

Supporting Information for

Effect of aggregation behavior and phenolic hydroxyl group content on the performance of lignosulfonate doped PEDOT as hole extraction layer in polymer solar cells

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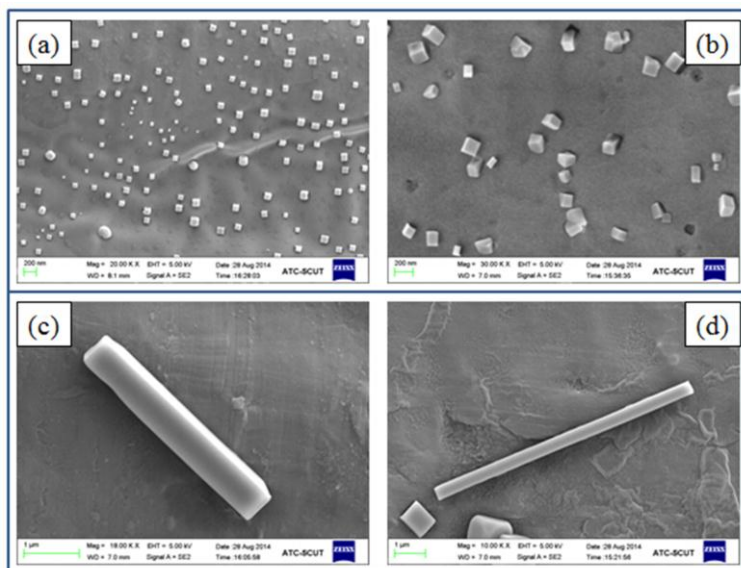


Figure S1. Scanning electron microscopy (SEM) images of various block-like self-assemblies from LS (a,b) and ALS (c,d).

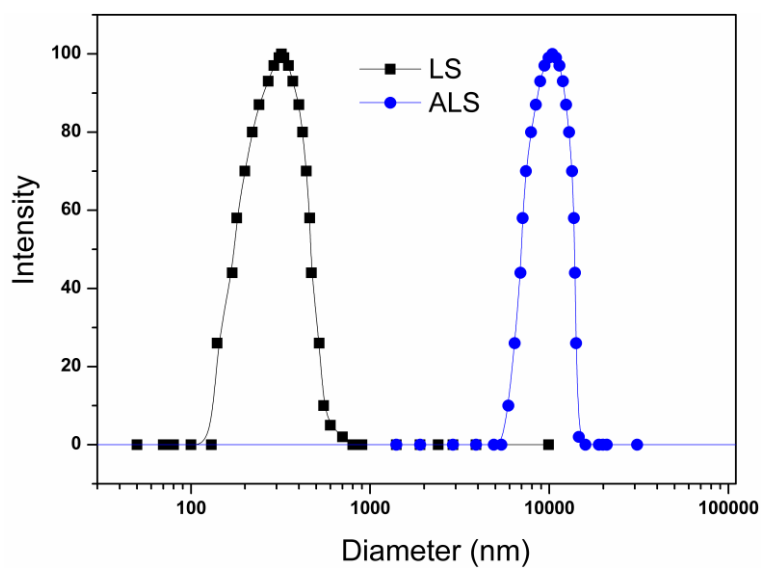


Figure S2. Dynamic light scattering (DLS) measurement of LS solution and ALS solution (0.05 mg mL^{-1}) in $\text{H}_2\text{O}/\text{EtOH}$ (v/v, 1/3).

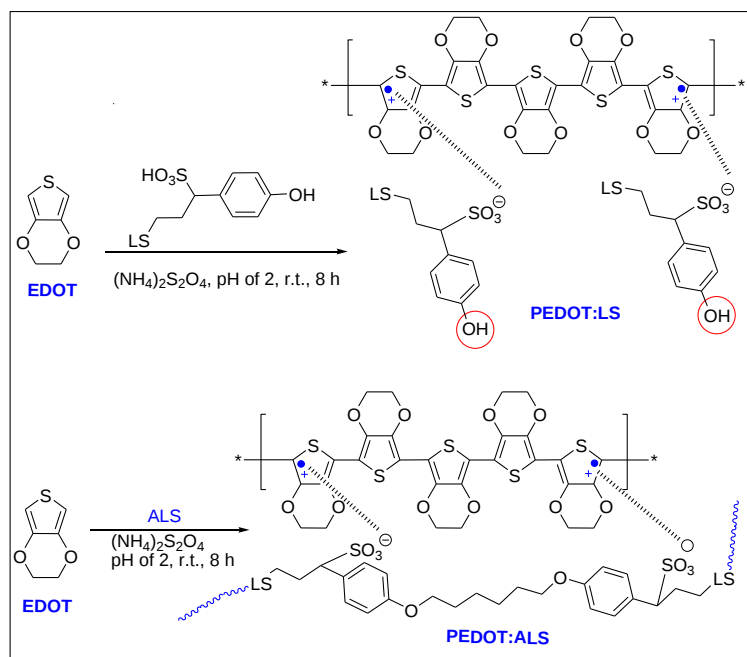


Figure S3. Proposed schematic for the polymerization of EDOT in the presence of LS (up) and ALS (down) polyelectrolyte templates.

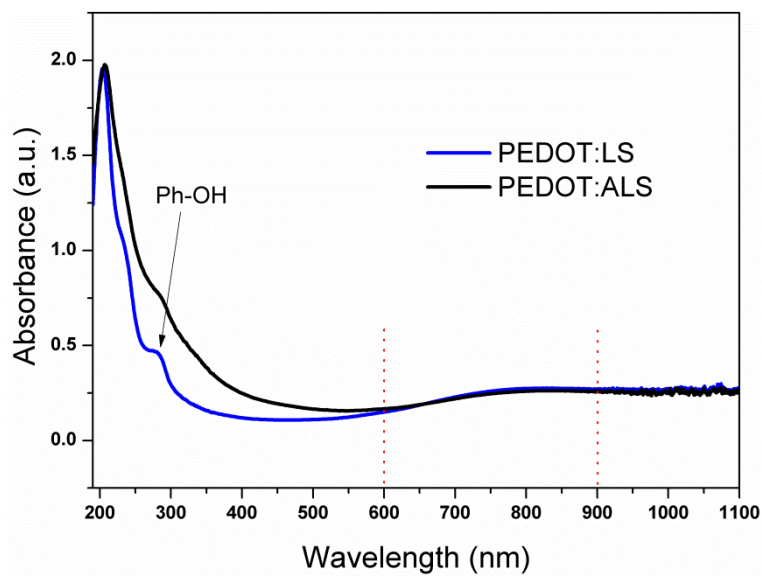


Figure S4. UV absorption spectra of PEDOT:LS and PEDOT:ALS aqueous dispersion.