

Fig. S1 The schematic diagram of the reactor system

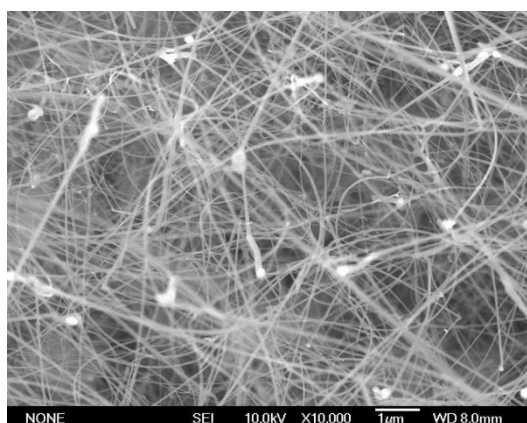


Fig. S2 The SEM image of SiC nanowires on Si substrate by using $\text{Ni}(\text{NO}_3)_2$ (0.04M) as catalyst