一种无线传感器网络质心定位改进算法

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摘 要：

本文提出一种改进型的质心定位算法。该算法利用RSSI计算影响因子θ对质心算法进行加权，提高初次定位的准确性，并通过一种校正机制对初次定位位置进行校正。该算法运算复杂度较低，通信开销与传统的质心算法相仿。仿真表明改进算法的定位精度较传统的质心定位算法有了极大的提高。

关键词：无线传感器网络；分布式定位；质心定位；定位校正.

A Improved Centroid Localization Algorithm for Wireless Sensor Network

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Abstract:

This paper proposes a improved centroid localization algorithm. The algorithm computes a weighting factor θ by using the RSSI for the Centroid Localization algorithm, improves the accuracy of the initial localization, and then uses a correction mechanism to correct the initial localization. The algorithm has lower computational complexity, communication spending is similar to the centroid localazation algorithm. Simulation results show that, the improved algorithm's accuracy has an greatly improvement than the traditional centroid localazation algorithm.

Keywords: WSNs; distributed localization; centroid localization; localization correction.

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