Supporting Information

Graphene supported mesoporous single crystal silicon on Cu foam as stable lithium-ion battery anode

Shilong Jing, Hao Jiang,* Yanjie Hu, Chunzhong Li*

Key Laboratory for Ultrafine Materials of Ministry of Education, School of Materials Science and Engineering, East China University of Science and Technology, Shanghai 200237, China

Email: jianghao@ecust.edu.cn (H. Jiang) and czli@ecust.edu.cn (C. Li)

Fig. S1 (a,b) TEM and (c) HRTEM images of PNPs Si nanoparticles, inset showing the corresponding SAED pattern of (220) plane.
Fig. S2 Rate performances of pure graphene from 200 to 12800 mA g\(^{-1}\).

Fig. S3 Thermogravimetric analysis of MSCs-Si/G hybrids, the result shows the mass fraction of Si is 38.2%.

Figure S3 shows the thermal gravimetric analysis (TGA) profile recorded during heating in air. A nearly 61.8% weight loss was recorded at 700 °C due to combustion of the graphene. And then the mass of the Si component increased because of the oxidation of Si.\(^1\)\(^2\)