Aubrey N Mainza

List of Publications by Year
in descending order

41 papers	838 citations	516710 16 h-index	501196 28 g-index
41 all docs	41 docs citations	41 times ranked	665 citing authors

#	Article	IF	Citations
1	Large particle effects in chemical/biochemical heap leach processes â€" A review. Minerals Engineering, 2011, 24, 1172-1184.	4.3	94
2	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
3	CFDâ€"DEM modelling of particle flow in IsaMills â€" Comparison between simulations and PEPT measurements. Minerals Engineering, 2011, 24, 181-187.	4.3	62
4	A semi-mechanistic model of hydrocyclones â€" Developed from industrial data and inputs from CFD. International Journal of Mineral Processing, 2014, 133, 1-12.	2.6	60
5	Comparisons of PEPT derived charge features in wet milling environments with a friction-adjusted DEM model. Chemical Engineering Science, 2013, 97, 162-175.	3.8	47
6	Fine grinding: How mill type affects particle shape characteristics and mineral liberation. Minerals Engineering, 2017, 111, 148-157.	4.3	43
7	Using mineralogical and particle shape analysis to investigate enhanced mineral liberation through phase boundary fracture. Powder Technology, 2016, 301, 794-804.	4.2	39
8	Auto-SEM particle shape characterisation: Investigating fine grinding of UG2 ore. Minerals Engineering, 2015, 82, 92-100.	4.3	35
9	The shape and behaviour of a granular bed in a rotating drum using Eulerian flow fields obtained from PEPT. Chemical Engineering Science, 2016, 152, 186-198.	3.8	35
10	Differential classification of dense material in a three-product cyclone. Minerals Engineering, 2004, 17, 573-579.	4.3	28
11	Study of flow behaviour in a three-product cyclone using computational fluid dynamics. Minerals Engineering, 2006, 19, 1048-1058.	4.3	28
12	Applying grindcurves to mill operation and optimisation. Minerals Engineering, 2009, 22, 625-632.	4.3	25
13	Investigation of the effect of mineralogy as rate-limiting factors in large particle leaching. Minerals Engineering, 2013, 52, 38-51.	4.3	24
14	Power draw estimations in experimental tumbling mills using PEPT. Minerals Engineering, 2011, 24, 319-324.	4.3	20
15	Using two-way coupled DEM-SPH to model an industrial scale Stirred Media Detritor. Minerals Engineering, 2019, 137, 259-276.	4.3	19
16	Understanding the influence of HPGR on PGM flotation behavior using mineralogy. Minerals Engineering, 2011, 24, 1370-1377.	4.3	17
17	Measurement of shear rates in a laboratory tumbling mill. Minerals Engineering, 2011, 24, 225-229.	4.3	16
18	Optimisation of the secondary ball mill using an on-line ball and pulp load sensor â€" The Sensomag. Minerals Engineering, 2011, 24, 325-334.	4.3	15

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19	Tracking the motion of media particles inside an IsaMillâ„¢ using PEPT. Minerals Engineering, 2011, 24, 195-204.	4.3	14
20	Development of a novel methodology to determine mill power draw. International Journal of Mineral Processing, 2016, 149, 94-103.	2.6	14
21	Study on the particle interaction in a hydrocyclone classifier with multi-component feed blend at a high solids content. Powder Technology, 2021, 393, 380-396.	4.2	14
22	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
23	Towards a mechanistic model for slurry transport in tumbling mills. Minerals Engineering, 2011, 24, 230-235.	4.3	11
24	Multiple particle tracking in PEPT using Voronoi tessellations. Chemical Engineering Science, 2019, 207, 780-789.	3.8	10
25	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
26	Extended grinding curves are essential to the comparison of milling performance. Minerals Engineering, 2006, 19, 1487-1494.	4.3	9
27	Development of a mechanistic model of granular flow on vibrating screens. Minerals Engineering, 2021, 163, 106771.	4.3	9
28	A positron emission particle tracking investigation of the scaling law governing free surface flows in tumbling mills. AICHE Journal, 2017, 63, 903-913.	3.6	7
29	Different perspectives of dynamics in comminution processes. Minerals Engineering, 2022, 176, 107326.	4.3	7
30	Characterising porosity of multi-component mixtures in rotary mills. Minerals Engineering, 2011, 24, 276-281.	4.3	6
31	Circulation rate modelling of mill charge using position emission particle tracking. Minerals Engineering, 2011, 24, 282-289.	4.3	6
32	Geometric features of tumbling mill flows: A positron emission particle tracking investigation. Chemical Engineering Science, 2019, 206, 41-49.	3.8	6
33	Testing of a new dynamic Ergun equation for transport with positron emission particle tracking. AICHE Journal, 2016, 62, 939-946.	3.6	5
34	Computational modelling of particle-fluid dynamics in comminution and classification: a review. Mineral Processing and Extractive Metallurgy: Transactions of the Institute of Mining and Metallurgy, 2020, 129, 145-156.	0.2	4
35	Evaluating the performance of new collectors on feed to Nkana concentrator's flotation circuit. Minerals Engineering, 1999, 12, 571-577.	4.3	3
36	Asymmetric dynamics in a horizontally stirred mill using DEM. Minerals Engineering, 2019, 134, 232-240.	4.3	3

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37	Ceramic Media Selection for Optimization of Energy Efficiency in IsaMillsâ„¢. Chemical Engineering and Technology, 2012, 35, 1949-1953.	1.5	2
38	SIMULATION-DRIVEN DEVELOPMENT FOR COARSE COMMINUTION PROCESS - A CASE STUDY OF GEITA GOLD MINE, TANZANIA USING PLANTSMITH PROCESS SIMULATOR. Proceedings of the Design Society, 2021, 1, 2681-2690.	0.8	2
39	Axial Segregation of Polydisperse Granular Mixtures in Rotating Drum Flows. Minerals (Basel,) Tj ETQq1 1 0.784314 rgBT /Overlock 10	2.6	1
40	Effect of different collector dose rates on cobalt segregation. Minerals Engineering, 1999, 12, 1033-1040.	4.3	0
41	PGM converter matte mineral characteristics and effects on downstream processing. International Journal of Mineral Processing, 2017, 166, 89-101.	2.6	0