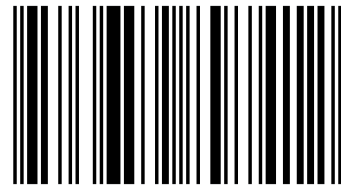


Renewable energy generation is becoming more prevalent on today's electric grid. The challenge of increasing the percentage of renewable energy will be dealing with the intermittent nature of renewable sources. This book provides collective information on various solar energy conversion techniques useful for academicians, researchers, and society at large. The understanding of each technology and its associated challenge provides a suitable basis to recognize advantages and drawbacks. More importantly, it gives the technological development of Linear Fresnel Reflector Mirror (LFRM) concentrator. In this book, a study considering the replacement of EWH by Concentrating solar Photovoltaic and thermal system (CSPV/TS) in the highlands of Yerevan region is presented. Analyses demonstrates that electricity and heating domestic water via solar (CSPV/T) energy is simple, reliable, and cost-effective. The model is used to analyze the performance of LFRM concentrating collector parameter such as reflector length, aperture diameter, PV/T receiver, focal distance and temperature at the PV/T receiver with different solar irradiances to increase the thermal efficiency.

LFRM-Based Type Concentrating Solar Ene



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Ruben Vardanyan

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