

Supporting materials

Preparation of conductive microfiltration membrane and its performance in a coupled configuration of membrane bioreactor with microbial fuel cell

Lihua Huang^{1,2,3,4}, Xiufen Li^{1,3,4,*}, Yueping Ren^{1,3,4}, and Xinhua Wang^{1,3,4}

¹Laboratory of Environmental Biotechnology, School of Environmental and Civil Engineering, Jiangnan University, Wuxi 214122, PR China

²School of Agriculture and Forestry Science, Linyi University, Linyi 276005, PR China

³Jiangsu Key Laboratory of Anaerobic Biotechnology, Wuxi 214122, PR China

⁴Jiangsu Cooperative Innovation Center of Technology and Material of Water Treatment, Suzhou 215009, PR China

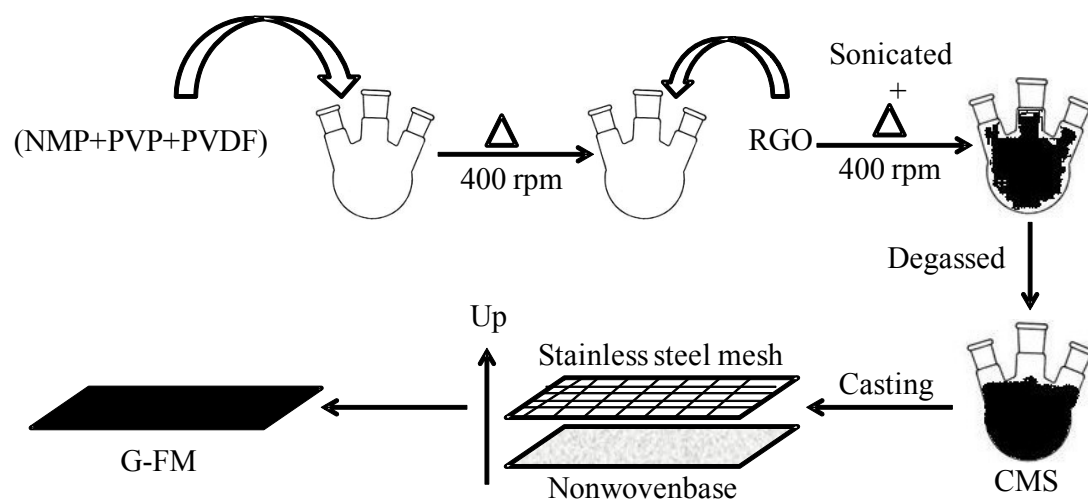


Fig. S1 Sketch map of the preparation for G-FM

*Address correspondence to Professor Xiufen Li, Laboratory of Environmental Biotechnology, School of Environmental and Civil Engineering, Jiangnan University, Wuxi 214122, China.

E-mail: xfli@jiangnan.edu.cn. Tel.: +86 510 85326516.(X. Li)

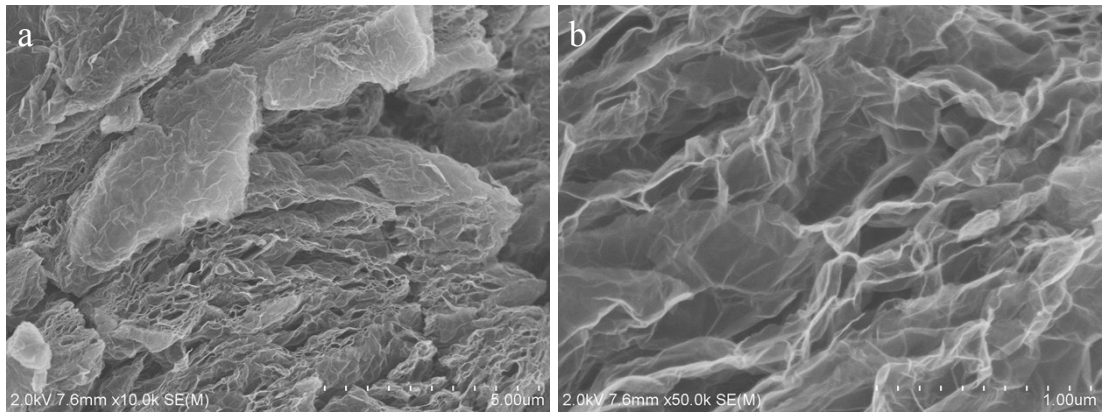


Fig. S2 SEM images of the graphene nanosheets prepared by redox method, (a, $\times 10,000$) and (b, $\times 50,000$).

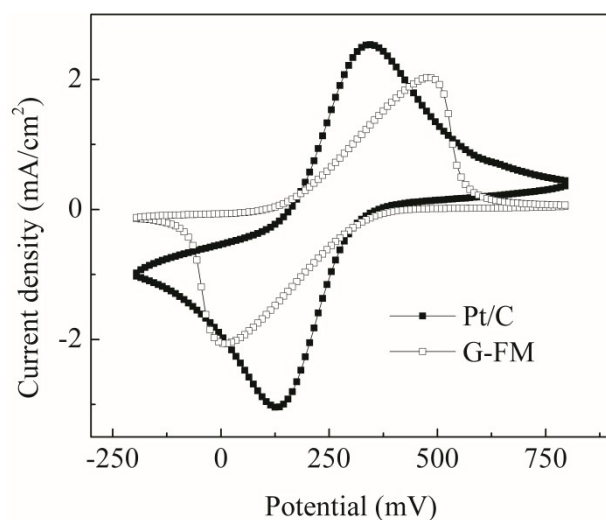


Fig. S3 CV curves of the bare Pt/C and prepared G-FM in 1 mol/L KCl containing 0.05 mol/L $K_3[Fe(CN)_6]$ at a scanning rate of 5 mV/s.

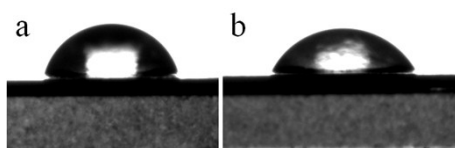


Fig. S4 Contact angles of the commercial FM (a) and prepared G-FM (b).

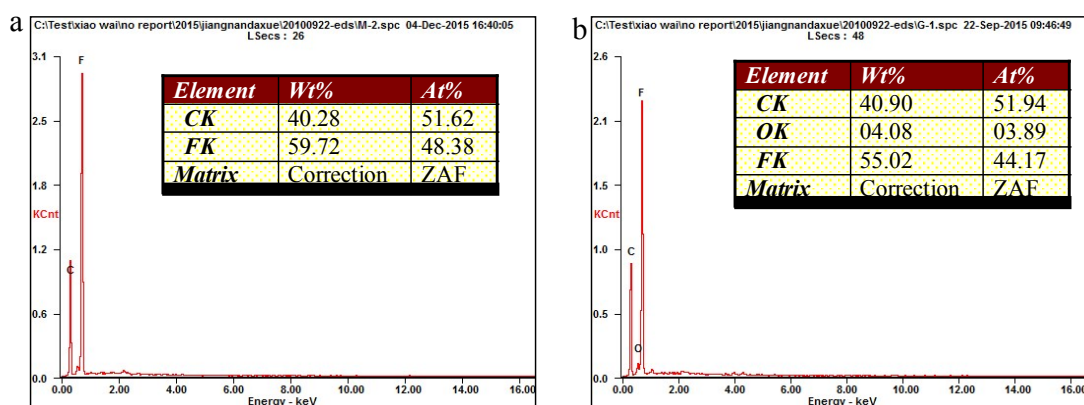


Fig. S5 EDX spectra of the commercial FM (a) and prepared G-FM (b).