Abstract

Computational topology and routing are the major area where energy is needed to activate a number of functions integrated in wireless sensor network. In this research, reducing energy consumption and increasing energy efficiency (EE) are the main aims when specific algorithm of routing protocol and topology are employed in WSN. In order to solve the main points through this research, we studied the novelties of the routing protocols based on ant colony optimization (ACO). In these studies, accurate distance between the sensor nodes based on the specific topology is also analyzed. From these approaches EE can be enhanced in future WSNs which have either 2D or 3D topologies.

References

Energy Efficiency with Computational Topology and Routing in Wireless Sensors Networks


- F. Weiwei, L. Feng, Y. Liu, Y. Fangnan, S. Lei, and S. Nishio, "Energy-efficient cooperative communication for data transmission in wireless sensor networks," IEEE

**Index Terms**

Computer Science

**Wireless**

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Energy aware algorithms  EE  topologies  CT  routing protocols  ACO  WSN