

Supporting information:

A tremella-like *In situ* synthesis of ZIF-67Co(OH)F@Co₃O₄ upon carbon cloth as an electrode material for supercapacitor

Shakeel Ahmad^a, Muhammad Tariq^a, Zia Ur Rehman^{*b}, Shanshan Yao^b, Bing Zhu^a, Henmei Ni^{*a}, Muhammad Samiuddin^c, Khalid Ali Khan^d, Magdi E.A. Zaki^e

- a. *School of Chemistry and Chemical Engineering, Southeast University, Nanjing 211189, PR China*
- b. *Institute for Advanced Materials, College of Materials Science and Engineering, Jiangsu University, Zhenjiang 212013, P. R. China*
- c. *Metallurgical Engineering Department, NED University of Engineering and Technology, Karachi, 75850, Pakistan,*
- d. *Advanced Materials Science (RCAMS), King Khalid University, Abha 61413, Saudi Arabia*
- e. *Department of Chemistry, Faculty of Science, Imam Mohammad Ibn Saud Islamic University, Riyadh 13318, Saudi Arabia*

Corresponding author: Henmei Ni (*henmei_ni@seu.edu.cn)

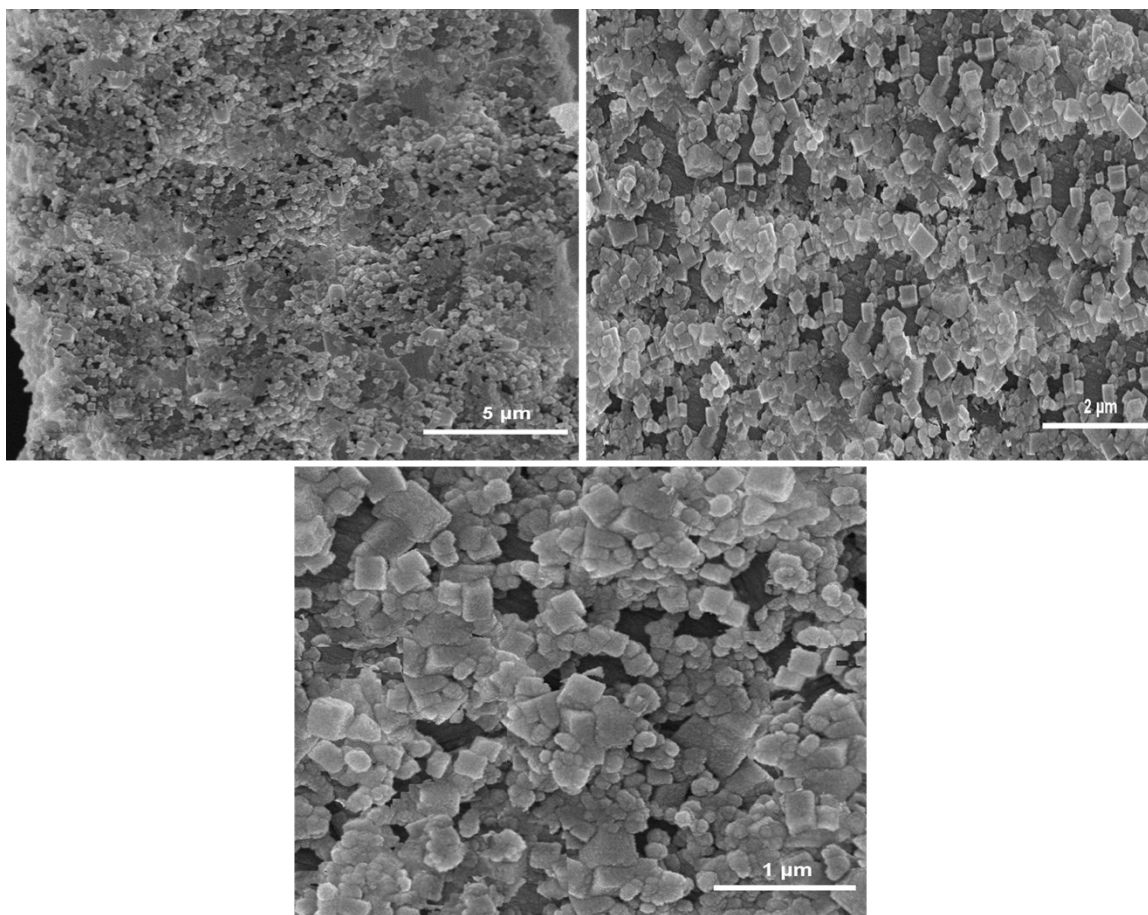


Fig S1. SEM images of ZIF-67Co(OH)F/ CC120 at different magnification.

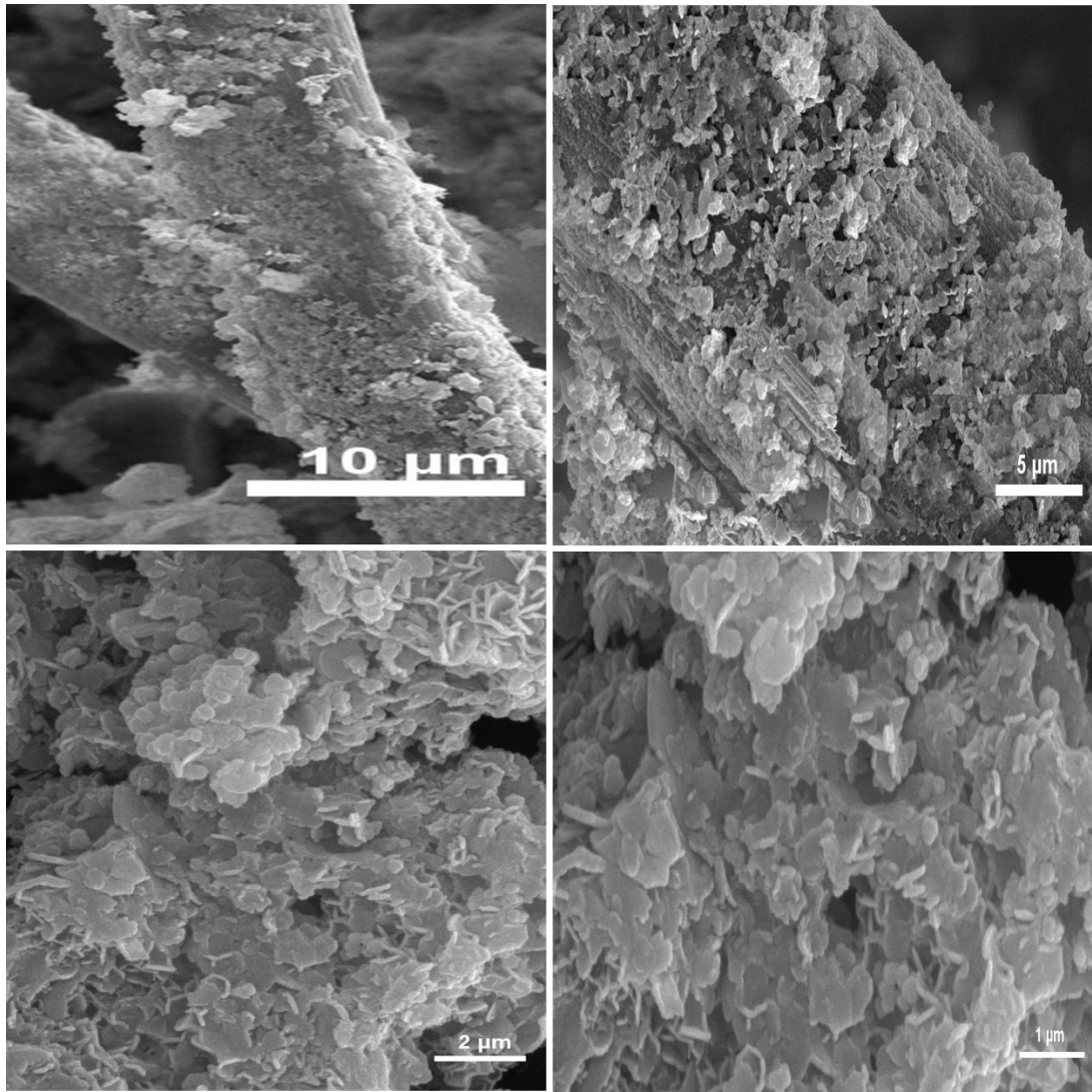


Fig S2. SEM images of ZIF-67Co(OH)F@Co₃O₄/ CC 160 at different magnification.

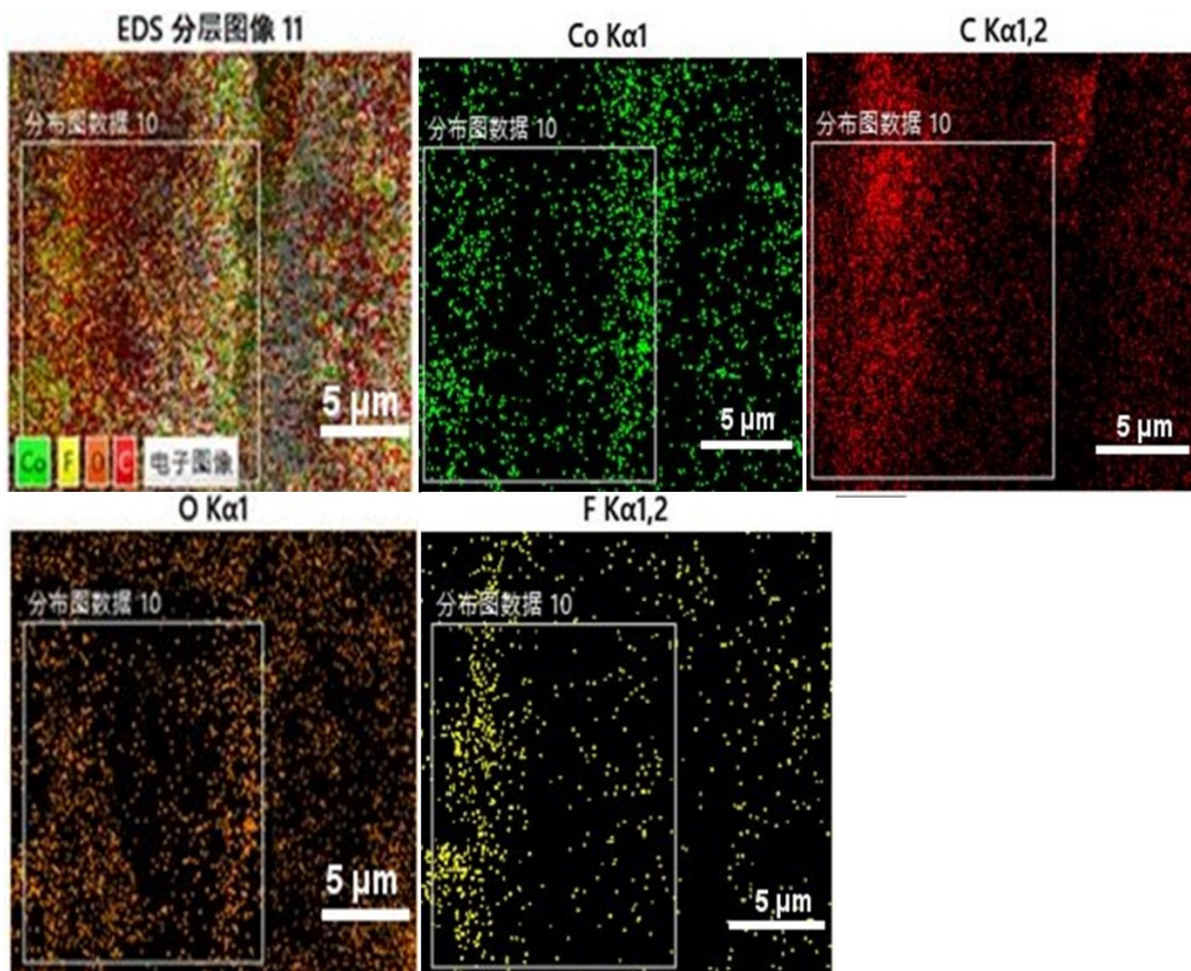


Fig S3. EDS mapping result of O,C,Co, and F in ZIF-67Co(OH)F@Co₃O₄200

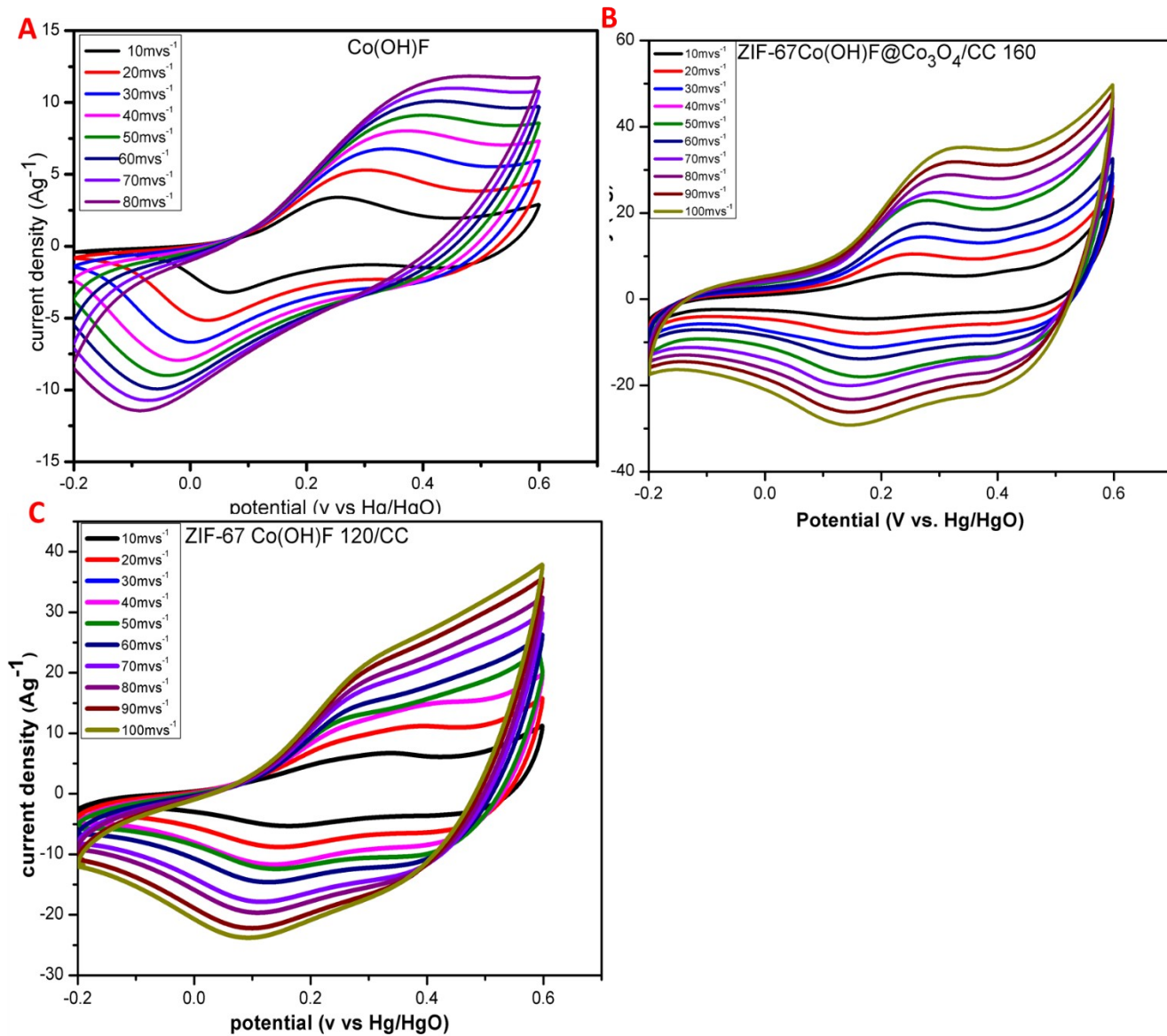


Fig. S4. (a) CV curves of Co(OH)F (b) CV curves of ZIF67-Co(OH)F@Co₃O₄160(c) CV curves of ZIF67-Co(OH)F120

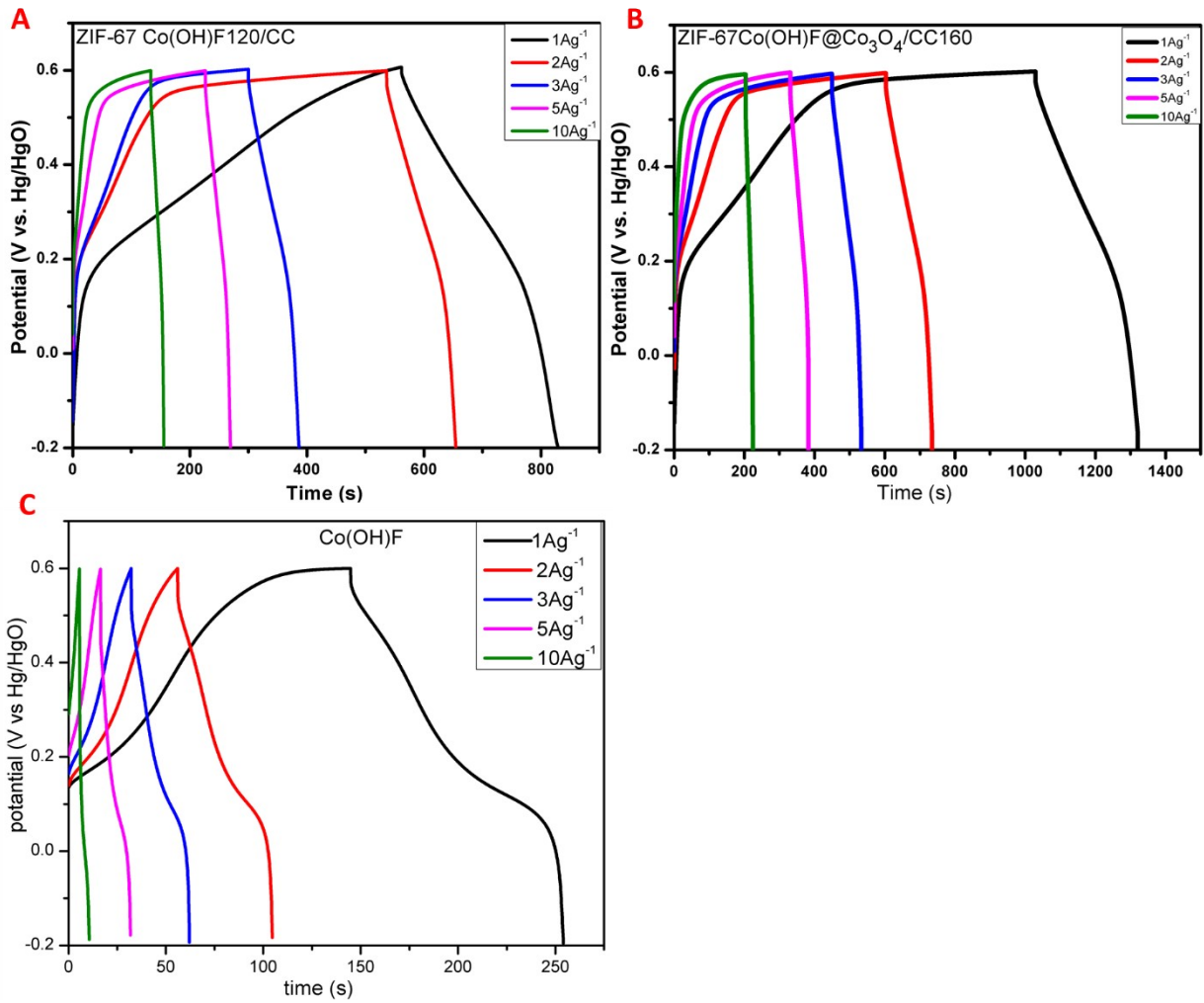


Fig. S5. (a) GCD curves of ZIF67-Co(OH)F/CC 120, (b) GCD curves ZIF67-Co(OH)F@Co₃O₄160(c) GCD curves of Co(OH)F

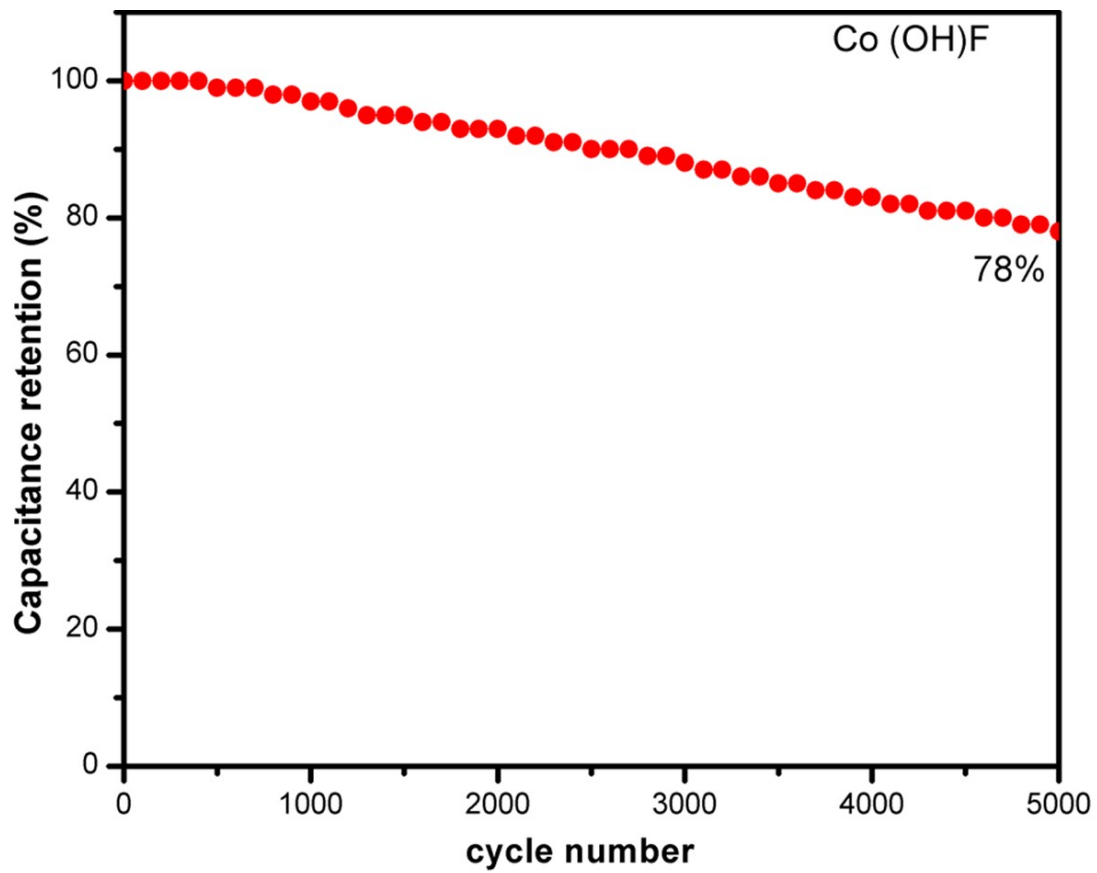


Fig.S6. cyclic stability at current density of 10Ag^{-1} of Co(OH)F electrode.