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Optimal Ate Pairing over Barreto–Naehrig Curves -- Invited Talk 1 -- Some Security Topics with Possible Applications for Pairing-Based Cryptography -- Digital Signatures -- A New Construction of Designated Confirmer Signature and Its Application to Optimistic Fair Exchange -- Anonymizable Signature and Its Construction from Pairings -- Identification of Multiple Invalid Pairing-Based Signatures in Constrained Batches -- Cryptographic Protocols -- Oblivious Transfer with Access Control : Realizing Disjunction without Duplication -- Increased Resilience in Threshold Cryptography: Sharing a Secret with Devices That Cannot Store Shares -- Shorter Verifier-Local Revocation Group Signature with Backward Unlinkability -- Key Agreement -- Strongly Secure Two-Pass Attribute-Based Authenticated Key Exchange -- Constructing Certificateless Encryption and ID-Based Encryption from ID-Based Key Agreement -- Ephemeral Key Leakage Resilient and Efficient ID-AKEs That Can Share Identities, Private and Master Keys -- Invited Talk 2 -- Pairing-Based Non-interactive Zero-Knowledge Proofs -- Applications: Code Generation, Time-Released Encryption, Cloud Computing -- Designing a Code Generator for Pairing Based Cryptographic Functions -- Efficient Generic Constructions of Timed-Release Encryption with Pre-open Capability -- Optimal Authenticated Data Structures with Multilinear Forms -- Point Encoding and Pairing-Friendly Curves -- Deterministic Encoding and Hashing to Odd Hyperelliptic Curves -- Encoding Points on Hyperelliptic Curves over Finite Fields in Deterministic Polynomial Time -- A New Method for Constructing Pairing-Friendly Abelian Surfaces -- Generating More Kawazoe-Takahashi Genus 2 Pairing-Friendly Hyperelliptic Curves -- ID-Based Encryption Schemes -- New Identity-Based Proxy Re-encryption Schemes to Prevent Collusion Attacks -- Fully Secure Anonymous HIBE and Secret-Key Anonymous IBE with Short Ciphertexts -- Chosen-Ciphertext Secure Identity-Based Encryption from Computational Bilinear Diffie-Hellman -- Invited Talk 3 -- A Survey of Local and Global Pairings on Elliptic Curves and Abelian Varieties -- Efficient Hardware, FPGAs, and Algorithms -- Compact Hardware for Computing the Tate Pairing over 128-Bit-Security Supersingular Curves -- A Variant of Miller's Formula and Algorithm -- Pairing Computation on Elliptic Curves with Efficiently Computable Endomorphism and Small Embedding Degree -- High Speed Flexible Pairing Cryptoprocessor on FPGA Platform.

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