

**Supplementary FIGURES: Mullanpudi et al. Plasma Enhanced Atomic Layer of  $WO_x$  Using a Wide Temperature Stability Precursor**

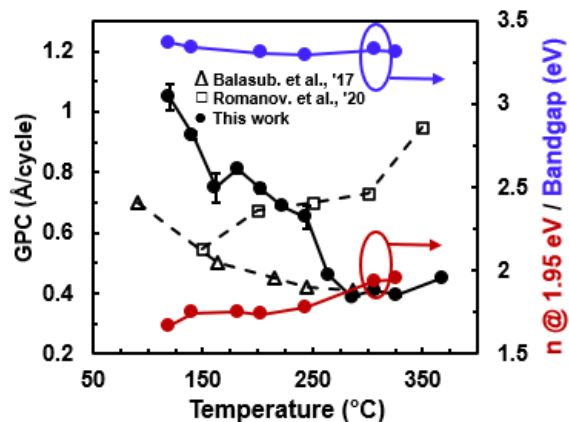


Fig. 1. GPC (black circles), refractive index (red circles) at 1.95 eV, and bandgap (blue circles) vs. temperature for 300 cycle ALD  $WO_x$  film on silicon. Open symbols show GPC values from other precursors in literature.

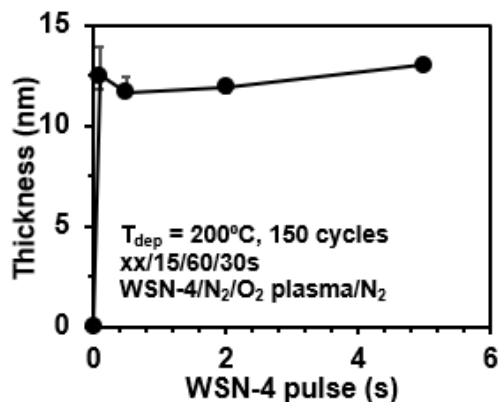


Fig. 2. Thickness vs. WSN-4 pulse time for a 150 cycle  $WO_x$  film deposited at  $200^\circ\text{C}$ .

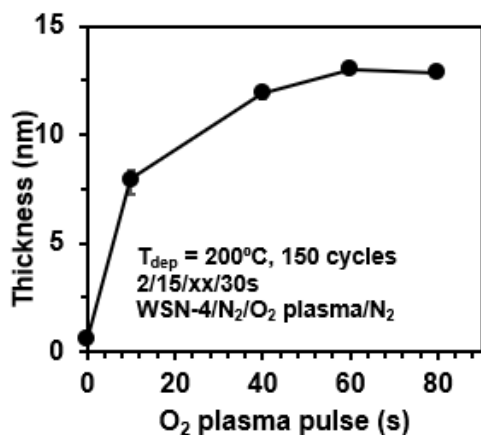


Fig 3. Thickness vs.  $O_2$  plasma pulse time for a 150 cycles  $WO_x$  film deposited at  $200^\circ\text{C}$ .

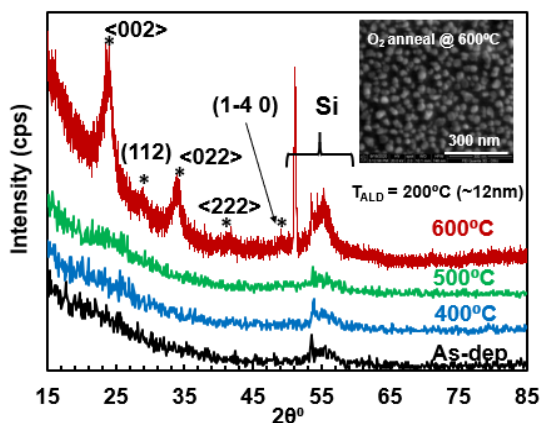


Fig 4. GI-XRD of a  $200^\circ\text{C}$ , 150 cycle film isochronally (60 minutes) annealed in  $O_2$  at up to  $600^\circ\text{C}$ . Triclinic  $WO_3$  phase seen at  $600^\circ\text{C}$  (REF: JCPDS 20-1323). Inset shows a plan SEM image of a  $600^\circ\text{C}$  annealed film.