Abstract

In wireless sensor networks (WSN) energy consumption is the most critical problem because each sensor node has limited batteries. In order to reduce energy consumption and to optimize the network life-time of this kind of networks clustering algorithms have been widely used. LEACH is the most popular clustering algorithm, which used an interesting technique to select a cluster head alternately and to build cluster. In this work, we propose a new scheme to select cluster head according to the residual energy of nodes. The simulation results show that proposed algorithm achieve longer stability period and network life-time by comparison to other clustering approaches i.e. LEACH, ALEACH, LEAHC-DCHS and LEACH-SWDN.

References

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Index Terms

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