## **Table of Contents**

Keynote Speech	
Can Code Polymorphism Limit Information Leakage?	1
Mobile Authentication and Access Control	
Mobile Electronic Identity: Securing Payment on Mobile Phones $\dots$ Chen Bangdao and A.W. Roscoe	22
Role-Based Secure Inter-operation and Resource Usage Management in Mobile Grid Systems	38
Lightweight Authentication	
SSL/TLS Session-Aware User Authentication Using a GAA Bootstrapped Key	54
An Almost-Optimal Forward-Private RFID Mutual Authentication Protocol with Tag Control	69
Affiliation-Hiding Authentication with Minimal Bandwidth  Consumption	85
Algorithms	
Formal Framework for the Evaluation of Waveform Resynchronization Algorithms	100
Solving DLP with Auxiliary Input over an Elliptic Curve Used in TinyTate Library	116
Information Leakage Discovery Techniques to Enhance Secure Chip Design	128

## **Hardware Implementation**

A Cryptographic Processor for Low-Resource Devices: Canning ECDSA and AES Like Sardines	144
An Evaluation of Hash Functions on a Power Analysis Resistant Processor Architecture	160
A Comparison of Post-Processing Techniques for Biased Random  Number Generators	175
Security and Cryptography	
AES Variants Secure against Related-Key Differential and Boomerang	
Attacks	191
Leakage Squeezing Countermeasure against High-Order Attacks  Houssem Maghrebi, Sylvain Guilley, and Jean-Luc Danger	208
Security Attacks and Measures (Short Papers)	
Differential Fault Analysis of the Advanced Encryption Standard Using a Single Fault	224
Michael Tunstall, Debdeep Mukhopadhyay, and Subidh Ali	
Entropy of Selectively Encrypted Strings	234
Practical Attacks on HB and HB+ Protocols	244
Attacks on a Lightweight Mutual Authentication Protocol under EPC	
C-1 G-2 Standard	254
Security Attacks	
A SMS-Based Mobile Botnet Using Flooding Algorithm  Jingyu Hua and Kouichi Sakurai	264

Table of Contents	XIII
FIRE: Fault Injection for Reverse Engineering	280
Hardware Trojan Side-Channels Based on Physical Unclonable Functions  Zheng Gong and Marc X. Makkes	294
Security and Trust	
Formal Analysis of Security Metrics and Risk  Leanid Krautsevich, Fabio Martinelli, and Artsiom Yautsiukhin	304
STORM - Collaborative Security Management Environment	320
Trust Agreement in Wireless Mesh Networks	336
Mobile Application Security and Privacy (Short Papers)	
Secure E-Auction for Mobile Users with Low-Capability Devices in Wireless Network	351
Privacy Respecting Targeted Advertising for Social Networks	361
Privacy Protection for Smartphones: An Ontology-Based Firewall Johann Vincent, Christine Porquet, Maroua Borsali, and Harold Leboulanger	371
A Study on the Security, the Performance and the Penetration of Wi-Fi Networks in a Greek Urban Area	381
Author Index	391