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A Review on Effects of Soiling on Solar Cells and its Mitigation

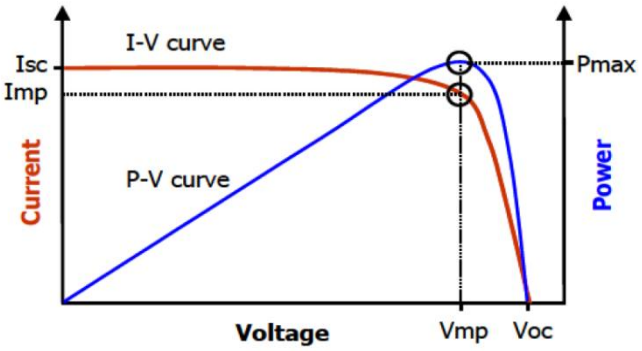
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Abstract (300 word limit)

Abstract—This review is sharply focused on the losses of solar energy by soiling or dust accumulation on photovoltaic cells and CPV (concentrated photovoltaic). Solar energy has the most increased rate in the recent years over other renewable energy sources which makes it a greater area of researchers to study. Some of the many measurements of soiling losses are discussed in this paper which are vital for mitigating them for maximum power extraction. CPV's tend to have more soiling losses due to its distinct characteristics over PV's. Soiling losses have a great effect on power which make the researchers to study on different methods for getting rid of soiling on PV and CPV's cells. This paper has some vital solutions for removal of dust accumulations on the solar cells.

Key words: *soiling, dust accumulation, CPV, renewable energy*

Image



Recent Publications (minimum 5)

1. Faraz Humayun, "Selection of an Optimal Mother Wavelet Basis Function for ECG Signal Denoising", 7th IEEE INternational Multi topic Conference 2014, Bahria University Karachi Campus, Pakistan

Biography

[1] Mohammad Reza Maghami; Hashim Hizam; Chandima Gomes; Mohd Amran Radzi; Mohammad Ismael Rezadad; Shahrooz Hajighorbani, "Power loss due to soiling on solar panel," Renewable and Sustainable Energy Reviews 59 (2016), 1307–1316

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