

**Supporting materials for:**

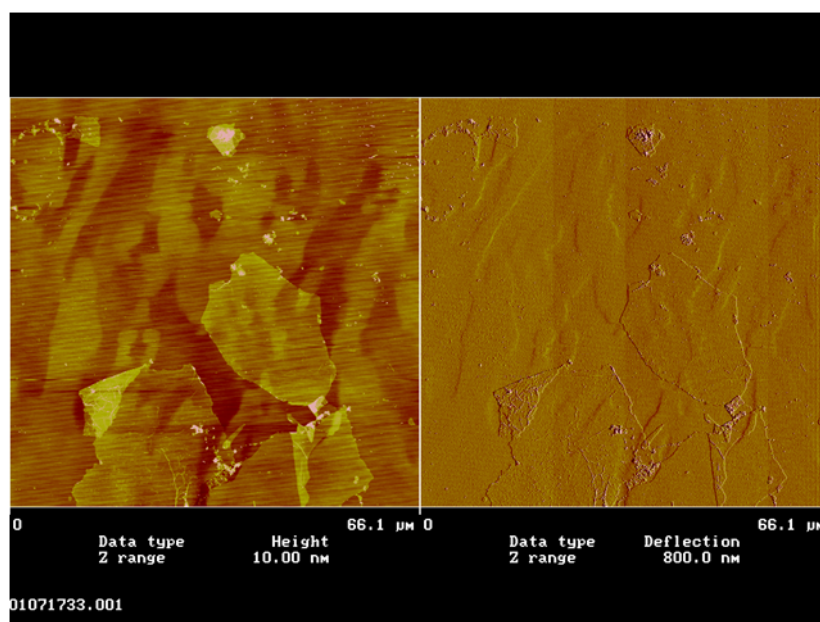
**Preparation of Macroporous Flexible Three Dimensional Graphene Sponge**

**Using Ice-Template as Anode Material for Microbial Fuel Cell**

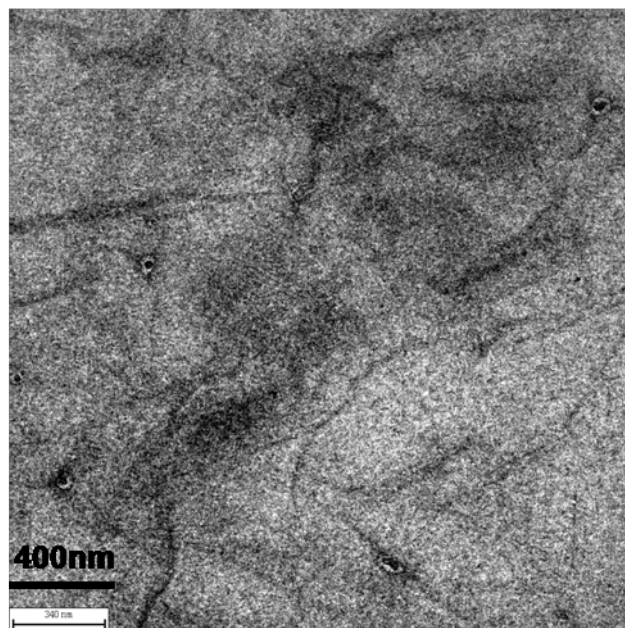
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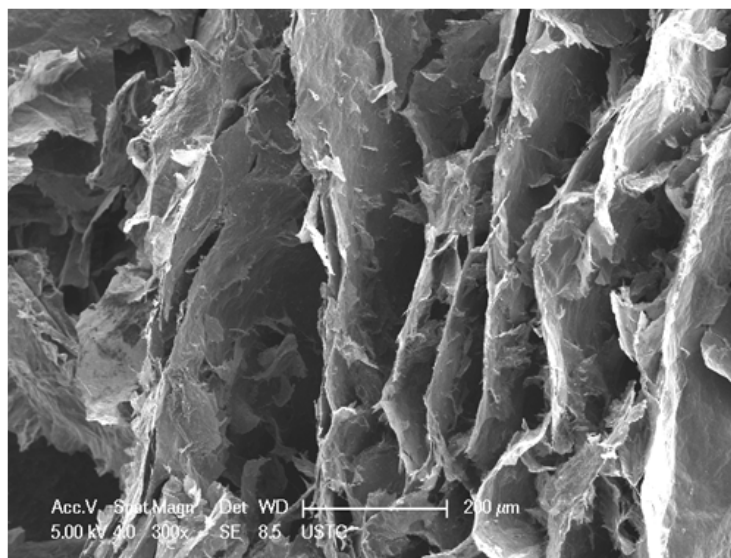
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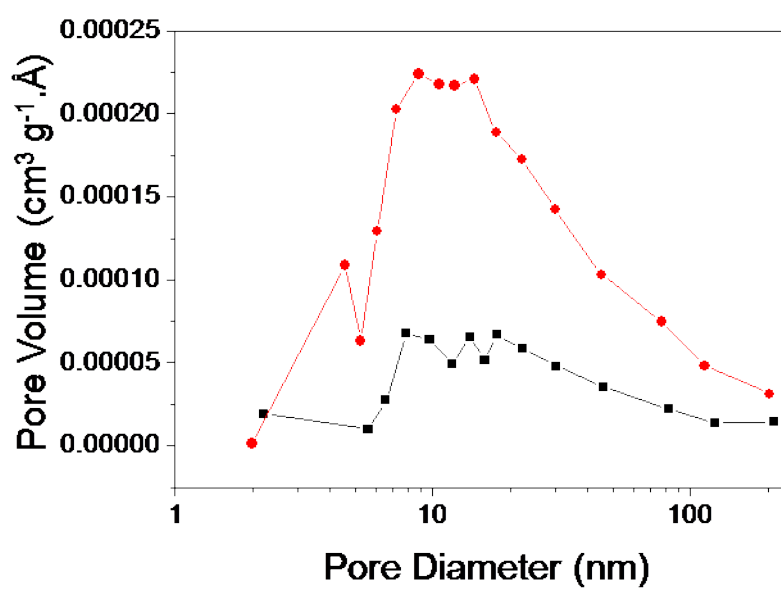
**Figure S1.** AFM image of large GO sheets on the surface of mica.



**Figure S2.** TEM image of reduced graphene sheet from graphene hydrogel.



**Figure S3.** SEM image of hierarchical GS with paralleled graphene films.



**Figure S4.** Pore size distribution of GS (red) and GF (black).

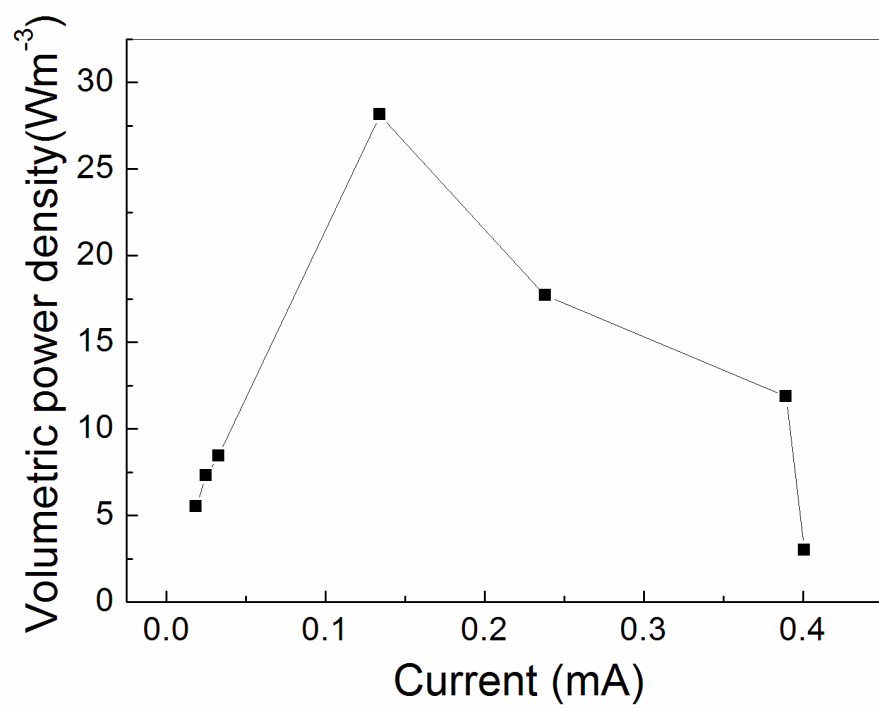
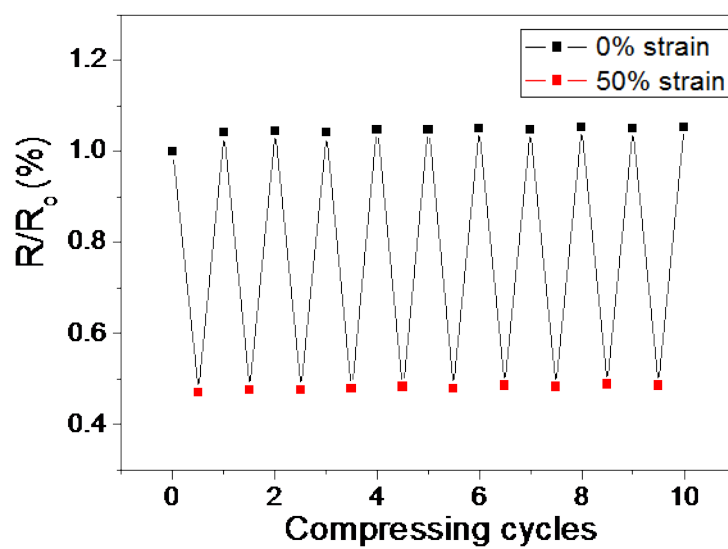
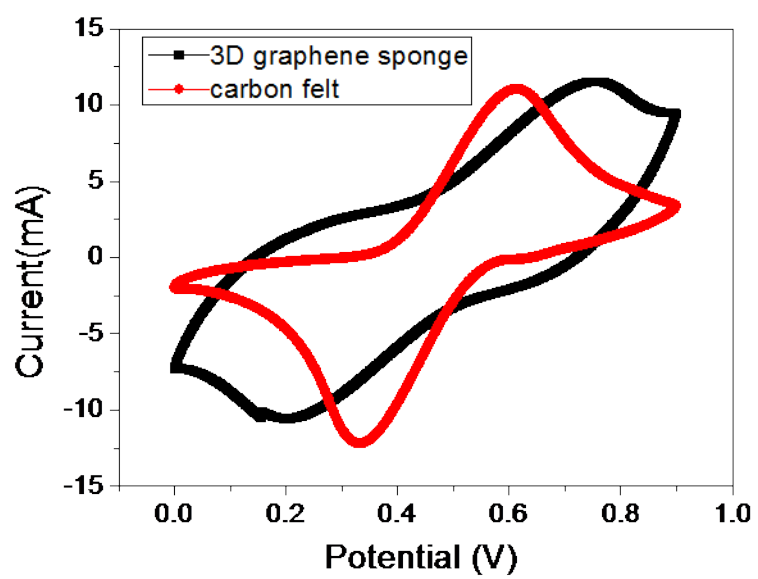


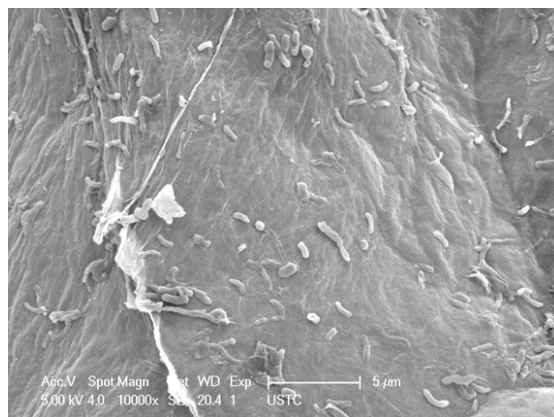
Figure S5. Effect of current on the power density



**Figure S6.** Electrical resistance change when GS was repeatedly compressed up to 50% of strain for 10 cycles.

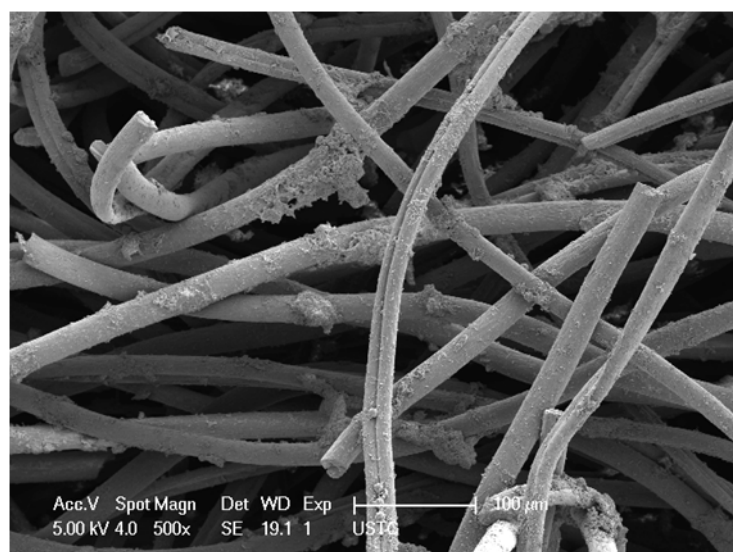


**Figure S7.** CV analysis of GS electrode and carbon felt electrode using a ferrocyanide solution, indicating similar electroactive surface areas of GS and CF.



**Figure S8.** SEM image of microbes deposited on graphene films, more close to the inner of GS.





**Figure S9.** SEM image of the colonized carbon fibers inside carbon felt.

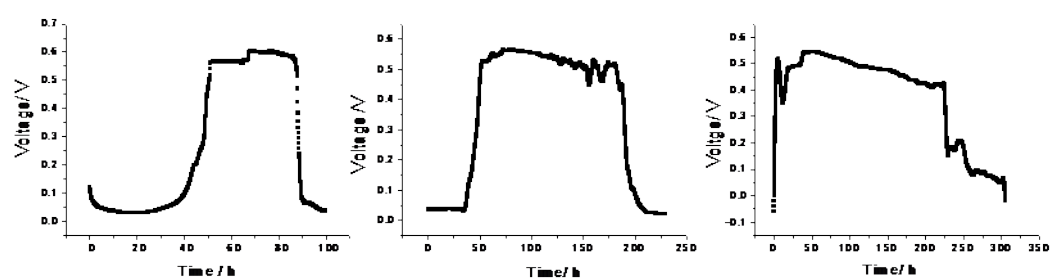


Figure S10. repeat of the experiments