SASOLAR13 FINAL REPORT FIGURES. PUBLISHABLE SUMMARY.

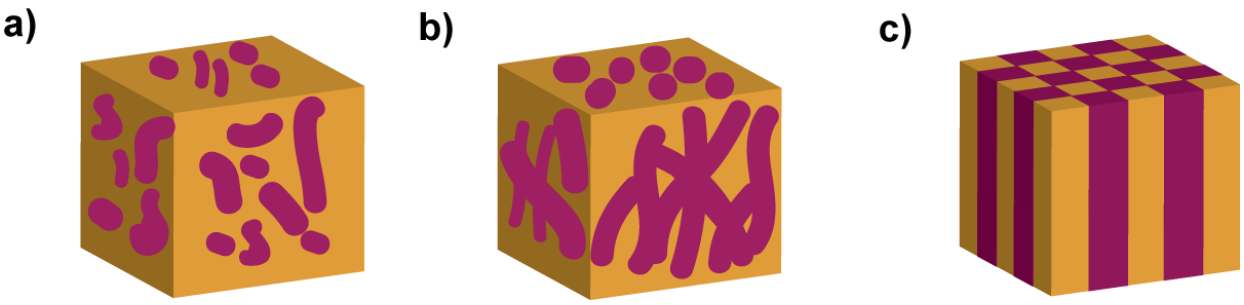


Figure 1: Possible morphologies of the active layer of BHJ OPV devices. a, Phase-separation leads to dispersed domains of donor **D** (dark) and acceptor **A** (light) molecules. **b,** Fibrous assemblies of **D** molecules, made possible by molecular recognition using hydrogen-bonding and π- π stacking as proposed in this project, percolate the continuous **A** phase. **c,** Ideal morphology for BHJ OPV devices calculated using dynamical Monte Carlo modelling, leading to the highest possible power conversion efficiency.

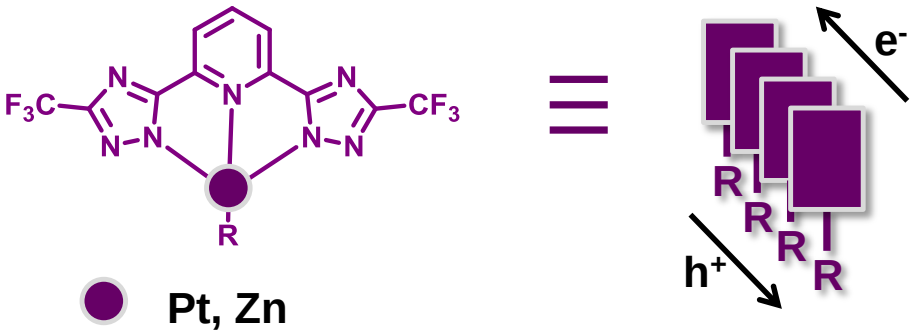
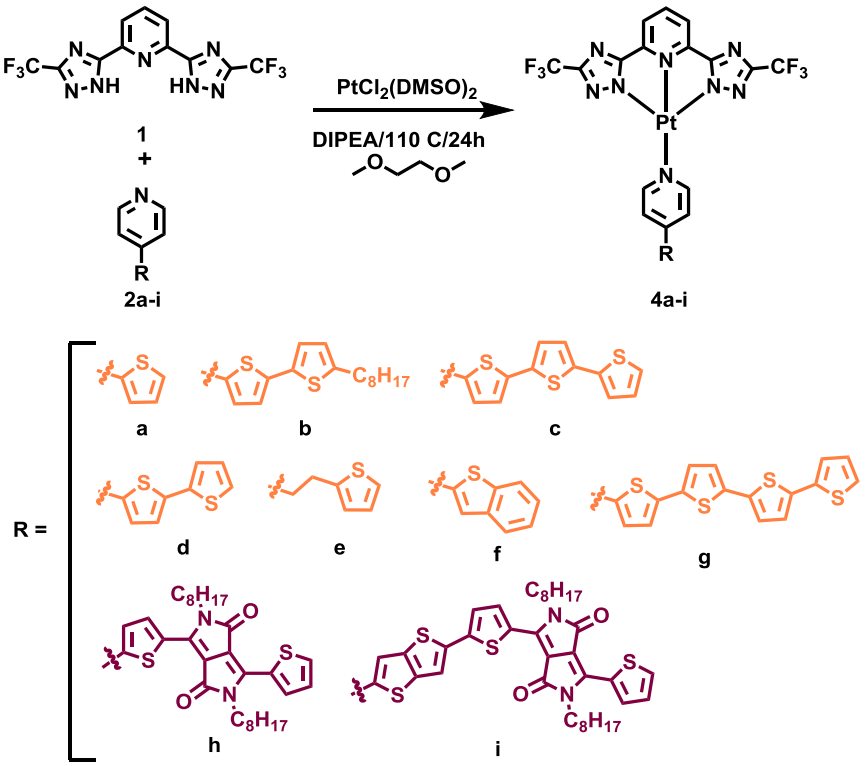


Figure 2: Schematic representation of the assemblies formed by square planar platinum (II) complexes. The Pt complexes contain a tridentate ligand and a semiconducting segment pending in the ancillary ligand.



Scheme 1: Synthesis of the Pt complexes containing semiconductors. Synthetic scheme of the library of Pt(II) complexes containing semiconducting segments.