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## Key revocation in wireless sensor networks: a survey on a less-addressed yet vital issue

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### Abstract

Key management in wireless sensor network (WSN) includes two important aspects namely key distribution, which constitutes the task of distributing secret keys to nodes in the network, and key revocation, which refers to the task of securely withdrawing the key information relating to any compromised node or because of tactical reasons. While in the existing literature, key distribution has been extensively studied, key revocation has received relatively little attention. A vital security issue like this needs proper recognition to be considered as a critical research area, not just as a partial segment of key management. With this motivation, in this paper, we present our rationale behind recognising the area and analyse the state-of-the-art key revocation techniques. Alongside our survey on the prominent schemes, we also present an analysis of security and performance that highlights the advantages and disadvantages of each scheme that explicitly mentions the method of key revocation.

### Keywords

**Author Keywords:** [key revocation](#); [key management](#); [security](#); [wireless](#); [sensor networks](#)

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