Electronic Supplementary Material

**Dicarboxylate CaC$_8$H$_4$O$_4$ as a high-performance anode for Li-ion batteries**

Liping Wang$^1$, Haiquan Zhang$^1$, Chengxu Mou$^1$, Qianling Cui$^2$, Qijiu Deng$^1$, Jing Xue$^1$, Xinyi Dai$^1$, and Jingze Li$^1$ (✉)

$^1$State Key Laboratory of Electronic Thin Films and Integrated Devices, School of Microelectronics and Solid-State Electronics, University of Electronic Science and Technology of China, Chengdu 610054, China

$^2$School of Materials Science and Engineering, University of Science and Technology Beijing, Beijing 100083, China

Supporting information to DOI 10.1007/s12274-014-0666-x

![Figure S1](image)

**Figure S1** $^1$H NMR spectra of LiTPA, CaTPA, and AITPA in D$_2$O.

Address correspondence to lijingze@uestc.edu.cn
Figure S2  Cyclic voltammetry curves of (a) LiTPA, (b) CaTPA, and (c) AlTPA at a scan rate of 0.05 mV·s$^{-1}$.

Figure S3  (a) Cyclic voltammetry curves and (b) charge–discharge curves of carbon black at a current rate 15 mA·h·g$^{-1}$. 
Figure S4  Electrochemical impedance spectra of (a) LiTPA, (b) CaTPA, and (c) AlTPA at 3.0 V for the initial, 1st, 3rd, 6th, 10th cycles.