

Nanocrystalline β -NiS; A Redox-mediated Electrode in Aqueous Electrolyte for Pseudo-capacitor/Supercapacitor Applications

Vishal Kushwaha¹, Asha Gupta^{1*}, Ram Bilash Choudhary², K. D. Mandal¹, Rakesh Mondal³ and Preetam Singh^{3*}

1. Department of Chemistry, Indian Institute of Technology (Banaras Hindu University) Varanasi, Uttar Pradesh, 221005, India
2. Department of Physics, Indian Institute of Technology (Indian School of Mines), Dhanbad 826004, India
3. Department of Ceramic Engineering, Indian Institute of Technology (Banaras Hindu University) Varanasi, Uttar Pradesh, 221005, India

***: corresponding Author**

Email: asha.chy@itbhu.ac.in, toashagupta@gmail.com

Phone: 91-6390363140

Email: preetamsingh.cer@itbhu.ac.in, preetamchem@gmail.com

Phone: 91-9473720659

The electrochemical properties of the fabricated AC (activate carbon) electrode was studied using cyclic voltammetry and galvanostatic charge-discharge as shown in Fig. S₁ and S₂.

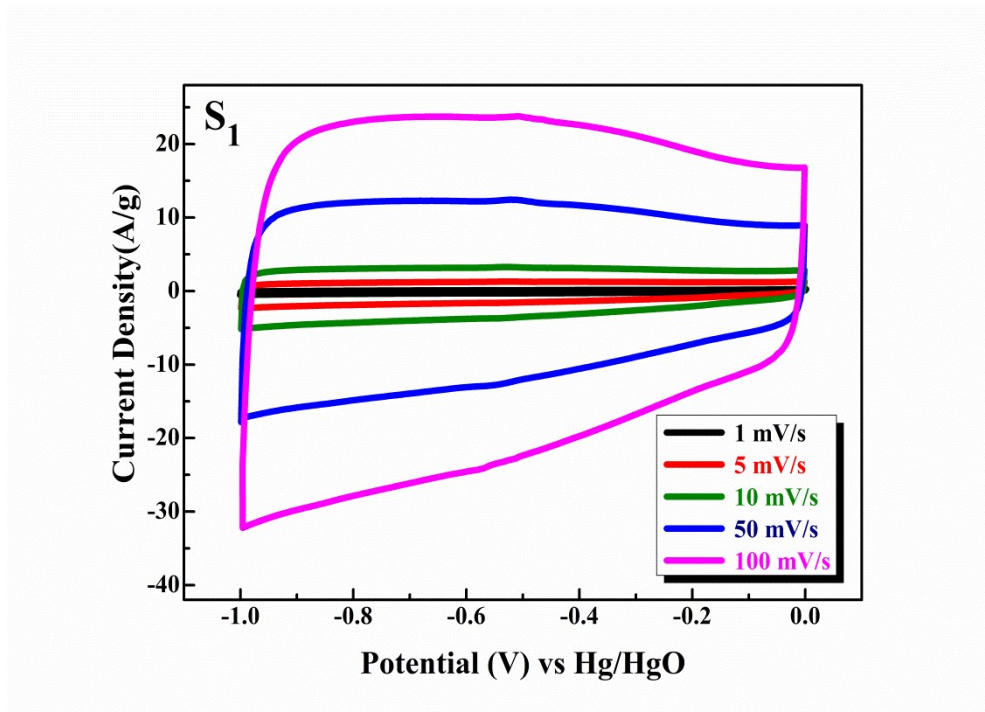


Fig. S₁. CV curve of AC in 1M KOH electrolyte using SCE as the reference electrode.

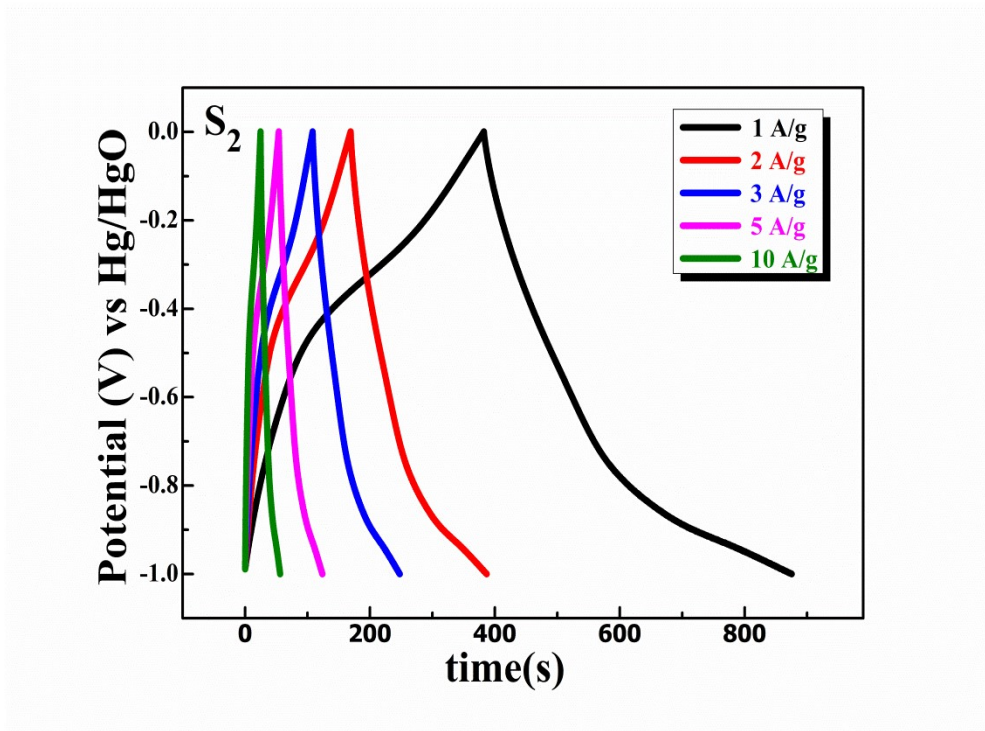


Fig. S₂. GCD curve of AC electrode in 1M KOH electrolyte using SCE as the reference electrode.