

A Sustainable Approach to the Preparation of MoO₂ Quantum Dots and the Pseudocapacitive Performance before and after Calcination

Yi An ¹, Weizhi Gong ¹, Junli Wang ^{1,2}, Jianlin Liu ³, Liexing Zhou ², Yi Xia ², Cheng Pan ¹, Mingjun Wang ^{1,2,*} and Dong Fang ^{1,*}

¹ Faculty of Materials Science and Engineering, Kunming University of Science and Technology, Kunming 650093, China; anyi@stu.kust.edu.cn (Y.A.); gongweizhi@stu.kust.edu.cn (W.G.); junliwangli@aliyun.com (J.W.); pancheng@stu.kust.edu.cn (C.P.)

² Analytic and Testing Research Center of Yunnan, Kunming 650093, China; 20110011@kust.edu.cn (L.Z.); xiayi0125@163.com (Y.X.)

³ Faculty of Science, Shaoyang University, Shaoyang 422000, China; liujianlin321123@163.com

* Correspondence: mjwang@kust.edu.cn (M.W.); fangdong@kust.edu.cn (D.F.)

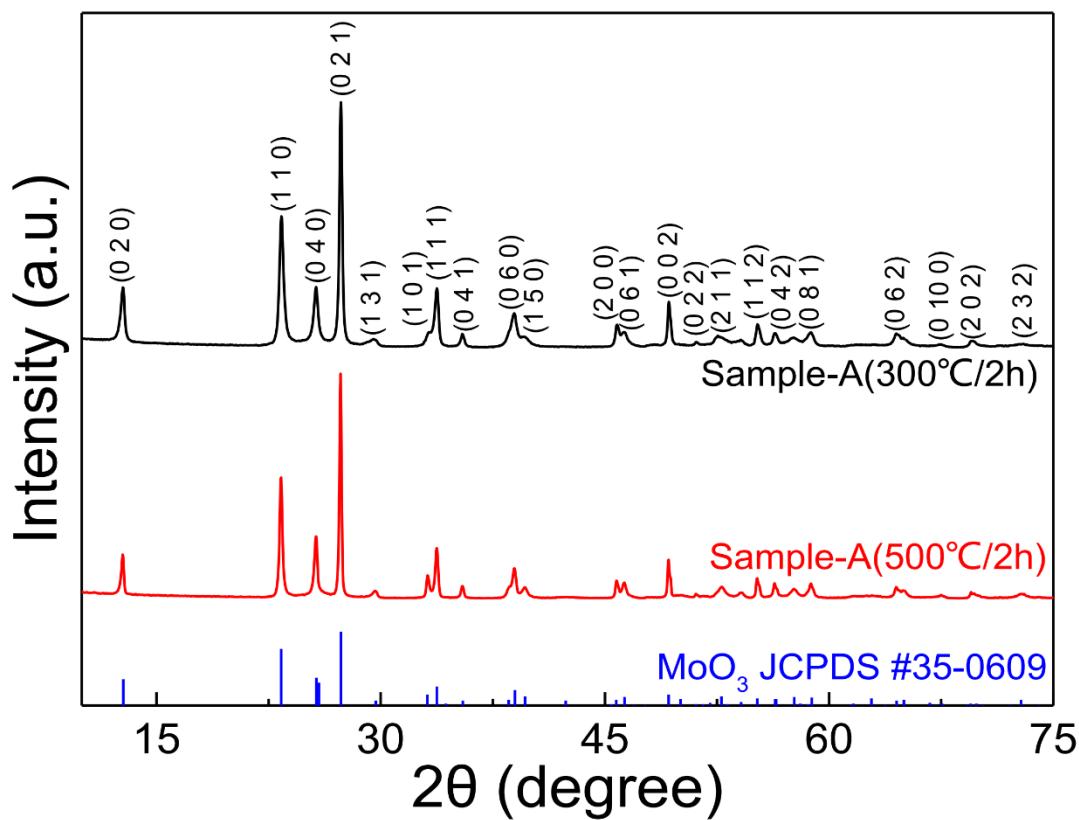


Figure S1. XRD patterns of the Sample-A(300 °C/2 h) and Sample-A(500 °C/2 h).

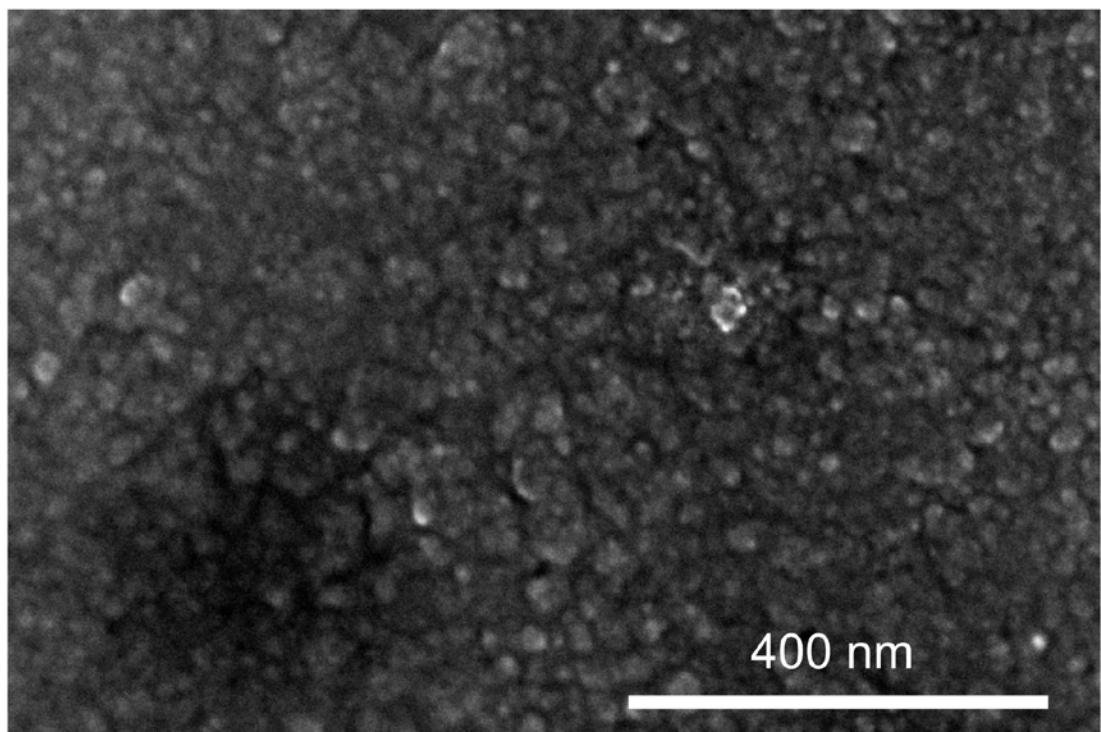


Figure S2. FESEM image of the Sample-U.

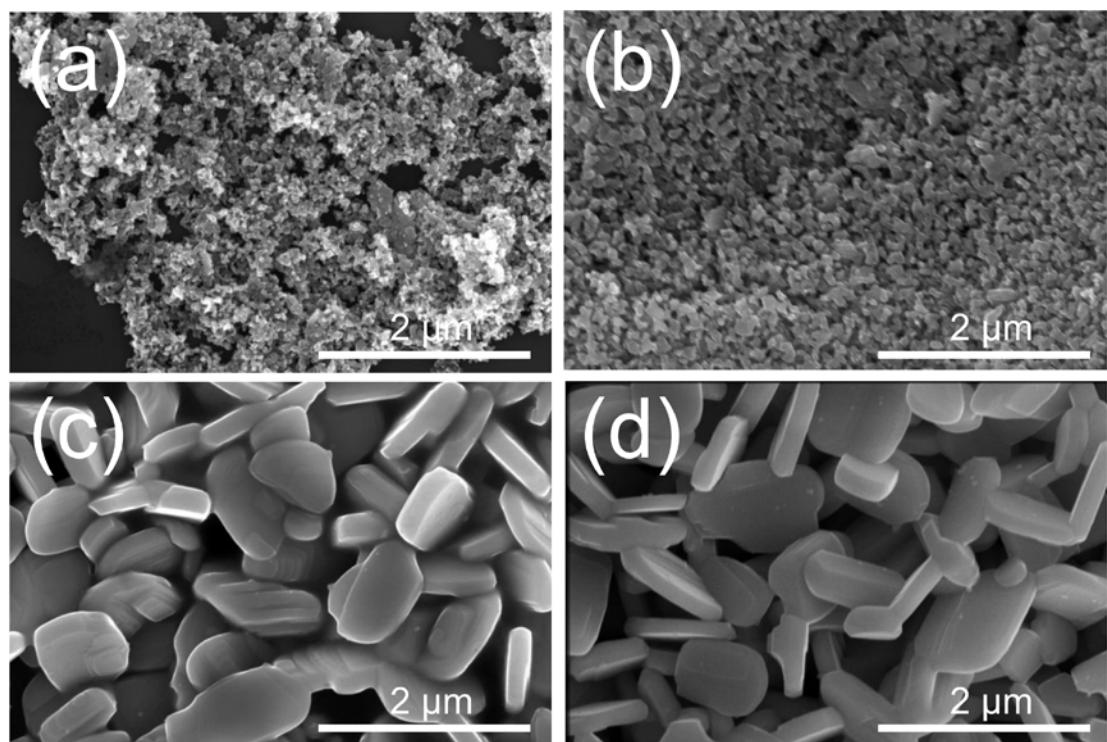


Figure S3. FESEM images of the Sample-A(300 °C/1 h) (a), Sample-A(350 °C/1 h) (b), Sample-A(450 °C/1 h) (c) and Sample-A(500 °C/1 h) (d).

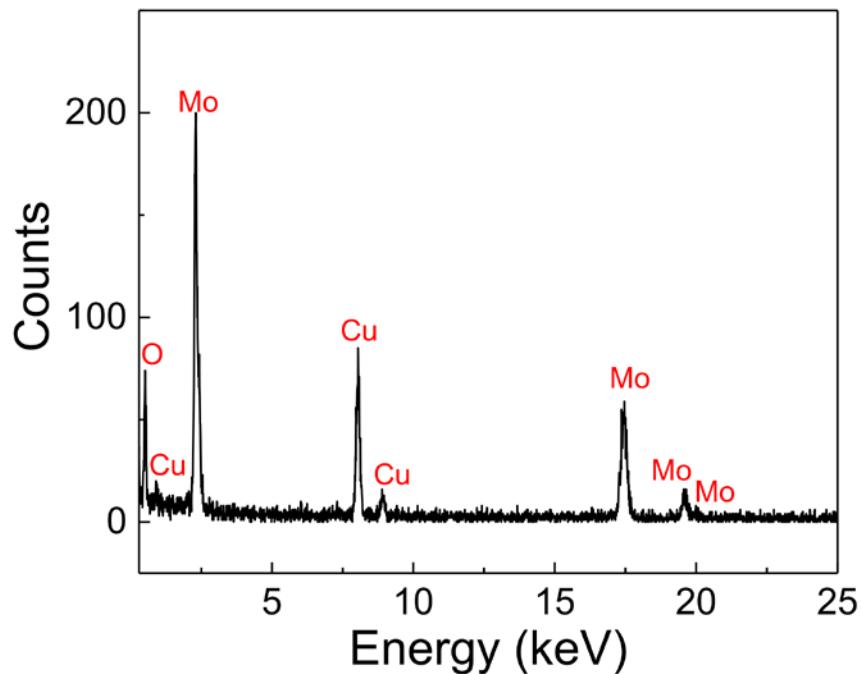


Figure S4. EDS result of the Sample-V.

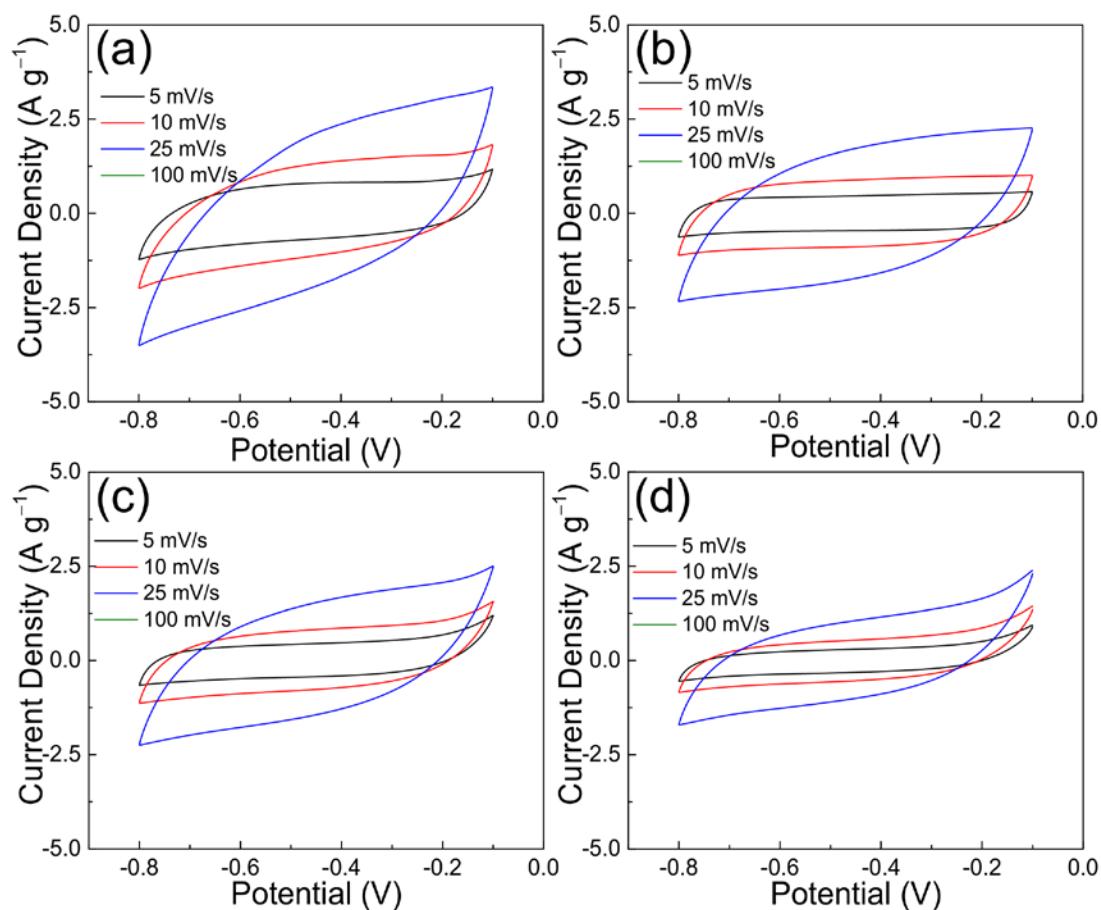


Figure S5. CV curves of the Sample-A($400^\circ\text{C}/2\text{ h}$) (a), Sample-N (b), Sample-V (c) and Sample-U (d).

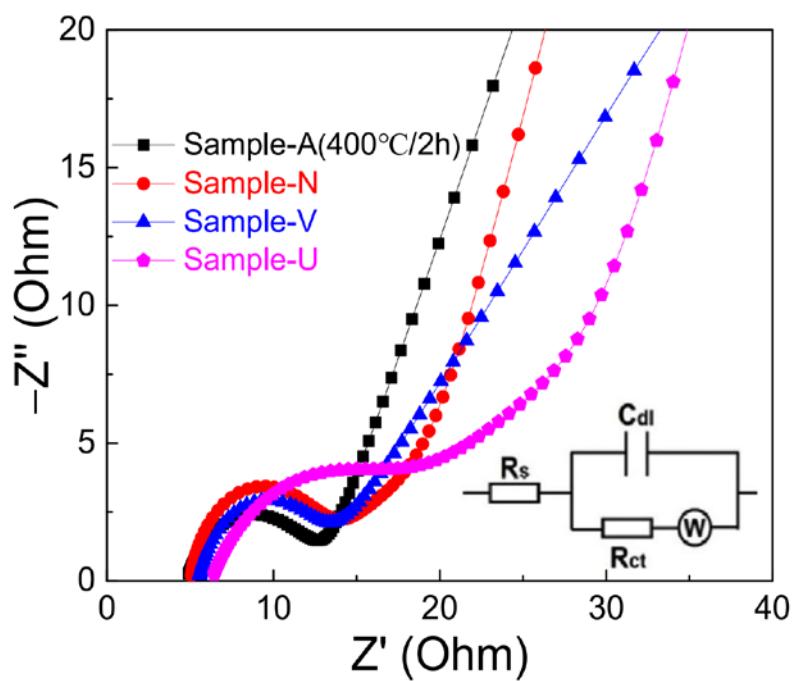


Figure S6. Fitting curves of the Nyquist plots of the Sample-U, Sample-A(400 °C/2 h), Sample-N and Sample-V; the inset is the proposed equivalent circuit.