Abstract

The performance of the heterogeneous protocols in terms of stability and network lifetime, DEEC preformed better as compare to others protocols. It is compare the different levels of DEECs performance in terms of number of node alive, number of node fail, stability, network lifetime and energy. Nodes are randomly deployed and each node has initially limited energy. Sensor nodes transmit sensed information to the sink or Base Station (BS) with minimum time delay. When the large numbers of rounds \( R_{\text{max}} \) have been involved in the system, the energy has been sharply decreases, so the first node has been died due to low battery and the connection has been broken. Thus, result in unsuccessful information transmission. To overcome this problem, the simulation results of the heterogeneous protocols performance in term of network lifetime, number of nodes alive during rounds and data packets sent to BS.

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Energy Efficient, heterogeneous protocols life time, stability, node failure, static nodes, mobiles nodes, shortest distance;