Poster Session (P) Poster Lunch (1)

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HYBRID PEAK POWER TRACKING STRATEGY FOR SMALL SATELLITE

Abstract

Considering the characteristics of sequential switching shunt regulator with high reliability and low peak power tracking efficiency and the characteristics of maximum power point tracking with low reliability and high peak power tracking efficiency, this paper studied a scheme of solar array peak power tracking for small satellite, proposed a topology and a hybrid control scheme that combined the ability of sequential switching shunt regulator and maximum power point tracking, and verified the topology and the hybrid control scheme by simulation, which can be a reference design for power conditioning unit of small satellite with high reliability and high peak power tracking efficiency.