Mesoporous β-Ag₂MoO₄ Nanopotatoes as Supercapacitor Electrodes

J. Johnson William, B. Saravanakumar, M. Mariyappan, G. Muralidharan, Allen J. Britten Martin Mkandawire,

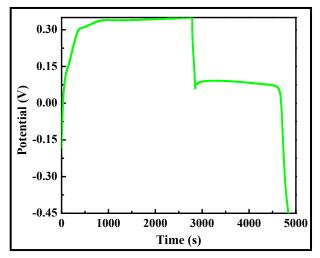
^aDepartment of Physics, Dr. Mahalingam College of Engineering and Technology, Pollachi, India 642003.

^bDepartment of Physics, The Gandhigram Rural Institute (DTBU), Gandhigram, India 624302.

^cDepartment of Chemistry, Cape Breton University, 1250 Grand Lake Rd. Sydney, Nova Scotia, Canada, B1P 6L2.

* Corresponding Author: martin mkandawire@cbu.ca

S1 Illustration of low IR drop



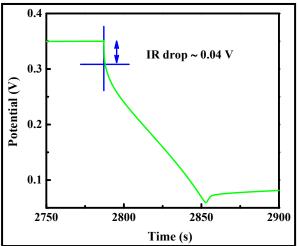
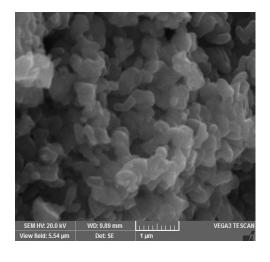


Figure S1. a) GCD curve at 2 A g-1 of β-Ag₂MoO₄nanostructures (b) enlarged view

S1 Morphological studies after stability analysis



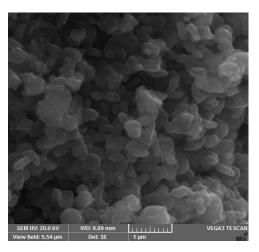


Figure S2 . SEM images after stability test.

S3 Fabrication of working electrode

In all the electrochemical studies, a nickel foam has been used as the current collector. The preparation of electroactive slurry is as follows: firstly, the electroactive material was prepared by grinding a mixture of 85% of prepared materials, 10% of carbon black and 5% of PTFE as binder using a pestle and mortar. 1.5 mg of the active material was weighed and was transferred into glass vial containing $10~\mu L$ of ethanol. The ultrasonication process was carried for 30 seconds to make an electroactive slurry. Afterward, the slurry was coated on to a nickel foam of area $1~\rm cm^2$. Further, the prepared electrodes were dried at $80~\rm ^{\circ}C$ in an atmosphere of air for 8 hours to remove traces of ethanol.