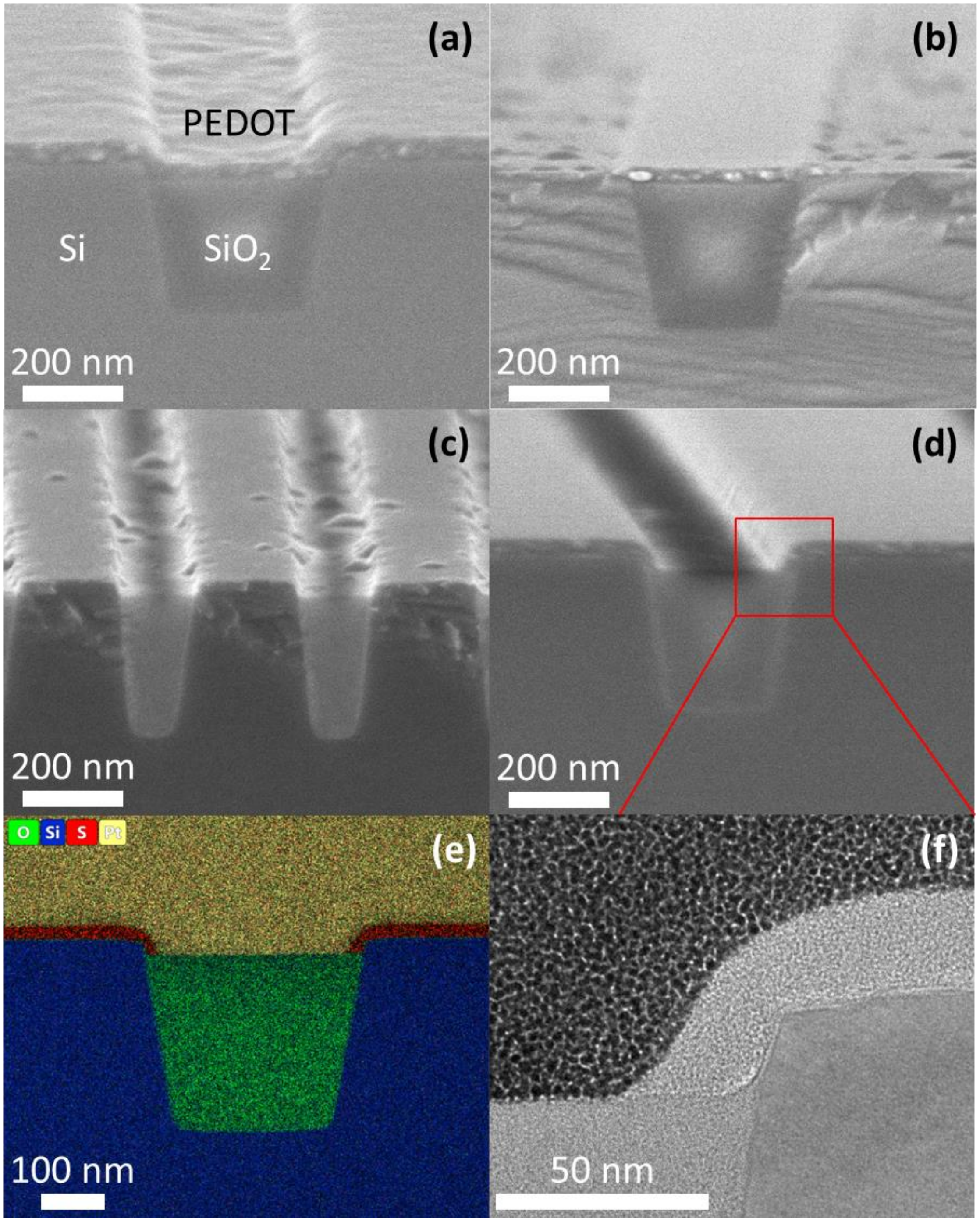

Figure 1. Cross-sectional images of PEDOT growth on Si/SiO_2 line structures after (a) piranha solution cleaning showing uniform non-selective growth of ~58 nm of PEDOT on Si and SiO_2, (b) 5 s DHF, showing ASD of ~39 nm of PEDOT on SiO_2 with no significant growth on Si, (c) 5 s DHF and 15 cy DMATMS, showing no significant growth on either Si or SiO_2, but with some nuclei formed on surface defect sites, (d) 5 s DHF, 15 cy DMATMS, and 1 h H_2O submersion, showing "inverted ASD" compared to panel (b), with ~39 nm of PEDOT on the Si region. (e) EDX elemental mapping of the inverted selectivity in (d). (f) TEM image of the boxed region in (d).