

Electrochemical Codeposition of ZnO-Graphene for Inverted Organic Solar Cell

안준섭, 박용철, 김석재, 한은미†
전남대학교
(emhan@chonnam.ac.kr†)

In this studies, graphene effect on the photoelectric conversion efficiency of the inverted organic solar cells were confirmed. Graphene has very high electron mobility and thermal conductivity. And also graphene has a 97.7% of light transmittance due to low absorption at 550nm. Graphene was added to ZnO which is commonly used in electron transport layer, and then it was doped by Electrochemical Co-deposition. The ZnO-Graphene layer was deposited by the cyclic voltammetry. The photoelectric conversion efficiency was determined by the current-voltage curves measurement and the A.C. impedance was measured to determine the charge transport resistance.