

Abstract Submitted
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Particle scattering approach for solar concentration JEHAN SENEVIRATNE, MATTHEW BERG, Department of Physics and Astronomy, Mississippi State University — The focus of this work is on increasing the solar concentration ratio for Photovoltaic (PV) applications. In this work, the scattering patterns of particles with various shapes are computationally studied in the near field. The results are analyzed to develop models with high concentration ratios. Based on the results, our question: “Which particle arrangement gives the optimum solar power yield for a given physical condition?” is investigated. Our work may have an impact on solar harvesting methodologies in solar energy applications.

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