



## **Fabrication of low-cost lead iodide based perovskite solar cells**

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Malevu TD is a Ph.D. candidate at Department of physics, University of the Free State, QwaQwa campus, South Africa. He has published 5 papers and peer reviewed more than 3 journal articles for high impacted international journals. He has presented his work at both international and national conferences. In 2014, He was awarded a best MSc presenter

in the field of Condense matter Physics at African Institute of Physics conference. His career aspiration is to partake in the revitalization, reconstruction, promotion, research and development (R&D) of renewable energy and Nanotechnology programs in South Africa. He is currently doing research studies on perovskite solar cells

A perovskite solar cell is a type of solar cell which includes a perovskite-structured compound, most commonly a hybrid organic-inorganic lead or tin halide-based material, as the light-harvesting active layer. Perovskite solar cells have attracted tremendous attention from the likes of DSSC and OPVs with greater potential. They have amazed with an incredibly fast efficiency improvement, going from just 2% in 2006 to over 20.1% in 2015. High and rapidly improved efficiencies, as well as low potential material and processing costs, are not the only advantages of perovskite solar cells. Flexibility, semi-transparency, tailored form factors, thin-film, light-weight are other value propositions of perovskite solar cells.