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**A self-adaptive trust management scheme for wireless sensor networks**

**作者:**[Wu, X](http://apps.webofknowledge.com/OneClickSearch.do?product=WOS&search_mode=OneClickSearch&excludeEventConfig=ExcludeIfFromFullRecPage&colName=WOS&SID=1Bzp2721lrDbGTOrvGK&field=AU&value=Wu,%20X) (Wu, Xu)**[**[**1**](http://apps.webofknowledge.com/full_record.do?product=WOS&search_mode=GeneralSearch&qid=1&SID=1Bzp2721lrDbGTOrvGK&page=1&doc=1#addressWOS:000361873600004-1)**,**[**2**](http://apps.webofknowledge.com/full_record.do?product=WOS&search_mode=GeneralSearch&qid=1&SID=1Bzp2721lrDbGTOrvGK&page=1&doc=1#addressWOS:000361873600004-2)**]**; [Zheng, QH](http://apps.webofknowledge.com/OneClickSearch.do?product=WOS&search_mode=OneClickSearch&excludeEventConfig=ExcludeIfFromFullRecPage&colName=WOS&SID=1Bzp2721lrDbGTOrvGK&field=AU&value=Zheng,%20QH" \o "查找此作者的更多记录) (Zheng, Qinghua)**[**[**1**](http://apps.webofknowledge.com/full_record.do?product=WOS&search_mode=GeneralSearch&qid=1&SID=1Bzp2721lrDbGTOrvGK&page=1&doc=1#addressWOS:000361873600004-1)**]**

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**摘要**

Trust management is fundamental to identify malicious, selfish, and compromised nodes which have been authenticated. Many trust managementmechanisms are proposed to provide effective security solution for wire and wireless networks, even some of them have become one of the most known in this field. But in fact, trust management in wireless sensor networks still remains a challenging field. Traditional trust models developed for wireless sensornetworks are not well suited for sensor networks because the trust evaluation process isn't related to certain application. In this paper, we propose a self-adaptive trust management scheme, which can adaptively adjust the trust evaluation process to cope with application requirement changes of trustmanagement. The simulation results show that our scheme has less rate of inauthentic downloads of nodes, energy consumption and message overheads as compared to the current state-of-the-art trust management schemes, and it is more suitable for large-scale sensor networks.

**关键词**

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