

# **IEEE P1363 / D13 (Draft Version 13). Standard Specifications for Public Key Cryptography**

## **Annex F (Informative). Bibliography.**

Copyright © 1999 by the Institute of Electrical and Electronics Engineers, Inc.  
345 East 47th Street  
New York, NY 10017, USA  
All rights reserved.

This is an unapproved draft of a proposed IEEE Standard, subject to change. Permission is hereby granted for IEEE Standards Committee participants to reproduce this document for purposes of IEEE standardization activities. If this document is to be submitted to ISO or IEC, notification shall be given to IEEE Copyright Administrator. Permission is also granted for member bodies and technical committees of ISO and IEC to reproduce this document for purposes of developing a national position. Other entities seeking permission to reproduce portions of this document for these or other uses must contact the IEEE Standards Department for the appropriate license. Use of information contained in the unapproved draft is at your own risk.

IEEE Standards Department  
Copyright and Permissions  
445 Hoes Lane, P. O. Box 1331  
Piscataway, NJ 08855-1331, USA

Comments and suggestions are welcome. Please contact the chair, Ari Singer, at [singerar@pb.com](mailto:singerar@pb.com).

## ANNEX F (informative)

### Bibliography

[AM98] C. Adams and M. Myers, "Certificate Management Message Formats," Internet Engineering Task Force (IETF), PKIX working group, work in progress. Available at <http://www.ietf.org/ids.by.wg/pkix.html>.

[AK98] Ross Anderson and Markus Kuhn, "Soft Tempest: Hidden Data Transmission Using Electromagnetic Emanations," D. Aucsmith, editor, *Second International Workshop on Information Hiding – IH'98, Lecture Notes In Computer Science* **1525** (1998), Springer-Verlag.

[ANS85] ANSI X9.17-1985, Financial institution key management (wholesale).

[ANS97a] ANSI X9.30:1-1997, Public Key Cryptography for the Financial Services Industry: Part 1: The Digital Signature Algorithm (DSA) (revision of X9.30:1-1995).

[ANS97b] ANSI X9.30:2-1997, Public Key Cryptography for the Financial Services Industry: Part 2: The Secure Hash Algorithm (SHA-1) (revision of X9.30:2-1993).

[ANS97c] ANSI X9.57-1997, Public Key Cryptography for the Financial Services Industry: Certificate Management.

[ANS98a] ANSI X9.31-1998, Digital Signatures Using Reversible Public Key Cryptography for the Financial Services Industry (rDSA).

[ANS98b] ANSI X9.42, Public Key Cryptography for the Financial Services Industry: Agreement of Symmetric Keys Using Diffie-Hellman and MQV Algorithms, draft, 1998.

[ANS98c] ANSI X9.44, Key Management Using Reversible Public Key Cryptography for the Financial Services Industry, draft, 1998.

[ANS98d] ANSI X9.52-1998, Cryptography for the Financial Services Industry: Triple Data Encryption Algorithm Modes of Operation.

[ANS98e] ANSI X9.62-1998, Public Key Cryptography for the Financial Services Industry: The Elliptic Curve Digital Signature Algorithm (ECDSA).

[ANS98f] ANSI X9.63, Public Key Cryptography for the Financial Services Industry: Elliptic Curve Key Agreement and Transport Protocols, draft, 1998.

[ANS98g] ANSI X9.80, Public Key Cryptography for the Financial Services Industry: Prime Number Generation and Validation Methods, draft, 1998.

[ANS98h] ANSI X9.TG-17 Public-Key Cryptography for the Financial Services Industry: Technical Guideline on Elliptic Curve Arithmetic, to appear.

[ABV89] D. Ash, I. Blake, and S. Vanstone, "Low Complexity Normal Bases," *Discrete Applied Mathematics* **25** (1989), 191-210.

[Atk92] O. Atkin, "Square roots and cognate matters modulo  $p = 8n + 5$ ," Internet communication to Number Theory mailing list (11 Nov 1992), archived at <http://listserv.nodak.edu/scripts/wa.exe?A2=ind9211&L=nmbrthry&O=T&P=562>

[BDPR98] M. Bellare, A. Desai, D. Pointcheval and P. Rogaway, "Relations Among Notions of Security for Public-Key Encryption Schemes," H. Krawczyk, editor, *Advances in Cryptology — CRYPTO '98, Lecture Notes in Computer Science* **1462** (1998), Springer-Verlag, 26-45. Full version appears in <http://www-cse.ucsd.edu/users/mihir/papers/crypto-papers.html>

[BR95] M. Bellare and P. Rogaway, "Optimal Asymmetric Encryption – How to Encrypt with RSA," A. De Santis, editor, *Advances in Cryptology — EUROCRYPT '94, Lecture Notes in Computer Science* **950** (1995), Springer-Verlag, 92-111. Revised version appears in <http://www-cse.ucsd.edu/users/mihir/papers/crypto-papers.html>

[BR96] M. Bellare and P. Rogaway, "The Exact Security of Digital Signatures: How to Sign with RSA and Rabin," U. M. Maurer, editor, *Advances in Cryptology — EUROCRYPT '96, Lecture Notes in Computer Science* **1070** (1996), Springer-Verlag, 399-416. Revised version appears in <http://www-cse.ucsd.edu/users/mihir/papers/crypto-papers.html>

[Ber68] E. Berlekamp, *Algebraic Coding Theory*, McGraw-Hill, 1968, pp. 36-44.

[BJM97] S. Blake-Wilson, D. Johnson and A. Menezes, "Key Agreement Protocols and their Security Analysis," M. Darnell, editor, *Cryptography and Coding: Sixth IMA International Conference, Lecture Notes in Computer Science* **1355** (1997), Springer-Verlag, 30-45. A full version is available from <http://www.cacr.math.uwaterloo.ca/>.

[BM98] S. Blake-Wilson and A. Menezes, "Unknown key-share attacks on the station-to-station (STS) protocol," H. Imai and Y. Zheng, editors, *Public Key Cryptography: Second International Workshop on Practice and Theory in Public Key Cryptography, PKC'99, Lecture Notes in Computer Science* **1560** (1999), 154-170. Also available as technical report CORR 98-42 from <http://www.cacr.math.uwaterloo.ca/>

[Ble98] D. Bleichenbacher, "Chosen Ciphertext Attacks Against Protocols Based on the RSA Encryption Standard PKCS #1," H. Krawczyk, editor, *Advances in Cryptology — CRYPTO '98, Lecture Notes in Computer Science* **1462** (1998), Springer-Verlag, 1-12.

[BBS86] L. Blum, M. Blum and M. Shub, "A simple unpredictable pseudo-random number generator," *SIAM Journal on Computing* **15** (1986), 364-383.

[BM84] M. Blum, S. Micali, "How to generate cryptographically strong sequences of pseudo-random bits," *SIAM Journal on Computing* **13** (1984), 850-864.

[BDL97] D. Boneh, R. A. DeMillo and R. J. Lipton, "On the Importance of Checking Cryptographic Protocols for Faults," W. Fumy, editor, *Advances in Cryptology — EUROCRYPT '97, Lecture Notes in Computer Science* **1223** (1997), Springer-Verlag, 37-51.

[BD99] D. Boneh and G. Durfee, "Cryptanalysis of RSA with private key  $d$  less than  $N^{0.292}$ ," J. Stern, editor, *Advances in Cryptology — EUROCRYPT '99, Lecture Notes in Computer Science* **1592** (1999), Springer-Verlag, 1-11.

[BDF98] D. Boneh, G. Durfee, Y. Frankel, "An attack on RSA given a small fraction of the private key bits," K. Ohta and D. Pei, editors, *Advances in Cryptology — ASIACRYPT '98, Lecture Notes In Computer Science* **1514** (1998), Springer-Verlag, 25-34.

- [BL96] D. Boneh and R. Lipton, "Algorithms for black box fields and their application to cryptography," N. Koblitz, editor, *Advances in Cryptology – CRYPTO '96, Lecture Notes in Computer Science* **1109** (1996), Springer-Verlag, 283-297.
- [BV98] D. Boneh, R. Venkatesan, "Breaking RSA May Not Be Equivalent to Factoring," K. Nyberg, editor, *Advances in Cryptology – EUROCRYPT '98, Lecture Notes in Computer Science* **1403** (1998), Springer-Verlag, 59-71.
- [BLS88] J. Brillhart, D.H. Lehmer, J.L. Selfridge, B. Tuckerman, and S.S. Wagstaff, "Factorizations of  $b^n \pm 1$ ,  $b = 2, 3, 5, 6, 7, 10, 11, 12$ , up to high powers," 2nd ed., American Math. Soc., 1988.
- [BLZ94] J. Buchmann, J. Loh and J. Zayer, "An implementation of the general number field sieve," D. R. Stinson, editor, *Advances in Cryptology – CRYPTO '93, Lecture Notes in Computer Science* **773** (1994), Springer-Verlag, 159-165.
- [Bue89] D. Buell, *Binary quadratic forms: classical theory and modern computations*, Springer-Verlag, 1989.
- [BLP93] J.P. Buhler, H. W. Lenstra, Jr. and C. Pomerance, "Factoring integers with the number field sieve," A. K. Lenstra and H.W. Lenstra, Jr., editors, *The Development of the Number Field Sieve, Lecture Notes in Mathematics* **1554** (1993), Springer-Verlag, 50-94.
- [Bur96] R. J. Burthe, Jr., "Further Investigations with the Strong Probable Prime Test," *Mathematics of Computation* **65** (1996), 373-381.
- [CW98] Lidong Chen and Charles Williams, "Public Key Sterilization," unpublished draft, August 1998.
- [CH98] M. Chen and E. Hughes, "Protocol Failures Related to Order of Encryption and Signature: Computation of Discrete Logarithms in RSA Groups," C. Boyd and E. Dawson, editors, *Third Australian Conference on Information Security and Privacy – ACISP '98, Lecture Notes in Computer Science* **1438** (1998).
- [CC87] D.V. Chudnovsky and G.V. Chudnovsky, "Sequences of Numbers Generated by Addition in Formal Groups and New Primality and Factorizations Tests," *Advances in Applied Mathematics*, **7** (1987), 385-434.
- [CFP96] D. Coppersmith, M. Franklin, J. Patarin and M. Reiter, "Low-exponent RSA with related messages," U. M. Maurer, editor, *Advances in Cryptology – EUROCRYPT '96, Lecture Notes in Computer Science* **1070** (1996), Springer-Verlag, 1-9.
- [CHI99] D. Coppersmith, S. Halevi and C. Jutla, "ISO 9796-1 and the new forgery strategy (working draft)." Presented at the rump session of *CRYPTO '99*. Available from <http://grouper.ieee.org/groups/1363/contrib.html>.
- [CN98] J.-S. Coron and D. Naccache, "An Accurate Evaluation of Maurer's Universal Test," *Selected Areas in Cryptography – SAC '98, Lecture Notes in Computer Science* (1998), Springer-Verlag.
- [CNS99] J.-S. Coron, D. Naccache, and J.P. Stern, "On the security of RSA padding," M. J. Wiener, editor, *Advances in Cryptology – CRYPTO '99, Lecture Notes in Computer Science* **1666** (1999), Springer-Verlag, 1-18.

- [DLP93] I. Damgard, P. Landrock, and C. Pomerance, "Average Case Error Estimates for the Strong Probable Prime Test," *Mathematics of Computation* **61** (1993), 177-194.
- [DIF94] D. Davis, R. Ihaka, and P. Fenstermacher, "Cryptographic randomness from air turbulence in disk drives," Yvo G. Desmedt, editor, *Advances in Cryptology — CRYPTO '94, Lecture Notes in Computer Science* **839** (1994), Springer-Verlag, 114-120.
- [DKL98] J.-F. Dhem, F. Koeune, P.-A. Leroux, P. Mestré, J.-J. Quisquater and J.-L. Willems, "A Practical Implementation of the Timing Attack," *CARDIS '98, Lecture Notes in Computer Science*, Springer Verlag, 1998.
- [Dif88] W. Diffie, "The first ten years of public-key cryptography," *Proceedings of the IEEE* **76** (1988), 560-577.
- [DH76] W. Diffie and M. Hellman, "New directions in cryptography," *IEEE Transactions on Information Theory* **22** (1976), 644-654.
- [DOW92] W. Diffie, P. C. van Oorschot and M. J. Wiener, "Authentication and authenticated key exchanges," *Designs, Codes and Cryptography* **2** (1992), 107-125
- [DBP96] H. Dobbertin, A. Bosselaers and B. Preneel, "RIPEMD-160: a strengthened version of RIPEMD," D. Gollmann, editor, *Fast Software Encryption, Third International Workshop, Lecture Notes in Computer Science* **1039** (1996), Springer-Verlag, 71-82. A corrected and updated version is available from <http://www.esat.kuleuven.ac.be/~bosselae/ripemd160.html>.
- [DL95] B. Dodson and A. K. Lenstra, "NFS with Four Large Primes: An Explosive Experiment," D. Coppersmith, editor, *Advances in Cryptology — CRYPTO '95, Lecture Notes in Computer Science* **963** (1995), Springer-Verlag, 372-385.
- [DHR98a] S. Dusse, P. Hoffman, B. Ramsdell, L. Lundblade and L. Repka, "RFC2311: S/MIME Version 2 Message Specification," Internet Activities Board, March 1998. Available from <http://www.rfc-editor.org/>. See also <http://www.ietf.org/html.charters/smime-charter.html> and <http://www.ietf.org/ids.by.wg/smime.html> for latest developments and drafts.
- [DHR98b] S. Dusse, P. Hoffman, B. Ramsdell and J. Weinstein, "RFC2312: S/MIME Version 2 Certificate Handling," Internet Activities Board, March 1998. Available from <http://www.rfc-editor.org/>. See also <http://www.ietf.org/html.charters/smime-charter.html> and <http://www.ietf.org/ids.by.wg/smime.html> for latest developments and drafts.
- [ECS94] D. Eastlake, S. Crocker, and J. Schiller. "RFC1750: Randomness Recommendations for Security," Internet Activities Board, December 1994. Available from <http://www.rfc-editor.org/>.
- [FIP94a] FIPS PUB 140-1, *Security Requirements for Cryptographic Modules*, Federal Information Processing Standards Publication 140-1, U.S. Department of Commerce/National Institute of Standards and Technology, National Technical Information Service, Springfield, Virginia, April 11, 1994 (supersedes FIPS PUB 140). Available at <http://www.itl.nist.gov/div897/pubs/fip140-1.htm>.
- [FIP95] FIPS PUB 180-1, *Secure Hash Standard*, Federal Information Processing Standards Publication 180-1, U.S. Department of Commerce/National Institute of Standards and Technology, National

Technical Information Service, Springfield, Virginia, April 17, 1995 (supersedes FIPS PUB 180). Available at <http://www.itl.nist.gov/div897/pubs/fip180-1.htm>.

[FIP94b] FIPS PUB 186, *Digital Signature Standard*, Federal Information Processing Standards Publication 186, U.S. Department of Commerce/National Institute of Standards and Technology, National Technical Information Service, Springfield, Virginia, 1994. Available at <http://www.itl.nist.gov/div897/pubs/fip186.htm>.

[GLV98] R. Gallant, R. Lambert and S. Vanstone, "Improving the parallelized Pollard lambda search on binary anomalous curves," *Mathematics of Computation*, to appear.

[GMR98] R. Gennaro, D. Micciancio and T. Rabin, "An efficient non-interactive statistical zero-knowledge proof system for quasi-safe prime products," *Proceedings of the Fifth ACM Conference on Computer and Communications Security (CCS-5)*, 1998, pp. 67-72. Available from <http://www.acm.org/pubs/articles/proceedings/commsec/288090/p67-gennaro/p67-gennaro.pdf>

[GGO98] H. Gilbert, D. Gupta, A. Odlyzko and J.-J. Quisquater, "Attacks on Shamir's 'RSA for Paranoids,'" *Information Processing Letters* vol.68 no.4 (November 30, 1998), pp.197-199. Also available from <http://www.research.att.com/~amo/doc/crypto.html>

[GK86] S. Goldwasser and J. Kilian, "Almost all primes can be quickly certified," *Proceedings of the 18th Annual ACM Symposium on Theory of Computing* (1986), 316-329.

[GM84] S. Goldwasser and S. Micali, "Probabilistic encryption," *Journal of Computer and System Sciences* **28** (1984), 270-299.

[GMR88] S. Goldwasser, S. Micali and R. L. Rivest, "A digital signature scheme secure against adaptive chosen-message attacks," *SIAM Journal on Computing* **17** (1988), 281-308.

[Gor93a] D. M. Gordon, "Designing and detecting trapdoors for discrete log cryptosystems," E. F. Brickell, editor, *Advances in Cryptology — CRYPTO '92, Lecture Notes in Computer Science* **740** (1993), Springer-Verlag, 66-75.

[Gor93b] D. M. Gordon, "Discrete logarithms in  $GF(p)$  using the number field sieve," *SIAM Journal on Discrete Mathematics*, **6** (1993), 124-138.

[Gor98] D. M. Gordon, "A survey of fast exponentiation methods," *Journal of Algorithms* **27** (1998), 129-146.

[GM93] D. M. Gordon and K. S. McCurley, "Massively parallel computations of discrete logarithms," E. F. Brickell, editor, *Advances in Cryptology — CRYPTO '92, Lecture Notes in Computer Science* **740** (1993), Springer-Verlag, 312-323.

[Gos90] K. C. Goss, "Cryptographic method and apparatus for public key exchange with authentications," U. S. Patent 4,956,863, 11 Sep 1990.

[GQW91] C. Guillou, J.-J. Quisquater, M. Walker, P. Landrock and C. Shaer, "Precautions taken against various potential attacks in ISO/IEC DIS 9796," I.B. Damgard, editor, *Advances in Cryptology — EUROCRYPT '90, Lecture Notes in Computer Science* **473** (1991), Springer-Verlag, 465-473.

[Gun90] C. G. Gunther, "An identity-based key-exchange protocol," J.-J. Quisquater and J. Vandewalle, editors, *Advances in Cryptology — EUROCRYPT '89, Lecture Notes in Computer Science* **434** (1990), Springer-Verlag, 29-37.

[HM95] Katie Hafner and John Markoff, *Cyberpunk: Outlaws and hackers on the computer frontier*, updated edition, Touchstone Books, 1995.

[Has88] J. Hastad, "Solving simultaneous modular equations of low degree," *SIAM Journal on Computing* **17** (1988), 336-341.

[ISO98a] ISO/IEC 8824-1:1998, Information Technology – Abstract Syntax Notation One (ASN.1): Specification of Basic Notation. Equivalent to ITU-T Rec. X.680 (1997).

[ISO98b] ISO/IEC 8824-2:1998, Information Technology – Abstract Syntax Notation One (ASN.1): Information Object Specification. Equivalent to ITU-T Rec. X.681 (1997)

[ISO98c] ISO/IEC 8824-3:1998, Information Technology – Abstract Syntax Notation One (ASN.1): Constraint Specification. Equivalent to ITU-T Rec. X.682 (1997).

[ISO98d] ISO/IEC 8824-4:1998, Information Technology – Abstract Syntax Notation One (ASN.1): Parameterization of ASN.1 Specifications. Equivalent to ITU-T Rec. X.683 (1997).

[ISO98e] ISO/IEC 8825-1:1998, Information Technology – ASN.1 Encoding Rules: Specification of Basic Encoding Rules (BER), Canonical Encoding Rules (CER) and Distinguished Encoding Rules (DER). Equivalent to ITU-T Rec. X.690 (1997).

[ISO98f] ISO/IEC 8825-2:1998, Information Technology – ASN.1 Encoding Rules: Specification of Packed Encoding Rules (PER). Equivalent to ITU-T Rec. X.691 (1997).

[ISO91] ISO/IEC 9796:1991 Information Technology – Security techniques – Digital signature scheme giving message recovery.

[ISO98g] ISO/IEC 9796-4 Information Technology – Security techniques – Digital signature schemes giving message recovery – Part 4: Methods based on the Discrete Logarithm, draft, 1998.

[ISO98h] ISO/IEC DIS 14888-3 Information technology – Security techniques – Digital signature with appendix – Part 3: Certificate-based mechanisms, Draft International Standard, 1998.

[ITT86] T. Itoh, O. Teechai and S. Tsujii, "A Fast Algorithm for Computing Multiplicative Inverses in  $GF(2^t)$  using normal bases," *J. Society for Electronic Communications (Japan)* **44** (1986), 31-36.

[ITU97] ITU-T Recommendation X.509 (1997 E): Information Technology – Open Systems Interconnection – The Directory: Authentication Framework, International Telecommunications Union, June 1997.

[JQ99] M. Joye and J.-J. Quisquater, "On Rabin-type signatures (working draft)." Presented at the rump session of *CRYPTO* '99. Available from <http://grouper.ieee.org/groups/1363/contrib.html>.

[Joh] D. B. Johnson, unpublished communication to ANSI X9F1 and IEEE P1363 working groups.

- [JM96] D. B. Johnson and S. M. Matyas, "Asymmetric encryption: Evolution and enhancements," *CryptoBytes* vol. 2 no. 1 (Spring 1996), RSA Laboratories, <ftp://ftp.rsa.com/pub/crypto/bytes/crypto2n1.pdf>
- [JQ96] M. Joye and J.J. Quisquater, "Efficient computation of full Lucas sequences," *Electronics Letters* vol. 32 (1996), pp. 537-538. Corrected version available at <http://www.dice.ucl.ac.be/crypto/publications.html>
- [Kal98a] B. S. Kaliski, Jr., "Compatible cofactor multiplication for Diffie-Hellman primitives," *Electronics Letters* vol. 34 no. 25 (December 10, 1998), pp. 2396-2397.
- [Kal98b] B. S. Kaliski, Jr., "MQV vulnerability," Internet communication to ANSI X9F1 and IEEE P1363 mailing lists, June 17, 1998.
- [Keh95] Brendan P. Kehoe, *Zen and the Art of the Internet : A Beginner's Guide*, fourth edition, Prentice Hall Computer Books, 1995.
- [KSW98] J. Kelsey, B. Schneier, D. Wagner and C. Hall, "Cryptanalytic attacks on pseudorandom number generators," S. Vaudenay, editor, *Fast Software Encryption, Fifth International Workshop Proceedings, Lecture Notes in Computer Science* **1372** (1998), Springer-Verlag, 168-188.
- [Ker83] A. Kerckhoffs, "La cryptographie militaire," *Journal des Sciences Militaires*, 9th Series (February 1883), 161-191.
- [Knu81] D. E. Knuth, *The Art of Computer Programming. Vol. 2: Seminumerical Algorithms*, 2nd edition, Addison-Wesley, 1981, p. 379.
- [Kob87] N. Koblitz, "Elliptic curve cryptosystems," *Mathematics of Computation* **48** (1987), 203-209.
- [Kob94] N. Koblitz, *A Course in Number Theory and Cryptography*, 2nd ed., Springer-Verlag, 1994.
- [Koc96] P. C. Kocher, "Timing attacks on implementations of Diffie-Hellman, RSA, DSS, and other systems," N. Koblitz, editor, *Advances in Cryptology – CRYPTO '96, Lecture Notes in Computer Science* **1109** (1996), Springer-Verlag, 104-113.
- [Kra93] D. W. Kravitz, "Digital signature algorithm," U.S. Patent 5,231,668, 27 Jul 1993.
- [LMQ98] L. Law, A. Menezes, M. Qu, J. Solinas, S. Vanstone, "An Efficient Protocol for Authenticated Key Agreement," Technical Report CORR 98-05, Dept. of C&O, University of Waterloo, Canada, March 1998 (revised August 28, 1998). Available from <http://www.cacr.math.uwaterloo.ca/>.
- [LZ94] G. Lay and H. Zimmer, "Constructing elliptic curves with given group order over large finite fields," *Algorithmic Number Theory: First International Symposium, Lecture Notes in Computer Science* **877** (1994), Springer-Verlag, 250-263.
- [Leh69] D. H. Lehmer, "Computer Technology Applied to the Theory of Numbers," *Studies in Number Theory* (W. J. LeVeque, ed.), Mathematical Association of America, 1969.
- [Len87] H. W. Lenstra, Jr., "Factoring integers with elliptic curves," *Annals of Mathematics* **126** (1987), 649-673.



- [LL97] C. H. Lim and P. J. Lee, "A key recovery attack on discrete log-based schemes using a prime order subgroup," B. S. Kaliski, Jr., editor, *Advances in Cryptology — CRYPTO '97, Lecture Notes in Computer Science* **1294** (1997), Springer-Verlag, 249-263.
- [LS98] M. Liskov and R. D. Silverman, "A Statistical Limited-Knowledge Proof for Secure RSA Keys," submitted to *Journal of Cryptology*, 1998.
- [MV97] MasterCard International, Inc. and Visa International Service Association, *SET Secure Electronic Transaction Specification*, May 31, 1997. Available from <http://www.setco.org/>.
- [MTI86] T. Matsumoto, Y. Takashima and H. Imai, "On seeking smart public-key-distribution systems," *The Transactions of the IECE of Japan* **E69** (1986), 99-106.
- [Mau91] U. M. Maurer, "A universal statistical test for random bit generators," A.J. Menezes and S. A. Vanstone, editors, *Advances in Cryptology — CRYPTO '90, Lecture Notes in Computer Science* **537** (1991), Springer-Verlag, 409-420.
- [Mau95] U. M. Maurer, "Fast generation of prime numbers and secure public-key cryptographic parameters," *Journal of Cryptology* **8** (1995), 123-155.
- [Men93a] A. Menezes, editor, *Applications of Finite Fields*, Kluwer Academic Publishers, 1993.
- [Men93b] A. Menezes, *Elliptic Curve Public Key Cryptosystems*, Kluwer Academic Publishers, 1993.
- [Men95] A. Menezes, "Elliptic Curve Cryptosystems," *CryptoBytes* vol. 1 no. 2 (Summer 1995), RSA Laboratories, <ftp://ftp.rsa.com/pub/cryptobytes/cryptoln2.pdf>
- [MOV93] A. Menezes, T. Okamoto and S. Vanstone, "Reducing elliptic curve logarithms to logarithms in a finite field," *IEEE Transactions on Information Theory* **39** (1993), 1639-1646.
- [MOV96] A. Menezes, P. van Oorschot and S. Vanstone, *Handbook of Applied Cryptography*, CRC Press, Boca Raton, Florida, 1996.
- [MQV95] A. Menezes, M. Qu and S. Vanstone, "Some new key agreement protocols providing implicit authentication," workshop record, 2nd Workshop on Selected Areas in Cryptography (SAC'95), Ottawa, Canada, May 18-19, 1995, 22-32.
- [MRS88] S. Micali, C. Rackoff and B. Sloan, "The notion of security for probabilistic cryptosystems," *SIAM Journal on Computing* **17** (1988), 412-426.
- [MS91] S. Micali and C. P. Schnorr, "Efficient, perfect polynomial random number generators," *Journal of Cryptology* **3** (1991), 157-172.
- [Mih94] P. Mihailescu, "Fast generation of provable primes using search in arithmetic progressions," Yvo G. Desmedt, editor, *Advances in Cryptology — CRYPTO '94, Lecture Notes in Computer Science* **839** (1994), Springer-Verlag, 282-293.
- [Mil86] V. S. Miller, "Use of elliptic curves in cryptography," H. C. Williams, editor, *Advances in Cryptology — Crypto '85, Lecture Notes in Computer Science* **218** (1986), Springer-Verlag, 417-426.

- [Mor91] F. Morain, "Building cyclic elliptic curves modulo large primes," D. W. Davies, editor, *Advances in Cryptology - EUROCRYPT '91, Lecture Notes in Computer Science* **547** (1991), Springer-Verlag, 328-336.
- [NIS99] National Institute of Standards and Technology. "Recommended elliptic curves for federal government use," draft, 1999. Available from <http://csrc.nist.gov/encryption/>.
- [NR93] K. Nyberg and R. Rueppel, "A new signature scheme based on the DSA giving message recovery," *First ACM Conference on Computer and Communications Security* (1993), ACM Press, 58-61.
- [Od95] A. M. Odlyzko, "The Future of Integer Factorization," *CryptoBytes* vol. 1 no. 2 (Summer 1995), RSA Laboratories, <ftp://ftp.rsa.com/pub/cryptoBytes/cryptoLn2.pdf>
- [OW94] P. van Oorschot and M. Wiener, "Parallel collision search with applications to hash functions and discrete logarithms," *2nd ACM Conference on Computer and Communications Security* (1994), ACM Press, 210-218.
- [Pol74] J. M. Pollard, "Theorems on factorization and primality testing," *Proceedings of the Cambridge Philosophical Society* **76** (1974), 521-528.
- [Pol75] J. M. Pollard, "A Monte Carlo method for factorization," *BIT* **15** (1975), 331-334.
- [Pol78] J. M. Pollard, "Monte Carlo methods for index computation (mod  $p$ )," *Mathematics of Computation* **32** (1978), 918-924.
- [PKC93] Public Key Cryptography Standards (PKCS). PKCS #1 v1.5: RSA Encryption Standard. November 1, 1993. Available from <http://www.rsa.com/rsalabs/pubs/PKCS/>.
- [PKC98] Public Key Cryptography Standards (PKCS). PKCS #1 v2.0: RSA Cryptography Standard. 1998. Available from <http://www.rsa.com/rsalabs/pubs/PKCS/>.
- [Rab79] M. O. Rabin, "Digitalized signatures and public-key functions as intractable as factorization," Massachusetts Institute of Technology Laboratory for Computer Science Technical Report 212 (MIT/LCS/TR-212), 1979.
- [RSA78] R. L. Rivest, A. Shamir and L. M. Adleman, "A method for obtaining digital signatures and public-key cryptosystems," *Communications of the ACM* **21** (1978), 120-126.
- [SA98] T. Satoh and K. Araki, "Fermat quotients and the polynomial time discrete log algorithm for anomalous elliptic curves," *Commentarii Mathematici Universitatis Sancti Pauli* **47** (1998), 81-92. Errata: *ibid.* 48(1999), 211-213.
- [Sch93] O. Schirokauer, "Discrete logarithms and local units," *Philosophical transactions of the Royal Society of London A*, **345** (1993), 409-423.
- [Sch95] B. Schneier, *Applied Cryptography : Protocols, Algorithms, and Source Code in C*, Second Edition, John Wiley and Sons, 1995.
- [SOM95] R. Schroepel, H. Orman, S. O'Malley, and O. Spatscheck. "Fast key exchange with elliptic curve systems," *Univ. of Arizona Comp. Sci. Tech. Report 95-03* (1995). A version also appears in D. Coppersmith, editor, *Advances in Cryptology — CRYPTO '95, Lecture Notes in Computer Science* **963** (1995), Springer-Verlag, 43-56.

- [Ser98] G. Seroussi, "Compact representation of elliptic curve points over  $F_2^n$ ." Research Manuscript, Hewlett-Packard Laboratories, April 1998.
- [Sha95] A. Shamir, "RSA for Paranoids," *CryptoBytes* vol. 1 no. 3 (Autumn 1995), RSA Laboratories, <ftp://ftp.rsa.com/pub/cryptobytes/cryptoln3.pdf>.
- [Sha86] J. Shawe-Taylor, "Generating strong primes," *Electronics Letters* **22** (July 31, 1986), 875-877.
- [Sil87] R. D. Silverman, "The multiple polynomial quadratic sieve," *Mathematics of Computation* **48** (1987), 329-339.
- [Sil86] J. Silverman, *The Arithmetic of Elliptic Curves*, Springer-Verlag, 1986.
- [Sma99] N. P. Smart, "Elliptic Curve Cryptosystems over Small Fields of Odd Characteristic," *J. Cryptology* vol. 12. (1999), pp. 141-151.
- [SAK98] D. Solo, C. Adams, D. Kemp and M. Myers, "Internet X.509 Certificate Request Message Format," Internet Engineering Task Force (IETF), PKIX working group, work in progress. Available at <http://www.ietf.org/ids.by.wg/pkix.html>.
- [SHW98] D. Solo, R. Housley, W. Ford and T. Polk, "Internet X.509 Public Key Infrastructure Certificate and CRL Profile," Internet Engineering Task Force (IETF), PKIX working group, work in progress. Available at <http://www.ietf.org/ids.by.wg/pkix.html>.
- [Sta98] William Stallings, *Cryptography and Network Security: Principles and Practice*, Second Edition, Prentice-Hall, 1998.
- [SEC99] Standards for Efficient Cryptography. "GEC1: Recommended Elliptic Curve Domain Parameters," draft, September 1999. Available from <http://www.secg.org/drafts.htm>.
- [Sti95] Douglas R. Stinson, *Cryptography: Theory and Practice*, CRC Press, 1995.
- [Vau96] S. Vaudenay, "Hidden collisions on DSS," N. Koblitz, editor, *Advances in Cryptology – CRYPTO '96, Lecture Notes in Computer Science* **1109** (1996), Springer-Verlag, 83-88.
- [Wie90] M. J. Wiener, "Cryptanalysis of short RSA secret exponents," *IEEE Transactions on Information Theory* **36** (1990), 553-558.
- [WZ98] M. J. Wiener and R. Zuccherato, "Faster Attacks on Elliptic Curve Cryptosystems," S. Tavares and H. Meijer, editors, *Selected Areas in Cryptography – SAC '98, Lecture Notes in Computer Science* (1998), Springer-Verlag.
- [Wil80] H. C. Williams, "A modification on the RSA public-key encryption procedure," *IEEE Transactions of Information Theory* **26** (1980), 726-729.
- [Wil82] H. C. Williams, "A  $p + 1$  method of factoring," *Mathematics of Computation* **39** (1982), 225-234.
- [Yao82] A. C. Yao, "Theory and applications of trapdoor functions," *Proceedings of the IEEE 23rd Annual Symposium on Foundations of Computer Science (FOCS '92)*, 1992, 80-91.