

## Security in Resource Constraints: Network Energy Efficient Encryption

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**Abstract :** Wireless nodes in a sensor network gather and process critical information designed to process and communicate, information flooding through such network is critical for decision making and data processing, the integrity of such data is one of the most critical factors in wireless security without compromising the processing and transmission capability of the network. This paper presents mechanism to securely transmit data over a chain of sensor nodes without compromising the throughput of the network utilizing available battery resources available at the sensor node.

**Keywords :** hybrid protocol, data integrity, lightweight encryption, neighbor based key sharing, sensor node data processing, Z-MAC

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