

## عنوان مقاله:

Enhanced optical absorption in organic solar cells using metal nano particles

## محل انتشار:

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## خلاصه مقاله:

In this study, for increasing absorption of the active layer in bulk hetero junction (BHJ) organic solar cells (OSCs) we used surface Plasmon effects of metal nano particles (MNPs). We embedded the MNPs inside the active layer and studied the device structure. For shown the results we investigated the model of our structure with Finite Difference Time Domain (FDTD) numerical method and achieved electromagnetic field characters. From the result of this model, drawn absorption curve that obviously shown enhancement in light absorption and thus the improving in power (conversion efficiency (PCE

## کلمات کلیدی:

(Light absorption, Organic solar cells, Metal nano particle, Surface plasmon, Power Conversion Efficiency (PCE

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/1483157>

