S S Russell

List of Publications by Year
in descending order

129 papers	5,895 citations	53794 45 h-index	85541 71 g-index
132 all docs	132 docs citations	132 times ranked	3056 citing authors

#	Article	IF	Citations
1	Evidence for Widespread 26Al in the Solar Nebula and Constraints for Nebula Time Scales. Science, 1996, 273, 757-762.	12.6	241
2	Oxygen Reservoirs in the Early Solar Nebula Inferred from an Allende CAI. , 1998, 282, 452-455.		211
3	The origin of chondritic macromolecular organic matter: A carbon and nitrogen isotope study. Meteoritics and Planetary Science, 1998, 33, 603-622.	1.6	174
4	Origin and chronology of chondritic components: A review. Geochimica Et Cosmochimica Acta, 2009, 73, 4963-4997.	3.9	171
5	Hfâ€"W evidence for rapid differentiation of iron meteorite parent bodies. Earth and Planetary Science Letters, 2006, 241, 530-542.	4.4	161
6	An Isotopic and Petrologic Study of Calcium-Aluminum-Rich Inclusions from CO3 Meteorites. Geochimica Et Cosmochimica Acta, 1998, 62, 689-714.	3.9	153
7	Aluminumâ€26 in calciumâ€aluminumâ€rich inclusions and chondrules from unequilibrated ordinary chondrites. Meteoritics and Planetary Science, 2001, 36, 975-997.	1.6	150
8	Supra-Canonical 26Al/27Al and the Residence Time of CAIs in the Solar Protoplanetary Disk. Science, 2005, 308, 223-227.	12.6	147
9	High-precision Cu and Zn isotope analysis by plasma source mass spectrometry. Journal of Analytical Atomic Spectrometry, 2004, 19, 218.	3.0	127
10	Modal abundances of CAIs: Implications for bulk chondrite element abundances and fractionations. Meteoritics and Planetary Science, 2008, 43, 1879-1894.	1.6	123
11	Amoeboid olivine aggregates and related objects in carbonaceous chondrites: records of nebular and asteroid processes. Chemie Der Erde, 2004, 64, 185-239.	2.0	122
12	The origin of water in the primitive Moon as revealed by the lunar highlands samples. Earth and Planetary Science Letters, 2014, 390, 244-252.	4.4	118
13	Oxygen Isotopic Abundances in Calcium- Aluminum-Rich Inclusions from Ordinary Chondrites: Implications for Nebular Heterogeneity. Science, 1998, 280, 414-418.	12.6	116
14	Modal mineralogy of CI and CI-like chondrites by X-ray diffraction. Geochimica Et Cosmochimica Acta, 2015, 165, 148-160.	3.9	115
15	Nitrogen and Carbon Isotopic Composition of the Sun Inferred from a High-Temperature Solar Nebular Condensate. Astrophysical Journal, 2007, 656, L33-L36.	4.5	111
16	High-precision Cu and Zn isotope analysis by plasma source mass spectrometry. Journal of Analytical Atomic Spectrometry, 2004, 19, 209.	3.0	107
17	A carbon and nitrogen isotope study of diamond from primitive chondrites. Meteoritics and Planetary Science, 1996, 31, 343-355.	1.6	103
18	Samples returned from the asteroid Ryugu are similar to Ivuna-type carbonaceous meteorites. Science, 2023, 379, .	12.6	97

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19	The Meteoritical Bulletin, No. 87, 2003 July. Meteoritics and Planetary Science, 2003, 38, A189.	1.6	88
20	Geo- and cosmochemistry of the twin elements yttrium and holmium. Geochimica Et Cosmochimica Acta, 2007, 71, 4592-4608.	3.9	88
21	A New Astrophysical Setting for Chondrule Formation. Science, 2001, 291, 1776-1779.	12.6	84
22	The Meteoritical Bulletin, No. 88, 2004 July. Meteoritics and Planetary Science, 2004, 39, A215.	1.6	84
23	NEUTRON-POOR NICKEL ISOTOPE ANOMALIES IN METEORITES. Astrophysical Journal, 2012, 758, 59.	4.5	83
24	Evidence for Multiple Sources of Diamond from Primitive Chondrites. Science, 1991, 254, 1188-1191.	12.6	82
25	Refractory calciumâ€aluminumâ€rich inclusions and aluminumâ€diopsideâ€rich chondrules in the metalâ€rich chondrites Hammadah al Hamra 237 and Queen Alexandra Range 94411. Meteoritics and Planetary Science, 2001, 36, 1189-1216.	1.6	81
26	The oxygen isotope composition, petrology and geochemistry of mare basalts: Evidence for large-scale compositional variation in the lunar mantle. Geochimica Et Cosmochimica Acta, 2010, 74, 6885-6899.	3.9	80
27	16 O-rich melilite in CO3.0 chondrites: possible formation of common, 16 O-poor melilite by aqueous alteration. Geochimica Et Cosmochimica Acta, 2001, 65, 4539-4549.	3.9	75
28	The Meteoritical Bulletin, No. 89, 2005 September. Meteoritics and Planetary Science, 2005, 40, A201-A263.	1.6	73
29	Mineralogy and texture of Fe-Ni sulfides in CI1 chondrites: Clues to the extent of aqueous alteration on the CI1 parent body. Geochimica Et Cosmochimica Acta, 2005, 69, 2687-2700.	3.9	72
30	The Meteoritical Bulletin, No. 86, 2002 July. Meteoritics and Planetary Science, 2002, 37, A157.	1.6	69
31	An asteroidal origin for water in the Moon. Nature Communications, 2016, 7, 11684.	12.8	68
32	Carbon and Nitrogen Isotopes in Type II Supernova Diamonds. Astrophysical Journal, 1995, 447, 894.	4.5	68
33	A short timescale for changing oxygen fugacity in the solar nebula revealed by high-resolution 26Alâ€“26Mg dating of CAI rims. Earth and Planetary Science Letters, 2005, 238, 272-283.	4.4	66
34	16 O enrichments in aluminum-rich chondrules from ordinary chondrites. Earth and Planetary Science Letters, 2000, 184, 57-74.	4.4	65
35	A New Type of Meteoritic Diamond in the Enstatite Chondrite Abee. Science, 1992, 256, 206-209.	12.6	62
36	Characterising the CI and CI-like carbonaceous chondrites using thermogravimetric analysis and infrared spectroscopy. Earth, Planets and Space, 2015, 67, .	2.5	62

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37	Type 1 aqueous alteration in <scp>CM</scp> carbonaceous chondrites: Implications for the evolution of waterâ€rich asteroids. Meteoritics and Planetary Science, 2017, 52, 1197-1215.	1.6	62
38	Nierite (Si₃N₄), a new mineral from ordinary and enstatite chondrites. Meteoritics, 1995, 30, 387-398.	1.4	61
39	The D-CIXS X-ray mapping spectrometer on SMART-1. Planetary and Space Science, 2003, 51, 427-433.	1.7	60
40	Fabric analysis of Allende matrix using EBSD. Meteoritics and Planetary Science, 2006, 41, 989-1001.	1.6	60
41	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. Meteoritics and Planetary Science, 2010, 45, 917-946.	1.6	59
42	The petrology and geochemistry of Miller Range 05035: A new lunar gabbroic meteorite. Geochimica Et Cosmochimica Acta, 2008, 72, 3822-3844.	3.9	58
43	The C1XS X-ray Spectrometer on Chandrayaan-1. Planetary and Space Science, 2009, 57, 717-724.	1.7	54
44	Martian moons exploration MMX: sample return mission to Phobos elucidating formation processes of habitable planets. Earth, Planets and Space, 2022, 74, .	2.5	51
45	A petrological, mineralogical, and chemical analysis of the lunar mare basalt meteorite LaPaz Icefield 02205, 02224, and 02226. Meteoritics and Planetary Science, 2006, 41, 1003-1025.	1.6	50
46	A nebula setting as the origin for bulk chondrule Fe isotope variations in CV chondrites. Earth and Planetary Science Letters, 2010, 296, 423-433.	4.4	47
47	X-ray fluorescence observations of the moon by SMART-1/D-CIXS and the first detection of Ti KÎ± from the lunar surface. Planetary and Space Science, 2009, 57, 744-750.	1.7	46
48	The D-CIXS X-ray spectrometer on the SMART-1 mission to the Moonâ€”First results. Planetary and Space Science, 2007, 55, 494-502.	1.7	41
49	An oxygen isotope study of Warkâ€“Lovering rims on type A CAIs in primitive carbonaceous chondrites. Earth and Planetary Science Letters, 2014, 401, 327-336.	4.4	41
50	Constraining the Evolutionary History of the Moon and the Inner Solar System: A Case for New Returned Lunar Samples. Space Science Reviews, 2019, 215, 1.	8.1	41
51	On early Solar System chronology: Implications of an heterogeneous spatial distribution of 26Al and 53Mn. Geochimica Et Cosmochimica Acta, 2005, 69, 3129-3144.	3.9	40
52	Short duration thermal metamorphism in CR chondrites. Geochimica Et Cosmochimica Acta, 2013, 122, 267-279.	3.9	39
53	Oxygen and magnesium isotopic compositions of amoeboid olivine aggregates from the Semarkona LL3.0 chondrite. Meteoritics and Planetary Science, 2007, 42, 1241-1247.	1.6	38
54	Spectral characterization of analog samples in anticipation of OSIRIS-REx's arrival at Bennu: A blind test study. Icarus, 2019, 319, 701-723.	2.5	38

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55	Heterogeneity in lunar anorthosite meteorites: implications for the lunar magma ocean model. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2014, 372, 20130241.	3.4	37
56	Linking mineralogy and spectroscopy of highly aqueously altered <scp>CM</scp> and <scp>CI</scp> carbonaceous chondrites in preparation for primitive asteroid sample return. Meteoritics and Planetary Science, 2020, 55, 77-101.	1.6	37
57	The alteration history of the Jbilet Winselwan CM carbonaceous chondrite: An analog for Câ€type asteroid sample return. Meteoritics and Planetary Science, 2019, 54, 521-543.	1.6	35
58	Mineral magnetism of dusty olivine: A credible recorder of pre-accretionary remanence. Geochemistry, Geophysics, Geosystems, 2011, 12, n/a-n/a.	2.5	34
59	Origin of shortâ€"lived radionuclides. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2001, 359, 1991-2004.	3.4	33
60	Hydrogen isotopic composition of water from fossil micrometeorites in howardites. Geochimica Et Cosmochimica Acta, 2005, 69, 3431-3443.	3.9	33
61	Presolar silicon carbide from the Indarch (EH4) meteorite: Comparison with silicon carbide populations from other meteorite classes. Meteoritics and Planetary Science, 1997, 32, 719-732.	1.6	31
62	Nebular and asteroidal modification of the iron isotope composition of chondritic components. Earth and Planetary Science Letters, 2005, 239, 203-218.	4.4	31
63	The scientific rationale for the C1XS X-ray spectrometer on India's Chandrayaan-1 mission to the moon. Planetary and Space Science, 2009, 57, 725-734.	1.7	30
64	An Fe isotope study of ordinary chondrites. Geochimica Et Cosmochimica Acta, 2009, 73, 7399-7413.	3.9	28
65	The Chandrayaan-1 X-ray Spectrometer: First results. Planetary and Space Science, 2012, 60, 217-228.	1.7	28
66	The thermal decomposition of fine-grained micrometeorites, observations from mid-IR spectroscopy. Geochimica Et Cosmochimica Acta, 2017, 206, 112-136.	3.9	28
67	Sulfur isotopic composition of Feâ€Ni sulfide grains in CI and CM carbonaceous chondrites. Meteoritics and Planetary Science, 2010, 45, 885-898.	1.6	27
68	The Burnwell, Kentucky, low iron oxide chondrite fall: Description, classification and origin. Meteoritics and Planetary Science, 1998, 33, 853-856.	1.6	26
69	Refractory inclusions from the ungrouped carbonaceous chondrites MacAlpine Hills 87300 and 88107. Meteoritics and Planetary Science, 2000, 35, 1051-1066.	1.6	25
70	Laser ablation ICP-MS study of IIIAB irons and pallasites: constraints on the behaviour of highly siderophile elements during and after planetesimal core formation. Chemical Geology, 2004, 208, 5-28.	3.3	25
71	Searching for signatures of life on Mars: an Fe-isotope perspective. Philosophical Transactions of the Royal Society B: Biological Sciences, 2006, 361, 1715-1720.	4.0	25
72	In situ analysis of residues resulting from laboratory impacts into aluminum 1100 foil: Implications for Stardust crater analyses. Meteoritics and Planetary Science, 2009, 44, 1541-1559.	1.6	24

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73	Isotopic coherence of refractory inclusions from CV and CK meteorites: Evidence from multiple isotope systems. Geochimica Et Cosmochimica Acta, 2018, 228, 62-80.	3.9	24
74	The Fe/S ratio of pyrrhotite group sulfides in chondrites: An indicator of oxidation and implications for return samples from asteroids Ryugu and Bennu. Geochimica Et Cosmochimica Acta, 2021, 303, 66-91.	3.9	24
75	The oldest magnetic record in our solar system identified using nanometric imaging and numerical modeling. Nature Communications, 2018, 9, 1173.	12.8	23
76	Scientific rationale for the D-CIXS X-ray spectrometer on board ESA's SMART-1 mission to the Moon. Planetary and Space Science, 2003, 51, 435-442.	1.7	22
77	Investigation of iron sulfide impact crater residues: A combined analysis by scanning and transmission electron microscopy. Meteoritics and Planetary Science, 2011, 46, 1007-1024.	1.6	22
78	The isotopic composition and origins of silicon nitride from ordinary and enstatite chondrites. Meteoritics, 1995, 30, 399-404.	1.4	21
79	Primordial formation of major silicates in a protoplanetary disc with homogeneous ²⁶ Al/ ²⁷ Al. Science Advances, 2020, 6, eaay9626.	10.3	21
80	Constraints on the Distances and Timescales of Solid Migration in the Early Solar System from Meteorite Magnetism. Astrophysical Journal, 2020, 896, 103.	4.5	21
81	Intense aqueous alteration on C-type asteroids: Perspectives from giant fine-grained micrometeorites. Geochimica Et Cosmochimica Acta, 2019, 245, 352-373.	3.9	20
82	Theories of planetary formation: constraints from the study of meteorites. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2001, 359, 2077-2093.	3.4	19
83	Long-lived magnetism on chondrite parent bodies. Earth and Planetary Science Letters, 2017, 475, 106-118.	4.4	18
84	Fe and O isotope composition of meteorite fusion crusts: Possible natural analogues to chondrule formation?. Meteoritics and Planetary Science, 2015, 50, 229-242.	1.6	17
85	Composition of Chondrules and Matrix and Their Complementary Relationship in Chondrites. , 0, , 91-121.		17
86	Oxygen Isotope Characteristics of Chondrules from Recent Studies by Secondary Ion Mass Spectrometry. , 0, , 196-246.		17
87	Multiple Mechanisms of Transient Heating Events in the Protoplanetary Disk. , 0, , 11-56.		16
88	A Spectral Investigation of Aqueously and Thermally Altered CM, CMâ€An, and CY Chondrites Under Simulated Asteroid Conditions for Comparison With OSIRISâ€REx and Hayabusa2 Observations. Journal of Geophysical Research E: Planets, 2021, 126, e2021JE006827.	3.6	15
89	Interstellar SiC grains in meteorites. Journal of the Chemical Society, Faraday Transactions, 1993, 89, 2297.	1.7	14
90	The atmospheric entry of fineâ€grained micrometeorites: The role of volatile gases in heating and fragmentation. Meteoritics and Planetary Science, 2019, 54, 503-520.	1.6	14

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91	26Alâ€"26Mg Systematics of Chondrules. , 0, , 247-275.		12
92	The vanadium isotopic composition of lunar basalts. Earth and Planetary Science Letters, 2019, 511, 12-24.	4.4	12
93	Exposure age, terrestrial age and preâ€atmospheric radius of the Chinguetti mesosiderite: Not part of a much larger mass. Meteoritics and Planetary Science, 2001, 36, 939-946.	1.6	10
94	The texture of a fine-grained calciumâ€"aluminium-rich inclusion (CAI) in three dimensions and implications for early solar system condensation. Geochimica Et Cosmochimica Acta, 2013, 116, 52-62.	3.9	10
95	Vaporâ€"Melt Exchange. , 0, , 151-174.		10
96	Definition and use of functional analogues in planetary exploration. Planetary and Space Science, 2021, 197, 105162.	1.7	10
97	Chemical and isotopic characteristics of the Didwanaâ€Rajod (H5) chondrite. Meteoritics and Planetary Science, 2001, 36, 1249-1256.	1.6	9
98	Shock fabrics in fineâ€grained micrometeorites. Meteoritics and Planetary Science, 2017, 52, 2258-2274.	1.6	9
99	Flying too close to the Sun â€" The viability of perihelion-induced aqueous alteration on periodic comets. Icarus, 2020, 351, 113956.	2.5	9
100	The D-CIXS X-ray spectrometer, and its capabilities for lunar science. Advances in Space Research, 2002, 30, 1901-1907.	2.6	8
101	NWA 1152 and Sahara 00182: New primitive carbonaceous chondrites with affinities to the CR and CV groups. Meteoritics and Planetary Science, 2004, 39, 2009-2032.	1.6	8
102	Formation of Chondrules by Shock Waves. , 0, , 375-399.		8
103	Petrology and oxygen isotopic compositions of calciumâ€aluminumâ€rich inclusions in primitive CO3.0â€3.1 chondrites. Meteoritics and Planetary Science, 2020, 55, 911-935.	1.6	8
104	Analytical protocols for Phobos regolith samples returned by the Martian Moons eXploration (MMX) mission. Earth, Planets and Space, 2021, 73, 120.	2.5	8
105	Iâ€Xe measurements of CAIs and chondrules from the CV3 chondrites Mokoia and Vigarano. Meteoritics and Planetary Science, 2004, 39, 1387-1403.	1.6	7
106	Chronology of formation of early solar system solids from bulk Mg isotope analyses of CV3 chondrules. Geochimica Et Cosmochimica Acta, 2018, 227, 19-37.	3.9	7
107	Tungsten Isotopes and the Origin of Chondrules and Chondrites. , 0, , 276-299.		7
108	One of the earliest refractory inclusions and its implications for solar system history. Geochimica Et Cosmochimica Acta, 2020, 286, 214-226.	3.9	7

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109	Preface: Evolution of the solar system: New advances in cosmochemistry and planetary chemistry. Geochemical Journal, 2017, 51, 1-2.	1.0	7
110	A microchondruleâ€bearing micrometeorite and comparison with microchondrules in CM chondrites. Meteoritics and Planetary Science, 2019, 54, 1303-1324.	1.6	6
111	Tracing the earliest stages of hydrothermal alteration on the CM chondrite parent body. Meteoritics and Planetary Science, 2021, 56, 1708-1728.	1.6	6
112	The origin, history and role of water in the evolution of the inner Solar System. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2017, 375, 20170108.	3.4	5
113	The Absolute Pbâ€"Pb Isotope Ages of Chondrules. , 0, , 300-323.		5
114	Abundance and importance of petrological type 1 chondritic material. Meteoritics and Planetary Science, 2022, 57, 277-301.	1.6	5
115	A history of the meteorite collection at the Natural History Museum, London. Geological Society Special Publication, 2006, 256, 153-162.	1.3	4
116	Shape and porosity of refractory inclusions in CV3 chondrites: A microâ€computed tomography (ÂµCT) study. Meteoritics and Planetary Science, 2021, 56, 500-514.	1.6	4
117	Asteroids accretion, differentiation, and break-up in the Vesta source region: Evidence from cosmochemistry of mesosiderites. Geochimica Et Cosmochimica Acta, 2022, 329, 135-151.	3.9	4
118	The Formation of the Solar System. Journal of the Geological Society, 2007, 164, 481-492.	2.1	3
119	The Formation of the Solar System: A Recipe for Worlds. Elements, 2018, 14, 113-118.	0.5	3
120	Records of Magnetic Fields in the Chondrule Formation Environment. , 0, , 324-340.		3
121	Relationship between CAIs and chondrules: A case study of a compound chondrule from the Allende (CV3) meteorite. Geochemical Journal, 2017, 51, 31-43.	1.0	3
122	Sorting stardust. Nature, 1998, 395, 325-327.	27.8	2
123	Delving into Allende's dark secrets. Astronomy and Geophysics, 2006, 47, 6.37-6.38.	0.2	2
124	Investigating the history of volatiles in the solar system using synchrotron infrared micro-spectroscopy. Infrared Physics and Technology, 2018, 94, 244-249.	2.9	2
125	The fall of the Murchison meteorite. Meteoritics and Planetary Science, 2021, 56, 8-10.	1.6	1
126	Precise and accurate determination of iron isotopes by multi-collector inductively coupled plasma mass spectrometry. Special Publication - Royal Society of Chemistry, 2007, , 351-361.	0.0	1

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127	Rock blasts in from the past. Physics World, 2000, 13, 25-26.	0.0	0
128	Down to Earth: Sara Russell. Nature, 2003, 422, 23-23.	27.8	0
129	Carbonaceous chondrite meteorites as a record of protoplanetary disk conditions. Proceedings of the International Astronomical Union, 2019, 15, 135-138.	0.0	0