Electronic Supplementary Material (ESI) for RSC Advances.

XPS Characterization

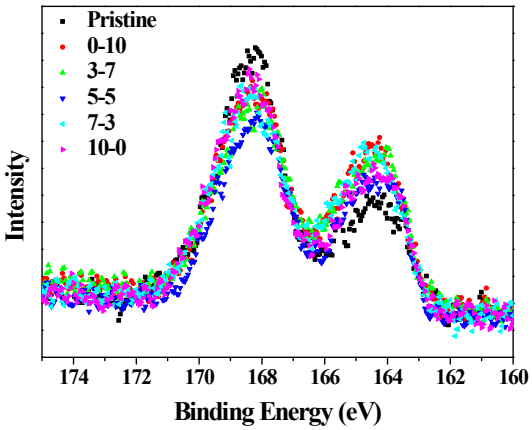

Figure 1 XPS characterization for PEDOT:PSS after post treatment by different co-solvent.

XPS characterization is conducted to confirm that PSS is depleted successfully from PEDOT:PSS films. In Fig. 1, The two XPS bands with binding energy between 166 and 172 eV originate from the sulfur atoms in PSS, whereas the two XPS bands with binding energy between 162 and 166 eV are due to the sulfur atoms in PEDOT. The ratio of area of the two bands represents the ratio of PSS to PEDOT. The ratio of pristine films is 2.84, while it becomes 1.321, 1.353, 1.520, 1.658 and 1.70 with EG increasing. This further confirms that more PSS are depleted instead of PEDOT.