

Megan Becker

List of Publications by Year in descending order

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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	Geochemistry of South African On- and Off-craton, Group I and Group II Kimberlites: Petrogenesis and Source Region Evolution. <i>Journal of Petrology</i> , 2006, 47, 673-703.	2.8	348
2	Large particle effects in chemical/biochemical heap leach processes – A review. <i>Minerals Engineering</i> , 2011, 24, 1172-1184.	4.3	94
3	Use of X-ray computed tomography to investigate crack distribution and mineral dissemination in sphalerite ore particles. <i>Minerals Engineering</i> , 2011, 24, 1249-1257.	4.3	77
4	A preliminary rheological classification of phyllosilicate group minerals. <i>Minerals Engineering</i> , 2014, 55, 190-200.	4.3	74
5	The influence of phyllosilicate mineralogy on the rheology of mineral slurries. <i>Minerals Engineering</i> , 2011, 24, 1314-1322.	4.3	73
6	Mineral carbonation of PGM mine tailings for CO ₂ storage in South Africa: A case study. <i>Minerals Engineering</i> , 2014, 59, 45-51.	4.3	52
7	The flotation of magnetic and non-magnetic pyrrhotite from selected nickel ore deposits. <i>Minerals Engineering</i> , 2010, 23, 1045-1052.	4.3	50
8	Investigation of the potential for mineral carbonation of PGM tailings in South Africa. <i>Minerals Engineering</i> , 2011, 24, 1348-1356.	4.3	44
9	Mineralogical characterisation of naturally floatable gangue in Merensky Reef ore flotation. <i>International Journal of Mineral Processing</i> , 2009, 93, 246-255.	2.6	43
10	Fine grinding: How mill type affects particle shape characteristics and mineral liberation. <i>Minerals Engineering</i> , 2017, 111, 148-157.	4.3	43
11	Presence of negative charge on the basal planes of New York talc. <i>Journal of Colloid and Interface Science</i> , 2007, 315, 337-342.	9.4	42
12	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
13	Geochemistry and petrogenesis of South African transitional kimberlites located on and off the Kaapvaal Craton. <i>South African Journal of Geology</i> , 2007, 110, 631-646.	1.2	37
14	The relationship between the electrochemical, mineralogical and flotation characteristics of pyrrhotite samples from different Ni Ores. <i>Journal of Electroanalytical Chemistry</i> , 2010, 647, 133-143.	3.8	35
15	Auto-SEM particle shape characterisation: Investigating fine grinding of UG2 ore. <i>Minerals Engineering</i> , 2015, 82, 92-100.	4.3	35
16	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
17	The Mineralogy and Crystallography of Pyrrhotite from Selected Nickel and PGE Ore Deposits. <i>Economic Geology</i> , 2010, 105, 1025-1037.	3.8	33
18	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

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19	A discussion of the occurrence and undesirable flotation behaviour of orthopyroxene and talc in the processing of mafic deposits. <i>Minerals Engineering</i> , 2008, 21, 905-912.	4.3	31
20	Investigation and modelling of the progression of zinc leaching from large sphalerite ore particles. <i>Hydrometallurgy</i> , 2013, 131-132, 8-23.	4.3	30
21	The crystal structure of a naturally occurring 5C pyrrhotite from Sudbury, its chemistry, and vacancy distribution. <i>American Mineralogist</i> , 2009, 94, 1405-1410.	1.9	29
22	Characterising and quantifying microwave induced damage in coarse sphalerite ore particles. <i>Minerals Engineering</i> , 2015, 82, 14-24.	4.3	29
23	The effects of chrysotile mineralogical properties on the rheology of chrysotile suspensions. <i>Minerals Engineering</i> , 2011, 24, 1004-1009.	4.3	28
24	An investigation into the relationship between particle shape and entrainment. <i>Minerals Engineering</i> , 2015, 83, 211-216.	4.3	28
25	In situ investigation and visualisation of microbial attachment and colonisation in a heap bioleach environment: The novel biofilm reactor. <i>Minerals Engineering</i> , 2010, 23, 486-491.	4.3	27
26	An experimental study of the long-term bioleaching of large sphalerite ore particles in a circulating fluid fixed-bed reactor. <i>Hydrometallurgy</i> , 2012, 129-130, 161-171.	4.3	26
27	Investigation into the mineralogy and flotation performance of oxidised PGM ore. <i>Minerals Engineering</i> , 2014, 65, 24-32.	4.3	26
28	Investigation of the effect of mineralogy as rate-limiting factors in large particle leaching. <i>Minerals Engineering</i> , 2013, 52, 38-51.	4.3	24
29	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
30	Study of the leaching and pore evolution in large particles of a sulfide ore. <i>Hydrometallurgy</i> , 2020, 192, 105261.	4.3	22
31	A rheological investigation of the behaviour of two Southern African platinum ores. <i>Minerals Engineering</i> , 2013, 49, 92-97.	4.3	21
32	A mineralogical approach to evaluating laboratory scale acid rock drainage characterisation tests. <i>Minerals Engineering</i> , 2015, 80, 33-36.	4.3	21
33	Understanding the influence of HPCR on PGM flotation behavior using mineralogy. <i>Minerals Engineering</i> , 2011, 24, 1370-1377.	4.3	17
34	An impedance study of the adsorption of CuSO ₄ and SIBX on pyrrhotite samples of different provenances. <i>Minerals Engineering</i> , 2010, 23, 903-907.	4.3	16
35	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
36	X-ray computed tomography: Practical evaluation of beam hardening in iron ore samples. <i>Minerals Engineering</i> , 2019, 131, 206-215.	4.3	15

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37	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
38	Investigating the effects of particle shape on chromite entrainment at a platinum concentrator. Minerals Engineering, 2016, 96-97, 46-52.	4.3	13
39	Towards cleaner production – Using flotation to recover monazite from a heavy mineral sands zircon waste stream. Minerals Engineering, 2017, 101, 30-39.	4.3	13
40	Quantifying the influence of classification with the 3 product cyclone on liberation and recovery of PGMs in UG2 ore. Minerals Engineering, 2008, 21, 549-558.	4.3	11
41	The effect of sulfide concentrate mineralogy and texture on Reactive Oxygen Species (ROS) generation. Applied Geochemistry, 2013, 29, 199-213.	3.0	11
42	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
43	The Robustness of the Gray Level Co-Occurrence Matrices and X-Ray Computed Tomography Method for the Quantification of 3D Mineral Texture. Minerals (Basel, Switzerland), 2020, 10, 334.	2.0	10
44	Characterisation and prediction of acid rock drainage potential in waste rock: Value of integrating quantitative mineralogical and textural measurements. Minerals Engineering, 2021, 163, 106750.	4.3	10
45	Towards the development of an integrated modelling framework underpinned by mineralogy. Minerals Engineering, 2018, 116, 123-131.	4.3	7
46	Integration of mineralogical attributes in evaluating sustainability indicators of a magnetic separator. Minerals Engineering, 2017, 107, 53-62.	4.3	4
47	Stable Isotope Imprints during Pyrite Leaching: Implications for Acid Rock Drainage Characterization. Minerals (Basel, Switzerland), 2020, 10, 982.	2.0	4
48	Sulfur and oxygen isotope constraints on sulfate sources and neutral rock drainage-related processes at a South African colliery. Science of the Total Environment, 2022, 846, 157178.	8.0	4
49	Effect of Alteration on the Mineralogy and Flotation Performance of PPM Platinum Ore. , 2012, , 63-71.		3
50	Decoupling the effects of alteration on the mineralogy and flotation performance of Great Dyke PGE ores. Journal of the Southern African Institute of Mining and Metallurgy, 2021, 121, 1-11.	0.3	3