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Performance optimization of active layer doped P3HT:PCBM nanoparticles for organic photovoltaic cell applications

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Abstract

Improving the performance of nanoparticle photoactive layers is a key factor in the fabrication of organic photovoltaic nanoparticle (OPV-NP) devices. In this study, we doped the nanoparticle photoactive layer of OPVs with cobalt NPs (1:2.5%). We characterized the doped NP thin film by measuring its surface morphology and electrical properties as a