

Supporting Information

Sodium-ion storage properties of nickel sulfide hollow nanospheres/reduced graphene oxide composite powders prepared by spray drying process and nanoscale Kirkendall effect

Gi Dae Park, Jung Sang Cho, and Yun Chan Kang*

Department of Materials Science and Engineering, Korea University, Anam-dong, Seongbuk-
gu, Seoul 136-713, Republic of Korea

E-mail: yckang@korea.ac.kr Fax: +82-2-928-3584; Tel: +82-2-3290-3268

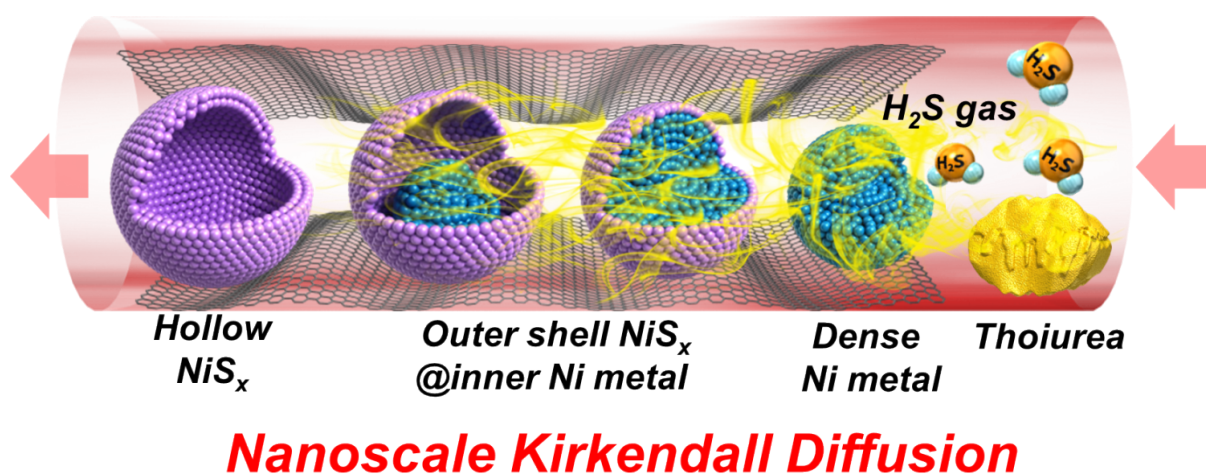


Figure S1. Formation mechanism of the nickel sulfide hollow nanospheres-rGO composite powder by nanoscale Kirkendall diffusion.

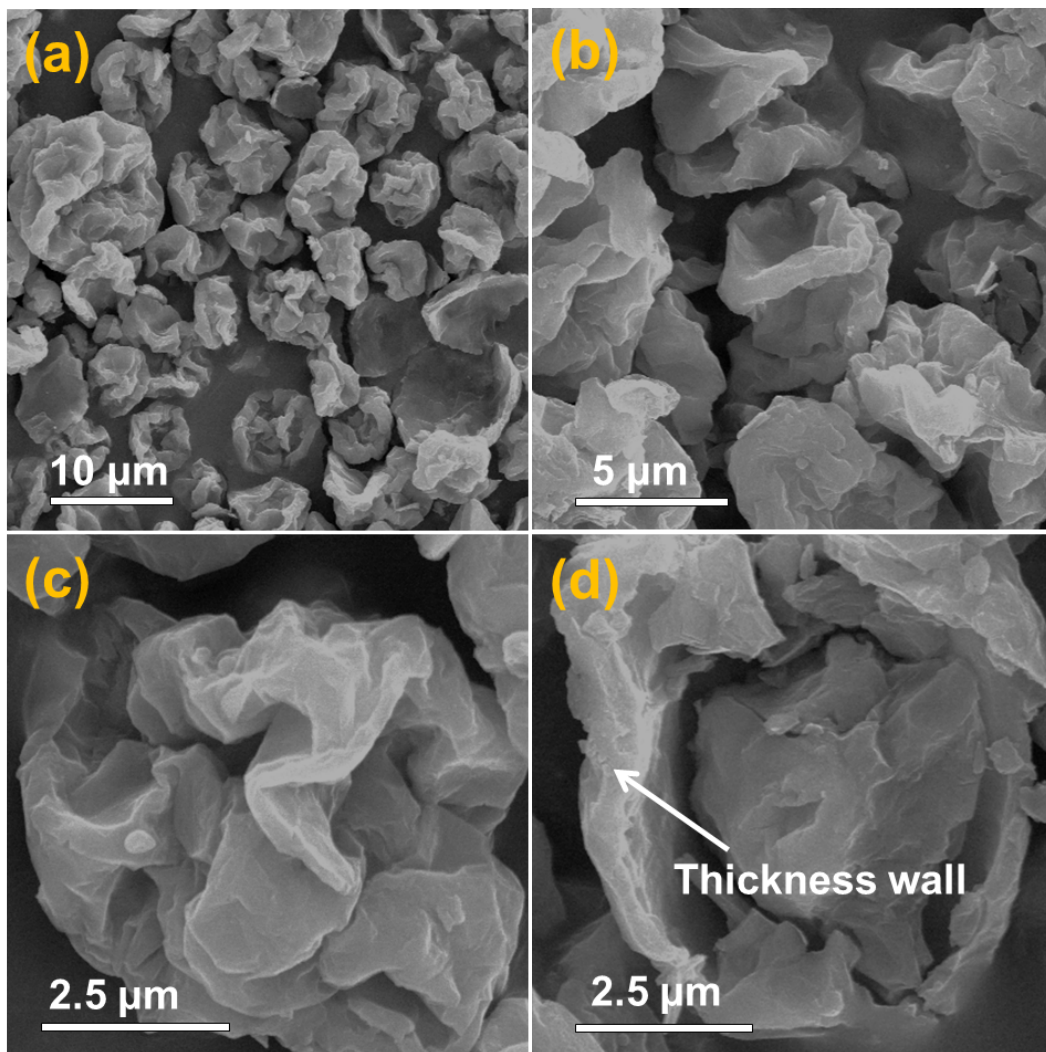


Figure S2. Morphologies of the nickel acetate/GO precursor powders prepared directly by spray drying process.

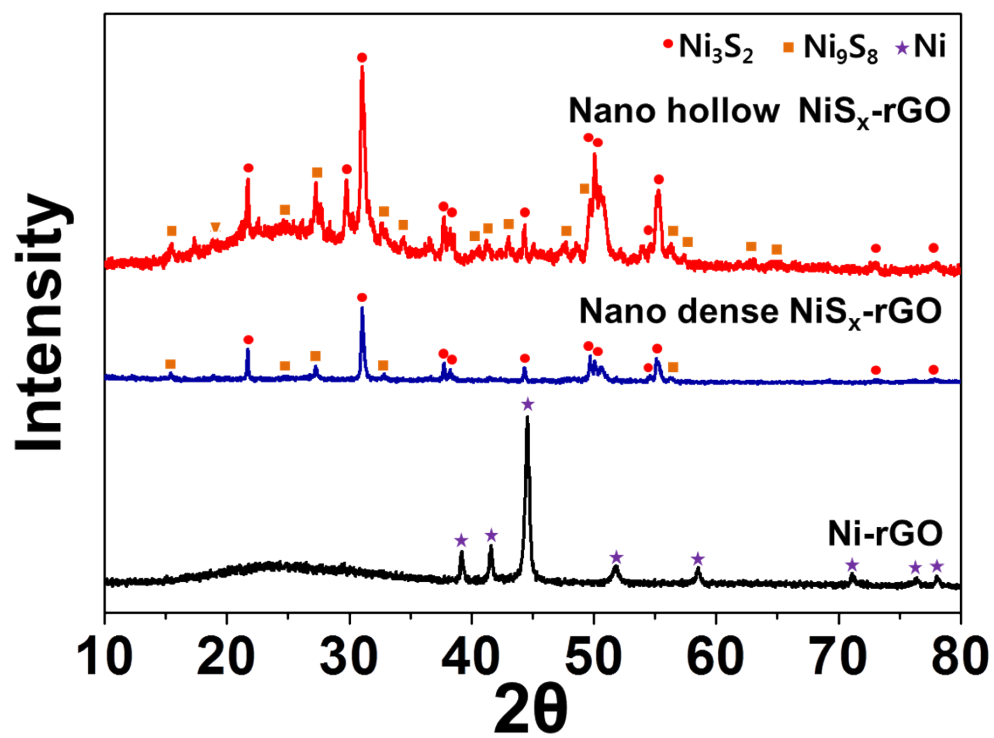


Figure S3. XRD patterns of the nickel sulfide hollow and dense nanospheres/rGO composite powders and nickel nanopowders/rGO composite powders.

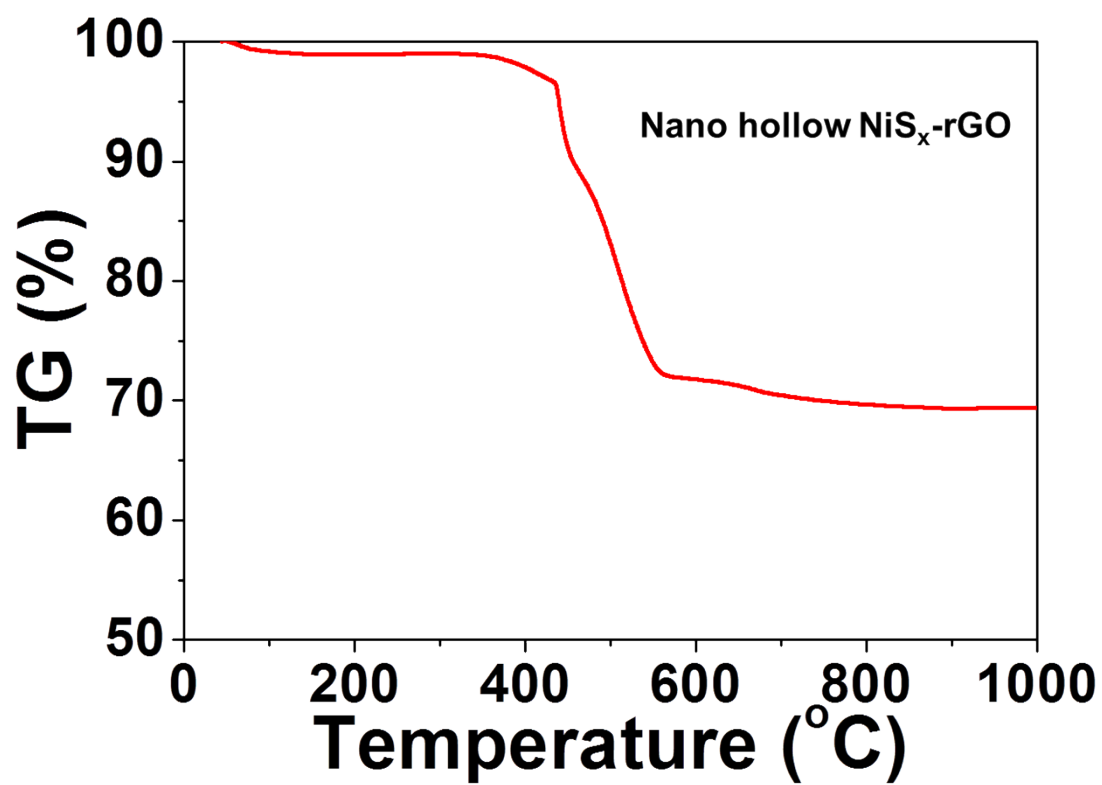


Figure S4. TG curve of the nickel sulfide hollow nanospheres/rGO composite powders.

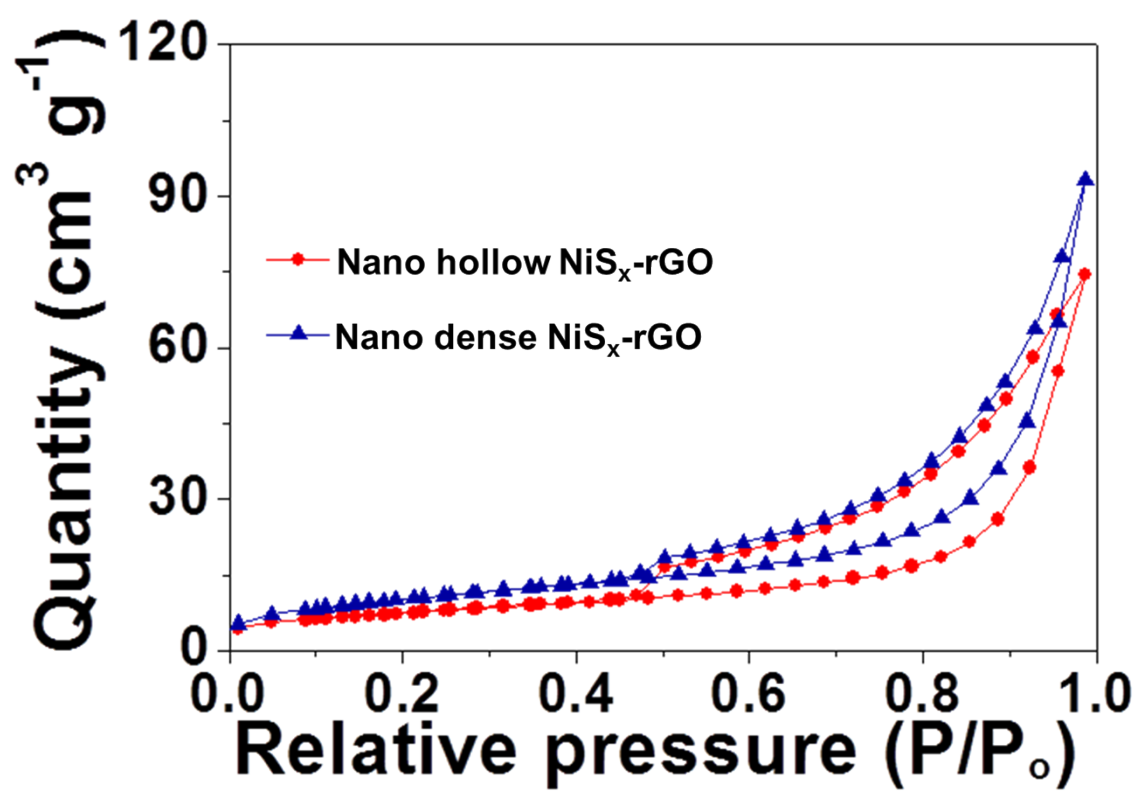


Figure S5. N₂ adsorption and desorption isotherms of the nickel sulfide hollow and dense nanospheres/rGO composite powders.