

1. Record Nr.	UNISA996495572203316
Titolo	Progress in cryptology - AFRICACRYPT 2022 : 13th International Conference on Cryptology in Africa, AFRICACRYPT 2022, Fes, Morocco, July 18-20, 2022, proceedings // Lejla Batina and Joan Daemen (editors)
Pubbl/distr/stampa	Cham, Switzerland : , : Springer, , [2022] ©2022
ISBN	3-031-17433-X
Descrizione fisica	1 online resource (599 pages)
Collana	Lecture notes in computer science ; ; Volume 13503
Disciplina	005.82
Soggetti	Data encryption (Computer science) Cryptography
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Intro -- Preface -- Organization -- Contents -- Symmetric Cryptography -- Construction of Recursive MDS Matrices Using DLS Matrices -- 1 Introduction -- 2 Definition and Preliminaries -- 2.1 Finite Fields and MDS Matrices -- 2.2 XOR Count -- 3 Construction of MDS Matrices from DLS Matrices -- 3.1 Diagonal-Like Sparse (DLS) Matrices -- 3.2 Equivalence Classes of DLS Matrices to Construct Recursive MDS Matrices -- 3.3 Equivalence of DLS Matrices with Sparse DSI Matrices -- 4 Construction of MDS Matrices from Generalized DLS Matrices -- 4.1 Construction of 44 Recursive MDS Matrices -- 4.2 Construction of 55 Recursive MDS Matrices -- 4.3 Construction of 66 Recursive MDS Matrices -- 4.4 Construction of 77 Recursive MDS Matrices -- 4.5 Importance of GDLS Matrices -- 5 Conclusion and Future Work -- References -- FUTURE: A Lightweight Block Cipher Using an Optimal Diffusion Matrix -- 1 Introduction -- 2 Definition and Preliminaries -- 2.1 MDS Matrix -- 2.2 Boolean Function and Sbox -- 3 Structure of FUTURE -- 3.1 Round Function -- 4 Design Decision -- 4.1 SubCell -- 4.2 MixColumn -- 4.3 Round Key -- 5 Security Analysis -- 5.1 Differential and Linear Cryptanalysis -- 5.2 Impossible Differential Attacks -- 5.3 Boomerang Attack -- 5.4 Integral Attack -- 5.5 Invariant Subspace Attacks -- 5.6 Meet-in-the-Middle Attacks -- 5.7 Algebraic

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