

Prof. GONCA AYIK

Personal Information

Office Phone: [+90 322 338 6084](tel:+903223386084)

Email: agonca@cu.edu.tr

Web: <https://avesis.cu.edu.tr//agonca>

International Researcher IDs

ORCID: 0000-0003-2301-0669

Yoksis Researcher ID: 102475

Education

Doctorate, Cukurova University, Fen Bilimleri, Matematik, Turkey 1997 - 2003

Postgraduate, Cukurova University, Fen Bilimleri, Matematik, Turkey 1995 - 1997

Undergraduate, Cukurova University, Fen Edebiyat, Matematik, Turkey 1990 - 1995

Foreign Languages

English, B2 Upper Intermediate

Dissertations

Doctorate, Yarıgrupların Takdimleri, Otamatiklik ve Adian Grafikleri, Cukurova University, Fen Bilimleri Enstitüsü, Matematik, 2003

Postgraduate, Yarigrup Takdimleri, Cukurova University, Fen Bilimleri Enstitüsü, Matematik, 1997

Research Areas

Group Theory and Generalizations, Natural Sciences

Academic Positions

Professor, Cukurova University, Fen Edebiyat Fakültesi, Matematik Bölümü, 2013 - Continues

Associate Professor, Cukurova University, Fen Edebiyat Fakültesi, Matematik Bölümü, 2007 - 2013

Assistant Professor, Cukurova University, Fen Edebiyat Fakültesi, Matematik Bölümü, 2005 - 2007

Lecturer PhD, Cukurova University, Fen Edebiyat Fakültesi, Matematik Bölümü, 2004 - 2005

Research Assistant, Cukurova University, Fen Edebiyat Fakültesi, Matematik Bölümü, 1995 - 2004

Academic and Administrative Experience

Head of Department, Cukurova University, Fen-Edebiyat Fakültesi, Matematik, 2016 - 2019

Cukurova University, Matematik, 2013 - 2016

Cukurova University, Matematik, 2010 - 2013
Cukurova University, Fen Bilimleri, 2012 - 2012

Courses

Postgraduate

Yarıgrup Yapıları ve Takdimleri, Postgraduate, 2018 - 2019

Cebir I, Postgraduate, 2019 - 2020

Undergraduate

Yüksek Matematik II, Undergraduate, 2019 - 2020

Matematik Tarihi, Undergraduate, 2019 - 2020

Kodlama Teorisi, Undergraduate, 2019 - 2020

Yüksek Matematik I, Undergraduate, 2019 - 2020

Cebir III, Undergraduate, 2019 - 2020

Supervised Theses

AYIK G., Sn Normal Yarıgruplar, Postgraduate, A.Altinel(Student), 2014

AYIK G., İdemotent Dönüşümler ve İdemotent Dönüşümler Tarafından Doğurulan Yarıgruplar,, Postgraduate, H.Güçkür(Student), 2012

AYIK G., Sonlu Yarıgrup Sınıflarının Rank Özellikleri, Doctorate, O.Kelekçi(Student), 2011

AYIK G., Nilpotent Dönüşümler Tarafından Doğurulan Yarıgruplar,, Postgraduate, E.Önder(Student), 2011

AYIK G., Grup tanımlayan yarıgrup takdimleri ve Adian Grafikleri, Doctorate, B.Özer(Student), 2010

AYIK G., Sonlu Dönüşümler Yarıgrubunda Çarpanlara Ayırma,, Postgraduate, D.Yaşar(Student), 2009

AYIK G., Kümeler ve Grup Üzerinde Grup Aksiyonları, Postgraduate, H.Öztürk(Student), 2006

Journal articles indexed in SCI, SSCI, and AHCI

- I. **On the semigroup of all injective orientation-preserving and order-decreasing partial transformations on a finite chain**
AYIK H., AYIK G., DAĞDEVİREN A.
Communications in Algebra, 2025 (SCI-Expanded)
- II. **Combinatorial results for semigroups of orientation-preserving and order-decreasing transformations**
DAĞDEVİREN A., AYIK G., AYIK H.
Semigroup Forum, 2024 (SCI-Expanded)
- III. **Combinatorial results for semigroups of orientation-preserving transformations**
DAĞDEVİREN A., AYIK G.
Turkish Journal of Mathematics, vol.48, no.2, pp.106-117, 2024 (SCI-Expanded)
- IV. **On the Rank of Generalized Transformation Semigroups**
AYIK G., Abusarris H. D. M.
BULLETIN OF THE MALAYSIAN MATHEMATICAL SCIENCES SOCIETY, vol.45, no.4, pp.1777-1787, 2022 (SCI-Expanded)
- V. **Relative ranks of some partial transformation semigroups**
Yigit E., AYIK G., AYIK H.
TURKISH JOURNAL OF MATHEMATICS, vol.43, no.5, pp.2218-2225, 2019 (SCI-Expanded)
- VI. **Minimal relative generating sets of some partial transformation semigroups**
YİĞİT E., AYIK G., AYIK H.

- Communications in Algebra, vol.45, no.3, pp.1239-1245, 2017 (SCI-Expanded)
- VII. **Minimal relative generating sets of some partial transformation semigroups**
YİĞİT E., AYIK G., AYIK H.
COMMUNICATIONS IN ALGEBRA, vol.45, no.3, pp.1239-1245, 2016 (SCI-Expanded)
- VIII. **On semigroup presentations that define a group**
AYIK G., Ozer B.
SEMIGROUP FORUM, vol.90, no.1, pp.149-154, 2015 (SCI-Expanded)
- IX. **SEMIGROUP PRESENTATIONS FOR CONGRUENCES ON GROUPS**
AYIK G., Caliskan B.
BULLETIN OF THE KOREAN MATHEMATICAL SOCIETY, vol.50, no.2, pp.445-449, 2013 (SCI-Expanded)
- X. **Generating sets of finite singular transformation semigroups**
AYIK G., AYIK H., BUGAY L., KELEKCI O.
SEMIGROUP FORUM, vol.86, no.1, pp.59-66, 2013 (SCI-Expanded)
- XI. **Combinatorial results for order-preserving and order-decreasing transformations**
AYIK G., Ayik H., KOC M.
TURKISH JOURNAL OF MATHEMATICS, vol.35, no.4, pp.617-625, 2011 (SCI-Expanded)
- XII. **Rank properties of the semigroup of singular transformations on a finite set**
AYIK G., AYIK H., Uenlue Y., HOWIE J. M.
COMMUNICATIONS IN ALGEBRA, vol.36, no.7, pp.2581-2587, 2008 (SCI-Expanded)
- XIII. **On semigroup presentations and adian graphs**
AYIK G., AYIK H., UNLU Y.
DISCRETE MATHEMATICS, vol.308, no.11, pp.2288-2291, 2008 (SCI-Expanded)
- XIV. **On factorisations and generators in transformation semigroups**
AYIK G., Ayik H., HOWIE J.
SEMIGROUP FORUM, vol.70, no.2, pp.225-237, 2005 (SCI-Expanded)
- XV. **The structure of elements in finite full transformation semigroups**
AYIK G., Ayik H., UNLU Y., HOWIE J.
BULLETIN OF THE AUSTRALIAN MATHEMATICAL SOCIETY, vol.71, no.1, pp.69-74, 2005 (SCI-Expanded)
- XVI. **Presentations for S and S/p from a given presentation for p**
AYIK G., Ayik H., UNLU Y.
SEMIGROUP FORUM, vol.70, no.1, pp.146-149, 2005 (SCI-Expanded)

Articles Published in Other Journals

- I. **Presentations and word problems for strong semilattices of semigroups**
AYIK G., AYIK H., UNLU Y.
Algebra and Discrete Mathematics, vol.4, pp.28-35, 2005 (ESCI)

Books

- I. **Matematik Ders Kitabı-Ortaöğretim 10. Sınıf**
Ayık G. (Editor)
MEB-Devlet Kitapları, Ankara, 2018
- II. **Matematik Ders Kitabı-Ortaöğretim 9. Sınıf**
Ayık G. (Editor)
MEB-Devlet Kitapları, Ankara, 2017

Papers Presented at Peer-Reviewed Scientific Conferences

- I. **Sonlu Tekil Dönüşüm Yarıgruplarının Doğuray Kümeleri**
BUGAY L., AYIK G., AYIK H., KELEKCI O.
XXV. Ulusal Matematik Sempozyumu, Niğde, Turkey, 5 - 07 September 2012, pp.12, (Summary Text)
- II. **(m,r)-rank of finite full transformation semigroups**
AYIK G., AYIK H., HOWIE J. M., UNLU Y.
Antalya Algebra Days VIII, Antalya, Turkey, 17 - 21 May 2006, pp.52, (Summary Text)
- III. **On factorisations and generators in transformation semigroups**
AYIK G., AYIK H., HOWIE J. M.
Antalya Algebra Days VII, Antalya, Turkey, 18 - 22 August 2005, pp.1, (Full Text)
- IV. **The Structure of Elements in Finite Full Transformation Semigroups**
AYIK H., AYIK G., HOWIE J. M., UNLU Y.
Antalya Algebra Days VII, Antalya, Turkey, 18 - 22 May 2005, pp.32, (Summary Text)
- V. **On factorisations and generators in transformation semigroups**
AYIK G., AYIK H., HOWIE J. M.
Antalya Algebra Days VII, Antalya, Turkey, 18 - 22 May 2005, pp.45, (Summary Text)
- VI. **Bazı Yarıgrup Ailelerinin Sonlu Takdimedilebilirliği**
AYIK G., AYIK H., UNLU Y.
XVII. Ulusal Matematik Sempozyumu, Bolu, Turkey, 23 - 26 August 2004, pp.15, (Summary Text)
- VII. **On a class of semigroups with special symmetric presentations,**
AYIK G.
XV Ulusal Matematik Sempozyumu Mersin Üniversitesi, Mersin, Turkey, 4 - 07 September 2002, pp.96-100, (Full Text)

Funded Projects

Ayık G., Ayık H., Bugay L., TUBITAK Project, Dönüşümler Yarıgrubu Ve Kısmi Dönüşümler Yarıgrubunun Belirli Alt Yarıgruplarının Araştırılması, 2024 - 2027

Memberships and Roles in Scientific Organizations

Türk Kadın Matematikçiler Derneği, Member, 2014 - Continues, Turkey
American Mathematical Society, Member, 2008 - Continues, United States Of America
Türk Matematik Derneği, Member, 1995 - Continues, Turkey

Metrics

Publication: 26
Citation (WoS): 45
Citation (Scopus): 46
H-Index (WoS): 4
H-Index (Scopus): 5

Congress and Symposium Activities

Kadın Matematikçiler Derneği Çalıştayı, Invited Speaker, Kocaeli, Turkey, 2014
Antalya Algebra Days VIII, Attendee, Antalya, Turkey, 2006
Antalya Algebra Days VII, Attendee, Antalya, Turkey, 2005

Scholarships

YÖK-Araştırma Bursu, University, 2012 - 2013

TÜBİTAK- NATO A2, NATO, 2003 - 2004

Non Academic Experience

MİLLİ EĞİTİM BAKANLIĞI, DERS KİTAPLARI HAZIRLAMA KOMİSYONU ÜYELİĞİ