Mexico. Meteoritics and Planetary Science, 2004, 39, 879-897.	1.6	63
77	Osmium isotope constraints on the proportion of bolide component in Chicxulub impact melt rocks. Meteoritics and Planetary Science, 2004, 39, 1003-1008.	1.6	29
78	Hydrothermal alteration in the core of the Yaxcopoilâ€1 borehole, Chicxulub impact structure, Mexico. Meteoritics and Planetary Science, 2004, 39, 1199-1221.	1.6	76
79	Environmental Consequences of Impact Cratering Events as a Function of Ambient Conditions on Earth. Astrobiology, 2003, 3, 133-152.	3.0	80
80	Trajectories and distribution of material ejected from the Chicxulub impact crater: Implications for postimpact wildfires. Journal of Geophysical Research, 2002, 107, 6-1.	3.3	84
81	Reevaluating the impact cratering kill curve. Meteoritics and Planetary Science, 2002, 37, 1648-1649.	1.6	15
82	Support for the Lunar Cataclysm Hypothesis from Lunar Meteorite Impact Melt Ages. , 2000, 290, 1754-1756.		279
83	Hydrocode simulation of the Chicxulub impact event and the production of climatically active gases. Journal of Geophysical Research, 1998, 103, 28607-28625.	3.3	182
84	Air blast produced by the Meteor Crater impact event and a reconstruction of the affected environment. Meteoritics and Planetary Science, 1997, 32, 517-530.	1.6	45
85	Impact-induced perturbations of atmospheric sulfur. Earth and Planetary Science Letters, 1996, 140, 201-212.	4.4	52
86	Cat Mountain: A meteoritic sample of an impact-melted asteroid regolith. Journal of Geophysical Research, 1996, 101, 29353-29371.	3.3	57
87	The dimensions of the Chicxulub impact crater and impact melt sheet. Journal of Geophysical Research, 1995, 100, 16979.	3.3	79
88	Provenance of mineral phases in the Cretaceous-Tertiary boundary sediments exposed on the southern peninsula of Haiti. Earth and Planetary Science Letters, 1994, 128, 629-641.	4.4	16
89	Petrogenesis of an augite-bearing melt rock in the Chicxulub structure and its relationship to K/T impact spherules in Haiti. Nature, 1992, 358, 141-144.	27.8	85
90	Altered spherules of impact melt and associated relic glass from the K/T boundary sediments in Haiti. Geochimica Et Cosmochimica Acta, 1991, 55, 1737-1742.	3.9	44

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91	Chicxulub Crater: A possible Cretaceous/Tertiary boundary impact crater on the YucatÃ¡n Peninsula, Mexico. Geology, 1991, 19, 867.	4.4	768
92	Petrophysics of Chicxulub impact craterâ€™s peak ring. Journal of Geophysical Research: Solid Earth, 0, , .	3.4	0