

Structural, Electronic and Electrochemical Properties of Vanadium Disulphide Material for Energy Conversion and Storage in Li/Na-ion Battery

Abstract.

We review work on rechargeable metal-ion batteries. Rechargeable metal-ion batteries play a crucial role in modern transport, communication and electronic industries with lithium ion batteries being the most common on the market. Despite the successful application, of lithium-ion batteries; their energy density, volumetric and gravimetric capacities, life span and charge /discharge rate have raised a lot of concern. Current research is being focused on the anode materials currently in use and also substituting Lithium/Sodium ion batteries. This review, we look into the structural, electronic and electrochemical properties of a newly synthesized Vanadium disulphide as promising near future anode for both sodium and lithium ion batteries

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