



Waterless cleaning of solar cells

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Clean energy technologies are the present focus for fulfilling the rising demand for energy across the globe. Whereas a vast majority of researchers are working on increasing the efficiency, far less investment and research have been done in addressing the “externalities that can be a showstopper for the technology deployment” [1]. One of the very important externalities among them is dust and airborne sedimentation on these solar cells over time. In order to clean the dust off the solar panels, most Photo Voltaic (PV) installations perform periodic water cleaning.

The demand for water less cleaning technique is quite high as locations with higher annual solar flux are places like desert or arid land. Unfortunately many of these techniques are very expensive and may not be cost effective for large scale PV power generation.

Nevada is in an unique position – here the solar flux is abundant and utilization of this energy source has the potential to significantly diversify the economy of the state (NEXUS in Nevada).



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