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## Comparison Between the Radiation Resistance of n/p and p/n InP Solar Cell

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**Abstract :** Effects of electron irradiation-induced deep level defects have been studied on both n/p and p/n indium phosphide solar cells with very thin emitters. The simulation results show that n/p structure offers a somewhat better short circuit current but the p/n structure offers improved circuit voltage, not only before electron irradiation, but also after 1MeV electron irradiation with 5.1015 fluence. The simulation also shows that n/p solar cell structure is more resistant than that of p/n structure

**Keywords:** InP solar cell, p/n and n/p structure, electron irradiation, output parameters

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