Electronic supplementary information

Design Synthesis of Porous NiMoO₄/C Composite Nanorods for

Asymmetric Supercapacitors

Boli Tong,^a Wutao Wei,^a Xueli Chen,^a Jing Wang,^a Wanyu Ye,^a Shizhong Cui,^a Weihua Chen,^{b,*} and Liwei Mi^{a,*}

^a Center for Advanced Materials Research, Zhongyuan University of Technology, Henan 450007, China. E-mail: mlwzzu@163.com

^b College of Chemistry and Molecular Engineering, Zhengzhou University, Henan 450001, China. E-mail: chenweih@zzu.edu.cn



Figure S1. (a-b) SEM image with different magnification of NMO-P prepared with only water as solvent.



Figure S2. FTIR spectrum of NMO-P and NMO/C composite nanorods at wavenumber from 400 cm⁻¹ to 4000 cm⁻¹.



Figure S3. Thermogravimetric curve of NMO/C under N₂ atmosphere with a heating rate of 10 °C min⁻¹.

Electrode material	Two-electrodes (specific capacitance@current density)	Ref.
NiMoO ₄ /PANI	1.34 F cm ⁻² @1 mA cm ⁻²	32
NiMoO₄@CoMoO₄	112.2 F g ⁻¹ @2 A g ⁻¹	33
NF@NiMoO₄@C	201.3 F g ⁻¹ @1 A g ⁻¹	34
NiMoO ₄ @CMS	137.5 F g ⁻¹ @1 A g ⁻¹	40
NiMoO ₄ @C@Ni ₃ S ₂	0.47 F cm ⁻² @2 mA cm ⁻²	41
NiMoO ₄ -HCNF	135 C g ⁻¹ @0.5 A g ⁻¹	42
NiMoO₄ nanosheet	151.7 F g ⁻¹ @1 A g ⁻¹	43
NiCo ₂ O ₄ @NiMoO ₄	61.7 F g ⁻¹ @5 mA cm ⁻²	44
NiMoO ₄ nanorods	96.7 F g ⁻¹ @5 mA cm ⁻²	45
NiMoO ₄ -CoMoO ₄	80 F g ⁻ 1@1 mA cm ⁻²	46
NiMoO ₄ -CoMoO ₄	105 F g ⁻¹ @5 mA cm ⁻² (0.5 A g ⁻¹)	47
nanotubes		
PCNS@Co _x Ni _{1-x} MoO ₄	127.5 F g ⁻¹ @0.5 A g ⁻¹	48
NiMoO ₄ /C	325.1 F g ⁻¹ @0.5 A g ⁻¹	This work

Table S1. Comparison of specific capacitance of NMO/C in this study and those of some NMO-based

 electrodes