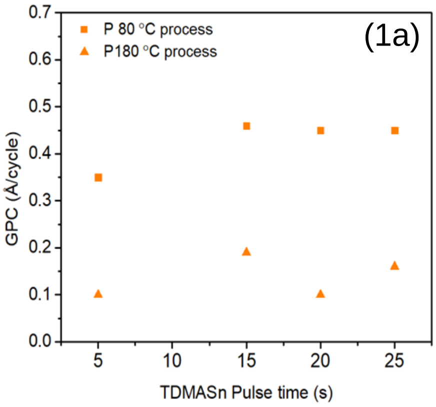

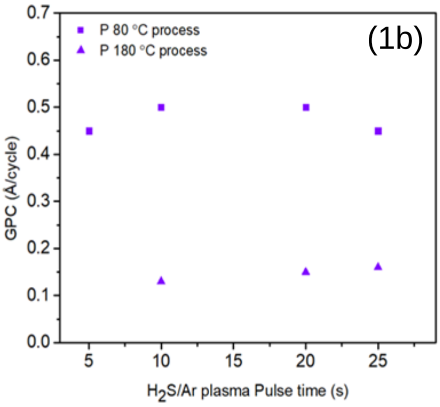

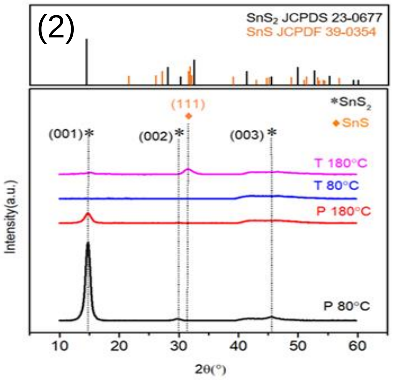

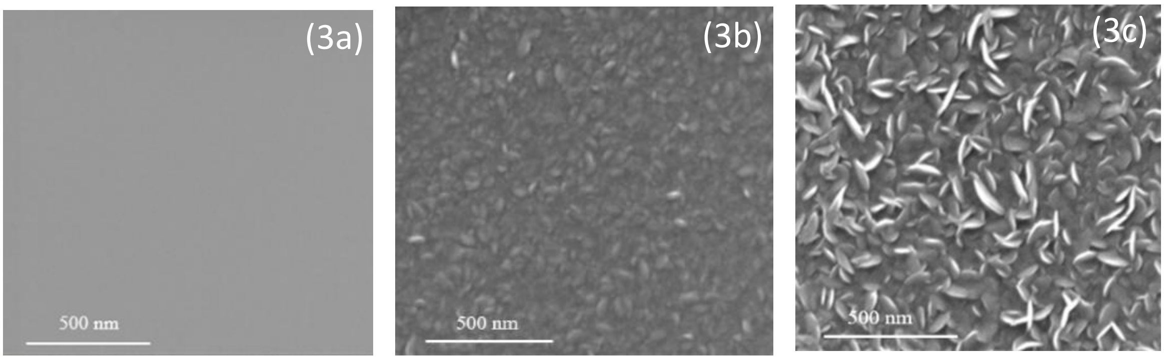

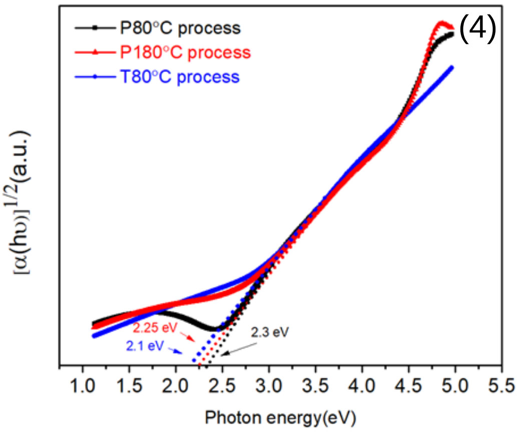

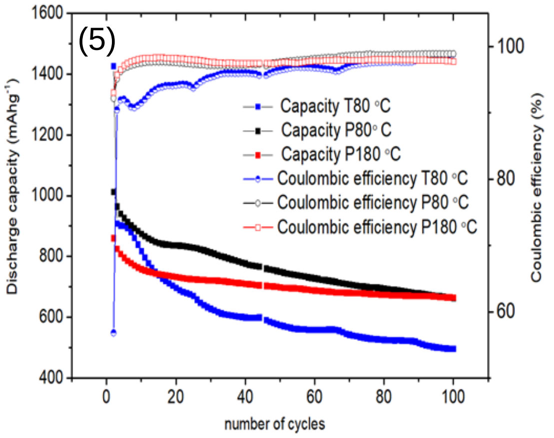

Fig. (1a) GPC against the TDMASn pulse time for PE - ALD process at 80°C and 180°C **Fig. (1b)** GPC against the H_2S plasma pulse time for PE - ALD process at 80°C and 180°C. **Fig. (2)** XRD of the thin films deposited by PE-ALD and thermal ALD process at 80°C and 180 °C. **Fig. (3)** Top view SEM images for SnS_2 thin films deposited by **(3a)** Thermal ALD process at 80 °C **(3b)** PE - ALD process at 80 °C **(3c)** PE - ALD process at 180 °C. **Fig. (4)** Tauc plot of the SnS_2 thin films deposited by PE - ALD process at 80 °C and 180 °C, and thermal ALD process at 80 °C. **Fig. (5)** Cyclic performance of all as deposited SnS_2 electrodes by PE - ALD process at 80 °C and 180 °C, and thermal ALD process at 80 °C.