4 show the functional and structural characteristics of create an efficient BHJ, the distance between P3HT:PCBM smaller than the exciton diffusion limit of 10-20nm. If these materials is greater than 20nm, than some of recombine before ever having a chance to dissociate.

Photoelectric process in organic (1) exciton creation (2) exciton (3) exciton dissociation (4) charge (5) charge carrier collection

Figure 4 – (a) Actual structure of the P3HT:PCBM with a layer 10-20nm