

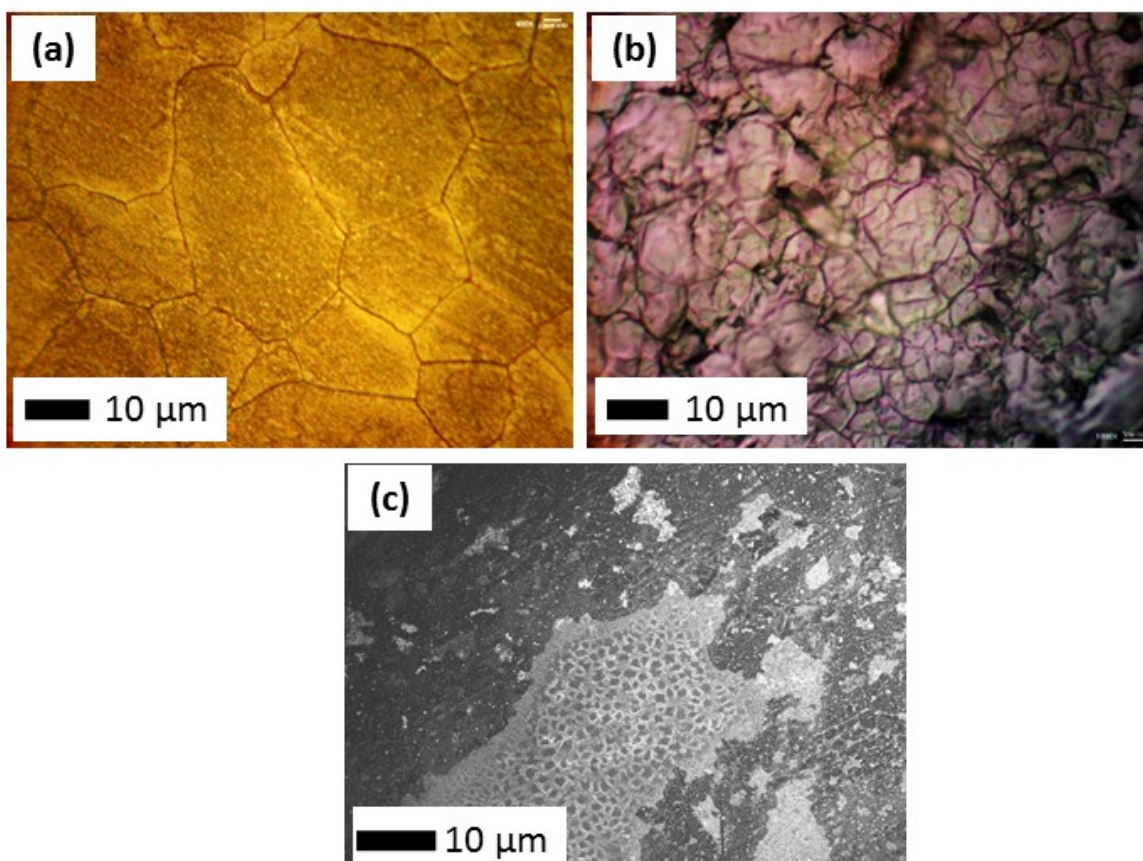
## Supplementary Information

### Additive-Free Thick Graphene Film as an Anode Material for Flexible Lithium-Ion Batteries

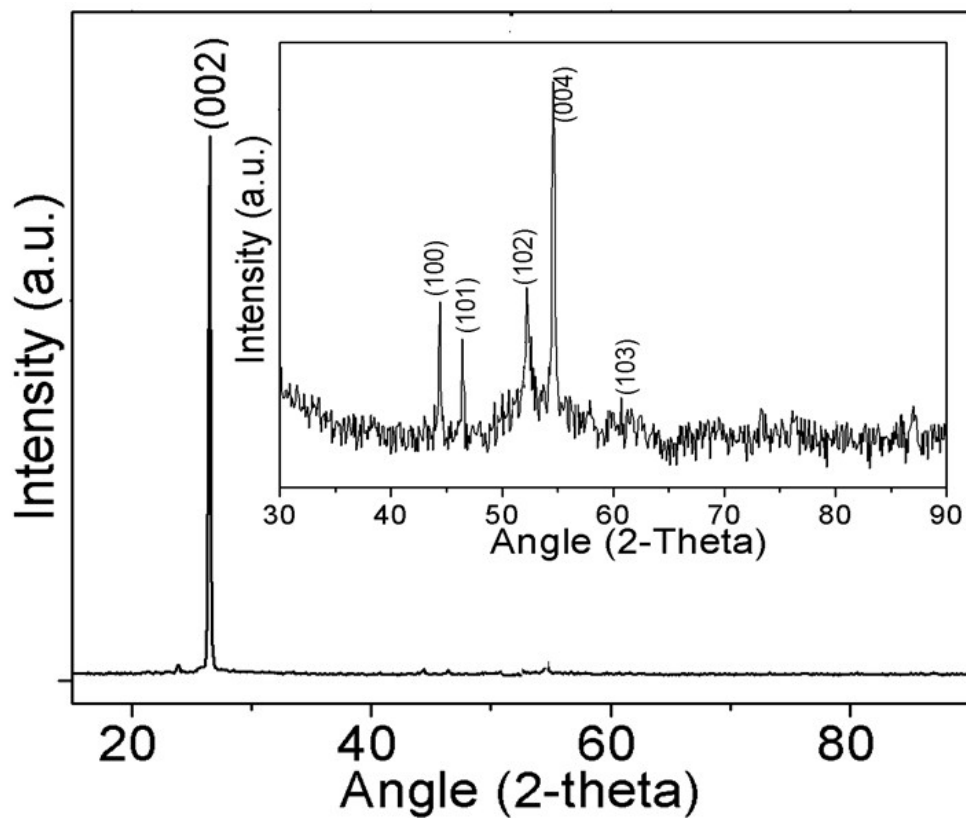
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**Fig. S1** Optical images of (a) Ni surface after annealing at 1000 °C, shows the Ni-grain (b) Thick graphene surface grown over Ni-surface (c) SEM image of FSG surface after 50 charge/discharge cycles.



**Fig. S2** XRD of free standing graphene film and inset shows the zoomed area.



XRD pattern of FSG after Ni-etching in figure shows the pure 2H-graphitic crystal structure without any remaining impurities of Ni and all the peaks are indexed as a 2H-graphite with very good crystallinity.