

Publications list:

- Karabelo Moloanto, Abdon Atangana, Esta van Heerden, **J Castillo** (2018). Study of environmental factors direct and indirect involved in the sulphate-reduction biogeochemical processes and its integration in a kinetic model. To be submitted to Frontiers in Microbiology.
- Ester Torres, Alba Lozano, Francisco Macías, Alba Gomez-Arias, **Julio Castillo**, Carlos Ayora (2018). Passive elimination of sulfate and metals from acid mine drainage using combined limestone and barium carbonate systems. *J Clean Prod.* 182:114-123
- Peter J. Williams, Elizabeth Ojo, Errol Cason, **Julio Castillo**, Mary F. DeFlaun, and Esta van Heerden (2017). Hexavalent Chromium Bioreduction and Chemical Precipitation of Sulphate as a Treatment of Site-specific Fly Ash Leachates. *World J Microbiol Biotechnol.* 33:88.
- Alba Gomez, **Julio Castillo**, Esta van Heerden, DanieVermeulen (2016). Use of alkaline mine waste as treatment for acid drainage. IMWA-Germany (International Mine Water Association). 11th IMWA Annual Conference. Paper nº 223.
- Alba lozano, Carlos ayora, Francisco macias, Jose miguel nieto, Alba gomez-arias, **Julio Castillo**, Esta van hereden (2015). Sulphate removal from acid mine drainage: evaluation of granular BaCO₃ with column experiments. Macla nº 20.
- Julio Castillo**, JJ Posthumus, Alba Gomez, Esta Van Heerden (2015). Geochemical study of the interaction of acid and alkaline mine drainage with BaCO₃. Proceedings of the 10th ICARD & IMWA Annual Conference, paper nº 290.
- Alba Gomez, **Julio Castillo**, JJ Posthumus, Esta van Heerden (2015). Evidences of effective treatment of alkaline mine drainage with BaCO₃. Proceedings of the 10th ICARD & IMWA Annual Conference, paper nº 303.
- Maleke M. Maleke, **Julio Castillo**, Peter J. Williams, ElsabeBotes, AbidemiOjo, Mary F. DeFlaun, Esta van Heerden (2015). Optimization of a bioremediation system of u (VI) based on the biostimulation of an indigenous bacterial community. *Environ Sci Pollut Res Int.* 22:8442-50.
- J Castillo**, R Pérez-López, AM Sarmiento, JM Nieto (2012). Evaluation of organic substrates to enhance the sulfate-reducing activity in phosphogypsum. *Sci Total Environ.* 439:106-113.
- J Castillo**, R Pérez-López, MA Caraballo, JM Nieto, M Martins, M Clara Costa, M Olías, JC Cerón, R Tucoulou (2012). Biologically-induced precipitation of sphalerite-wurtzite nanoparticles by sulfate-reducing bacteria: Implications for acid mine drainage treatment. *Sci Total Environ.* 423:176-184.
- R Pérez-López, **J Castillo**, AM Sarmiento, JM Nieto (2011). Assessment of phosphogypsum impact on the salt-marshes of the Tinto river (SW Spain): Role of natural attenuation processes. *Mar Pollut Bull.* 62:2787-2796.
- MA Caraballo, F Macias, JM Nieto, C Ayora, **J Castillo**, D Quispe (2011). Hydrochemical performance and mineralogical evolution of a dispersed alkaline substrate (DAS) remediating the highly polluted acid mine drainage in the full scale passive treatment of Mina Esperanza (SW, Spain). *Am Mineral.* 96:1270-1277.
- R Pérez-López, Dino Quispe, **J Castillo**, JM Nieto (2011). Neutralization and retention of metals in acid mine drainage from the Iberian Pyrite Belt with Paper Waste Industry Huelva. *Am Mineral.* 96:781-791.
- J. Castillo**, R. Pérez-López, M.A. Caraballo, J.M. Nieto (2011). Precipitation of sphalerite and wurtzite by sulfate-reducing bacteria. Macla nº 15.
- R Pérez-López, **J Castillo**, D Quispe, JM Nieto (2010). Neutralization of acid mine drainage using the final product from CO₂ emissions capture with alkaline paper mill waste. *J Hazard Mater.* 177: 1-3.
- J. Castillo** (2009). Experimental study of the environmental applications of an alkaline residue in the paper industry. *Journal of the Spanish Society of Mineralogy* Macla nº 12.