

## Prof. ERCAN ALTINIŞIK

### Personal Information

Office Phone: [+90 312 202 1070](tel:+903122021070)

Email: [ealtinisik@gazi.edu.tr](mailto:ealtinisik@gazi.edu.tr)

Web: <https://avesis.gazi.edu.tr/ealtinisik>



### International Researcher IDs

ScholarID: drVLAikAAAAJ

ORCID: 0000-0002-0476-9429

Publons / Web Of Science ResearcherID: AHA-2706-2022

ScopusID: 8870022800

Yoksis Researcher ID: 108782

### Education Information

Doctorate, Selcuk University, Institute Of Science, Matematik (Dr), Turkey 1998 - 2001

Postgraduate, Dokuz Eylul University, Fen Bilimleri Enstitüsü, Matematik Eğitimi (YI), Turkey 1994 - 1998

Undergraduate, Dokuz Eylul University, Buca Eğitim Fakültesi, Matematik Ve Fen Bilimleri Eğitimi Bölümü, Turkey 1990 - 1994

### Foreign Languages

English, C1 Advanced

### Dissertations

Doctorate, Hemen-hemen Hilbert-Smith matrislerinin karakterizasyonu, Selcuk University, Fen Bilimleri Enstitüsü, Matematik (Dr), 2001

Postgraduate, Complex curves in  $R^4$ , Dokuz Eylul University, Fen Bilimleri Enstitüsü, Matematik Eğitimi (YI), 1997

### Research Areas

Linear and Multilinear Algebra: Matrix Theory, Number Theory

### Academic Titles / Tasks

Professor, Gazi University, Fen Fakültesi, Matematik, 2017 - Continues

Associate Professor, Gazi University, Fen Fakültesi, Matematik, 2010 - 2017

Assistant Professor, Gazi University, Fen Fakültesi, Matematik, 2003 - 2010

Assistant Professor, Selcuk University, Akören Ali Rıza Ercan Vocational School, Department Of Accounting And Tax Department, 2001 - 2003

Lecturer, Selcuk University, Akören Ali Rıza Ercan Vocational School, Department Of Accounting And Tax Department,

1998 - 2001

Research Assistant, Selcuk University, Institute Of Science, 1997 - 1998

## Academic and Administrative Experience

Director of the Center, Gazi University, Arařtırma ve Uygulama Merkezleri, Ölçme ve Değerlendirme Uygulama ve Arařtırma Merkezi, 2021 - Continues

Gazi University, Fen Fakóltesi, Matematik Bölümü, 2012 - 2014

Farabi Program Department Coordinator, Gazi University, Fen Fakóltesi, Matematik, 2009 - 2012

Member of ADEK Commission, Gazi University, Fen Fakóltesi, 2011 - 2011

Selcuk University, Akören Ali Rıza Ercan Meslek Yüksekokulu, 1998 - 2002

## Courses

SAYILAR TEORİSİ, Undergraduate, 2016 - 2017

MATEMATİK I, Undergraduate, 2016 - 2017

UZMANLIK ALAN DERSİ, Postgraduate, 2016 - 2017

## Advising Theses

ALTINIŞIK E., Singularity Of Lcm Matrices On Gcd Closed Sets, Postgraduate, T.ALTINTAŞ(Student), 2019

ALTINIŞIK E., Lattice-Theoretic Generalization Of The Lehmer Matrix, Postgraduate, F.YAĞCI(Student), 2017

ALTINIŞIK E., Divisibility Problem Between Of Gcd And Lcm Matrices, Postgraduate, M.BURAK(Student), 2015

ALTINIŞIK E., Proof Of Ilmonen-Haukkanen-Merikoski Conjecture, Postgraduate, A.KESKİN(Student), 2015

ALTINIŞIK E., Meet and join matrices, Postgraduate, M.GENÇ(Student), 2014

ALTINIŞIK E., Applications of GCD and LCM matrices, Postgraduate, A.ÇOŞKUN(Student), 2011

ALTINIŞIK E., Möbius inversiyon formülü, genelleřtirilmeleri ve uygulamaları, Postgraduate, M.YILDIZ(Student), 2010

ALTINIŞIK E., MÖBIUS INVERSION FORMULA, ITS GENERALIZATIONS AND APPLICATIONS, Postgraduate, M.YILDIZ(Student), 2010

ALTINIŞIK E., Dirichlet serileri, Postgraduate, P.POŞPOŞ(Student), 2008

## Jury Memberships

PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Ankara Üniversitesi, April, 2022

Appointment to Academic Staff-Assistant Professorship, Appointment Academic Staff, Bursa Teknik Üniversitesi, January, 2022

Associate Professor Exam, Associate Professor Exam, Gazi University, October, 2021

Appointment to Academic Staff-Assistant Professorship, Appointment Academic Staff, Ankara Üniversitesi, August, 2021

Associate Professor Exam, Associate Professor Exam, Gazi University, May, 2021

Associate Professor Exam, Associate Professor Exam, Gazi University, May, 2021

Doctoral Examination, Doctoral Examination, Gazi Üniversitesi, December, 2020

Post Graduate, Post Graduate, Gazi Üniversitesi, December, 2020

Appointment to Academic Staff-Assistant Professorship, Appointment Academic Staff, Ankara Üniversitesi, November, 2020

Appointment to Academic Staff-Assistant Professorship, Appointment Academic Staff, Çankırı Karatekin Üniversitesi, October, 2020

Associate Professor Exam, Associate Professor Exam, Ankara Üniversitesi, October, 2020

Doctoral Examination, Doctoral Examination, Gazi Üniversitesi, September, 2020

Appointment to Academic Staff-Assistant Professorship, Appointment Academic Staff, Gazi Üniversitesi, July, 2020  
 Appointment to Academic Staff-Assistant Professorship, Appointment Academic Staff, Trakya Üniversitesi, May, 2020  
 Doctorate, Doctorate, Gazi Üniversitesi, May, 2020  
 Appointment to Academic Staff-Assistant Professorship, Appointment Academic Staff, Ankara Üniversitesi, March, 2020  
 Associate Professor Exam, Associate Professor Exam, Gazi University, October, 2019  
 Associate Professor Exam, Associate Professor Exam, Gazi University, October, 2018

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

- I. **Non-divisibility of LCM matrices by GCD matrices on gcd-closed sets**  
 ALTINIŞIK E., Yildiz M., Keskin A.  
 LINEAR ALGEBRA AND ITS APPLICATIONS, vol.516, pp.47-68, 2017 (SCI-Expanded)
- II. **On a conjecture of Ilmonen, Haukkanen and Merikoski concerning the smallest eigenvalues of certain GCD related matrices**  
 ALTINIŞIK E., Keskin A., Yildiz M., Demirbuken M.  
 LINEAR ALGEBRA AND ITS APPLICATIONS, vol.493, pp.1-13, 2016 (SCI-Expanded)
- III. **ON BOUNDS FOR THE SMALLEST AND THE LARGEST EIGENVALUES OF GCD AND LCM MATRICES**  
 ALTINIŞIK E., BÜYÜKKÖSE Ş.  
 MATHEMATICAL INEQUALITIES & APPLICATIONS, vol.19, no.1, pp.117-125, 2016 (SCI-Expanded)
- IV. **A proof of a conjecture on monotonic behavior of the smallest and the largest eigenvalues of a number theoretic matrix**  
 ALTINIŞIK E., BÜYÜKKÖSE Ş.  
 LINEAR ALGEBRA AND ITS APPLICATIONS, vol.471, pp.141-149, 2015 (SCI-Expanded)
- V. **On inverses of GCD matrices associated with multiplicative functions and a proof of the Hong-Loewy conjecture**  
 Altinisik E.  
 LINEAR ALGEBRA AND ITS APPLICATIONS, vol.430, no.4, pp.1313-1327, 2009 (SCI-Expanded)
- VI. **ON THE MATRIX NORMS OF A GCD RELATED MATRIX**  
 Altinisik E.  
 MATHEMATICAL INEQUALITIES & APPLICATIONS, vol.11, no.4, pp.635-646, 2008 (SCI-Expanded)
- VII. **On the representation of k-generalized Fibonacci and Lucas numbers**  
 Ocal A., TUĞLU N., Altinisik E.  
 APPLIED MATHEMATICS AND COMPUTATION, vol.170, no.1, pp.584-596, 2005 (SCI-Expanded)
- VIII. **GCD matrices, posets, and nonintersecting paths**  
 Altinisik E., Sagan B., TUĞLU N.  
 LINEAR & MULTILINEAR ALGEBRA, vol.53, no.2, pp.75-84, 2005 (SCI-Expanded)
- IX. **A note on bounds for norms of the reciprocal LCM matrix**  
 Altinisik E., TUĞLU N., Haukkanen P.  
 MATHEMATICAL INEQUALITIES & APPLICATIONS, vol.7, no.4, pp.491-496, 2004 (SCI-Expanded)
- X. **On the almost Hilbert-Smith matrices**  
 Tasci D., Altinisik E.  
 FIBONACCI QUARTERLY, vol.40, no.4, pp.339-344, 2002 (SCI-Expanded)

## Articles Published in Other Journals

- I. **On the smallest singular value in the class of unit lower triangular matrices with entries in  $[-a, a]$**   
 ALTINIŞIK E.  
 SPECIAL MATRICES, vol.9, no.1, pp.297-304, 2021 (ESCI)
- II. **THE DISTANCE MATRIX AND THE DISTANCE ENERGY OF THE POWER GRAPHS OF  $C_n$  AND  $D_{2n}$**

- BÜYÜKKÖSE Ş., Varlioglu N. M., ALTINIŞIK E.  
JOURNAL OF SCIENCE AND ARTS, no.4, pp.823-838, 2019 (ESCI)
- III. **SOME RESULTS AND A CONJECTURE ON CERTAIN SUBCLASSES OF GRAPHS ACCORDING TO THE RELATIONS AMONG CERTAIN ENERGIES, DEGREES AND CONJUGATE DEGREES OF GRAPHS**  
ALTINIŞIK E., Varlioglu N. M.  
JOURNAL OF SCIENCE AND ARTS, no.4, pp.811-822, 2019 (ESCI)
- IV. **A NOTE ON THE SINGULARITY OF LCM MATRICES ON GCD - CLOSED SETS WITH 9 ELEMENTS**  
ALTINIŞIK E., Altintas T.  
JOURNAL OF SCIENCE AND ARTS, no.3, pp.413-422, 2017 (ESCI)
- V. **A Lattice-theoretic Generalization of the Lehmer Matrix**  
ALTINIŞIK E., Yagci F., Yildiz M.  
GAZI UNIVERSITY JOURNAL OF SCIENCE, vol.29, no.3, pp.675-679, 2016 (ESCI)
- VI. **Determinants and inverses of circulant matrices with complex Fibonacci numbers**  
ALTINIŞIK E., Yalcin N. F., BÜYÜKKÖSE Ş.  
SPECIAL MATRICES, vol.3, no.1, pp.82-90, 2015 (ESCI)
- VII. **Improved Bounds for the Extremal Non-Trivial Laplacian Eigenvalues**  
BÜYÜKKÖSE Ş., ALTINIŞIK E., Yalcin F.  
GAZI UNIVERSITY JOURNAL OF SCIENCE, vol.28, no.1, pp.65-68, 2015 (ESCI)
- VIII. **Determinants of Circulant Matrices with Some Certain Sequences**  
ALTINIŞIK E., BÜYÜKKÖSE Ş.  
GAZI UNIVERSITY JOURNAL OF SCIENCE, vol.28, no.1, pp.59-63, 2015 (ESCI)
- IX. **Determinant and Inverse of Meet and Join Matrices**  
ALTINIŞIK E., TUĞLU N., Penti H.  
International Journal of Mathematics and Mathematical Sciences, vol.2007, pp.1-11, 2007 (Scopus)
- X. **Inverses of  $S_f$  and  $S_f$  on gcd closed sets and lcm closed sets**  
ÖÇAL A. A., ALTINIŞIK E., TUĞLU N.  
International Journal of Analyzing Methods of Components and Combinatorial Biology in Mathematics, vol.1, no.1, pp.45-57, 2007 (Peer-Reviewed Journal)
- XI. **Gcd matrisinin karakteristik polinomu üzerine**  
Altınışik E.  
Anadolu University Journal of Science and Technology, vol.3, no.3, pp.401-404, 2002 (Peer-Reviewed Journal)
- XII. **On a generalization of the reciprocal LCM matrix**  
ALTINIŞIK E., TAŞCI D.  
COMMUNICATIONS FACULTY OF SCIENCES UNIVERSITY OF ANKARA-SERIES A1 MATHEMATICS AND STATISTICS, vol.51, no.2, pp.37-46, 2002 (Peer-Reviewed Journal)

## Refereed Congress / Symposium Publications in Proceedings

- I. **Some Conjectures on the Smallest Eigenvalues of Certain Positive Definite Matrices**  
ALTINIŞIK E.  
International Conference on Mathematics and Mathematics Education, 12 - 14 May 2016
- II. **The Bourque Ligh Conjecture of LCM matrices**  
YILDIZ M., ALTINIŞIK E.  
International Conference on Mathematics and Mathematics Education, 12 - 14 May 2016
- III. **On a Conjecture on the Smallest Eigenvalues of Some Special Positive Definite Matrices**  
ALTINIŞIK E.  
AMAT 20153rd International Conference on Applied Mathematics and Approximation Theory (AMAT2015), Ankara, Turkey, 28 - 31 May 2015
- IV. **A Proof of a Conjecture on Monotonic Behavior of the Largest Eigenvalue of a Number-theoretic Matrix**

ALTINIŞIK E., BÜYÜKKÖSE Ş.

International Conference on Numerical Analysis and Applied Mathematics (ICNAAM), Rhodes, Greece, 22 - 28 September 2014, vol.1648

## Activities in Scientific Journals

Asian Journal of Mathematics and Applications, Committee Member, 2020 - Continues

Advances in Linear Algebra & Matrix Theory, Committee Member, 2015 - Continues

## Memberships / Tasks in Scientific Organizations

Türk Matematik Derneği, Member, 2001 - Continues, Turkey

## Scientific Refereeing

TUBITAK Project, 2219 - Yurt Dışı Doktora Sonrası Araştırma Burs Programı, tübitak, Turkey, December 2020

TUBITAK Project, 2219 - Yurt Dışı Doktora Sonrası Araştırma Burs Programı, Tübitak, Turkey, December 2020

TUBITAK Project, 2219 - Yurt Dışı Doktora Sonrası Araştırma Burs Programı, tübitak, Turkey, December 2020

TUBITAK Project, 2219 - Yurt Dışı Doktora Sonrası Araştırma Burs Programı, tübitak, Turkey, December 2020

Project Supported by Higher Education Institutions, BAP Research Project, Amasya University, Turkey, July 2020

Adances in Linear Algebra and Matrix theory , Other journals, April 2020

IRANIAN JOURNAL OF SCIENCE AND TECHNOLOGY TRANSACTION A-SCIENCE, Journal Indexed in SCI-E, April 2020

TURKISH JOURNAL OF MATHEMATICS, Journal Indexed in SCI-E, March 2020

IRANIAN JOURNAL OF SCIENCE AND TECHNOLOGY TRANSACTION A-SCIENCE, Journal Indexed in SCI-E, March 2020

TURKISH JOURNAL OF MATHEMATICS, Journal Indexed in SCI-E, February 2020

Gazi University Journal of Science, Journal Indexed in ESCI, February 2020

IRANIAN JOURNAL OF SCIENCE AND TECHNOLOGY TRANSACTION A-SCIENCE, Journal Indexed in SCI-E, January 2020

## Metrics

Publication: 38

Citation (WoS): 100

Citation (Scopus): 97

H-Index (WoS): 6

H-Index (Scopus): 6