Supporting information

Fluoride anions-Assisted Hydrothermal Preparation and Its Growth Process of

 β -MnO₂ with Bipyramid Prism Morphology

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Fig. S1. XRD patterns of the obtained materials with different amounts of NaF: (a) 0 mmol, (b) 2 mmol, (c) 2.5 mmol, (d) 3 mmol, (e) 4 mmol, and (f) 6 mmol.



Fig. S2. TEM (left) and HRTEM (right) images of the obtained materials after hydrothermal treatment for 15 h.



Fig. S3. Crystal structures of some low-index faces of β -MnO₂: the top structures are the top view and the bottom structures are the side view.