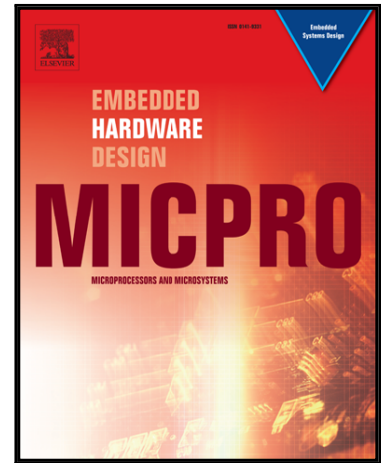


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PERFORMANCE IMPROVEMENT OF SOLAR POWERED
EVAPORATIVE COOLER USING VERSATILE ECOLOGICAL
BALANCED CONTROL TECHNIQUE

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PERFORMANCE IMPROVEMENT OF SOLAR POWERED EVAPORATIVE COOLER USING VERSATILE ECOLOGICAL BALANCED CONTROL TECHNIQUE

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ABSTRACT:

Solar Energy is one of the essential sources of sustainable power source. Solar Photovoltaic power (SPV) is utilized today in various applications. The mechanical load of the current evaporative cooler is the primary source of high energy consumption. This case incited us to look for better approaches to enhance the evaporative cooler regards to energy production, water utilizes proficiency, life, support, and reliance on utility power. Thus, we planned, built, and tried another computerized solar-powered evaporative cooler that significantly enhances existing outlines on every one of the regions specified above utilizing Versatile Ecological Balanced Control (VEBC) algorithm. Evaporative cooling is a notable framework to be a productive and economical means for decreasing the temperature and expanding the relative humidity in a nook. The test comes about because of the altered cooler in light of the new plan demonstrate that it conveyed air with recognizably higher humidity and lower temperature than the standard outline. The test comes about because of the changed cooler given the first model demonstrate that it furnished a climate with discernibly higher humidity and lower temperature than the traditional design. The proposed VEBC strategy decreases the storage temperature yet, also, builds the relative humidity of the storage which is essential for keeping up the freshness of the items.

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