

PUBLICATIONS

Journal Articles

Barbosa, K., Hilden, M. and Yahyaei, M. (2022). Analysis of force-deformation and force-time profiles of 3D-printed specimens of single and binary mineral composition tested with Short Impact Load Cell. *Minerals Engineering*, 189, 107887, 1-16.

<https://doi.org/10.1016/j.mineng.2022.107887>

Barbosa, K., Hodder, K. and Yahyaei, M. (2022). Experimental study on mechanical properties of 3D-printed specimens of iron oxide, quartz, and bedded composites under uniaxial compression and indirect tensile strength. *3D Printing and Additive Manufacturing*.

<https://doi.org/10.1089/3dp.2021.0247>

Barbosa, K., Esterle, J. and Chen, Z. (2020). Scaling compressive strength from mini-cylinder specimens of sub-bituminous coal. *Rock Mechanics and Rock Engineering*, 53 (6), 2839-2853.

<https://doi.org/10.1007/s00603-020-02083-6>

Barbosa, K., Esterle, J., Van De Wetering, N. and Chen, Z. (2020). Shore hardness measurements of sub-bituminous coal microlithotypes. *International Journal of Coal Geology*, 217, 103341, 103341.

<https://doi.org/10.1016/j.coal.2019.103341>

Barbosa, K., Esterle, J., Bonfils, B. and Chen, Z. (2019). The use of short impact load cell to derive geomechanical properties of sub-bituminous coal and mudstone. *Journal of Natural Gas Science and Engineering*, 72 103018, 103018.

<https://doi.org/10.1016/j.jngse.2019.103018>

Barbosa, K., Chalaturnyk, R., Bonfils, B., Esterle, J. and Chen, Z. (2019). Testing impact load cell calculations of material fracture toughness and strength using 3D-printed sandstone. *Geotechnical and Geological Engineering*, 38 (2), 1065-1096.

<https://doi.org/10.1007/s10706-019-01073-y>

Barbosa, K., Esterle, J. and Ruest, M. (2016). A workflow to build a model investigating coal cleat upscaling conditioned by the lithotype. *The APPEA Journal*, 56 (1), 331-340.

<https://doi.org/10.1071/aj15024>

Conference Papers

Reyes, F., **Barbosa, K.**, Evans, C. , Jokovic, V. and Wilkie, G. (2022). Towards grade engineering using X-ray microtomography. IMPC Asia Pacific 2022, Melbourne, VIC, Australia, 22-24 August 2022. Carlton, VIC Australia: The Australian Institute of Mining and Metallurgy.

Jokovic, V., **Barbosa, K.J.**, Ndimande, C., Hilden, M., Runge, K. and Yahyaei, M. (2022). Measuring the effect of hybrid classification in a pilot-scale test. IMPC Asia-Pacific 2022, Melbourne, Australia, 22-24 August 2022. Carlton, VIC, Australia: The Australasian Institute of Mining and Metallurgy.

Barbosa, K., Miceli, H. and Lois-Morales, P. (2021). Characteristics of single-particle breakage from Short Impact Load Cell guiding Precision Rolls Crusher tester. Procemin - GEOMET 2021, Santiago, Chile, 20-22 October 2021. Gecamin.

Lois-Morales, P., **Barbosa, K.**, Evans, C. and Yahyaei, M (2020). A geometallurgical approach to comminution using primary breakage properties of ores. Procemin - GEOMET 2020, Santiago, Chile, 23-27 November 2020. Gecamin.

Barbosa, K.J. and Vieira F.M.C.C. (2012). Numerical modeling-based evaluation of sublevel design options for the Cuiabá gold mine, Brazil. The Southern African Institute of Mining and Metallurgy Southern Hemisphere International Rock Mechanics Symposium, Sun City, South Africa, 14-17 May 2012.

Vieira, F.M.C.C. and **Barbosa, K.J.** (2010). Numerical modeling-based evaluation of layout design options for the Cuiabá gold mine – Brazil. XV Brazilian Congress Soil Mechanics and Geotech Engineer, COMRAMSEG, Gramado, Brazil, 17 - 22 October.

Gama E.M., Pinto C.L., Timóteo L.G.M., **Barbosa K.J.**, and Cordeiro, R. (2006). Mechanic comportment of rocks in laboratorial testes. IV Brazilian Congress OP/ IV Brazilian Congress UG Mine, IBRAM / DEMIN, Belo Horizonte, Brazil.