Abstract

In wireless sensor networks, emergence of sink mobility has been considered as a good strategy to maintain the nodes energy dissipation. According to previous approaches the Dynamic Routes Adjustment (VGDRA) plan that acquires slightest correspondence cost while keeping up almost ideal courses to the most recent area of the portable sink. The proposed plan parcels the sensor field into a virtual matrix and develops a virtual spine structure included the cell header hubs. A versatile sink while moving around the sensor field continues changing its area and associates with the nearest marginal cell-header for information accumulation. Utilizing a set of correspondence guidelines, limited number of the cellheaders participates in the courses recreation prepares along these lines diminishing the general correspondence cost. The proposed approach is to minimize energy utilization and maximize network lifetime by implementing optimization technique Biogeography Based Optimization (BBO) as selection algorithm for route adjustment. The simulation results represented improved network lifetime of existed VGDRA comparison with VGDRA-BBO using ns2 as a simulation tool.
References


Index Terms

Computer Science  Wireless

Keywords

Wireless Sensor Network, Life time, Throughput, Mobile sink