传感技术学报

首 而 阿问委员 特约海外编委 特约科学院编委 主编 编辑委员会委员

留 言 板 联系我们

一种基于LEACH协议的无线传感器网络路由算法

作 者: 李芳芳, 王靖

单 位: 兰州工业高等专科学校

基金项目:

摘 要:

无线传感器网络路由技术是当今国内外研究的重点和热点,其设计的首要目标是提高能量有效性,延长网络生命周期。论文结合前人研究的成果,针对特定的网络应用环境,对LEACH协议路由算法的进行了改进。理论分析及仿真结果表明,改进后的路由算法比原LEACH协议路由算法系统整体能耗降低,网络生命周期和吞吐量显著提高,并且网络扩展性能更好。这对于可靠性有特殊要求的应用场合具有一定的实用价值。

关键词: 无线传感器网络; 路由算法; LEACH; S-LEACH

A new LEACH-based routing algorithm for wireless sensor networks

Author's Name:

Institution:

Abstract:

Routing protocol is the popular and point which studies at home and abroad nowadays, the all-important aim of its design is to reduce the overall energy dissipated in the network and to maximize the network lifetime. In this thesis, former research work has been studied. LEACH routing protocol was choosed as the research target by analyzed, and is brought forward according to the special kinds of network environment. The analysis and simulation results indicate that improved routing algorithm compared with LEACH: the overall low consumption, network life cycle extended, thruput increased, and better network scalability. This is very useful in case of some networks that have special requirement on reliability.

Keywords: wireless sensor network; routing protocol; LEACH; Specifically-LEACH

投稿时间: 2012-05-14

查看pdf文件

版权所有 © 2009 《传感技术学报》编辑部 地址: 江苏省南京市四牌楼2号东南大学 <u>苏ICP备09078051号-2</u> 联系电话: 025-83794925; 传真: 025-83794925; Email: dzcg-bjb@seu.edu.cn; dzcg-bjb@163.com 邮编: 210096 技术支持: 南京杰诺瀚软件科技有限公司