Supporting Information

Well-aligned Molybdenum Oxides Nanorods on Metal Substrate: Solution-based Synthesis and Their Electrochemical Capacitor Application

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S1. XPS survey spectrum of molybdenum oxides arrays

**Fig. S1** XPS survey spectrum of as-obtained MoO$_3$ (A) and MoO$_2$ (B) nanorod arrays (insets are the spectrum of Mo 3d core level region).
S2. SEM images of the comparative experiments of MoO$_3$ nanorod arrays

Fig. S2 (A) Side-view SEM images of the brink zone of MoO$_3$ nanorod arrays with a thick incubation layer. (B) Typical SEM image of as-obtained sample on Cu foil without depositing an incubation layer.

S3. SEM images of MoO$_3$ nanorod arrays at different visual angles

Fig. S3 Side-view (A) and back-view (B) SEM images of as-prepared MoO$_3$ nanorod arrays scraped down from Cu substrate.
**S4. Charge/discharge curve of molybdenum oxides arrays**

**Fig. S4** Charge/discharge curve of as-obtained MoO$_3$ (A) and MoO$_2$ (B) nanorod arrays on the number of cycles at a constant current density of 1 mA.