Supplementary Information

One-pot synthesis of spring-like superstructures consisting of layered tin(IV) hydrogen phosphate nanodisks

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Fig. S1 XRD pattern of the sample obtained in the presence of 0.3 mL H₃PO₄ via solvothermal reaction for 6 h.
Fig. S2 SEM image of the resulting Sn(HPO$_4$)$_2$·H$_2$O superstructures obtained in the presence of 0.6 mL H$_3$PO$_4$ via solvothermal reaction for 24 h.

Fig. S3 SEM image of the resulting Sn(HPO$_4$)$_2$·H$_2$O superstructures obtained in the presence of 0.3 mL H$_3$PO$_4$ via solvothermal reaction for 48 h.
Fig. S4 FTIR spectra of resulting Sn(HPO$_4$)$_2$·H$_2$O superstructures.

Fig. S5 TGA curve of Sn(HPO$_4$)$_2$·H$_2$O superstructures.
Fig. S6 SEM image of the resulting Sn(HPO₄)₂·H₂O in the presence of excess water.

Fig. S7 Variation of discharge capacity vs number of cycles for the lithium ion batteries using Sn(HPO₄)₂·H₂O spring-like superstructures as the anode electrode materials.
Fig. S8 Charge and discharge curves of the cell with Sn(HPO₄)₂·H₂O spring-like superstructures during 1st to 60th cycles between 2.0 – 0 V.