

## عنوان مقاله:

Design Smart Home Energy Management Systems based on ZigBee

## محل انتشار:

دومین کنفرانس بین المللی دستاوردهای نوین در علوم مهندسی و پایه (سال: 1393)

تعداد صفحات اصل مقاله: 6

## نویسنده:

Akram Sadat Mostafavi

## خلاصه مقاله:

wireless sensor networks are rapidly gaining popularity. Today, organizations use IEEE 802.15.4 and ZigBee to effectively deliver solutions for a variety of areas. The SHEMS (Smart Home Energy Management System) includes both energy consumption and renewable energy generation. That consists of the system server, the family controller (modules), the composition of routers, switches, communication device, wireless transceiver, all kinds of detectors, sensors, actuators and other major parts. The SHEMS not only supplies power as the way the common power strips do but also controls sockets using ZigBee wireless communication. By Using SHEMS, users can recognize and reduce the amount of energy consumption, and the appliances can be controlled considering the energy efficiency. The advantages of our system are low cost, robustness and simple deployment. In this paper we tried to review the papers published in this field and by comparing the similarities and differences between research and experiments to reach a comprehensive conclusion.

## کلمات کلیدی:

Smart Home, Smart Energy, ZigBee, IEEE802.15.4, wireless sensor network

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/358791>

