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Power Optimization and Temperature control in Solar Powered Automated Dryer Using Fuzzy Controller

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Abstract : Drying is an exceptional way to defend food and solar food dryers are appropriate food preservation technology for sustainable development. The main objective of this paper is to design a solar powered Automatic drier which has solar as well as electric heater for efficient and quality drying in an economical way. This work is split up into two stages, initially an efficient drier has to be designed and modelling and conventional PI controller and Fuzzy controller has to be designed for maintaining temperature in the heating chambers for drying process and the efficient usage of solar energy and solar powered electrical energy for heating process has to be studied in detail.
Keywords: PI controller, Fuzzy logic, solar dryer, heating process.

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