عنوان فارسی مقاله:
الگوریتم پیشرفته بهینه‌سازی انرژی خوشه‌ای مبتنی بر PSO برای شبکه‌های حسگر بی‌سیم

عنوان انگلیسی مقاله:
An Enhanced PSO-Based Clustering Energy Optimization Algorithm for Wireless Sensor Network

توجه!
این فایل تنها قسمتی از ترجمه می‌باشد. برای تهیه مقاله ترجمه شده کامل با فرمت ورد (قابل ویرایش) همراه با نسخه انگلیسی مقاله، اینجا کلیک فلایید.
6. Conclusions

The network performance of the WSNs is enhanced by various PSO-based clustering and cluster head selection scheme algorithms in terms of increasing the throughput, packet delivery ratio, residual energy, and number of active nodes. The enhanced PSO algorithm constructs clusters in a centralized manner within a base station and the cluster heads are selected by using PSO in distributed manner. The sensed data from the sensor nodes are aggregated by the head and transmit to the BT directly or using relay node based on the threshold value for which the multihop routing protocol is used. The performance metrics such as throughput, packet delivery ratio, network lifetime, normalized overhead, delay, residual energy, and total energy consumption are evaluated and compared with competitive clustering methodology. The simulation outcome shows that the projected (ECPBC-CEO) scheme gives improved performance in order to minimize the total consumed energy and increase the lifetime of WSN. In future, this work can be extended to improve the network lifetime and data transmission using multiple sink or mobile sink [25] and efficient data collection using data aggregation [6] owing to reduction of delay in a certain level in the proposed system.