Martin Bizzarro

List of Publications by Year
in descending order

132 papers	8,809 citations	41258 49 h-index	46693 89 g-index
135 all docs	135 docs citations	135 times ranked	5073 citing authors

#	Article	IF	Citations
1	The Absolute Chronology and Thermal Processing of Solids in the Solar Protoplanetary Disk. Science, 2012, 338, 651-655.	6.0	720
2	An abundance of small exoplanets around stars with a wide range of metallicities. Nature, 2012, 486, 375-377.	13.7	546
3	Origin of Nucleosynthetic Isotope Heterogeneity in the Solar Protoplanetary Disk. Science, 2009, 324, 374-376.	6.0	454
4	Growth of asteroids, planetary embryos, and Kuiper belt objects by chondrule accretion. Science Advances, 2015, 1, e1500109.	4.7	331
5	EVIDENCE FOR MAGNESIUM ISOTOPE HETEROGENEITY IN THE SOLAR PROTOPLANETARY DISK. Astrophysical Journal Letters, 2011, 735, L37.	3.0	253
6	Three regimes of extrasolar planet radius inferred from host star metallicities. Nature, 2014, 509, 593-595.	13.7	249
7	Early planetesimal melting from an age of 4.5662â€‰Gyr for differentiated meteorites. Nature, 2005, 436, 1127-1131.	13.7	242
8	Mg isotope evidence for contemporaneous formation of chondrules and refractory inclusions. Nature, 2004, 431, 275-278.	13.7	229
9	Rapid Timescales for Accretion and Melting of Differentiated Planetesimals Inferred from 26 Al- 26 Mg Chronometry. Astrophysical Journal, 2005, 632, L41-L44.	1.6	205
10	Early history of Earth's crustâ€“mantle system inferred from hafnium isotopes in chondrites. Nature, 2003, 421, 931-933.	13.7	184
11	Early formation of planetary building blocks inferred from Pb isotopic ages of chondrules. Science Advances, 2017, 3, e1700407.	4.7	174
12	Isotopic evidence for primordial molecular cloud material in metal-rich carbonaceous chondrites. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 2011-2016.	3.3	152
13	Extremely Brief Formation Interval for Refractory Inclusions and Uniform Distribution of 26 Al in the Early Solar System. Astrophysical Journal, 2006, 646, L159-L162.	1.6	149
14	Isotopic evolution of the protoplanetary disk and the building blocks of Earth and the Moon. Nature, 2018, 555, 507-510.	13.7	140
15	Uranium isotopes distinguish two geochemically distinct stages during the later Cambrian SPICE event. Earth and Planetary Science Letters, 2014, 401, 313-326.	1.8	134
16	Chronology of the Solar System's Oldest Solids. Astrophysical Journal, 2008, 675, L121-L124.	1.6	130
17	High-precision Mg-isotope measurements of terrestrial and extraterrestrial material by HR-MC-ICPMSâ€”implications for the relative and absolute Mg-isotope composition of the bulk silicate Earth. Journal of Analytical Atomic Spectrometry, 2011, 26, 565.	1.6	128
18	Î³-ray irradiation in the early Solar System and the conundrum of the 176Lu decay constant. Geochimica Et Cosmochimica Acta, 2006, 70, 1261-1270.	1.6	115

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19	Early accretion of protoplanets inferred from a reduced inner solar system 26Al inventory. Earth and Planetary Science Letters, 2015, 420, 45-54.	1.8	112
20	Evidence for extremely rapid magma ocean crystallization and crust formation on Mars. Nature, 2018, 558, 586-589.	13.7	111
21	In situ 87Sr/86Sr investigation of igneous apatites and carbonates using laser-ablation MC-ICP-MS. Geochimica Et Cosmochimica Acta, 2003, 67, 289-302.	1.6	110
22	Evidence for a Late Supernova Injection of 60Fe into the Protoplanetary Disk. Science, 2007, 316, 1178-1181.	6.0	108
23	Pbâ€Pb dating of individual chondrules from the <scp>CB</scp>_a chondrite Gujba: Assessment of the impact plume formation model. Meteoritics and Planetary Science, 2015, 50, 1197-1216.	0.7	104
24	A New Digestion and Chemical Separation Technique for Rapid and Highly Reproducible Determination of Lu/Hf and Hf Isotope Ratios in Geological Materials by MC-ICP-MS. Geostandards and Geoanalytical Research, 2003, 27, 133-145.	1.7	98
25	Samples returned from the asteroid Ryugu are similar to Ivuna-type carbonaceous meteorites. Science, 2023, 379, .	6.0	97
26	Hf isotope evidence for a hidden mantle reservoir. Geology, 2002, 30, 771.	2.0	95
27	A method for purifying Lu and Hf for analyses by MC-ICP-MS using TODGA resin. Chemical Geology, 2006, 233, 126-136.	1.4	93
28	26Alâ€“26Mg dating of asteroidal magmatism in the young Solar System. Geochimica Et Cosmochimica Acta, 2010, 74, 4844-4864.	1.6	93
29	A pebble accretion model for the formation of the terrestrial planets in the Solar System. Science Advances, 2021, 7, .	4.7	93
30	RAPID TIMESCALES FOR MAGMA OCEAN CRYSTALLIZATION ON THE HOWARDITE-EUCRITE-DIOGENITE PARENT BODY. Astrophysical Journal Letters, 2011, 740, L22.	3.0	90
31	Pbâ€“Pb chronometry and the early Solar System. Geochimica Et Cosmochimica Acta, 2017, 201, 345-363.	1.6	86
32	Multiple Generations of Refractory Inclusions in the Metalâ€Rich Carbonaceous Chondrites Acfer 182/214 and Isheyevo. Astrophysical Journal, 2008, 672, 713-721.	1.6	78
33	Magnesium and 54Cr isotope compositions of carbonaceous chondrite chondrules â€“ Insights into early disk processes. Geochimica Et Cosmochimica Acta, 2016, 191, 118-138.	1.6	73
34	Atmosphereâ€“ocean oxygen and productivity dynamics during early animal radiations. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 19352-19361.	3.3	72
35	Calcium isotope measurement by combined HR-MC-ICPMS and TIMS. Journal of Analytical Atomic Spectrometry, 2012, 27, 38-49.	1.6	71
36	The Pbâ€“Pb age of Angrite SAH99555 revisited. Geochimica Et Cosmochimica Acta, 2008, 72, 4813-4824.	1.6	70

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37	Precise measurement of chromium isotopes by MC-ICPMS. Journal of Analytical Atomic Spectrometry, 2014, 29, 1406-1416.	1.6	67
38	Hafniumâ€“tungsten chronometry of angrites and the earliest evolution of planetary objects. Earth and Planetary Science Letters, 2007, 262, 214-229.	1.8	66
39	Constraints on source-forming processes of West Greenland kimberlites inferred from Hfâ€“Nd isotope systematics. Geochimica Et Cosmochimica Acta, 2007, 71, 2820-2836.	1.6	66
40	Evidence for nucleosynthetic enrichment of the protosolar molecular cloud core by multiple supernova events. Geochimica Et Cosmochimica Acta, 2015, 149, 88-102.	1.6	64
41	Lead isotope evidence for a young formation age of the Earthâ€“Moon system. Earth and Planetary Science Letters, 2016, 452, 36-43.	1.8	62
42	¹⁸² Hfâ€“ ¹⁸² W age dating of a ²⁶ Al-poor inclusion and implications for the origin of short-lived radioisotopes in the early Solar System. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 8819-8823.	3.3	60
43	Calcium-aluminum-rich inclusions with fractionation and unknown nuclear effects (FUN CAIs): I. Mineralogy, petrology, and oxygen isotopic compositions. Geochimica Et Cosmochimica Acta, 2014, 145, 206-247.	1.6	57
44	The Multifaceted Planetesimal Formation Process. , 2014, , .		57
45	Chromatographic speciation of Cr(III)-species, inter-species equilibrium isotope fractionation and improved chemical purification strategies for high-precision isotope analysis. Journal of Chromatography A, 2016, 1443, 162-174.	1.8	55
46	Iron isotope evidence for very rapid accretion and differentiation of the proto-Earth. Science Advances, 2020, 6, eaay7604.	4.7	54
47	Major element composition of the lithospheric mantle under the North Atlantic craton: Evidence from peridotite xenoliths of the Sarfartoq area, southwestern Greenland. Contributions To Mineralogy and Petrology, 2003, 146, 223-240.	1.2	51
48	Ultra-high-precision Nd-isotope measurements of geological materials by MC-ICPMS. Journal of Analytical Atomic Spectrometry, 2016, 31, 1490-1504.	1.6	51
49	Calcium-aluminum-rich inclusions with fractionation and unidentified nuclear effects (FUN CAIs): II. Heterogeneities of magnesium isotopes and 26Al in the early Solar System inferred from in situ high-precision magnesium-isotope measurements. Geochimica Et Cosmochimica Acta, 2017, 201, 6-24.	1.6	50
50	Isotopic fractionation of zirconium during magmatic differentiation and the stable isotope composition of the silicate Earth. Geochimica Et Cosmochimica Acta, 2019, 250, 311-323.	1.6	50
51	Reorganisation of Earthâ€™s biogeochemical cycles brieï¬,y oxygenated the oceans 520 Myr ago. Geochemical Perspectives Letters, 2017, , 210-220.	1.0	50
52	ABUNDANCE OF ²⁶ Al AND ⁶⁰ Fe IN EVOLVING GIANT MOLECULAR CLOUDS. Astrophysical Journal Letters, 2013, 769, L8.	3.0	49
53	IDENTIFICATION OF AN ⁸⁴ Sr-DEPLETED CARRIER IN PRIMITIVE METEORITES AND IMPLICATIONS FOR THERMAL PROCESSING IN THE SOLAR PROTOPLANETARY DISK. Astrophysical Journal Letters, 2013, 763, L40.	3.0	49
54	Jupiter Analogs Orbit Stars with an Average Metallicity Close to That of the Sun. Astrophysical Journal, 2018, 856, 37.	1.6	44

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55	A TIMS-based method for the high precision measurements of the three-isotope potassium composition of small samples. Journal of Analytical Atomic Spectrometry, 2011, 26, 366-377.	1.6	43
56	Calciumâ€“aluminum-rich inclusions recycled during formation of porphyritic chondrules from CH carbonaceous chondrites. Geochimica Et Cosmochimica Acta, 2017, 201, 185-223.	1.6	42
57	26Alâ€“26Mg deficit dating ultramafic meteorites and silicate planetesimal differentiation in the early Solar System?. Geochimica Et Cosmochimica Acta, 2012, 77, 415-431.	1.6	41
58	Pbâ€“Pb dating of chondrules from CV chondrites by progressive dissolution. Chemical Geology, 2009, 259, 143-151.	1.4	40
59	Observations of nitrogen isotope fractionation in deeply embedded protostars. Astronomy and Astrophysics, 2014, 572, A24.	2.1	40
60	Accretion timescales and style of asteroidal differentiation in an 26Al-poor protoplanetary disk. Geochimica Et Cosmochimica Acta, 2016, 176, 295-315.	1.6	40
61	Discovery of a New FUN CAI from a CV Carbonaceous Chondrite: Evidence for Multistage Thermal Processing in the Protoplanetary Disk. Astrophysical Journal, 2008, 680, L141-L144.	1.6	39
62	EVIDENCE FOR MULTIPLE SOURCES OF¹⁰Be IN THE EARLY SOLAR SYSTEM. Astrophysical Journal Letters, 2012, 748, L25.	3.0	38
63	Discovery of dmisteinbergite (hexagonal CaAl2Si2O8) in the Allende meteorite: A new member of refractory silicates formed in the solar nebula. American Mineralogist, 2013, 98, 1368-1371.	0.9	38
64	TRACKING THE DISTRIBUTION OF ²⁶Al AND ⁶⁰Fe DURING THE EARLY PHASES OF STAR AND DISK EVOLUTION. Astrophysical Journal, 2016, 826, 22.	1.6	37
65	High-temperature rims around calciumâ€“aluminum-rich inclusions from the CR, CB and CH carbonaceous chondrites. Geochimica Et Cosmochimica Acta, 2017, 201, 155-184.	1.6	37
66	Combined U-corrected Pb-Pb dating and 26Al-26Mg systematics of individual chondrules â€“ Evidence for a reduced initial abundance of 26Al amongst inner Solar System chondrules. Geochimica Et Cosmochimica Acta, 2019, 260, 62-83.	1.6	37
67	Discovery of asimowite, the Fe-analog of wadsleyite, in shock-melted silicate droplets of the Suizhou L6 and the Quebrada Chimborazo 001 CB3.0 chondrites. American Mineralogist, 2019, 104, 775-778.	0.9	37
68	Chronologic implications for slow cooling of troctolite 76535 and temporal relationships between the Mg-suite and the ferroan anorthosite suite. Geochimica Et Cosmochimica Acta, 2017, 201, 377-391.	1.6	36
69	Injection mechanisms of short-lived radionuclides and their homogenization. Geochimica Et Cosmochimica Acta, 2009, 73, 4946-4962.	1.6	35
70	Timing and Origin of the Angrite Parent Body Inferred from Cr Isotopes. Astrophysical Journal Letters, 2019, 877, L13.	3.0	33
71	The internal structure and geodynamics of Mars inferred from a 4.2-Gyr zircon record. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 30973-30979.	3.3	33
72	Chromium isotopic insights into the origin of chondrite parent bodies and the early terrestrial volatile depletion. Geochimica Et Cosmochimica Acta, 2021, 301, 158-186.	1.6	33

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73	MAGNESIUM ISOTOPE EVIDENCE FOR SINGLE STAGE FORMATION OF CB CHONDRULES BY COLLIDING PLANETESIMALS. Astrophysical Journal Letters, 2013, 776, L1.	3.0	31
74	ORIGIN OF EXCESS176Hf IN METEORITES. Astrophysical Journal, 2010, 717, 861-867.	1.6	29
75	Magnesium and chromium isotope evidence for initial melting by radioactive decay of 26Al and late stage impact-melting of the ureilite parent body. Geochimica Et Cosmochimica Acta, 2017, 208, 1-23.	1.6	29
76	Untangling the diagenetic history of uranium isotopes in marine carbonates: A case study tracing the Î´238U composition of late Silurian oceans using calcitic brachiopod shells. Geochimica Et Cosmochimica Acta, 2020, 287, 93-110.	1.6	29
77	Probing the Protosolar Disk Using Dust Filtering at Gaps in the Early Solar System. Astronomical Journal, 2019, 158, 55.	1.9	28
78	Uranium isotope compositions of biogenic carbonates â€“ Implications for U uptake in shells and the application of the paleo-ocean oxygenation proxy. Geochimica Et Cosmochimica Acta, 2020, 287, 50-64.	1.6	28
79	Chromium Isotopic Constraints on the Origin of the Ureilite Parent Body. Astrophysical Journal, 2020, 888, 126.	1.6	28
80	Episodic formation of refractory inclusions in the Solar System and their presolar heritage. Earth and Planetary Science Letters, 2020, 535, 116088.	1.8	28
81	Dating and Tracing the Origin of Enstatite Chondrite Chondrules with Cr Isotopes. Astrophysical Journal Letters, 2020, 894, L26.	3.0	27
82	Thermal Evolution of Hydrated Asteroids Inferred from Oxygen Isotopes. Astrophysical Journal Letters, 2019, 882, L20.	3.0	26
83	Early oxidation of the martian crust triggered by impacts. Science Advances, 2020, 6, .	4.7	26
84	The role of Bells in the continuous accretion between the <scp>CM</scp> and <scp>CR</scp> chondrite reservoirs. Meteoritics and Planetary Science, 2020, 55, 575-590.	0.7	26
85	Origin of hydrogen isotopic variations in chondritic water and organics. Earth and Planetary Science Letters, 2021, 567, 117008.	1.8	26
86	Hadean geodynamics inferred from time-varying 142Nd/144Nd in the early Earth rock record. Geochemical Perspectives Letters, 2018, 7, 43-48.	1.0	26
87	Platinum stable isotope ratio measurements by double-spike multiple collector ICPMS. Journal of Analytical Atomic Spectrometry, 2013, 28, 853.	1.6	25
88	Excess hafniumâ€176 in meteorites and the early Earth zircon record. Geochemistry, Geophysics, Geosystems, 2012, 13, .	1.0	24
89	Late accretion history of the terrestrial planets inferred from platinum stable isotopes. Geochemical Perspectives Letters, 2017, , 94-104.	1.0	24
90	Platinum stable isotope analysis of geological standard reference materials by double-spike MC-ICPMS. Chemical Geology, 2014, 363, 293-300.	1.4	23

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91	Multi-element ion-exchange chromatography and high-precision MC-ICP-MS isotope analysis of Mg and Ti from sub-mm-sized meteorite inclusions. Journal of Analytical Atomic Spectrometry, 2018, 33, 613-628.	1.6	21
92	Natural separation of two primordial planetary reservoirs in an expanding solar protoplanetary disk. Science Advances, 2022, 8, eabm3045.	4.7	20
93	Isotope record of mineralogical changes in a spectrum of aqueously altered CM chondrites. Geochimica Et Cosmochimica Acta, 2018, 237, 79-102.	1.6	19
94	Volatile element evolution of chondrules through time. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 8547-8552.	3.3	19
95	Testing accretion mechanisms of the H chondrite parent body utilizing nucleosynthetic anomalies. Meteoritics and Planetary Science, 2019, 54, 1215-1227.	0.7	19
96	Oxygen isotopic heterogeneity in the early Solar System inherited from the protosolar molecular cloud. Science Advances, 2020, 6, .	4.7	19
97	Pbâ€Pb ages and initial Pb isotopic composition of lunar meteorites: NWA 773 clan, NWA 4734, and Dhofar 287. Meteoritics and Planetary Science, 2020, 55, 1808-1832.	0.7	18
98	High-precision 27Al/24Mg ratio determination using a modified isotope-dilution approach. Journal of Analytical Atomic Spectrometry, 2012, 27, 644.	1.6	16
99	Tracing the origin and core formation of the enstatite achondrite parent bodies using Cr isotopes. Geochimica Et Cosmochimica Acta, 2021, 308, 256-272.	1.6	16
100	Solar system Nd isotope heterogeneity: Insights into nucleosynthetic components and protoplanetary disk evolution. Geochimica Et Cosmochimica Acta, 2020, 281, 135-148.	1.6	16
101	Tracing metalâ€“silicate segregation and late veneer in the Earth and the ureilite parent body with palladium stable isotopes. Geochimica Et Cosmochimica Acta, 2017, 216, 28-41.	1.6	15
102	Mass-independent and mass-dependent Cr isotopic composition of the Rumuruti (R) chondrites: Implications for their origin and planet formation. Geochimica Et Cosmochimica Acta, 2021, 293, 598-609.	1.6	15
103	Zirconium isotopic composition of the mantle through time. Geochemical Perspectives Letters, 0, 15, 40-43.	1.0	15
104	A divergent heritage for complex organics in Isheyevo lithic clasts. Geochimica Et Cosmochimica Acta, 2017, 205, 119-148.	1.6	14
105	Chondrules: Ubiquitous Chondritic Solids Tracking the Evolution of the Solar Protoplanetary Disk. Astrophysics and Space Science Library, 2017, , 161-195.	1.0	14
106	Evaluating the robustness of a consensus 238U/235U value for U-Pb geochronology. Geochimica Et Cosmochimica Acta, 2018, 237, 171-183.	1.6	14
107	Mineralogy, petrography, and oxygen and aluminum-magnesium isotope systematics of grossite-bearing refractory inclusions. Chemie Der Erde, 2019, 79, 125529.	0.8	14
108	Impact glasses from Belize represent tektites from the Pleistocene Pantasma impact crater in Nicaragua. Communications Earth & Environment, 2021, 2, 94.	2.6	14

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109	Tracking the formation of magma oceans in the Solar System using stable magnesium isotopes. Geochemical Perspectives Letters, 2017, , 22-31.	1.0	14
110	Hybrid Accretion of Carbonaceous Chondrites by Radial Transport across the Jupiter Barrier. Astrophysical Journal, 2021, 910, 70.	1.6	12
111	Pb isotope evidence for rapid accretion and differentiation of planetary embryos. Earth and Planetary Science Letters, 2019, 525, 115722.	1.8	11
112	Identification of a meteoritic component using chromium isotopic composition of impact rocks from the Lonar impact structure, India. Meteoritics and Planetary Science, 2019, 54, 2592-2599.	0.7	10
113	Chromium Stable Isotope Panorama of Chondrites and Implications for Earth Early Accretion. Astrophysical Journal, 2021, 923, 94.	1.6	10
114	Dental Caries in Rome, 50â€“100 AD. Caries Research, 2012, 46, 467-473.	0.9	9
115	Tungsten isotopes in bulk meteorites and their inclusionsâ€”Implications for processing of presolar components in the solar protoplanetary disk. Meteoritics and Planetary Science, 2015, 50, 1643-1660.	0.7	7
116	Lead and Mg isotopic age constraints on the evolution of the <scp>HED</scp> parent body. Meteoritics and Planetary Science, 2017, 52, 1233-1243.	0.7	7
117	Determination of the zirconium isotopic composition of the new isotopic standard NRC ZIRC-1 using MC-ICP-MS. Journal of Analytical Atomic Spectrometry, 2022, 37, 656-662.	1.6	6
118	The Absolute Pbâ€“Pb Isotope Ages of Chondrules. , 0, , 300-323.		5
119	Chronology of meteorites and the early solar system. Geochimica Et Cosmochimica Acta, 2009, 73, 4919-4921.	1.6	4
120	Wholeâ€rock ²⁶Alâ€²⁶Mg systematics of amoeboid olivine aggregates from the oxidized CV3 carbonaceous chondrite Allende. Meteoritics and Planetary Science, 2011, 46, 1688-1702.	0.7	4
121	Mineralogy, petrology, and oxygen isotopic composition of Northwest Africa 12379, metal-rich chondrite with affinity to ordinary chondrites. Chemie Der Erde, 2019, 79, 125537.	0.8	4
122	AMBITION â€“ comet nucleus cryogenic sample return. Experimental Astronomy, 2022, 54, 1077-1128.	1.6	4
123	Isotope Dichotomy from Solar Protoplanetary Disk Processing of ¹⁵⁰Nd-rich Stellar Ejecta. Astrophysical Journal Letters, 2021, 919, L8.	3.0	4
124	Improved methods for high-precision Pbâ€“Pb dating of extra-terrestrial materials. Journal of Analytical Atomic Spectrometry, 2021, 36, 2579-2587.	1.6	4
125	Microstructural and Chemical Investigations of Presolar Silicates from Diverse Stellar Environments. Astrophysical Journal, 2022, 925, 110.	1.6	4
126	Probing the solar system's prenatal history. Science, 2014, 345, 620-621.	6.0	3

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127	Presolar Silicate and Oxide Grains Found in Lithic Clasts from Isheyevo and the Fine-grained Matrix of Northwest Africa 801. Astrophysical Journal, Supplement Series, 2021, 253, 41.	3.0	3
128	Spontaneous Formation of Prebiotic Compartment Colonies on Hadean Earth and Preâ€Noachian Mars**. ChemSystemsChem, 2022, 4, .	1.1	3
129	Unique igneous textures and shock metamorphism of the Northwest Africa 7203 angrite: Implications for crystallization processes and the evolutionary history of the angrite parent body. Meteoritics and Planetary Science, 2022, 57, 105-121.	0.7	3
130	Calibrating volatile loss from the Moon using the U-Pb system. Geochimica Et Cosmochimica Acta, 2022, 324, 1-16.	1.6	2
131	Isotopic, Structural and Chemical Analyses of Pre-Solar Silicates from Asymptotic Giant Branch Stars and Type-II Supernova Explosions. Microscopy and Microanalysis, 2021, 27, 2782-2784.	0.2	0
132	Spontaneous Formation of Prebiotic Compartment Colonies on Hadean Earth and Preâ€Noachian Mars. ChemSystemsChem, 2022, 4, .	1.1	0