

Effects of poly(3,4-ethylene dioxythiophene) : poly(styrene sulfonate) bi-layer structure with various thickness in polymer solar cells

김완정, 김정규, 김남훈, 채희엽, 박종혁*
성균관대학교
(lutts@skku.edu*)

PEDOT:PSS(poly(3,4-ethylene dioxythiophene):poly(styrene sulfonate)) is conducting polymer which widely used as hole extraction layer in polymer solar cell. In this experiment, we fabricated polymer solar cells composed of PEDOT:PSS bi-layer structure with various thickness to enhanced power conversion efficiency. Compared to conventional devices having PEDOT:PSS single layer, we found that controlled cells had higher power conversion efficiency than conventional cells. In addition, the more thickness of PEDOT:PSS layer in controlled cell were thicker, the more power conversion efficiency of devices was increased.