Simon Jowitt

List of Publications by Year in descending order

85 papers	3,334 citations	156536 32 h-index	175968 55 g-index
99 all docs	99 docs citations	99 times ranked	2940 citing authors

#	Article	IF	Citations
1	Numerical modeling of mineralizing processes during the formation of the Yangzhuang Kiruna-type iron deposit, Middle and Lower Yangtze River Metallogenic Belt, China: Implications for the genesis and longevity of Kiruna-type iron oxide-apatite systems. Solid Earth Sciences, 2022, 7, 23-37.	0.8	4
2	Mineral economics of the rare-earth elements. MRS Bulletin, 2022, 47, 276-282.	1.7	13
3	Exploration for Byproduct Critical Element Resources: Proxy Development Using a LAâ€“ICPâ€“MS Database. Frontiers in Earth Science, 2022, 10, .	0.8	3
4	THE IMPORTANCE OF GEOLOGY IN ASSESSING BY- AND COPRODUCT METAL SUPPLY POTENTIAL; A CASE STUDY OF ANTIMONY, BISMUTH, SELENIUM, AND TELLURIUM WITHIN THE COPPER PRODUCTION STREAM. Economic Geology, 2022, 117, 1367-1385.	1.8	8
5	Middle Triassic arc magmatism in the southern Lhasa terrane: Geochronology, petrogenesis and tectonic setting. Lithos, 2021, 380-381, 105857.	0.6	8
6	Geology and Mining: Mineral Resources and Reserves: Their Estimation, Use, and Abuse. SEG Discovery, 2021, , 27-36.	1.2	13
7	Molybdenite Reâ€“Os, titanite and garnet Uâ€“Pb dating of the Magushan skarn Cuâ€“Mo deposit, Xuancheng district, Middleâ€“Lower Yangtze River Metallogenic Belt. Geoscience Frontiers, 2021, 12, 101116.	4.3	10
8	Barriers to and uncertainties in understanding and quantifying global critical mineral and element supply. IScience, 2021, 24, 102809.	1.9	45
9	Garnet major and trace element evidence of the alteration and mineralizing processes associated with genesis of the Qiaomaishan skarn deposit, Xuancheng ore district, eastern China. Ore Geology Reviews, 2021, 137, 104304.	1.1	7
10	Battery and Energy Metals: Future Drivers of the Minerals Industry?. SEG Discovery, 2021, , 11-18.	1.2	14
11	Numerical modeling of ore-forming processes within the Chating Cu-Au porphyry-type deposit, China: Implications for the longevity of hydrothermal systems and potential uses in mineral exploration. Ore Geology Reviews, 2020, 116, 103230.	1.1	23
12	Paleomagnetic evidence for the Gothenburg geomagnetic excursion during the Pleistoceneâ€“Holocene transition recorded in the Paleo-Danyang Lake, eastern China. Journal of Asian Earth Sciences, 2020, 201, 104140.	1.0	2
13	Convolutional neural network and transfer learning based mineral prospectivity modeling for geochemical exploration of Au mineralization within the Guandianâ€“Zhangbaling area, Anhui Province, China. Applied Geochemistry, 2020, 122, 104747.	1.4	45
14	Geochronology, petrogenesis and metallogenic implications of mineralization-related intrusive rocks in the Xuancheng ore district, Eastern China. Ore Geology Reviews, 2020, 125, 103690.	1.1	9
15	Future availability of non-renewable metal resources and the influence of environmental, social, and governance conflicts on metal production. Communications Earth & Environment, 2020, 1, .	2.6	109
16	Reviewing the material and metal security of low-carbon energy transitions. Renewable and Sustainable Energy Reviews, 2020, 124, 109789.	8.2	99
17	Mining in Papua New Guinea: A complex story of trends, impacts and governance. Science of the Total Environment, 2020, 741, 140375.	3.9	22
18	Arcâ€Type Magmatism Due to Continentalâ€Edge Plowing Through Ancient Subductionâ€Enriched Mantle. Geophysical Research Letters, 2020, 47, e2020GL087484.	1.5	15

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19	COVID-19 and the Global Mining Industry. SEG Newsletter, 2020, , 33-41.	0.6	15
20	3D Numerical Simulation-Based Targeting of Skarn Type Mineralization within the Xuancheng-Magushan Orefield, Middle-Lower Yangtze Metallogenic Belt, China. Lithosphere, 2020, 2020, .	0.6	7
21	Fluid inclusion and stable isotope constraints on the heavy rare earth element mineralisation in the Browns Range Dome, Tanami Region, Western Australia. Ore Geology Reviews, 2019, 113, 103068.	1.1	4
22	A new plumbing system framework for mantle plume-related continental Large Igneous Provinces and their mafic-ultramafic intrusions. Journal of Volcanology and Geothermal Research, 2019, 384, 75-84.	0.8	94
23	Petrogenesis and economic potential of rare-metal pegmatites in the North Virgin Mountains, Nevadaâ€“Arizona. Canadian Mineralogist, 2019, 57, 767-769.	0.3	0
24	Geochronology, geochemistry and petrogenesis of Late Triassic dolerites associated with the Nibao gold deposit, Youjiang Basin, southwestern China: Implications for post-collisional magmatism and its relationships with Carlin-like gold mineralization. Ore Geology Reviews, 2019, 111, 102971.	1.1	9
25	In situ LAâ€“ICPâ€“MS trace element analyses of magnetite: genetic implications for the Zhonggu orefield, Ningwu volcanic basin, Anhui Province, China. Mineralium Deposita, 2019, 54, 1243-1264.	1.7	19
26	Numerical Simulation Based Targeting of the Magushan Skarn Cuâ€“Mo Deposit, Middle-Lower Yangtze Metallogenic Belt, China. Minerals (Basel, Switzerland), 2019, 9, 588.	0.8	8
27	3D computational simulation-based mineral prospectivity modeling for exploration for concealed Feâ€“Cu skarn-type mineralization within the Yueshan orefield, Anqing district, Anhui Province, China. Ore Geology Reviews, 2019, 105, 1-17.	1.1	51
28	GLOBAL COPPER RESOURCES AND RESERVES; DISCOVERY IS NOT THE ONLY CONTROL ON SUPPLY. , 2019, , .		0
29	Recycling of the rare earth elements. Current Opinion in Green and Sustainable Chemistry, 2018, 13, 1-7.	3.2	211
30	Global platinum group element resources, reserves and mining â€“ A critical assessment. Science of the Total Environment, 2018, 622-623, 614-625.	3.9	69
31	Fate of transition metals during passive carbonation of ultramafic mine tailings via air capture with potential for metal resource recovery. International Journal of Greenhouse Gas Control, 2018, 71, 155-167.	2.3	37
32	Global Resource Assessments of Primary Metals: An Optimistic Reality Check. Natural Resources Research, 2018, 27, 229-240.	2.2	34
33	3D characteristic analysis-based targeting of concealed Kiruna-type Fe oxide-apatite mineralization within the Yangzhuang deposit of the Zhonggu orefield, southern Ningwu volcanic basin, middle-lower Yangtze River metallogenic Belt, China. Ore Geology Reviews, 2018, 92, 240-256.	1.1	19
34	Growing Global Copper Resources, Reserves and Production: Discovery Is Not the Only Control on Supply. Economic Geology, 2018, 113, 1235-1267.	1.8	94
35	When do mantle plumes destroy diamonds?. Earth and Planetary Science Letters, 2018, 502, 244-252.	1.8	25
36	The genesis of the Hehuashan Pbâ€“Zn deposit and implications for the Pbâ€“Zn prospectivity of the Tongling district, Middleâ€“Lower Yangtze River Metallogenic Belt, Anhui Province, China. Ore Geology Reviews, 2018, 101, 105-121.	1.1	19

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37	Introduction to a Resources Special Issue on Criticality of the Rare Earth Elements: Current and Future Sources and Recycling. Resources, 2018, 7, 35.	1.6	4
38	The Critical Metals: An Overview and Opportunities and Concerns for the Future. , 2018, , 25-38.		12
39	The world's by-product and critical metal resources part I: Uncertainties, current reporting practices, implications and grounds for optimism. Ore Geology Reviews, 2017, 86, 924-938.	1.1	67
40	Geochronology and geochemistry of the Fe ore-bearing Zhonggu intrusions of the Ningwu Basin: Implications for tectonic setting and contemporaneous Cu-Au mineralization in the Middleâ€“Lower Yangzte Metallogenic Belt. Ore Geology Reviews, 2017, 84, 246-272.	1.1	16
41	Regrowth of arsenateâ€“sulfate efflorescences on processing plant walls at the Ottery arsenicâ€“tin mine, New South Wales, Australia: Implications for arsenic mobility and remediation of mineral processing sites. Applied Geochemistry, 2017, 79, 91-106.	1.4	4
42	The worldâ€™s by-product and critical metal resources part III: A global assessment of indium. Ore Geology Reviews, 2017, 86, 939-956.	1.1	109
43	The rare earth element (REE) mineralisation potential of highly fractionated rhyolites: A potential low-grade, bulk tonnage source of critical metals. Ore Geology Reviews, 2017, 86, 548-562.	1.1	32
44	Singularity mapping of fracture fills and its relationship to deep concealed orebodies â€“ a case study of the Shaxi porphyry Cu-Au deposit, China. Geochemistry: Exploration, Environment, Analysis, 2017, 17, 252-260.	0.5	3
45	The exposure of global base metal resources to water criticality, scarcity and climate change. Global Environmental Change, 2017, 44, 109-124.	3.6	114
46	Petrogenesis and timing of emplacement of porphyritic monzonite, dolerite, and basalt associated with the Kuoerzhenkuola Au deposit, Western Junggar, NW China: implications for early Carboniferous tectonic setting and Cuâ€“Au mineralization prospectivity. International Geology Review, 2017, 59, 1154-1174.	1.1	10
47	Critical metals in the critical zone: controls, resources and future prospectivity of regolith-hosted rare earth elements. Australian Journal of Earth Sciences, 2017, 64, 1045-1054.	0.4	19
48	The world's by-product and critical metal resources part II: A method for quantifying the resources of rarely reported metals. Ore Geology Reviews, 2017, 80, 658-675.	1.1	40
49	The world's lead-zinc mineral resources: Scarcity, data, issues and opportunities. Ore Geology Reviews, 2017, 80, 1160-1190.	1.1	99
50	Large Igneous Provinces and Their Mafic-Ultramafic Intrusions. IOP Conference Series: Earth and Environmental Science, 2017, 110, 012005.	0.2	3
51	Comparison of the multifractal characteristics of heavy metals in soils within two areas of contrasting economic activities in China. Nonlinear Processes in Geophysics, 2016, 23, 331-339.	0.6	5
52	Mineral Economics and Critical Metals: continuing a multi-part thematic issue. Transactions of the Institution of Mining and Metallurgy Section B-Applied Earth Science, 2016, 125, 1-2.	0.8	3
53	Assessing the energy requirements and global warming potential of the production of rare earth elements. Journal of Cleaner Production, 2016, 139, 1282-1297.	4.6	67
54	Rare earth elements from heavy mineral sands: assessing the potential of a forgotten resource. Transactions of the Institution of Mining and Metallurgy Section B-Applied Earth Science, 2016, 125, 107-113.	0.8	22

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55	Indium: key issues in assessing mineral resources and long-term supply from recycling. Transactions of the Institution of Mining and Metallurgy Section B-Applied Earth Science, 2015, 124, 213-226.	0.8	70
56	Three-dimensional mineral prospectivity modeling for targeting of concealed mineralization within the Zhonggu iron orefield, Ningwu Basin, China. Ore Geology Reviews, 2015, 71, 633-654.	1.1	63
57	Mineral Economics and Critical Metals: introduction to a multi-part thematic issue. Transactions of the Institution of Mining and Metallurgy Section B-Applied Earth Science, 2015, 124, 205-206.	0.8	9
58	Multifractal modelling-based mapping and identification of geochemical anomalies associated with Cu and Au mineralisation in the NW Junggar area of northern Xinjiang Province, China. Journal of Geochemical Exploration, 2015, 154, 252-264.	1.5	33
59	Origin of temporal - compositional variations during the eruption of Lake Purrumbete Maar, Newer Volcanics Province, southeastern Australia. Bulletin of Volcanology, 2015, 77, 1.	1.1	15
60	Petrogenesis of the A-type, Mesoproterozoic Intra-caldera Rheomorphic Kathleen Ignimbrite and Comagmatic Rowland Suite Intrusions, West Musgrave Province, Central Australia: Products of Extreme Fractional Crystallization in a Failed Rift Setting. Journal of Petrology, 2015, 56, 493-525.	1.1	22
61	Geochemistry and petrogenesis of maficâ€“ultramafic suites of the Irindina Province, Northern Territory, Australia: Implications for the Neoproterozoic to Devonian evolution of central Australia. Lithos, 2015, 234-235, 61-78.	0.6	14
62	A Detailed Assessment of Global Rare Earth Element Resources: Opportunities and Challenges. Economic Geology, 2015, 110, 1925-1952.	1.8	263
63	Controls on disseminated PGEâ€“Cuâ€“Ni sulfide mineralization within the Rietfontein deposit, Eastern Limb, Bushveld Complex, South Africa: Implications for the formation of contact-type magmatic sulfide deposits. Ore Geology Reviews, 2015, 64, 253-272.	1.1	5
64	Geochemistry of the 130 to 80 Ma Canadian High Arctic Large Igneous Province (HALIP) Event and Implications for Ni-Cu-PGE Prospectivity. Economic Geology, 2014, 109, 281-307.	1.8	63
65	An assessment of portable X-ray fluorescence spectroscopy in mineral exploration, Kurnalpi Terrane, Eastern Goldfields Superterrane, Western Australia. Transactions of the Institution of Mining and Metallurgy Section B-Applied Earth Science, 2014, 123, 150-163.	0.8	24
66	Geology, mineralogy, and geochemistry of magnetite-associated Au mineralization of the ultramaficâ€“basalt greenstone hosted Crusader Complex, Agnew Gold Camp, Eastern Yilgarn Craton, Western Australia; a Late Archean intrusion-related Au deposit?. Ore Geology Reviews, 2014, 56, 53-72.	1.1	17
67	A Detailed Assessment of Global Nickel Resource Trends and Endowments. Economic Geology, 2014, 109, 1813-1841.	1.8	177
68	Three-dimensional weights of evidence-based prospectivity modeling: A case study of the Baixiangshan mining area, Ningwu Basin, Middle and Lower Yangtze Metallogenic Belt, China. Journal of Geochemical Exploration, 2014, 145, 82-97.	1.5	49
69	Geochemical assessment of the metallogenic potential of Proterozoic LIPs of Canada. Lithos, 2013, 174, 291-307.	0.6	50
70	Quantifying the recoverable resources of by-product metals: The case of cobalt. Ore Geology Reviews, 2013, 55, 87-98.	1.1	130
71	The Avebury Ni deposit, Tasmania: A case study of an unconventional nickel deposit. Ore Geology Reviews, 2013, 52, 4-17.	1.1	41
72	Early Paleozoic mafic magmatic events on the eastern margin of the Siberian Craton. Lithos, 2013, 174, 44-56.	0.6	35

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73	Assessing rare earth element mineral deposit types and links to environmental impacts. Transactions of the Institution of Mining and Metallurgy Section B-Applied Earth Science, 2013, 122, 83-96.	0.8	72
74	HIDDEN MINERAL DEPOSITS IN Cu-DOMINATED PORPHYRY-SKARN SYSTEMS: HOW RESOURCE REPORTING CAN OCCLUDE IMPORTANT MINERALIZATION TYPES WITHIN MINING CAMPS. Economic Geology, 2013, 108, 1185-1193.	1.8	35
75	A Detailed Assessment of Global Cu Resource Trends and Endowments. Economic Geology, 2013, 108, 1163-1183.	1.8	131
76	Mineralogical and Geochemical Controls on the Formation of the Woods Point Dike Swarm, Victoria, Australia: Evidence from the Morning Star Dike and Implications for Sourcing of Au Within Orogenic Gold Systems. Economic Geology, 2012, 107, 251-273.	1.8	11
77	Source, evolution and emplacement of Permian Tarim Basalts: Evidence from Uâ€“Pb dating, Srâ€“Ndâ€“Pbâ€“Hf isotope systematics and whole rock geochemistry of basalts from the Keping area, Xinjiang Uygur Autonomous region, northwest China. Journal of Asian Earth Sciences, 2012, 49, 175-190.	1.0	52
78	Anomaly identification in soil geochemistry using multifractal interpolation: A case study using the distribution of Cu and Au in soils from the Tongling mining district, Yangtze metallogenic belt, Anhui province, China. Journal of Geochemical Exploration, 2012, 116-117, 28-39.	1.5	22
79	Quantifying the release of base metals from source rocks for volcanogenic massive sulfide deposits: Effects of protolith composition and alteration mineralogy. Journal of Geochemical Exploration, 2012, 118, 47-59.	1.5	56
80	Siderophile and chalcophile metal variations in basalts: Implications for the sulfide saturation history and Niâ€“Cuâ€“PGE mineralization potential of the Tarim continental flood basalt province, Xinjiang Province, China. Ore Geology Reviews, 2012, 45, 5-15.	1.1	29
81	Petrogenesis of volcanic and intrusive rocks of the Zhuanqiao stage, Luzong Basin, Yangtze metallogenic belt, east China: implications for ore deposition. International Geology Review, 2011, 53, 526-541.	1.1	20
82	Shale-hosted Niâ€“(Cuâ€“PGE) mineralisation: a global overview. Transactions of the Institution of Mining and Metallurgy Section B-Applied Earth Science, 2011, 120, 187-197.	0.8	26
83	Comparison of normalisation methods for non-normal distributed soil geochemical data: a case study from the Tongling metallogenic district, Yangtze belt, Anhui Province, China. Transactions of the Institution of Mining and Metallurgy Section B-Applied Earth Science, 2010, 119, 227-235.	0.8	3
84	â€²Tâ€²-type mineralisation â€” a pseudo-epithermal style of VHMS associated gold mineralisation, Cyprus. , 2005, , 635-637.		1
85	Mineralisation potential mapping for ophiolitehosted volcanic massive sulphide (VHMS) deposits, Troodos Ophiolite, Cyprus. , 2005, , 1469-1472.		1