

Ian A Crawford

List of Publications by Year in descending order

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137
papers

3,674
citations

117453

34
h-index

161609

54
g-index

143
all docs

143
docs citations

143
times ranked

3090
citing authors

#	ARTICLE	IF	CITATIONS
1	Complex burial histories of Apollo 12 basaltic soil grains derived from cosmogenic noble gases: Implications for local regolith evolution and future in-situ investigations. <i>Meteoritics and Planetary Science</i> , 2022, 57, 603-634.	0.7	4
2	Assessing the survivability of biomarkers within terrestrial material impacting the lunar surface. <i>Icarus</i> , 2021, 354, 114026.	1.1	4
3	Astronomy from the Moon: the next decades. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2021, 379, 20190560.	1.6	5
4	The lunar surface as a recorder of astrophysical processes. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2021, 379, 20190562.	1.6	11
5	A database of noble gases in lunar samples in preparation for mass spectrometry on the Moon. <i>Planetary and Space Science</i> , 2020, 182, 104823.	0.9	14
6	Regions of interest (ROI) for future exploration missions to the lunar South Pole. <i>Planetary and Space Science</i> , 2020, 180, 104750.	0.9	44
7	The BepiColombo Mercury Imaging X-Ray Spectrometer: Science Goals, Instrument Performance and Operations. <i>Space Science Reviews</i> , 2020, 216, 1.	3.7	36
8	Expanding worldviews: cosmic perspectives. <i>Astronomy and Geophysics</i> , 2019, 60, 6.36-6.40.	0.1	1
9	Widening Perspectives: The Intellectual and Social Benefits of Astrobiology, Big History, and the Exploration of Space. <i>Journal of Big History</i> , 2019, 3, 205-224.	0.4	4
10	Why Space Is Still the Place. <i>Inference</i> , 2019, 4, .	0.0	0
11	Widening perspectives: the intellectual and social benefits of astrobiology (regardless of whether) <i>Tj ETQq1 1 0.784314 rgBT/Overlook</i>	0.9	14
12	Direct Exoplanet Investigation Using Interstellar Space Probes. , 2018, , 3413-3431.		5
13	Big history and the cosmic perspective. <i>Astronomy and Geophysics</i> , 2018, 59, 5.33-5.36.	0.1	5
14	Biogeochemical probing of microbial communities in a basalt-hosted hot spring at Kverkfjall volcano, Iceland. <i>Geobiology</i> , 2018, 16, 507-521.	1.1	15
15	Was There an Early Habitability Window for Earth's Moon?. <i>Astrobiology</i> , 2018, 18, 985-988.	1.5	22
16	The PanCam Instrument for the ExoMars Rover. <i>Astrobiology</i> , 2017, 17, 511-541.	1.5	55
17	The petrology, geochemistry, and age of lunar regolith breccias Miller Range 090036 and 090070: Insights into the crustal history of the Moon. <i>Meteoritics and Planetary Science</i> , 2017, 52, 3-23.	0.7	8
18	Atomic gas in debris discs. <i>Monthly Notices of the Royal Astronomical Society</i> , 2017, 466, 3582-3593.	1.6	10

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19	The Moon as a Recorder of Nearby Supernovae. , 2017, , 2507-2522.		2
20	Why we should build a Moon village. Astronomy and Geophysics, 2017, 58, 6.18-6.21.	0.1	7
21	Direct Exoplanet Investigation Using Interstellar Space Probes. , 2017, , 1-19.		0
22	Organic Matter Responses to Radiation under Lunar Conditions. Astrobiology, 2016, 16, 900-912.	1.5	5
23	An analysis of Apollo lunar soil samples 12070,889, 12030,187, and 12070,891: Basaltic diversity at the Apollo 12 landing site and implications for classification of small-sized lunar samples. Meteoritics and Planetary Science, 2016, 51, 1654-1677.	0.7	9
24	Lunar basalt chronology, mantle differentiation and implications for determining the age of the Moon. Earth and Planetary Science Letters, 2016, 451, 149-158.	1.8	60
25	The long-term scientific benefits of a space economy. Space Policy, 2016, 37, 58-61.	0.8	38
26	The Moon: An Archive of Small Body Migration in the Solar System. Earth, Moon and Planets, 2016, 118, 133-158.	0.3	60
27	Using extraterrestrial resources for science. Astronomy and Geophysics, 2016, 57, 4.32-4.36.	0.1	13
28	The Moon Zoo citizen science project: Preliminary results for the Apollo 17 landing site. Icarus, 2016, 271, 30-48.	1.1	17
29	The Moon as a Recorder of Nearby Supernovae. , 2016, , 1-16.		0
30	The Moon as a Recorder of Nearby Supernovae. , 2016, , 1-16.		0
31	The Moon as a Recorder of Organic Evolution in the Early Solar System: A Lunar Regolith Analog Study. Astrobiology, 2015, 15, 154-168.	1.5	18
32	Lunar resources. Progress in Physical Geography, 2015, 39, 137-167.	1.4	183
33	Constraining the source regions of lunar meteorites using orbital geochemical data. Meteoritics and Planetary Science, 2015, 50, 214-228.	0.7	38
34	The Lethality of Interplanetary Warfare: A Fundamental Constraint on Extraterrestrial Liberty. Space and Society, 2015, , 187-198.	1.6	20
35	Interplanetary Federalism: Maximising the Chances of Extraterrestrial Peace, Diversity and Liberty. Space and Society, 2015, , 199-218.	1.6	24
36	Lunar Exploration. , 2014, , 555-579.		13

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37	An unusual clast in lunar meteorite MacAlpine Hills 88105: A unique lunar sample or projectile debris?. <i>Meteoritics and Planetary Science</i> , 2014, 49, 677-695.	0.7	13
38	Searching for nonlocal lithologies in the Apollo 12 regolith: A geochemical and petrological study of basaltic coarse fines from the Apollo lunar soil sample 12023,155. <i>Meteoritics and Planetary Science</i> , 2014, 49, 1288-1304.	0.7	8
39	Introduction to the Special Issue on the Global Exploration Roadmap. <i>Space Policy</i> , 2014, 30, 141-142.	0.8	1
40	Basaltic diversity at the Apollo 12 landing site: Inferences from petrologic examinations of the soil sample 12003. <i>Meteoritics and Planetary Science</i> , 2014, 49, 842-871.	0.7	15
41	Western Oceanus Procellarum as seen by C1XS on Chandrayaan-1. <i>Icarus</i> , 2014, 229, 254-262.	1.1	6
42	Lunar exploration: opening a window into the history and evolution of the inner Solar System. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2014, 372, 20130315.	1.6	53
43	Numerical modeling of lavaâ€regolith heat transfer on the Moon and implications for the preservation of implanted volatiles. <i>Journal of Geophysical Research E: Planets</i> , 2013, 118, 382-397.	1.5	31
44	Glaciovolcanic hydrothermal environments in Iceland and implications for their detection on Mars. <i>Journal of Volcanology and Geothermal Research</i> , 2013, 256, 61-77.	0.8	40
45	Hydrothermal modification of the Sikhote-Alin iron meteorite under low pH geothermal environments. A plausibly prebiotic route to activated phosphorus on the early Earth. <i>Geochimica Et Cosmochimica Acta</i> , 2013, 109, 90-112.	1.6	52
46	The Moon and the early Earth. <i>Astronomy and Geophysics</i> , 2013, 54, 1.31-1.34.	0.1	3
47	Minimagnetospheres above the Lunar Surface and the Formation of Lunar Swirls. <i>Physical Review Letters</i> , 2012, 109, 081101.	2.9	43
48	Back to the Moon: The scientific rationale for resuming lunar surface exploration. <i>Planetary and Space Science</i> , 2012, 74, 3-14.	0.9	119
49	The production of oxygen and metal from lunar regolith. <i>Planetary and Space Science</i> , 2012, 74, 49-56.	0.9	103
50	Selecting the geology filter wavelengths for the ExoMars Panoramic Camera instrument. <i>Planetary and Space Science</i> , 2012, 71, 80-100.	0.9	28
51	Lunar PanCam: Adapting ExoMars PanCam for the ESA Lunar Lander. <i>Planetary and Space Science</i> , 2012, 74, 247-253.	0.9	10
52	Characterisation of potential landing sites for the European Space Agency's Lunar Lander project. <i>Planetary and Space Science</i> , 2012, 74, 224-246.	0.9	75
53	A brief review of chemical and mineralogical resources on the Moon and likely initial in situ resource utilization (ISRU) applications. <i>Planetary and Space Science</i> , 2012, 74, 42-48.	0.9	200
54	Geology, geochemistry, and geophysics of the Moon: Status of current understanding. <i>Planetary and Space Science</i> , 2012, 74, 15-41.	0.9	104

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55	Dispelling the myth of robotic efficiency. <i>Astronomy and Geophysics</i> , 2012, 53, 2.22-2.26.	0.1	27
56	The scientific legacy of Apollo. <i>Astronomy and Geophysics</i> , 2012, 53, 6.24-6.28.	0.1	10
57	Lunar Netâ€™a proposal in response to an ESA M3 call in 2010 for a medium sized mission. <i>Experimental Astronomy</i> , 2012, 33, 587-644.	1.6	15
58	The Chandrayaan-1 X-ray Spectrometer: First results. <i>Planetary and Space Science</i> , 2012, 60, 217-228.	0.9	28
59	Petrogenesis and chronology of lunar meteorite Northwest Africa 4472: A KREEPy regolith breccia from the Moon. <i>Geochimica Et Cosmochimica Acta</i> , 2011, 75, 2420-2452.	1.6	58
60	Characterization of multiple lithologies within the lunar feldspathic regolith breccia meteorite Northeast Africa 001. <i>Meteoritics and Planetary Science</i> , 2011, 46, 1288-1312.	0.7	23
61	Volcano-Ice Interaction as a Microbial Habitat on Earth and Mars. <i>Astrobiology</i> , 2011, 11, 695-710.	1.5	52
62	Moon Zoo: citizen science in lunar exploration. <i>Astronomy and Geophysics</i> , 2011, 52, 2.10-2.12.	0.1	14
63	Planetary X-ray fluorescence analogue laboratory experiments and an elemental abundance algorithm for C1XS. <i>Planetary and Space Science</i> , 2011, 59, 1393-1407.	0.9	17
64	Project Icarus: A review of local interstellar medium properties of relevance for space missions to the nearest stars. <i>Acta Astronautica</i> , 2011, 68, 691-699.	1.7	17
65	Penetrators for in situ subsurface investigations of Europa. <i>Advances in Space Research</i> , 2011, 48, 725-742.	1.2	51
66	Lunar X-ray fluorescence observations by the Chandrayaan-1 X-ray Spectrometer (C1XS): Results from the nearside southern highlands. <i>Icarus</i> , 2011, 214, 53-66.	1.1	46
67	Lunar Palaeoregolith Deposits as Recorders of the Galactic Environment of the Solar System and Implications for Astrobiology. <i>Earth, Moon and Planets</i> , 2010, 107, 75-85.	0.3	39
68	Hypervelocity Impact Experiments in the Laboratory Relating to Lunar Astrobiology. <i>Earth, Moon and Planets</i> , 2010, 107, 55-64.	0.3	13
69	Introduction to the Special Issue on Astrobiology on the Moon. <i>Earth, Moon and Planets</i> , 2010, 107, 1-1.	0.3	2
70	Mercury's surface and composition to be studied by BepiColombo. <i>Planetary and Space Science</i> , 2010, 58, 21-39.	0.9	31
71	Preservation potential of implanted solar wind volatiles in lunar paleoregolith deposits buried by lava flows. <i>Icarus</i> , 2010, 207, 595-604.	1.1	47
72	Individual lava flow thicknesses in Oceanus Procellarum and Mare Serenitatis determined from Clementine multispectral data. <i>Icarus</i> , 2010, 209, 323-336.	1.1	39

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73	Astrobiological Considerations for the Selection of the Geological Filters on the ExoMars PanCam Instrument. <i>Astrobiology</i> , 2010, 10, 933-951.	1.5	15
74	A Comment on "The Far Future of Exoplanet Direct Characterization" The Case for Interstellar Space Probes. <i>Astrobiology</i> , 2010, 10, 853-856.	1.5	3
75	Astrobiological Benefits of Human Space Exploration. <i>Astrobiology</i> , 2010, 10, 577-587.	1.5	14
76	Lunar meteorite regolith breccias: An in situ study of impact melt composition using LA-ICP-MS with implications for the composition of the lunar crust. <i>Meteoritics and Planetary Science</i> , 2010, 45, 917-946.	0.7	59
77	The preservation of fossil biomarkers during meteorite impact events: Experimental evidence from biomarker-rich projectiles and target rocks. <i>Meteoritics and Planetary Science</i> , 2010, 45, 1340-1358.	0.7	28
78	ESSC-ESF Position Paper "Science-Driven Scenario for Space Exploration: Report from the European Space Sciences Committee (ESSC). <i>Astrobiology</i> , 2009, 9, 23-41.	1.5	13
79	A comparative study of endolithic microborings in basaltic lavas from a transitional subglacial-marine environment. <i>International Journal of Astrobiology</i> , 2009, 8, 37-49.	0.9	30
80	LunarEX a proposal to cosmic vision. <i>Experimental Astronomy</i> , 2009, 23, 711-740.	1.6	18
81	Does the UK need a Space Agency?. <i>Astronomy and Geophysics</i> , 2009, 50, 1.07-1.07.	0.1	1
82	Ground calibration of the Chandrayaan-1 X-ray Solar Monitor (XSM). <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2009, 607, 544-553.	0.7	19
83	The scientific rationale for the C1XS X-ray spectrometer on India's Chandrayaan-1 mission to the moon. <i>Planetary and Space Science</i> , 2009, 57, 725-734.	0.9	30
84	X-ray fluorescence observations of the moon by SMART-1/D-CIXS and the first detection of Ti K α from the lunar surface. <i>Planetary and Space Science</i> , 2009, 57, 744-750.	0.9	46
85	The C1XS X-ray Spectrometer on Chandrayaan-1. <i>Planetary and Space Science</i> , 2009, 57, 717-724.	0.9	54
86	The thermal alteration by pyrolysis of the organic component of small projectiles of mudrock during capture at hypervelocity. <i>Journal of Analytical and Applied Pyrolysis</i> , 2008, 82, 312-314.	2.6	23
87	Lunar science with affordable small spacecraft technologies: MoonLITE and Moonraker. <i>Planetary and Space Science</i> , 2008, 56, 368-377.	0.9	27
88	Exploring the Moon: a UK perspective. <i>Astronomy and Geophysics</i> , 2008, 49, 1.09-1.12.	0.1	0
89	Astronomy from the Moon. <i>Astronomy and Geophysics</i> , 2008, 49, 2.17-2.19.	0.1	11
90	MoonLITE: A UK-led mission to the Moon. <i>Astronomy and Geophysics</i> , 2008, 49, 3.11-3.14.	0.1	4

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91	The petrology and geochemistry of Miller Range 05035: A new lunar gabbroic meteorite. <i>Geochimica Et Cosmochimica Acta</i> , 2008, 72, 3822-3844.	1.6	58
92	On the Survivability and Detectability of Terrestrial Meteorites on the Moon. <i>Astrobiology</i> , 2008, 8, 242-252.	1.5	43
93	Detection of Circumstellar Material in a Normal Type Ia Supernova. <i>Science</i> , 2007, 317, 924-926.	6.0	313
94	Laboratory impacts into dry and wet sandstone with and without an overlying water layer: Implications for scaling laws and projectile survivability. <i>Meteoritics and Planetary Science</i> , 2007, 42, 1905-1914.	0.7	33
95	UK Lunar Science Missions: Moonlite & Moonraker. , 2007, , .		4
96	The D-CIXS X-ray spectrometer on the SMART-1 mission to the Moon—First results. <i>Planetary and Space Science</i> , 2007, 55, 494-502.	0.9	41
97	Space exploration and the RAS. <i>Astronomy and Geophysics</i> , 2007, 48, 6.9-6.10.	0.1	1
98	Possible evidence for on-going volcanism on Mars as suggested by thin, elliptical sheets of low-albedo particulate material around pits and fissures close to Cerberus Fossae. <i>Earth, Moon and Planets</i> , 2007, 101, 1-16.	0.3	6
99	A petrological, mineralogical, and chemical analysis of the lunar mare basalt meteorite LaPaz Icefield 02205, 02224, and 02226. <i>Meteoritics and Planetary Science</i> , 2006, 41, 1003-1025.	0.7	50
100	Which way to the Moon?. <i>Astronomy and Geophysics</i> , 2006, 47, 4.17-4.19.	0.1	3
101	The chemistry of transient microstructure in the diffuse interstellar medium. <i>Monthly Notices of the Royal Astronomical Society</i> , 2005, 357, 961-966.	1.6	40
102	THE SCIENTIFIC CASE FOR HUMAN SPACE EXPLORATION. <i>Earth, Moon and Planets</i> , 2005, 94, 167-168.	0.3	0
103	TOWARDS AN INTEGRATED SCIENTIFIC AND SOCIAL CASE FOR HUMAN SPACE EXPLORATION. <i>Earth, Moon and Planets</i> , 2005, 94, 245-266.	0.3	11
104	The scientific case for human space exploration. <i>Astronomy and Geophysics</i> , 2005, 46, 1.17-1.18.	0.1	2
105	Human exploration of the Moon and Mars: implications for Aurora. <i>Astronomy and Geophysics</i> , 2004, 45, 2.28-2.29.	0.1	7
106	The scientific case for renewed human activities on the Moon. <i>Space Policy</i> , 2004, 20, 91-97.	0.8	38
107	Variable interstellar absorption lines: a brief review. <i>Astrophysics and Space Science</i> , 2003, 285, 661-675.	0.5	20
108	Back to the Moon?. <i>Astronomy and Geophysics</i> , 2003, 44, 2.15-2.17.	0.1	5

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109	A VAPID analysis of interstellar lithium in the $\hat{\Gamma}$ Oph sightline. Monthly Notices of the Royal Astronomical Society, 2002, 335, 267-274.	1.6	24
110	Detection of Ca I and CH absorption at the velocity of the variable interstellar component towards \hat{A} Velorum. Monthly Notices of the Royal Astronomical Society, 2002, 334, L33-L37.	1.6	18
111	High-resolution observations of interstellar Na I and Ca II towards the southern opening of the $\hat{\epsilon}$ Local Interstellar Chimney TM : probing the disc-halo connection. Monthly Notices of the Royal Astronomical Society, 2002, 337, 720-730.	1.6	27
112	Ultra-high-resolution observations of CH in Southern Molecular Cloud envelopes. Monthly Notices of the Royal Astronomical Society, 2002, 334, 327-337.	1.6	13
113	The scientific case for human space exploration. Space Policy, 2001, 17, 155-159.	0.8	5
114	\hat{A} Orionis: further temporal variability and evidence for small-scale structure in the interstellar medium. Monthly Notices of the Royal Astronomical Society, 2001, 321, 553-558.	1.6	6
115	An ultra-high-resolution study of the interstellar medium in the direction of \hat{A} Ophiuchi. Monthly Notices of the Royal Astronomical Society, 2001, 327, 841-848.	1.6	17
116	An ultra-high-resolution study of the interstellar medium towards Orion. Monthly Notices of the Royal Astronomical Society, 2001, 328, 555-582.	1.6	32
117	Ultra-high-resolution observations of interstellar Na I and K I towards the Scorpius OB1 association. Monthly Notices of the Royal Astronomical Society, 2001, 328, 1115-1124.	1.6	10
118	Design of the high-resolution optical spectrograph (HROS) for the Gemini telescope. , 2000, 4008, 159.		0
119	Ultra-high-resolution observations of circumstellar K I and C2 around the post-AGB star HD 56126. Monthly Notices of the Royal Astronomical Society, 2000, 311, 370-376.	1.6	14
120	Detection of a variable interstellar absorption component towards \hat{A} Orionis A. Monthly Notices of the Royal Astronomical Society, 2000, 312, L43-L48.	1.6	35
121	A study of interstellar Na I D absorption lines towards the Lupus molecular clouds. Monthly Notices of the Royal Astronomical Society, 2000, 317, 996-1004.	1.6	31
122	κ Velorum: another variable interstellar sightline?. Monthly Notices of the Royal Astronomical Society, 2000, 319, L1-L6.	1.6	16
123	Where are They?. Scientific American, 2000, 283, 38-43.	1.0	15
124	The optical interstellar spectrum of \hat{A} Vel (HD 81188) and a measurement of interstellar cloud turbulence. Monthly Notices of the Royal Astronomical Society, 1999, 302, 197-202.	1.6	14
125	Spatially resolved optical spectroscopy of the Herbig Ae/Vega-like binary star HD 35187. Monthly Notices of the Royal Astronomical Society, 1998, 298, 275-284.	1.6	20
126	Additional ultra-high-resolution observations of Ca ⁺ ions in the local interstellar medium. Monthly Notices of the Royal Astronomical Society, 1998, 300, 1181-1188.	1.6	18

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127	<title>Ultrastable high-resolution spectrographs for large telescopes</title>. , 1998, , .		1
128	Atomic and Molecular Interstellar Absorption Lines toward the High Galactic Latitude Stars HD 141569 and HD 157841 at Ultraâ€“High Resolution. <i>Astrophysical Journal</i> , 1998, 504, 522-532.	1.6	15
129	Ultraâ€“Highâ€“Resolution Observations of Interstellar NaI and CaII toward the High Galactic Latitude Star HD 28497. <i>Astrophysical Journal</i> , 1997, 478, 648-657.	1.6	26
130	Space development: social and political implications. <i>Space Policy</i> , 1995, 11, 219-225.	0.8	13
131	World government the answer?. <i>Nature</i> , 1994, 371, 194-194.	13.7	1
132	<title>UHRF: spectral resolution to the limit</title>. , 1994, 2198, 274.		0
133	Observations of molecules in diffuse interstellar clouds. <i>Journal of the Chemical Society, Faraday Transactions</i> , 1993, 89, 2261.	1.7	9
134	Beyond the nation-state. <i>Nature</i> , 1992, 358, 448-448.	13.7	0
135	Benefits of mission to Mars. <i>Nature</i> , 1990, 346, 504-504.	13.7	1
136	High-resolution observations of interstellar Na I and Ca II absorption lines toward the Scorpius OB1 association. <i>Astrophysical Journal</i> , 1989, 336, 212.	1.6	20
137	Antimatter. <i>Nature</i> , 1987, 329, 758-758.	13.7	0