Debiao He

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Working Experiences

- **Wuhan University** — Professor
  School of Cyber Science and Engineering — *2008-now*
- **Hubei Provincial Blockchain Technology Innovation Research Institute** — Executive Vice Director

Research Interests

- Cryptography, Data Security, and Blockchain.

Fundings

- 国家杰出青年科学基金 — 项目负责人
- 国家重点研发计划 — 项目负责人
- 国家自然科学基金联合基金重点 — 项目负责人
- 湖北省重大研究计划 — 项目负责人

Representative Publications

1. Yijian Zhang, Jie Chen, Debiao He, Yuqing Zhang, Bounded Collusion-Resistant Registered Functional Encryption for Circuits, International Conference on the Theory and Application of Cryptology and Information Security, 2025: 32-64
2. Yu Dai, Debiao He, Cong Peng, Zhijian Yang, Chang-an Zhao, Revisiting Pairing-Friendly Curves with Embedding Degrees 10 and 14, International Conference on the Theory and Application of Cryptology and Information Security, 2025: 454-485
3. Bei Li, Hong Zhong, Jie Cui, Chengjie Gu, Debiao He, RRMAC: A Multi-data Owner Access Control Scheme with Robust Revocation for Co-owned Data SharingCCF None, IEEE Transactions on Information Forensics and Security, 2024
4. Yang Liu, Debiao He, Min Luo, Lianhai Wang, Cong Peng, k-TEVS: A k-Times E-Voting Scheme on Blockchain with Supervision, IEEE Transactions on Dependable and Secure Computing, 2024
5. Chenkai Zeng, Debiao He, Qi Feng, Xiaolin Yang, Qingcai Luo, SecureGPT: A Framework for Multi-Party Privacy-Preserving Transformer Inference in GPT, IEEE Transactions on Information Forensics and Security, 2024

6. Qingyang Zhang, Xiaolong Zhou, Hong Zhong, Jie Cui, Jiaxin Li, Debiao He, Device-Side Lightweight Mutual Authentication and Key Agreement Scheme based on Chameleon Hashing for Industrial Internet of Things, IEEE Transactions on Information Forensics and Security, 2024
7. Yujie Song, Yue Cao, ChakLam Cheong, Debiao He, Kim-Kwang Raymond Choo, Juan Wang, CAT: A Consensus-Adaptive Trust Management based on the Group Decision Making in IoVs, IEEE Transactions on Information Forensics and Security, 2024
8. Parhat Abla, Taotao Li, Debiao He, Huawei Huang, SongSen Yu, Yan Zhang, Fair and Privacy-Preserved Data Trading Protocol by Exploiting Blockchain, IEEE Transactions on Information Forensics and Security, 2024
9. Qin Yuan, Chunlei Li, Xiangyong Zeng, Tor Helleseth, Debiao He, Further Investigations on Nonlinear Complexity of Periodic Binary Sequences, IEEE Transactions on Information Theory, 2024
10. Cong Peng, Rongmao Chen, Yi Wang, Debiao He, Xinyi Huang, Parameter-Hiding Order-Revealing Encryption Without Pairings, IACR International Conference on Public-Key Cryptography, 2024
11. Douwei Lei, Debiao He, Cong Peng, Min Luo, Zhe Liu, Xinyi Huang, Faster Implementation of Ideal Lattice-Based Cryptography Using AVX512, ACM Transactions on Embedded Computing Systems, 2023
12. Xiaotong Zhou, Debiao He, Jianting Ning, Min Luo, Xinyi Huang, Efficient Construction of Verifiable Timed Signatures and its Application in Scalable Payments, IEEE Transactions on Information Forensics and Security, 2023
13. Tian Li, Huaqun Wang, Debiao He, Jia Yu, Designated-Verifier Aggregate Signature Scheme with Sensitive Data Privacy Protection for Permissioned Blockchain-assisted IIoT, IEEE Transactions on Information Forensics and Security, 2023
14. Jing Zhang, Shuangshuang Su, Hong Zhong, Jie Cui, Debiao He, Identity-based Broadcast Proxy Re-encryption for Flexible Data Sharing in VANETs, IEEE Transactions on Information Forensics and Security, 2023
15. Qingyang Zhang, Jing Wu, Hong Zhong, Debiao He, Jie Cui, Efficient Anonymous Authentication Based on Physically Unclonable Function in Industrial Internet of Things, IEEE Transactions on Information Forensics and Security, 2022
16. Chao Lin, Xinyi Huang, Debiao He, EBCPA: Efficient blockchain-based conditional privacy-preserving authentication for VANETs, IEEE Transactions on Dependable and Secure Computing, 2022
17. Qingxuan Wang, Ding Wang, Chi Cheng, Debiao He, Quantum2fa: efficient quantum-resistant two-factor authentication scheme for mobile devices, IEEE Transactions on Dependable and Secure Computing, 2021
18. Chao Lin, Debiao He, Xinyi Huang, Kim-Kwang Raymond Choo, OBFP: Optimized Blockchain-Based Fair Payment for Outsourcing Computations in Cloud Computing, IEEE Transactions on Information Forensics and Security, 2021