

Supporting Information

Hierarchical Multi-villous Nickel-cobalt Oxide Nanocyclobenzene Arrays: Morphology Control and Electrochemical Supercapacitive Behaviors

Jinbing Cheng^{†a,b}, Yang Lu^{†a,c}, Kangwen Qiu^{†a,b}, Deyang Zhang^{†a,d}, Chunlei Wang^{a,b}, Hailong Yan^{a,b}, Jinyou Xu^{a,b}, Yihe Zhang^d, Xianming Liu^e and Yongsong Luo^{*a,b}

^a School of Physics and Electronic Engineering, Xinyang Normal University, Xinyang 464000, P. R. China

^b Key Laboratory of Advanced Micro/Nano Functional Materials, Xinyang Normal University, Xinyang 464000, P. R. China

^c School of Material Science and Engineering, Hebei University of Technology, Tianjin 300130, P. R. China

^d School of Materials Science and Technology, China University of Geosciences, Beijing 100083, P. R. China

^e College of Chemistry and Chemical Engineering, Luoyang Normal University, Luoyang 471022, P. R. China

* To whom correspondence should be addressed: E-mail: ysluo@xynu.edu.cn

† These authors contribute equally to this work.

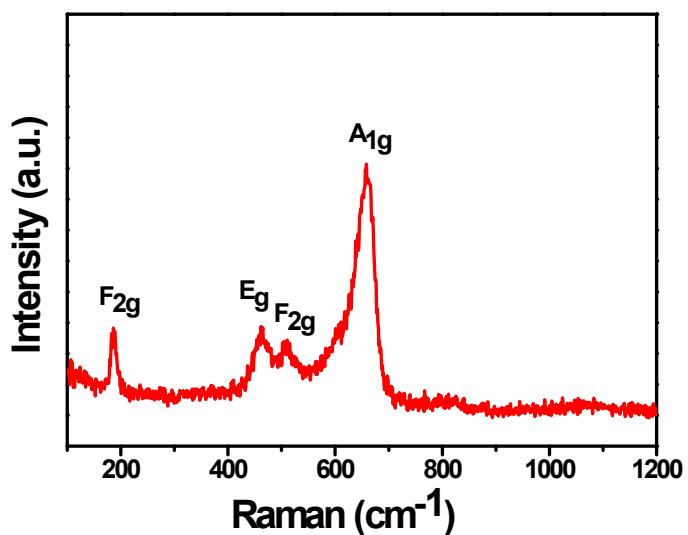


Fig. S1 Room temperature Raman spectra of NCAs sample.

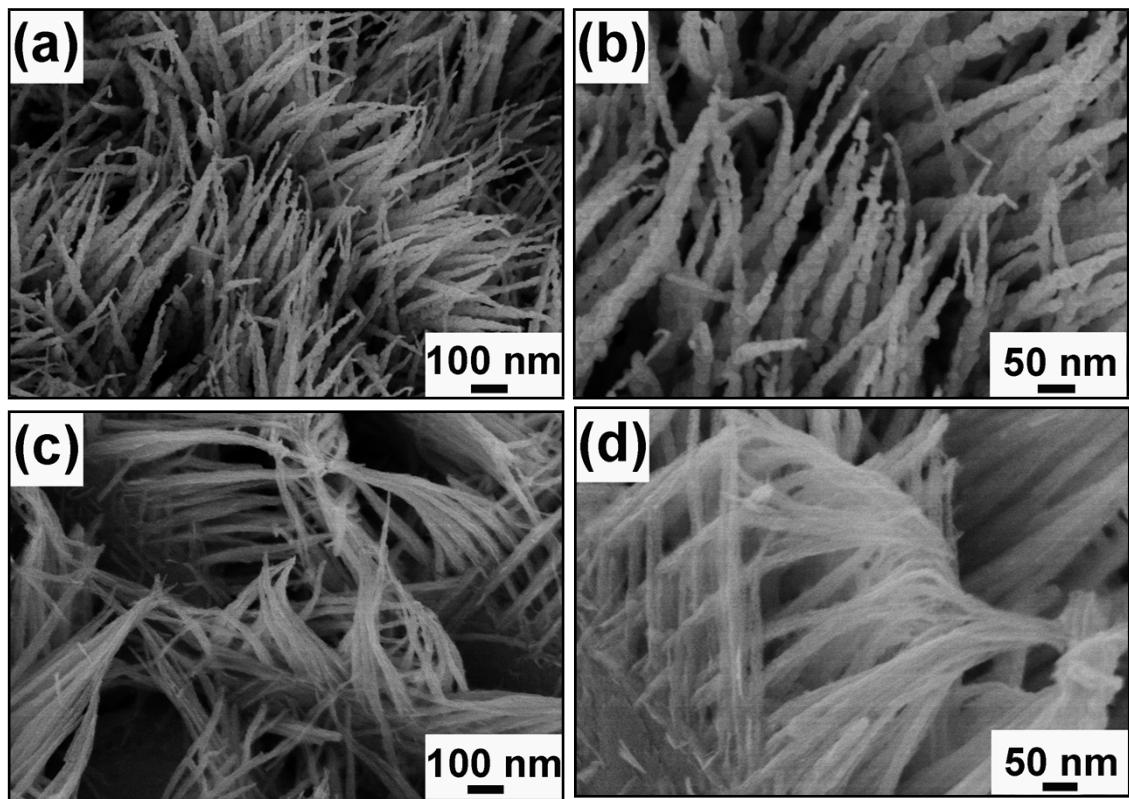


Fig. S2 SEM images of the products obtained with controlling the reaction time for 4h at different concentration of NH_4F (a, b) 0 mmol; (c, d) 12 mmol.

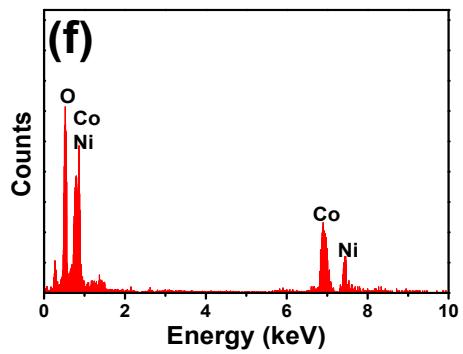
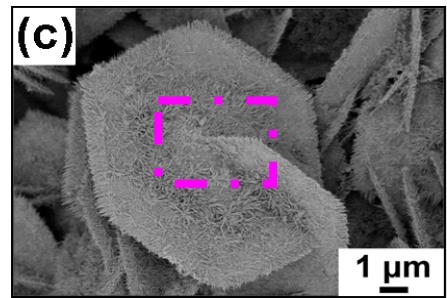
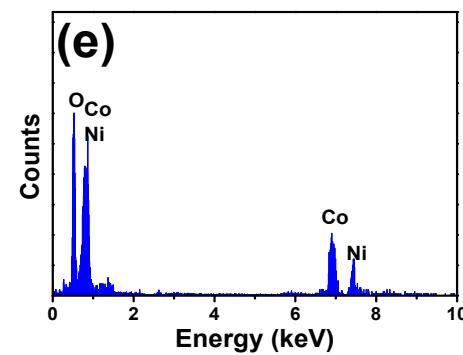
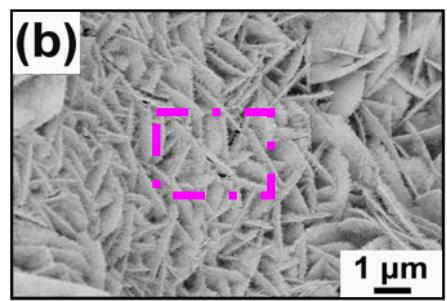
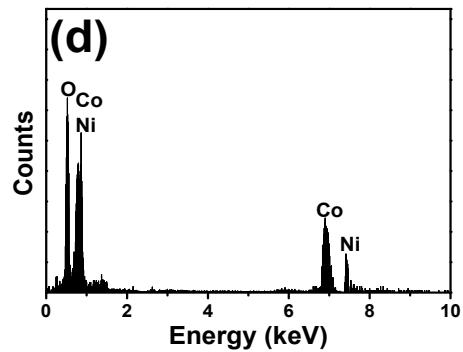
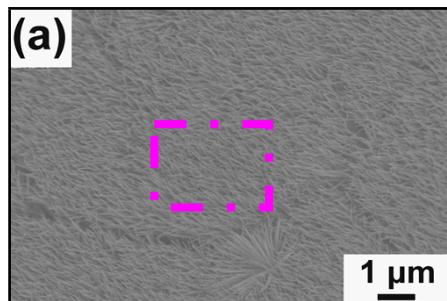


Fig. S3 SEM images of (a, b, c) NPAs, NFAs, NCAs and corresponding EDS patterns of (d, e, f) NPAs, NFAs, NCAs.