

A variant of schnorr signature scheme for path-checking in RFID-based supply chains

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Abstract The RFID technology has attracted considerable attention in recent years, and brings convenience to supply chain management. In this paper, we concentrate on designing path-checking protocols to check the valid paths in supply chains. By entering a valid path, the check reader can distinguish whether the tags have gone through the path or not. Based on modified schnorr signature scheme, we provide a path-checking method to achieve multi-signatures and final verification. In the end, we conduct security and privacy analysis to the scheme.

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