

# Megan Becker

## List of Publications by Year in descending order

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Version: 2024-02-01

50  
papers

1,732  
citations

218677

26  
h-index

276875

41  
g-index

52  
all docs

52  
docs citations

52  
times ranked

1381  
citing authors

#	ARTICLE	IF	CITATIONS
1	Sulfur and oxygen isotope constraints on sulfate sources and neutral rock drainage-related processes at a South African colliery. <i>Science of the Total Environment</i> , 2022, 846, 157178.	8.0	4
2	Characterisation and prediction of acid rock drainage potential in waste rock: Value of integrating quantitative mineralogical and textural measurements. <i>Minerals Engineering</i> , 2021, 163, 106750.	4.3	10
3	Decoupling the effects of alteration on the mineralogy and flotation performance of Great Dyke PGE ores. <i>Journal of the Southern African Institute of Mining and Metallurgy</i> , 2021, 121, 1-11.	0.3	3
4	Geometallurgical Approach for Implications of Ore Blending on Cyanide Leaching and Adsorption Behavior of Witwatersrand Gold Ores, South Africa. <i>Natural Resources Research</i> , 2020, 29, 1007-1030.	4.7	16
5	Stable Isotope Imprints during Pyrite Leaching: Implications for Acid Rock Drainage Characterization. <i>Minerals (Basel, Switzerland)</i> , 2020, 10, 982.	2.0	4
6	A Mineral X-ray Linear Attenuation Coefficient Tool (MXLAC) to Assess Mineralogical Differentiation for X-ray Computed Tomography Scanning. <i>Minerals (Basel, Switzerland)</i> , 2020, 10, 441.	2.0	23
7	Study of the leaching and pore evolution in large particles of a sulfide ore. <i>Hydrometallurgy</i> , 2020, 192, 105261.	4.3	22
8	The Robustness of the Gray Level Co-Occurrence Matrices and X-Ray Computed Tomography Method for the Quantification of 3D Mineral Texture. <i>Minerals (Basel, Switzerland)</i> , 2020, 10, 334.	2.0	10
9	X-ray computed tomography: Practical evaluation of beam hardening in iron ore samples. <i>Minerals Engineering</i> , 2019, 131, 206-215.	4.3	15
10	Leaching and recovery of phosphate and rare earth elements from an iron-rich fluorapatite concentrate: Part I: Direct baking of the concentrate. <i>Hydrometallurgy</i> , 2018, 177, 66-78.	4.3	33
11	Towards the development of an integrated modelling framework underpinned by mineralogy. <i>Minerals Engineering</i> , 2018, 116, 123-131.	4.3	7
12	Coupled X-ray computed tomography and grey level co-occurrence matrices as a method for quantification of mineralogy and texture in 3D. <i>Computers and Geosciences</i> , 2018, 111, 105-117.	4.2	34
13	Integration of mineralogical attributes in evaluating sustainability indicators of a magnetic separator. <i>Minerals Engineering</i> , 2017, 107, 53-62.	4.3	4
14	Fine grinding: How mill type affects particle shape characteristics and mineral liberation. <i>Minerals Engineering</i> , 2017, 111, 148-157.	4.3	43
15	Towards cleaner production – Using flotation to recover monazite from a heavy mineral sands zircon waste stream. <i>Minerals Engineering</i> , 2017, 101, 30-39.	4.3	13
16	Using mineralogical and particle shape analysis to investigate enhanced mineral liberation through phase boundary fracture. <i>Powder Technology</i> , 2016, 301, 794-804.	4.2	39
17	Investigating the effects of particle shape on chromite entrainment at a platinum concentrator. <i>Minerals Engineering</i> , 2016, 96-97, 46-52.	4.3	13
18	A mineralogical approach to evaluating laboratory scale acid rock drainage characterisation tests. <i>Minerals Engineering</i> , 2015, 80, 33-36.	4.3	21

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19	Auto-SEM particle shape characterisation: Investigating fine grinding of UC2 ore. Minerals Engineering, 2015, 82, 92-100.	4.3	35
20	An investigation into the relationship between particle shape and entrainment. Minerals Engineering, 2015, 83, 211-216.	4.3	28
21	Characterising and quantifying microwave induced damage in coarse sphalerite ore particles. Minerals Engineering, 2015, 82, 14-24.	4.3	29
22	Mineral carbonation of PGM mine tailings for CO2 storage in South Africa: A case study. Minerals Engineering, 2014, 59, 45-51.	4.3	52
23	A preliminary rheological classification of phyllosilicate group minerals. Minerals Engineering, 2014, 55, 190-200.	4.3	74
24	Investigation into the mineralogy and flotation performance of oxidised PGM ore. Minerals Engineering, 2014, 65, 24-32.	4.3	26
25	A rheological investigation of the behaviour of two Southern African platinum ores. Minerals Engineering, 2013, 49, 92-97.	4.3	21
26	The effect of sulfide concentrate mineralogy and texture on Reactive Oxygen Species (ROS) generation. Applied Geochemistry, 2013, 29, 199-213.	3.0	11
27	Investigation of the effect of mineralogy as rate-limiting factors in large particle leaching. Minerals Engineering, 2013, 52, 38-51.	4.3	24
28	Investigation and modelling of the progression of zinc leaching from large sphalerite ore particles. Hydrometallurgy, 2013, 131-132, 8-23.	4.3	30
29	An experimental study of the long-term bioleaching of large sphalerite ore particles in a circulating fluid fixed-bed reactor. Hydrometallurgy, 2012, 129-130, 161-171.	4.3	26
30	Effect of Alteration on the Mineralogy and Flotation Performance of PPM Platinum Ore. , 2012, , 63-71.		3
31	The mineralogy of pyrrhotite from Sudbury CCN and Phoenix nickel ores and its effect on flotation performance. Canadian Metallurgical Quarterly, 2011, 50, 10-19.	1.2	13
32	Large particle effects in chemical/biochemical heap leach processes – A review. Minerals Engineering, 2011, 24, 1172-1184.	4.3	94
33	Use of X-ray computed tomography to investigate crack distribution and mineral dissemination in sphalerite ore particles. Minerals Engineering, 2011, 24, 1249-1257.	4.3	77
34	The effects of chrysotile mineralogical properties on the rheology of chrysotile suspensions. Minerals Engineering, 2011, 24, 1004-1009.	4.3	28
35	The influence of phyllosilicate mineralogy on the rheology of mineral slurries. Minerals Engineering, 2011, 24, 1314-1322.	4.3	73
36	Investigation of the potential for mineral carbonation of PGM tailings in South Africa. Minerals Engineering, 2011, 24, 1348-1356.	4.3	44

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37	Understanding the influence of HPCR on PGM flotation behavior using mineralogy. Minerals Engineering, 2011, 24, 1370-1377.	4.3	17
38	The Mineralogy and Crystallography of Pyrrhotite from Selected Nickel and PGE Ore Deposits. Economic Geology, 2010, 105, 1025-1037.	3.8	33
39	In situ investigation and visualisation of microbial attachment and colonisation in a heap bioleach environment: The novel biofilm reactor. Minerals Engineering, 2010, 23, 486-491.	4.3	27
40	An impedance study of the adsorption of CuSO <sub>4</sub> and SIBX on pyrrhotite samples of different provenances. Minerals Engineering, 2010, 23, 903-907.	4.3	16
41	A comparison of the flotation behaviour and the effect of copper activation on three reef types from the Merensky reef at Northam. Minerals Engineering, 2010, 23, 846-854.	4.3	10
42	The flotation of magnetic and non-magnetic pyrrhotite from selected nickel ore deposits. Minerals Engineering, 2010, 23, 1045-1052.	4.3	50
43	The relationship between the electrochemical, mineralogical and flotation characteristics of pyrrhotite samples from different Ni Ores. Journal of Electroanalytical Chemistry, 2010, 647, 133-143.	3.8	35
44	The crystal structure of a naturally occurring 5C pyrrhotite from Sudbury, its chemistry, and vacancy distribution. American Mineralogist, 2009, 94, 1405-1410.	1.9	29
45	Mineralogical characterisation of naturally floatable gangue in Merensky Reef ore flotation. International Journal of Mineral Processing, 2009, 93, 246-255.	2.6	43
46	Quantifying the influence of classification with the 3 product cyclone on liberation and recovery of PGMs in UG <sub>2</sub> ore. Minerals Engineering, 2008, 21, 549-558.	4.3	11
47	A discussion of the occurrence and undesirable flotation behaviour of orthopyroxene and talc in the processing of mafic deposits. Minerals Engineering, 2008, 21, 905-912.	4.3	31
48	Geochemistry and petrogenesis of South African transitional kimberlites located on and off the Kaapvaal Craton. South African Journal of Geology, 2007, 110, 631-646.	1.2	37
49	Presence of negative charge on the basal planes of New York talc. Journal of Colloid and Interface Science, 2007, 315, 337-342.	9.4	42
50	Geochemistry of South African On- and Off-craton, Group I and Group II Kimberlites: Petrogenesis and Source Region Evolution. Journal of Petrology, 2006, 47, 673-703.	2.8	348