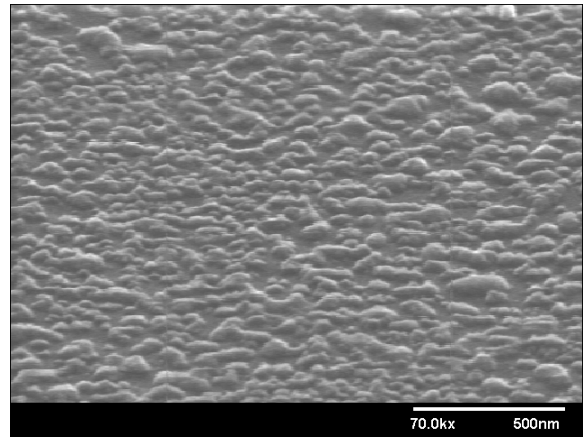
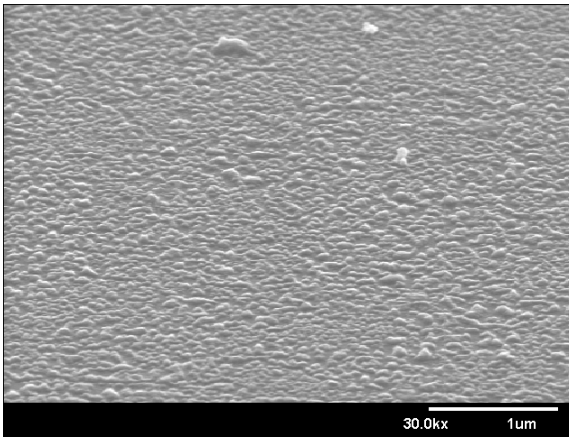
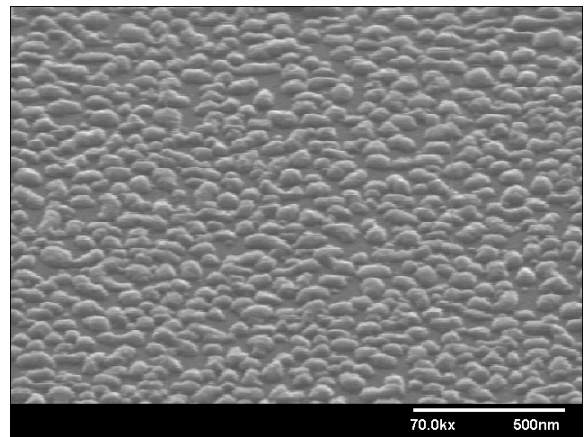
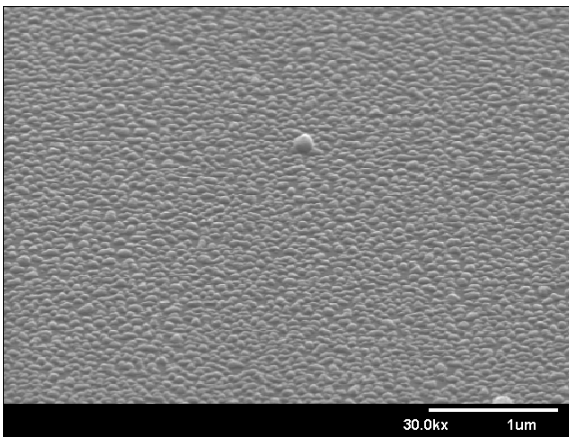


**C1、550°C H<sub>2</sub>:300 (Ni 1 nm)**



**C2、550°C H<sub>2</sub>:300 (Ni 5 nm)**



**C3、550°C H<sub>2</sub>:300 (Ni 7 nm)**

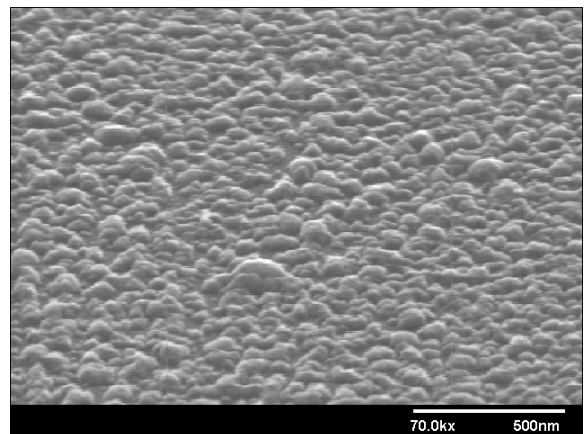
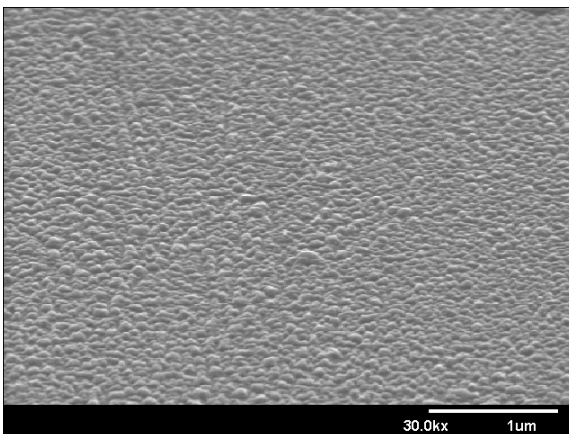
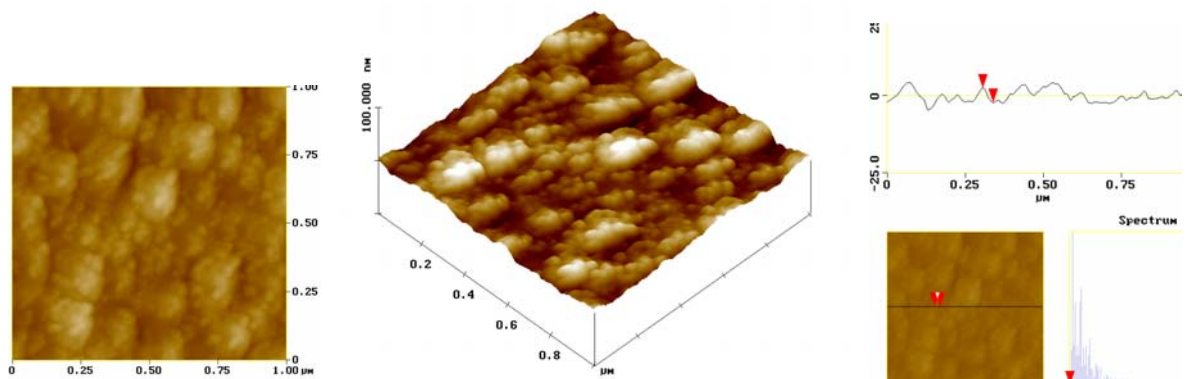
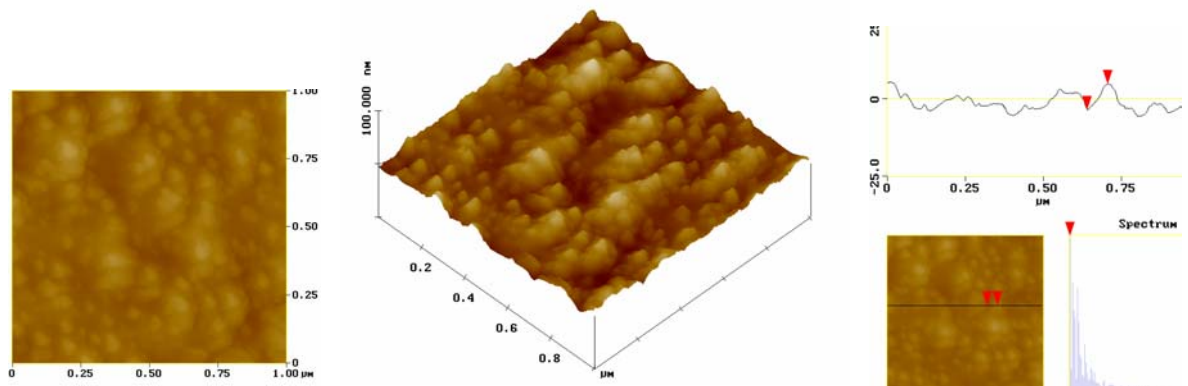


圖 4-10 製程 C 無緩衝層試件(1、2、3) SEM 圖面(30、70 kx)

C1、550°C H<sub>2</sub>:300 (Ni 1 nm) ; Rms 2.720 nm



C2、550°C H<sub>2</sub>:300 (Ni 5 nm) ; Rms 3.146 nm



C3、550°C H<sub>2</sub>:300 (Ni 7 nm) ; Rms 4.318 nm

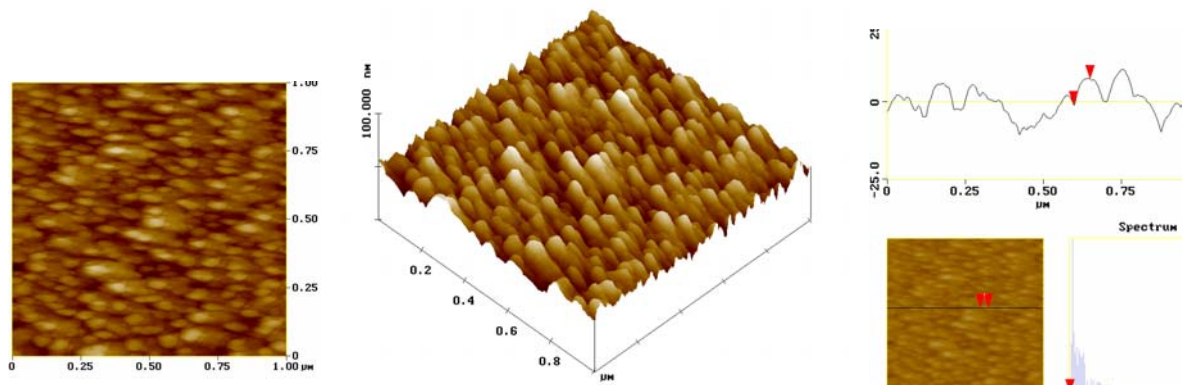
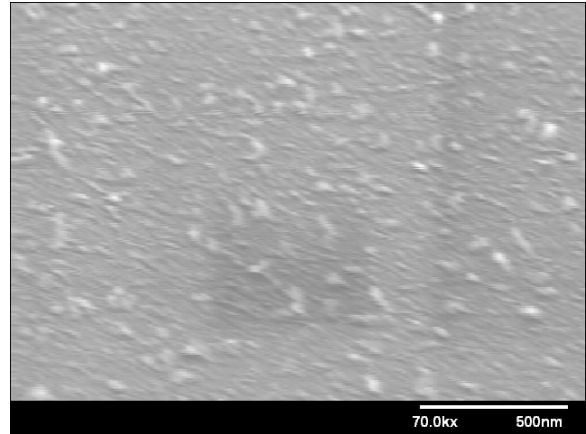
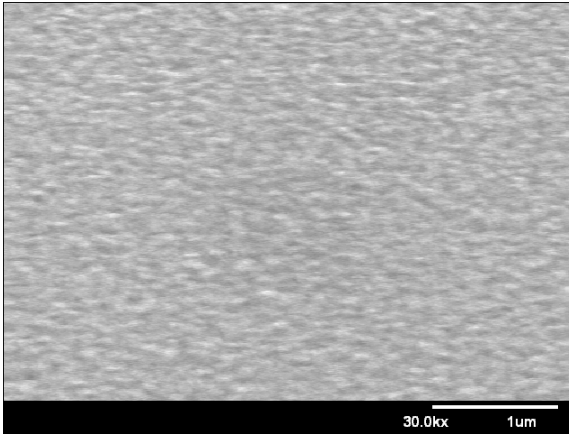
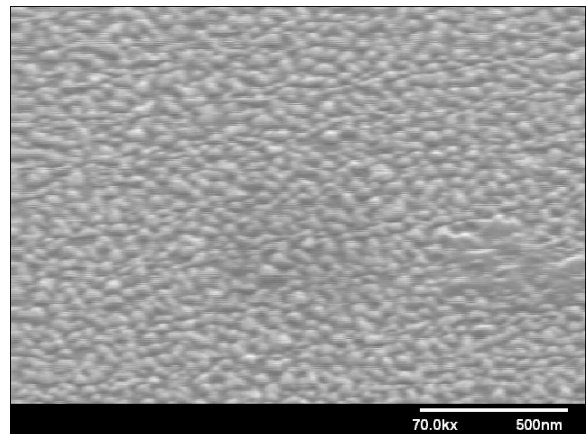
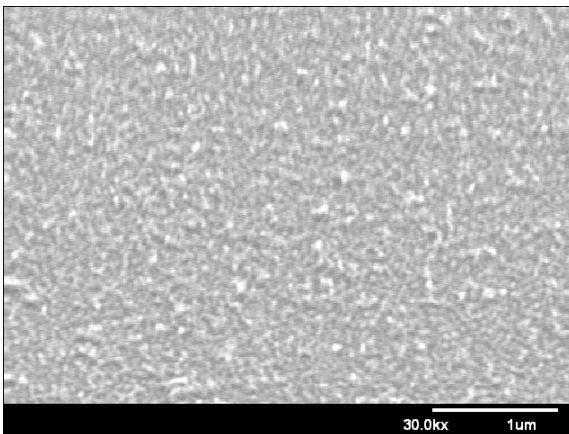


圖 4-11 製程 C 無緩衝層試件(1、2、3) AFM 圖面

**D1、600°C H<sub>2</sub>:100 (Ni 1 nm)**



**D2、600°C H<sub>2</sub>:100 (Ni 5 nm)**



**D3、600°C H<sub>2</sub>:100 (Ni 7 nm)**

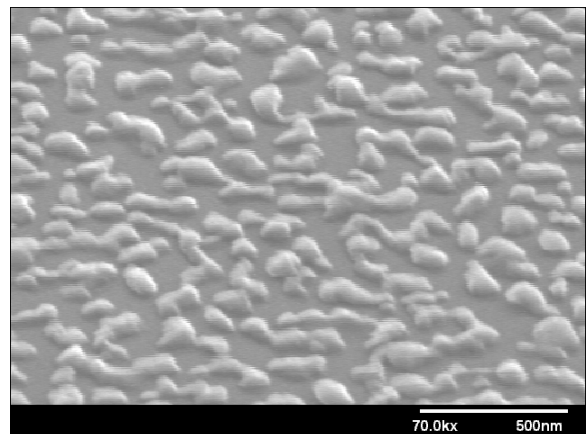
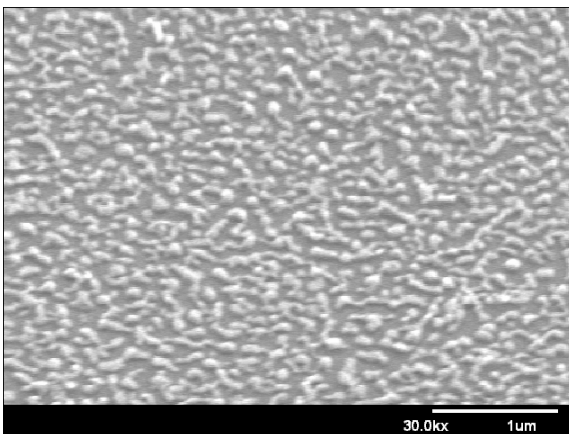
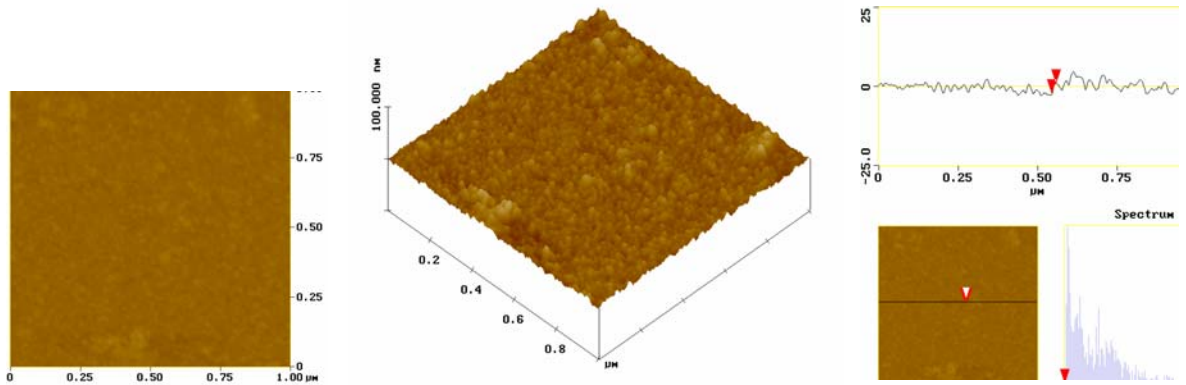
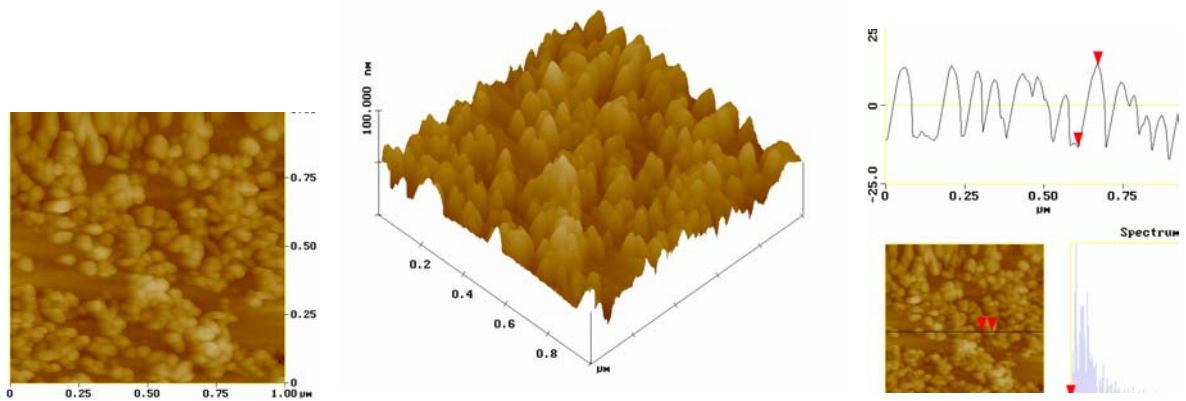


圖 4-12 製程 D 無緩衝層試件(1、2、3) SEM 圖面(30、70 kx)

D1、600°C H<sub>2</sub>:100 (Ni 1 nm) ; Rms 1.532 nm



D2、600°C H<sub>2</sub>:100 (Ni 5 nm) ; Rms 8.813 nm



D3、600°C H<sub>2</sub>:100 (Ni 7 nm) ; Rms 15.532 nm

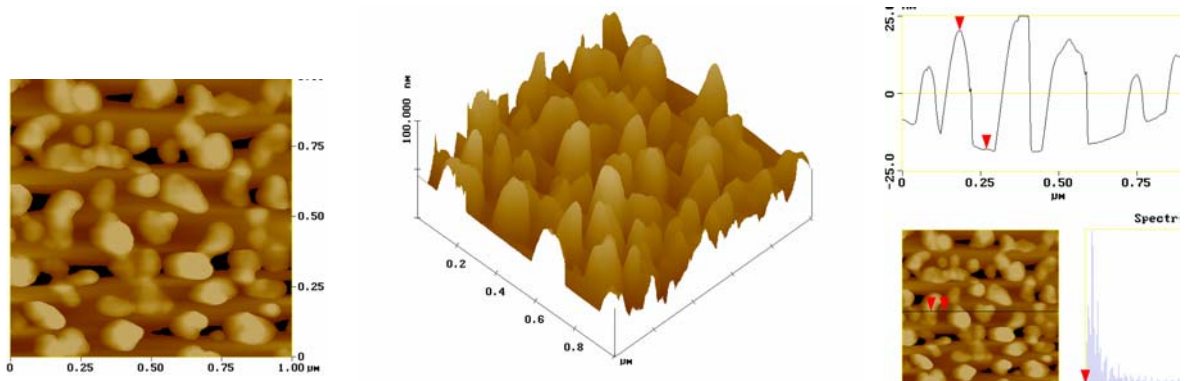


圖 4-13 製程 D 無緩衝層試件(1、2、3) AFM 圖面