## **Table of Contents**

Hash Functions	
Second Preimage Attack on 5-Pass HAVAL and Partial Key-Recovery Attack on HMAC/NMAC-5-Pass HAVAL	1
Cryptanalysis of Vortex	14
Two Passes of Tiger Are Not One-Way	29
Block Ciphers	
Generic Attacks on Feistel Networks with Internal Permutations Joana Treger and Jacques Patarin	41
Distinguishers for Ciphers and Known Key Attack against Rijndael with Large Blocks	60
Asymmetric Encryption	
Reducing Key Length of the McEliece Cryptosystem	77
Cryptanalysis of RSA Using the Ratio of the Primes	98
Digital Signatures	
New RSA-Based (Selectively) Convertible Undeniable Signature Schemes	116
A Schnorr-Like Lightweight Identity-Based Signature Scheme	135
On the Theoretical Gap between Group Signatures with and without	

Unlinkability .....

Go Ohtake, Arisa Fujii, Goichiro Hanaoka, and Kazuto Ogawa



149

Practical Threshold Signatures with Linear Secret Sharing Schemes  İlker Nadi Bozkurt, Kamer Kaya, and Ali Aydın Selçuk	167
Asymmetric Encryption and Anonymity	
Certified Encryption Revisited	179
Threshold Attribute-Based Signatures and Their Application to Anonymous Credential Systems	198
Anonymity from Public Key Encryption to Undeniable Signatures Laila El Aimani	217
Key Agreement Protocols	
Security Analysis of Standard Authentication and Key Agreement Protocols Utilising Timestamps	235
Password-Authenticated Group Key Agreement with Adaptive Security and Contributiveness	254
Cryptographic Protocols	
Unifying Zero-Knowledge Proofs of Knowledge  Ueli Maurer	272
Co-sound Zero-Knowledge with Public Keys	287
Another Look at Extended Private Information Retrieval Protocols Julien Bringer and Hervé Chabanne	305
Constructing Universally Composable Oblivious Transfers from Double Trap-Door Encryptions	323
Efficient Implementations	
Exponent Recoding and Regular Exponentiation Algorithms  Marc Joye and Michael Tunstall	334

Table of Contents	XI
Efficient Acceleration of Asymmetric Cryptography on Graphics Hardware	350
Fast Elliptic-Curve Cryptography on the Cell Broadband Engine  Neil Costigan and Peter Schwabe	368
On Modular Decomposition of Integers	386
Implementation Attacks	
Breaking Keeloq in a Flash: On Extracting Keys at Lightning Speed	403
An Improved Fault Based Attack of the Advanced Encryption Standard  Debdeep Mukhopadhyay	421
Author Index	435