Scopus

Documents

Belhadj-Yahya, C.

Energy options for wireless sensors
(2010) *2010 IEEE International Energy Conference and Exhibition, EnergyCon 2010*, art. no. 5771745, pp. 564-569. Cited 1 time.

Abstract
Successful design strategies for energy efficient wireless sensor networks must involve the optimization of system energy at all levels including sensor circuits, communication, and powering methods. The paper reviews the various sensor powering options focusing on remote wireless powering and hybrid powering solutions. The comparative analysis of the two main wireless remote powering methods based on power transfer from RF and optical sources is backed with design procedures and experimental verification. The study shows that optical powering can have an edge over RF with the advantage of being easily combined with solar power harvesting to form a reliable hybrid energy harvesting option for autonomous wireless sensors. © 2010 IEEE.

2-s2.0-79958291134
Document Type: Conference Paper
Publication Stage: Final
Source: Scopus