基于投影矢量的双组播树高效路由数据收集

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摘　要：

现有的节点数据收集算法复杂度高，与路由结合效果不理想，且不能满足无线传感器网络高效能量的节点数据收集，点。基于压缩感知的特性，提出了一种传感器网络中基于投影矢量的双组播树高效路由数据收集，该算法将贝叶斯压法不能满足传感器对能耗敏感的问题。算法的基本思想首先根据初始观测矢量来寻求能量高效并得到合适路由的最优的主分量作为目标节点，采用微分嫡改变量最大的原则进行求解节点最佳投影系数，最后在sink与目标节点路由问题真结果表明在保证能耗的条件下取得了较好的重建仿真效果，对无线传感器通信具有一定的实用价值。

关键词：压缩感知；观测矢量；投影系数；组播树

High-efficiency Routing Data Collection of Dual Multicast Tree Based on The Pr

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Abstract:

The present node data gathering algorithm is complex, and its routing binding effect is not ideal, and it cannot meet the high network, whereas compressed sensing theory has the merits of fault tolerance and simple coding. Based on compressed sen efficiency routing data collection of dual multicast tree based on the projection vector in sensor networks is proposed. It cor sensor route, solves the problem of existing algorithm, that is, the sensor is sensitive to energy consumption. The basic idea and appropriate routing optimal projection according to the initial observation vector, and secondly use the node coefficient principal component of generalized vector as the target node and the principle of maximum differential entropy change for no reverse multicast routing structure in the problem of sink and the target node routing. Theoretical and simulation results ind effect of simulation under the condition of ensuring energy consumption, which has a certain practical value on wireless sen

Keywords: compressed sensing; measurement vector; projection coefficient; multicast tree