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Biography (Please provide in paragraph form within 500 words.) (中英文)		
<p>江金芳，2015年在河海大学计算机与信息学院获得博士学位。现任河海大学（常州校区）信息科学与工程学院教授、副院长。在相关国际会议及期刊发表论文50余篇，包括IEEE TMC、IEEE TPDS、IEEE TWC、IEEE TVT、IEEE TIE、IEEE WCM等。其研究方向包括无线传感器网络、水下物联网及信息安全技术等。</p> <p>Jinfang Jiang received her Ph.D. degree from the College of Computer and Information, Hohai University, Nanjing, China, in 2015. She is currently a Professor and Associate Dean of the College of Information Science and Engineering, Hohai University, Changzhou, China. She has published over 50 papers in related international conferences and journals, including IEEE TMC, IEEE TPDS, IEEE TWC, IEEE TVT, IEEE TIE, IEEE WCM. Her research interests include wireless sensor networks, internet of underwater things and information security technologies, etc.</p>		
Speech Title (English): (中英文)		
水下物联网中的安全数据传输技术 Secure Data Transmission in the Internet of Underwater Things		
Speech Abstract (Please provide in paragraph form within 500 words.) (中英文)		
<p>安全数据传输对于水下物联网至关重要，因为其通常部署在无人值守且防护薄弱的环境中，例如海底。网络节点自身缺乏有效保护，基本直接暴露于部署环境，导致整体网络安全性较低。此外，网络维护极为困难甚至无法进行。这要求网络本身具备一定的容错性和鲁棒性，且节点间能够相互协作，以抵御外部攻击者的入侵，确保数据安全传输与网络正常运行。本次报告将讨论我们过去几年研发的多种安全数据传输协议，包括基于仲裁机制的邻居发现、多维信任评估、机会性数据传输等。此外，还将重点探讨相关技术挑战及未来研究方向。</p> <p>Secure data transmission is crucial for IoUT because the network is often deployed in unattended and poorly secured environments, such as the seabed. And the network nodes themselves are poorly protected and basically directly exposed to the deployment environment, resulting in lower security for the entire network. In addition, the network is very difficult or even unmaintainable to maintain. This requires that the network itself has a certain degree of fault tolerance and robustness, and that the nodes can collaborate with each other to resist the invasion of external attackers and ensure the safe transmission of data and the normal operation of the network. In this talk, we shall discuss several secure data transmission protocols we have developed over the past few years including Quorum-based neighbor discovery, multidimensional trust assessment, opportunistic data transmission, etc. Furthermore, Challenges and future research directions will be highlighted.</p>		