

## Res. Asst. TALHA ARIKAN

### Personal Information

**Email:** tarikan@hacettepe.edu.tr

**Web:** <https://avesis.hacettepe.edu.tr/tarikan>

### Education Information

Doctorate, Hacettepe University, Fen Bilimleri Enstitüsü, Matematik, Turkey 2013 - Continues

Postgraduate, Tobb University Of Economics And Technology, Fen Bilimleri Enstitüsü, Matematik, Turkey 2011 - 2013

Undergraduate Double Major, Tobb University Of Economics And Technology, İktisadi İdari Bilimler Fakültesi, İktisat, Turkey 2007 - 2011

Undergraduate, Tobb University Of Economics And Technology, Fen Edebiyat Fakültesi, Matematik, Turkey 2005 - 2011

### Dissertations

Postgraduate, Yüksek mertebeden lineer indirgeme dizilerinin terimlerinin ters toplamları, Tobb Ekonomi Ve Teknoloji Üniversitesi, Fen Bilimleri Enstitüsü, Matematik (YI) (Tezli), 2013

### Research Areas

Mathematics, Linear and Multilinear Algebra: Matrix Theory, Combinatorics, Number Theory, Natural Sciences

### Academic Titles / Tasks

Research Assistant, Hacettepe University, Fen Fakültesi, Matematik Bölümü, 2013 - Continues

### Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Asymptotically optimal  $[2k+1, k, k]$ -almost affinely disjoint subspaces**  
Duzgun B., ARIKAN T., Otal K., Ozbudak F.  
DISCRETE MATHEMATICS, no.10, 2024 (SCI-Expanded)
- II. **On a group under which symmetric Reed-Muller codes are invariant**  
Toplu S. K., ARIKAN T., AYDOĞDU P., YAYLA O.  
JOURNAL OF ALGEBRA AND ITS APPLICATIONS, 2024 (SCI-Expanded)
- III. **An asymptotically optimal construction of almost affinely disjoint subspaces**  
Otal K., ARIKAN T.  
FINITE FIELDS AND THEIR APPLICATIONS, vol.84, 2022 (SCI-Expanded)
- IV. **Evaluation of some reciprocal trigonometric sums via partial fraction decomposition**  
ARIKAN T., Prodinger H.  
KUWAIT JOURNAL OF SCIENCE, vol.47, no.1, pp.14-21, 2020 (SCI-Expanded)
- V. **Evaluation of sums of products of Gaussian  $q$ -binomial coefficients with rational weight functions**

- ARIKAN T., KILIÇ E., Prodinger H.  
TURKISH JOURNAL OF MATHEMATICS, vol.44, no.1, pp.307-318, 2020 (SCI-Expanded)
- VI. **A NONSYMMETRICAL MATRIX AND ITS FACTORIZATIONS**  
ARIKAN T., KILIÇ E., Prodinger H.  
MATHEMATICA SLOVACA, vol.69, no.4, pp.753-762, 2019 (SCI-Expanded)
- VII. **A nonlinear generalization of the Filbert matrix and its Lucas analogue**  
KILIÇ E., ARIKAN T.  
LINEAR & MULTILINEAR ALGEBRA, vol.67, no.1, pp.141-157, 2019 (SCI-Expanded)
- VIII. **Studying new generalizations of Max-Min matrices with a novel approach**  
KILIÇ E., ARIKAN T.  
TURKISH JOURNAL OF MATHEMATICS, vol.43, no.4, pp.2010-2024, 2019 (SCI-Expanded)
- IX. **Double Binomial Sums and Double Sums Related with Certain Linear Recurrences of Various Order**  
KILIÇ E., ARIKAN T.  
CHIANG MAI JOURNAL OF SCIENCE, vol.45, no.3, pp.1569-1577, 2018 (SCI-Expanded)
- X. **Evaluation of Hessenberg Determinants via Generating Function Approach**  
KILIÇ E., ARIKAN T.  
FILOMAT, vol.31, no.15, pp.4945-4962, 2017 (SCI-Expanded)
- XI. **A CLASS OF NON-SYMMETRIC BAND DETERMINANTS WITH THE GAUSSIAN  $q$ -BINOMIAL COEFFICIENTS**  
ARIKAN T., KILIÇ E.  
QUAESTIONES MATHEMATICAE, vol.40, no.5, pp.645-660, 2017 (SCI-Expanded)
- XII. **Evaluation of spectrum of 2-periodic tridiagonal-Sylvester matrix**  
Kilic E., ARIKAN T.  
TURKISH JOURNAL OF MATHEMATICS, vol.40, no.1, pp.80-89, 2016 (SCI-Expanded)
- XIII. **The generalized reciprocal super Catalan matrix**  
KILIÇ E., ARIKAN T.  
TURKISH JOURNAL OF MATHEMATICS, vol.40, no.5, pp.960-972, 2016 (SCI-Expanded)

### Articles Published in Other Journals

- I. **103.26 A proof of Clarke's conjecture**  
KILIÇ E., ARIKAN T.  
MATHEMATICAL GAZETTE, vol.103, no.557, pp.346-352, 2019 (ESCI)
- II. **A Wilf class composed of 19 symmetry classes of quadruples of 4-letter patterns**  
ARIKAN T., KILIÇ E., Mansour T.  
NOTES ON NUMBER THEORY AND DISCRETE MATHEMATICS, vol.23, no.3, pp.79-99, 2017 (ESCI)
- III. **Ruehr  $s$  identities with two additional parameters**  
KILIÇ E., ARIKAN T.  
INTEGERS, vol.16, pp.1-8, 2016 (Scopus)

### Refereed Congress / Symposium Publications in Proceedings

- I. **A New Construction of Asymptotically Optimal Almost Affinely Disjoint Spaces**  
ARIKAN T., Düzgün B., Otal K., ÖZBUDAK F.  
2023 IEEE International Symposium on Information Theory, ISIT 2023, Taipei, Taiwan, 25 - 30 June 2023, vol.2023-June, pp.282-285
- II. **Evaluating Some Hessenberg Determinants via Generating Functions**  
KILIÇ E., ARIKAN T.  
International Conference on Approximation Theory and its Applications, 26 - 29 May 2016

**III. Some Classes of Band Determinants of  $q$  binomial Coefficients**

KILIÇ E., ARIKAN T.

LICMA'15 Lebanese International Conference on Mathematics and Applications, 26 - 29 May 2015

**IV. İki Periyodik Tridiagonal Sylvester Matrisinin Spektrumu**

KILIÇ E., ARIKAN T.

14. Matematik Sempozyumu, Turkey, 14 - 16 May 2015

**V. Double binomial sums and double sums related with certain linear recurrences of various order**

KILIÇ E., ARIKAN T.

3rd International Eurasian Conference On Mathematical Sciences and Applications, 25 - 28 August 2014

**VI. Some further results on the sums of reciprocals of terms of a order  $k$  recurring sequence**

KILIÇ E., ARIKAN T.

15th International Conference on Fibonacci Numbers and Their Applications, 25 - 30 June 2012

## Supported Projects

ARIKAN T., KILIÇ E., Project Supported by Higher Education Institutions, Bazı Hessenberg Determinantlarının Üreteç Fonksiyonlarıyla Hesaplanması, 2016 - 2016

ARIKAN T., KILIÇ E., Project Supported by Higher Education Institutions,  $q$ -Binom Katsayılarının Bant Determinantlarının Bazı Sınıfları, 2015 - 2015

## Metrics

Publication: 22

Citation (WoS): 20

H-Index (WoS): 3