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International Researcher IDs

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Education Information

2010 - 2014	Doctorate, Sabanci University, Faculty Of Engineering And Natural Sciences, Turkey
2006 - 2009	Postgraduate, Georg-August-Universitaet Göttingen, Mathematics, Germany
2001 - 2006	Undergraduate, Bogazici University, Faculty Of Arts And Sciences, Department Of Mathematics, Turkey

Research Areas

Field Theory and Polynomials

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **On a class of permutation trinomials over finite fields**
Özkaya B., Gülmez Temür B.
TURKISH JOURNAL OF MATHEMATICS, vol.48, no.4, pp.778-792, 2024 (SCI-Expanded)
- II. **On some permutation trinomials in characteristic three**
Özkaya B., Gülmez Temür B.
HACETTEPE JOURNAL OF MATHEMATICS AND STATISTICS, vol.1, pp.1, 2024 (SCI-Expanded)
- III. **New distance bounds for quasi-cyclic codes**
Özkaya B., Özbudak F.
DESIGNS, CODES, AND CRYPTOGRAPHY, vol.1, pp.1, 2024 (SCI-Expanded)
- IV. **Improved Spectral Bound for Quasi-Cyclic Codes**
Luo G., Ezerman M. F., Ling S., Özkaya B.
IEEE TRANSACTIONS ON INFORMATION THEORY, vol.70, no.6, pp.4002-4015, 2024 (SCI-Expanded)
- V. **Complete Characterization of a Class of Permutation Trinomial in Characteristic Five**
Grassl M., Özbudak F., Özkaya B., Gülmez Temür B.
CRYPTOGRAPHY AND COMMUNICATIONS, vol.16, pp.825-841, 2024 (SCI-Expanded)
- VI. **Quasi-twisted codes as contractions of quasi-cyclic codes**
Özkaya B., Özbudak F.
ADVANCES IN MATHEMATICS OF COMMUNICATIONS, vol.18, no.2, pp.394-409, 2023 (SCI-Expanded)
- VII. **A Comparison of Distance Bounds for Quasi-Twisted Codes**
Ezerman M. F., Lampos J. M., Ling S., Ozkaya B., Tharnnukhroh J.
IEEE TRANSACTIONS ON INFORMATION THEORY, vol.67, no.10, pp.6476-6490, 2021 (SCI-Expanded)
- VIII. **New bounds on the minimum distance of cyclic codes**
Ling S., ÖZKAYA B.

Advances in Mathematics of Communications, vol.15, no.1, pp.1-8, 2021 (SCI-Expanded)

- IX. **On complementary dual multinegacirculant codes**
Alahmadi A., Guneri C., Ozkaya B., Shoaib H., Sole P.
CRYPTOGRAPHY AND COMMUNICATIONS-DISCRETE-STRUCTURES BOOLEAN FUNCTIONS AND SEQUENCES, vol.12, no.1, pp.101-113, 2020 (SCI-Expanded)
- X. **Multidimensional quasi-twisted codes: equivalent characterizations and their relation to multidimensional convolutional codes**
Ling S., Ozkaya B.
DESIGNS CODES AND CRYPTOGRAPHY, vol.87, no.12, pp.2941-2965, 2019 (SCI-Expanded)
- XI. **On Linear Complementary Pair of nD Cyclic Codes**
Guneri C., Ozkaya B., Sayici S.
IEEE COMMUNICATIONS LETTERS, vol.22, no.12, pp.2404-2406, 2018 (SCI-Expanded)
- XII. **On Linear Complementary Pairs of Codes**
CARLET C., Guneri C., ÖZBUDAK F., Ozkaya B., SOLE P.
IEEE TRANSACTIONS ON INFORMATION THEORY, vol.64, no.10, pp.6583-6589, 2018 (SCI-Expanded)
- XIII. **Structure and performance of generalized quasi-cyclic codes**
Guneri C., ÖZBUDAK F., Ozkaya B., Sacikara E., SEPASDAR Z., SOLÉ P.
FINITE FIELDS AND THEIR APPLICATIONS, vol.47, pp.183-202, 2017 (SCI-Expanded)
- XIV. **On self-dual double negacirculant codes**
Alahmadi A., Guneri C., Ozkaya B., Shoaib H., Sole P.
DISCRETE APPLIED MATHEMATICS, vol.222, pp.205-212, 2017 (SCI-Expanded)
- XV. **QUASI-CYCLIC SUBCODES OF CYCLIC CODES**
Belfiore J., Guneri C., Ozkaya B.
SIAM JOURNAL ON DISCRETE MATHEMATICS, vol.31, no.2, pp.1454-1475, 2017 (SCI-Expanded)
- XVI. **Multidimensional Quasi-Cyclic and Convolutional Codes**
Guneri C., Ozkaya B.
IEEE TRANSACTIONS ON INFORMATION THEORY, vol.62, no.12, pp.6772-6785, 2016 (SCI-Expanded)
- XVII. **Quasi-cyclic complementary dual codes**
Guneri C., Ozkaya B., Sole P.
FINITE FIELDS AND THEIR APPLICATIONS, vol.42, pp.67-80, 2016 (SCI-Expanded)
- XVIII. **A minimum distance bound for quasi-nD-cyclic codes**
ÖZBUDAK F., Ozkaya B.
FINITE FIELDS AND THEIR APPLICATIONS, vol.41, pp.193-222, 2016 (SCI-Expanded)

Articles Published in Other Journals

- I. **The combinatorics of LCD codes: linear programming bound and orthogonal matrices**
Dougherty S., Kim J., Özkaya B., Sok L., Sole P.
International Journal of Information and Coding Theory, vol.4, no.2-3, pp.116-128, 2017 (Peer-Reviewed Journal)

Books & Book Chapters

- I. **Quasi-cyclic codes**
Özkaya B., Güneri C., Ling S.
in: A Concise Encyclopedia of Coding Theory, W. Cary Huffman, Jon-Lark Kim, Patrick Solé, Editor, CRC, New York, New York, pp.129-150, 2021

Refereed Congress / Symposium Publications in Proceedings

I. Spectral Bounds for Quasi-Twisted Codes

Ezerman M. F., Ling S., Ozkaya B., Tharnnukhroh J.

IEEE International Symposium on Information Theory (ISIT), Paris, France, 7 - 12 July 2019, pp.1922-1926

II. Good Stabilizer Codes from Quasi-Cyclic Codes over F_4 and F_9

Ezerman M. F., Ling S., Ozkaya B., Sole P.

IEEE International Symposium on Information Theory (ISIT), Paris, France, 7 - 12 July 2019, pp.2898-2902

Supported Projects

2024 - 2026

Orthogonal Arrays, Covering Radius, LCD Codes, Flag Codes and Related Areas, TÜBİTAK International Bilateral Joint Cooperation Program Project

Metrics

Publication: 23

Citation (WoS): 201

Citation (Scopus): 198

H-Index (WoS): 6

H-Index (Scopus): 6