

Number of Perovskite Layers and the Effect of Antisolvent on Perovskite Solar Cell Efficiency

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Abstract : Energy is one of the most important components of production processes, economic activities, and daily life. Non-renewable energy sources cause serious environmental problems with the increase of greenhouse gases. Obtaining energy from renewable sources is also essential for sustainable economic growth. Solar energy is also an important renewable energy source with its unlimited and clean features. In this study, the effect of 1, 2, and 3 layers of perovskite film number and antisolvent dripping on perovskite based solar cell efficiency was investigated. The yield increased as the number of perovskite films increased. In addition, the yields obtained with the antisolvent dripped in the last 5 seconds are higher than the ones dropped in the last 17 seconds. The highest efficiency was obtained with 3 perovskite films, and antisolvent dropped in the last 5 seconds.

Keywords : antisolvent, efficiency, perovskite, solar cell

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