



**Figure 1:** Thickness of PEDOT (from ellipsometry) vs deposition time on SiN (red), SiO<sub>2</sub> (black), and Si (Blue) surfaces after: (a) 5s diluted HF wet etch; (b) HF + 1 cycle of MoF<sub>6</sub>/N<sub>2</sub>; (c) HF + 15 cycles of DMATMS/N<sub>2</sub>; and (d) HF + 15 cycles of DMATMS/N<sub>2</sub> followed by 15 min in liquid deionized H<sub>2</sub>O. Above each graph is a cartoon showing the configuration of the resulting ASD for each treatment. The sequence allows multiple configurations for this “three-color” set of surfaces.