Stable and efficient photoinduced charge transfer of $MnFe_2O_4$/Polyaniline photoelectrode in highly acidic solution

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Experiment part

Hydrothermal method is must common method to prepare nanostructure materials such as nanowire, spherical nanoparticles, nanoflower and more. Such method is highly uniform morphology and single crystals compared with other wet chemical method such as ion-exchange precipitation method. The growth start when small nucleus in water solution start self-assembly and became solid. The process is normally carried out in an apparatus consisting of a steel pressure vessel called autoclave[1].

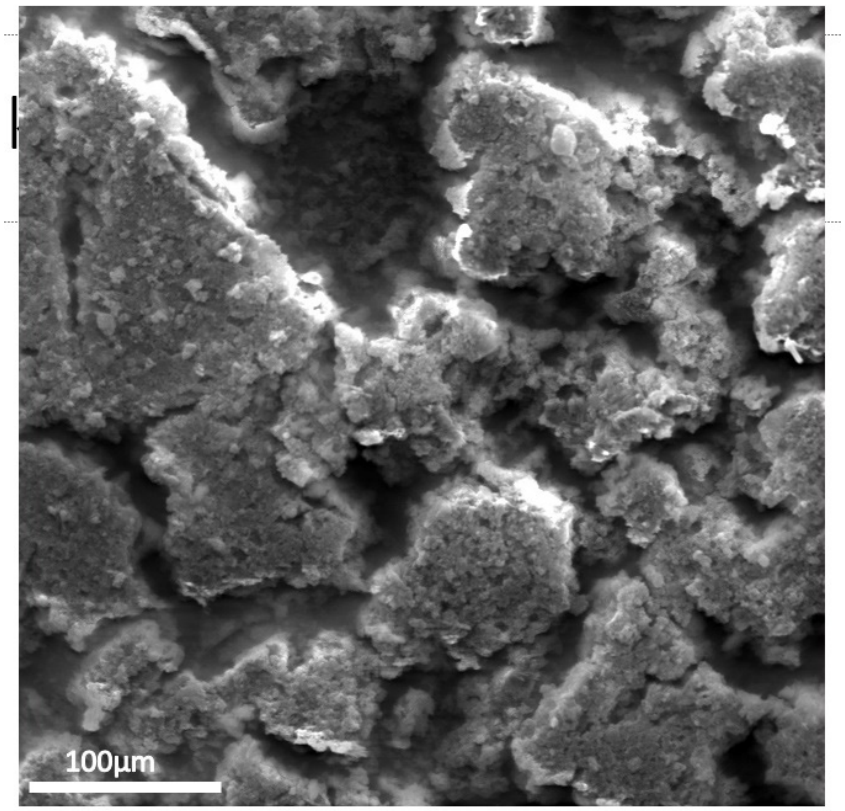

Figure S1. SEM image shows a further ratio of $Mn_2Fe_2O_4$/PANi causes unstable and rough

1. Feng, S. H.; Li, G. H., Chapter 4 - Hydrothermal and Solvothermal Syntheses. In *Modern Inorganic Synthetic Chemistry (Second Edition)*, Xu, R.; Xu, Y., Eds. Elsevier: Amsterdam, 2017; pp 73-104.