Clive R Neal

List of Publications by Year
in descending order

53 papers	5,906 citations	218677 26 h-index	189892 50 g-index
53 all docs	53 docs citations	53 times ranked	5552 citing authors

#	Article	IF	Citations
1	A Compilation of New and Published Major and Trace Element Data for NIST SRM 610 and NIST SRM 612 Glass Reference Materials. Geostandards and Geoanalytical Research, 1997, 21, 115-144.	3.1	2,280
2	The Chicxulub Asteroid Impact and Mass Extinction at the Cretaceous-Paleogene Boundary. Science, 2010, 327, 1214-1218.	12.6	1,140
3	A chemical model for generating the sources of mare basalts: Combined equilibrium and fractional crystallization of the lunar magmasphere. Geochimica Et Cosmochimica Acta, 1992, 56, 3809-3823.	3.9	421
4	Petrogenesis of mare basalts: A record of lunar volcanism. Geochimica Et Cosmochimica Acta, 1992, 56, 2177-2211.	3.9	295
5	Water in lunar anorthosites and evidence for a wet early Moon. Nature Geoscience, 2013, 6, 177-180.	12.9	165
6	Age and composition of young basalts on the Moon, measured from samples returned by Changâ€™e-5. Science, 2021, 374, 887-890.	12.6	148
7	Interior of the Moon: The presence of garnet in the primitive deep lunar mantle. Journal of Geophysical Research, 2001, 106, 27865-27885.	3.3	125
8	The Ontong Java Plateau. Geophysical Monograph Series, 0, , 183-216.	0.1	100
9	Biomass Byproducts for the Remediation of Wastewaters Contaminated with Toxic Metals. Environmental Science & Technology, 2001, 35, 3786-3791.	10.0	97
10	Quantifying the platinum group elements (PGEs) and gold in geological samples using cation exchange pretreatment and ultrasonic nebulization inductively coupled plasma-mass spectrometry (USN-ICP-MS). Chemical Geology, 1999, 157, 219-234.	3.3	86
11	Basalt generation at the Apollo 12 site, Part 1: New data, classification, and reâ€evaluation. Meteoritics, 1994, 29, 334-348.	1.4	68
12	Metasomatic products of the lunar magma ocean: The role of KREEP dissemination. Geochimica Et Cosmochimica Acta, 1989, 53, 529-541.	3.9	60
13	Effect of NOM on arsenic adsorption by TiO2 in simulated As(III)-contaminated raw waters. Water Research, 2008, 42, 2309-2319.	11.3	60
14	The origin of young mare basalts inferred from lunar meteorites Northwest Africa 4734, 032, and LaPaz Icefield 02205. Meteoritics and Planetary Science, 2014, 49, 261-291.	1.6	57
15	Using platinum-group elements to investigate the origin of the Ontong Java Plateau, SW Pacific. Chemical Geology, 2003, 196, 235-257.	3.3	50
16	Lunar Science for Landed Missions Workshop Findings Report. Earth and Space Science, 2019, 6, 2-40.	2.6	50
17	The petrogenesis of the Apollo 14 high-Al mare basalts. American Mineralogist, 2006, 91, 1521-1535.	1.9	47
18	Globally distributed iridium layer preserved within the Chicxulub impact structure. Science Advances, 2021, 7, .	10.3	47

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19	Anatexis of lunar cumulate mantle in time and space: Clues from trace-element, strontium, and neodymium isotopic chemistry of parental Apollo 12 basalts. Geochimica Et Cosmochimica Acta, 1997, 61, 2731-2747.	3.9	46
20	Distinguishing highâ€alumina mare basalts using Clementine UVVIS and Lunar Prospector GRS data: Mare Moscoviense and Mare Nectaris. Journal of Geophysical Research, 2008, 113, .	3.3	41
21	Martian magmatism from plume metasomatized mantle. Nature Communications, 2018, 9, 4799.	12.8	41
22	Platinum-group element constraints on source composition and magma evolution of the Kerguelen Plateau using basalts from ODP Leg 183. Geochimica Et Cosmochimica Acta, 2005, 69, 4685-4701.	3.9	38
23	Detailed petrogenesis of the unsampled Oceanus Procellarum: The case of the Chang'e-5 mare basalts. Icarus, 2022, 383, 115082.	2.5	37
24	Basait generation at the Apollo 12 site, Part 2: Source heterogeneity, multiple melts, and crustal contamination. Meteoritics, 1994, 29, 349-361.	1.4	35
25	Characterisation of Memory Effects and Development of an Effective Wash Protocol for the Measurement of Petrogenetically Critical Trace Elements in Geological Samples by ICP-MS. Geostandards and Geoanalytical Research, 1997, 21, 289-305.	3.1	35
26	Investigation into the petrogenesis of Apollo 14 high-Al basaltic melts through crystal stratigraphy of plagioclase. Geochimica Et Cosmochimica Acta, 2011, 75, 6439-6460.	3.9	34
27	Plumeâ€cratonic lithosphere interaction recorded by water and other trace elements in peridotite xenoliths from the <scp>L</scp>abait volcano, <scp>T</scp>anzania. Geochemistry, Geophysics, Geosystems, 2015, 16, 1687-1710.	2.5	34
28	Quantifying the Effects of Metasomatism in Mantle Xenoliths: Constraints from Secondary Chemistry and Mineralogy in Udachnaya Eclogites, Yakutia. International Geology Review, 1999, 41, 391-416.	2.1	25
29	Distinguishing between basalts produced by endogenic volcanism and impact processes: A non-destructive method using quantitative petrography of lunar basaltic samples. Geochimica Et Cosmochimica Acta, 2015, 148, 62-80.	3.9	21
30	Method of Data Reduction and Uncertainty Estimation for Platinum-Group Element Data Using Inductively Coupled Plasma-Mass Spectrometry. Geostandards and Geoanalytical Research, 2002, 26, 31-39.	3.1	20
31	Searching for high alumina mare basalts using Clementine UVVIS and Lunar Prospector GRS data: Mare Fecunditatis and Mare Imbrium. Icarus, 2008, 198, 7-18.	2.5	20
32	Absence of a long-lived lunar paleomagnetosphere. Science Advances, 2021, 7, .	10.3	18
33	Responseâ€"Cretaceous Extinctions. Science, 2010, 328, 975-976.	12.6	16
34	Chemical Characterisation of Natural Ilmenite: A Possible New Reference Material. Geostandards and Geoanalytical Research, 2012, 36, 61-73.	3.1	15
35	Exploring the Moon's surface for remnants of the lunar mantle 1. Dunite xenoliths in mare basalts. A crustal or mantle origin?. Meteoritics and Planetary Science, 2015, 50, 1449-1467.	1.6	15
36	Large igneous province magma petrogenesis from source to surface: platinum-group element evidence from Ontong Java Plateau basalts recovered during ODP Legs 130 and 192. Geological Society Special Publication, 2004, 229, 219-238.	1.3	14

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37	Geochemical fluxes related to alteration of a subaerially exposed seamount: Nintoku seamount, ODP Leg 197, Site 1205. Geochemistry, Geophysics, Geosystems, 2007, 8, n/a-n/a.	2.5	14
38	Petrogenesis of Hawaiian postshield lavas: Evidence from Nintoku Seamount, Emperor Seamount Chain. Geochemistry, Geophysics, Geosystems, 2005, 6, n/a-n/a.	2.5	13
39	Petrogenetic association of the oldest lunar basalts: Combined Rbâ€“Sr isotopic and trace element constraints. Earth and Planetary Science Letters, 2013, 373, 150-159.	4.4	11
40	Quantitative textural analysis of ilmenite in Apollo 17 high-titanium mare basalts. Geochimica Et Cosmochimica Acta, 2015, 149, 115-130.	3.9	11
41	A Reappraisal of Rb, Y, Zr, Pb and Th Values in Geochemical Reference Material BHVO-1. Geostandards and Geoanalytical Research, 2003, 27, 181-192.	3.1	8
42	Developing the global exploration roadmap: An example using the humans to the lunar surface theme. Space Policy, 2014, 30, 156-162.	1.5	7
43	Textural and mineral chemical evidence for the cumulate origin and evolution of high-titanium basalt fragment 71597. American Mineralogist, 2018, 103, 284-297.	1.9	7
44	Oldest high-Ti basalt and magnesian crustal materials in feldspathic lunar meteorite Dhofar 1428. Geochimica Et Cosmochimica Acta, 2019, 266, 74-108.	3.9	7
45	The Lunar Geophysical Network Landing Sites Science Rationale. Planetary Science Journal, 2022, 3, 40.	3.6	7
46	Archean Enriched Mantle Beneath the Baltic Shield: Rare-Earth-Element Evidence from the Burakovsky Layered Intrusion, Southern Karelia, Russia. International Geology Review, 1996, 38, 389-404.	2.1	5
47	<scp>KREEP</scp> basalt petrogenesis: Insights from 15434,181. Meteoritics and Planetary Science, 2017, 52, 827-841.	1.6	5
48	Report of the Joint Workshop on Induced Special Regions. Life Sciences in Space Research, 2019, 23, 50-59.	2.3	3
49	Origin of lunar Very High Potassium (VHK) basalts: A combination of endogenous and exogenous processes. Geochimica Et Cosmochimica Acta, 2019, 266, 54-73.	3.9	3
50	Understanding the textures of Apollo 11 highâ€Ti mare basalts: A quantitative petrographic approach. Meteoritics and Planetary Science, 2021, 56, 2211-2229.	1.6	2
51	Water in lunar anorthosites and evidence for a wet early Moon. , 0, .		1
52	Unraveling the Components Within Apollo 16 Ferroan Anorthosite Suite Cataclastic Anorthosite Sample 60025: Implications for the Lunar Magma Ocean Model. Journal of Geophysical Research E: Planets, 2022, 127, .	3.6	1
53	Exploring the Complexities of the Serenitatis Basin: Breccia Clasts from Apollo 17. International Geology Review, 1998, 40, 945-962.	2.1	0