

Supporting Information

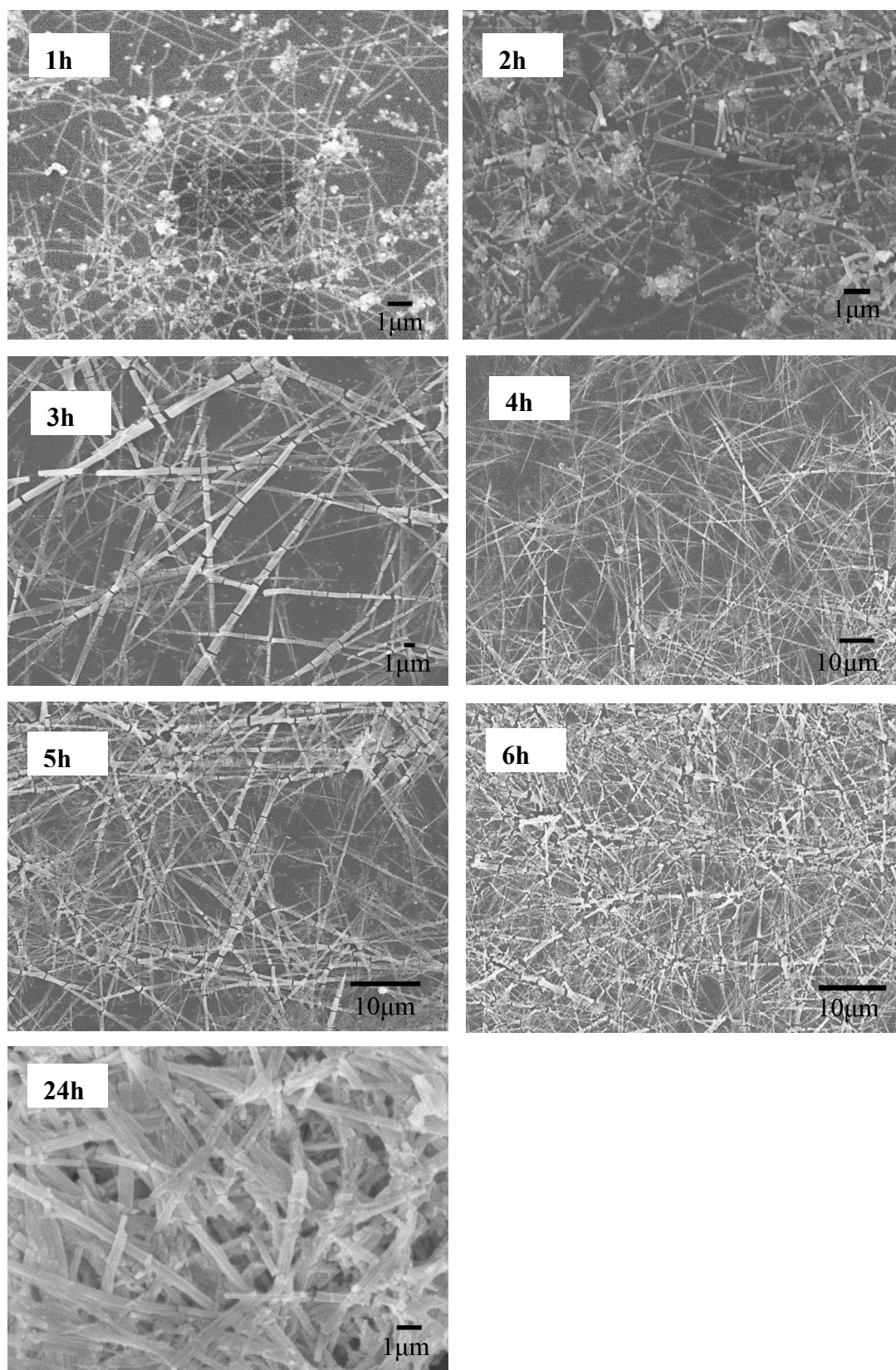


Fig. S11. Typical SEM images of Au microstructures on the silicon substrate at different growth times for the first case.

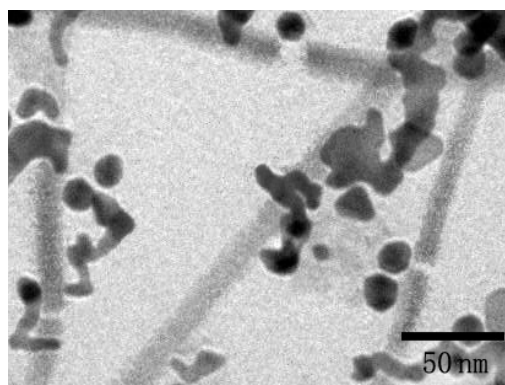


Fig.SI2. Typical TEM image of Au microstructures for the first case..

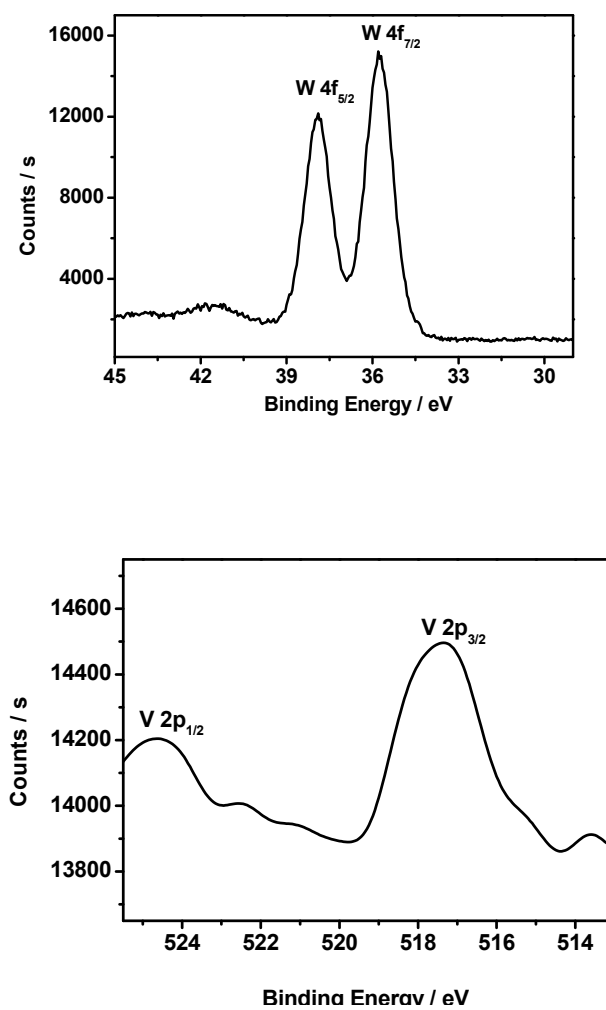


Fig. SI3. XPS spectra of the Au microstructures of W 4f and V 2p at $\gamma = 10$.

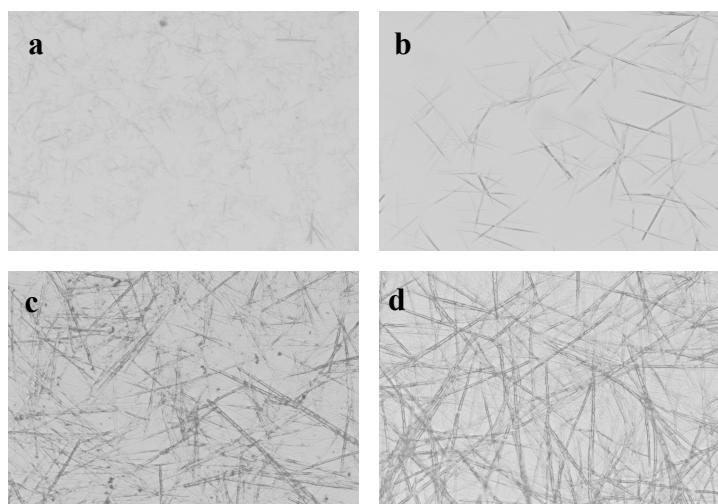


Fig. SI4. The optical micrographs of Au microstructures on the glass slide at (a) 15 min; (b) 20 min; (c) 25 min; (d) 40 min.