

عنوان مقاله:

A Scalable And Robust Communication Paradigm For Data In Wireless Sensor Networks

محل انتشار:

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خلاصه مقاله:

Recently, secure in-network aggregation in wireless sensor networks becomes a challenge issue, there is an extensive research on this area due to the large number of applications where the sensors are deployed and the security needs. In the last few years, aggregation of encrypted data has been proposed in order to maintain secrecy between the sensors and the sink, so the end-to-end data confidentiality is provided. However, the data integrity was not addressed. In this paper, we propose RSAED that allows integrity verification at intermediate nodes, ensures the base station to receive ciphertexts which come only from legitimate nodes and also improves the efficiency. Through implementation results, we evaluate our scheme using computation and communication overhead.

کلمات کلیدی:

Data Aggregation, Wireless Sensor Networks, Homomorphic encryption, Elliptic Curve Cryptography

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