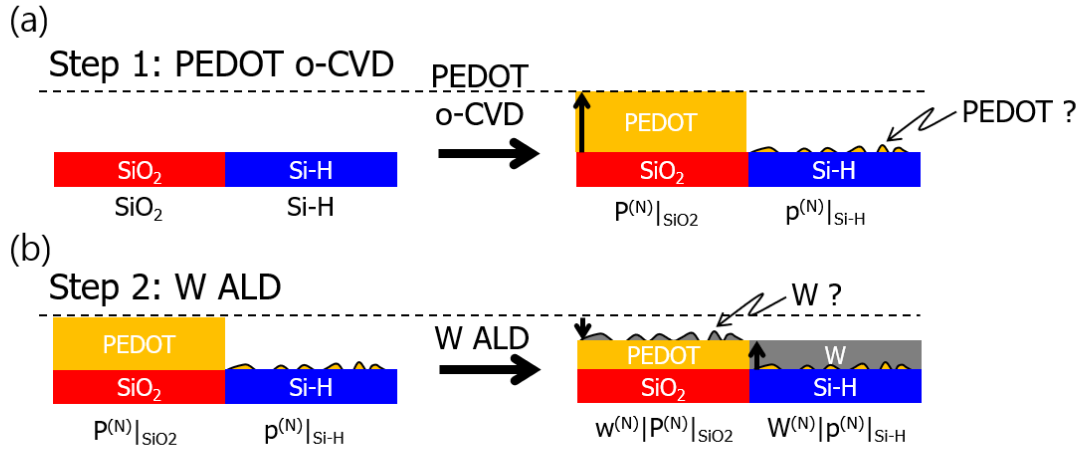

Scheme 1. Schematic for the sequential ASD of PEDOT and W. (a) ASD of PEDOT on SiO_2 (growth region) vs. Si-H (non-growth region) through o-CVD. (b) ASD of W on Si-H (growth region) vs. PEDOT deposited SiO_2 (non-growth region).

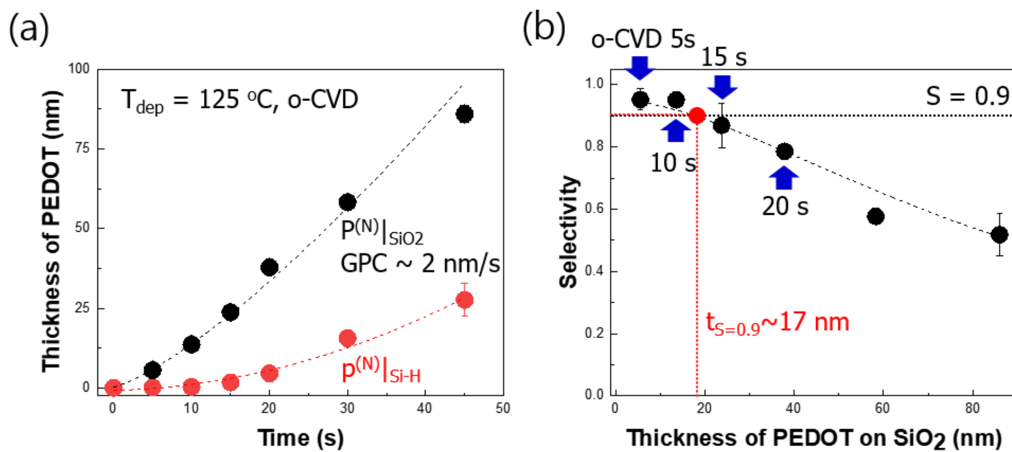

Figure 1. (a) The thickness of PEDOT films on SiO_2 (black) and Si-H (red) substrates as a function of time. The thickness is measured using *ex-situ* spectroscopy ellipsometry (SE). (b) The selectivity (S) estimated by thickness for PEDOT on SiO_2 vs. Si-H.

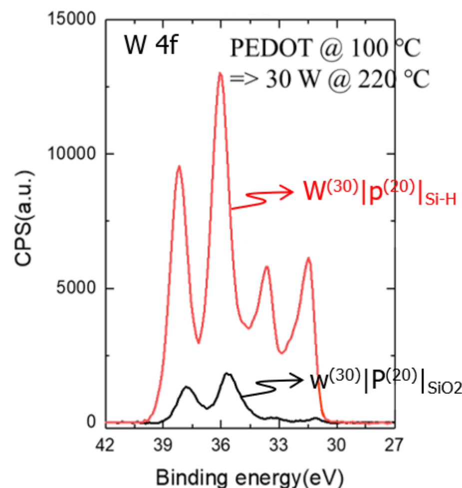

Figure 2. The *ex-situ* high resolution XPS data collected from PEDOT deposited on SiO_2/Si-H substrates, respectively, after 30 cycles of W ALD.