Supporting Information

One-pot Rapid Synthesis of Core-Shell Structured \( \text{NiO}@\text{TiO}_2 \) Nanopowders and Their Excellent Electrochemical Properties for Anode Materials in Lithium Ion Batteries

Seung Ho Choi, a Jong-Heun Lee b and Yun Chan Kang * a

[*] Prof. Y.C. Kang

a Department of Chemical Engineering, Konkuk University, 1 Hwayang-dong, Gwangjin-gu, Seoul 143-701, Korea. E-mail: vckang@konkuk.ac.kr; Fax: +82-2-458-3504; Tel: +82-2-2049-6010

b Department of Materials Science and Engineering, Korea University, Anam-Dong, Seongbuk-Gu, Seoul 136-713, Korea. E-mail: jongheun@korea.ac.kr; Fax: +82-2-928-3584; Tel: +82-2-3290-3282

Fig. S1 Schematic diagram of the flame spray pyrolysis process.
**Fig. S2** TEM image and EDX spectra of the core-shell structured NiO@TiO$_2$ nanopowders.
Fig. S3 Second cycle curves of the pure NiO and NiO@TiO₂ nanopowders.
Fig. S4 Cycle curves of the NiO@TiO₂ nanopowders at different current densities.
Fig. S5 N$_2$ adsorption-desorption isotherms measured at 77 K for the pure NiO and NiO@TiO$_2$ nanopowders.