

Effect of gold nanoparticles on photovoltaic properties of solar cells

This paper demonstrates the influence of gold nanoparticles incorporated into monocrystalline silicon solar cells using electrodeposition technique. It was determined that the presence of nanoparticles into the solar cell led to an unequivocal increase of short-circuit current. The largest increase in short-circuit current is observed for p⁺/n/n⁺ -structure of solar cell and nanoparticle size of 90 nm.

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