

Prof. Nuran GÜZEL

Personal Information

Office Phone: [+90 383 433 9](tel:+903834339)

Email: nguzel@yildiz.edu.tr

Other Email: nguzel@yildiz.edu.tr

Web: <https://avesis.yildiz.edu.tr/nguzel> - ORCID 0000-0002-6585-7326-ID:A-9449-2016

Address: Yıldız Teknik Üniversitesi Fen Edebiyat Fakültesi Matematik Bölümü Davutpaşa-Esenler İstanbul

Education Information

Doctorate, Yıldız Technical University, Graduate School Of Natural And Applied Sciences, Matematik, Turkey 1986 - 1991

Postgraduate, Istanbul Technical University, Fen Bilimleri Enstitüsü, Matematik Mühendisliği Sistem Analizi, Turkey 1983 - 1986

Undergraduate, Yıldız Technical University, Kimya Metalurji Fakültesi, Matematik Mühendisliği, Turkey 1979 - 1983

Foreign Languages

English, B1 Intermediate

Dissertations

Doctorate, Laserle Işınlamada Sıcaklık Dağılımı, Yıldız Teknik Üniversitesi, Graduate School of Natural and Applied Sciences, Matematik, 1991

Postgraduate, Dualite ve Dual Simpleks Metodu, İstanbul Teknik Üniversitesi, Fen Bilimleri Enstitüsü, Sistem Analizi, 1986

Research Areas

Mathematics, Differential Equations, Natural Sciences

Academic and Administrative Experience

Yıldız Teknik Üniversitesi, Matematik, 2014 - 2016

Courses

Undergraduate

Olasılık ve İstatistik, Undergraduate, 2020 - 2021

MATEMATİK 2, Undergraduate, 2016 - 2017

NÜMERİK ANALİZ, Undergraduate, 2016 - 2017

DİFERANSİYEL DENKLEMLER, Undergraduate, 2016 - 2017

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Deep learning aided surrogate modeling of the epidemiological models**
Kurul E., Tunc H., Sarı M., GÜZEL N.
Journal of Computational Science, vol.84, 2025 (SCI-Expanded)
- II. **A Fuzzy Set-Based Approach to Multi-objective Multi-item Solid Transportation Problem Under Uncertainty**
Dalman H., GÜZEL N., SİVRİ M.
INTERNATIONAL JOURNAL OF FUZZY SYSTEMS, vol.18, no.4, pp.716-729, 2016 (SCI-Expanded)
- III. **A Proposal to the Solution of Multiobjective Linear Fractional Programming Problem**
Guzel N.
ABSTRACT AND APPLIED ANALYSIS, 2013 (SCI-Expanded)
- IV. **Multivariate Pade Approximation for Solving Nonlinear Partial Differential Equations of Fractional Order**
Turut V., GÜZEL N.
ABSTRACT AND APPLIED ANALYSIS, 2013 (SCI-Expanded)
- V. **A Solution Proposal to the Interval Fractional Transportation Problem**
Güzel N., Emiroglu Y., Tapci F., Guler C., Syvry M.
APPLIED MATHEMATICS & INFORMATION SCIENCES, vol.6, no.3, pp.567-571, 2012 (SCI-Expanded)
- VI. **Comparing Numerical Methods for Solving Time-Fractional Reaction-Diffusion Equations**
GÜZEL N.
ISRN Mathematical Analysis, vol.2012, 2012 (SSCI)
- VII. **NUMERICAL SOLUTION OF ISOTHERMAL GAS SPHERE PROBLEM**
GÜZEL N., OYLUMLU M. T.
INTERNATIONAL JOURNAL OF COMPUTATIONAL METHODS, vol.4, no.1, pp.163-171, 2007 (SCI-Expanded)
- VIII. **On the numerical solution of differential-algebraic equations with index-3**
Guzel N., Bayram M.
APPLIED MATHEMATICS AND COMPUTATION, vol.175, no.2, pp.1320-1331, 2006 (SCI-Expanded)
- IX. **On the numerical solution of stiff systems**
Guzel N., Bayram M.
APPLIED MATHEMATICS AND COMPUTATION, vol.170, no.1, pp.230-236, 2005 (SCI-Expanded)

Articles Published in Other Journals

- I. **An Alternative Approach to the Solution of Multi-Objective Geometric Programming Problems**
Öz E., Güzel N., Alp S.
Open Journal of Optimization, vol.6, no.1, pp.11-25, 2017 (Peer-Reviewed Journal)
- II. **An Alternative Solution to Multi Objective Linear Fractional Programming Problem by Using Geometric Programming Technique**
Öz E., Alp S., Güzel N.
Mathematical Theory and Modelling, no.6, pp.1-12, 2016 (Peer-Reviewed Journal)
- III. **Fuzzy Transportation Problem with the fuzzy Amounts and the fuzzy costs**
GÜZEL N.
World Applied Sciences Journal, vol.8, no.5, pp.543-549, 2010 (Peer-Reviewed Journal)
- IV. **Solution of Stiff Systems by using Differential Transform Method**
GÜZEL N., KURULAY M.
Dumlupınar Üniversitesi Fen Bilimleri Dergisi, no.16, pp.49-59, 2008 (Peer-Reviewed Journal)
- V. **Proposal of a Solution to Fuzzy Transportation Problem using Fuzzy Set Approach**
GÜZEL N.
Dumlupınar Üniversitesi Fen Bilimleri Dergisi, no.13, pp.54-61, 2007 (Peer-Reviewed Journal)

- VI. **On The Solution of An Inverse Scattering Problem On The Semi Axis with A Self Adjoint Potensial Matrix**
Guler C., Bayram M., Güzel N.
INTERNATIONAL JOURNAL OF PURE AND APPLIED MATHEMATICS, no.29, pp.259-269, 2006 (Peer-Reviewed Journal)
- VII. **Power Series Solution of Non-Linear First Order Differential Equation Systems**
Guzel N., BAYRAM M.
Trakya Üniversitesi Dergisi, vol.6, no.1, pp.107-111, 2005 (Peer-Reviewed Journal)
- VIII. **Application of Groöbner Bases theory to Derive Steady State Rate Equations in Biochemical Kinetic Theory**
BAYRAM M., GÜZEL N., Çelik E.
INTERNATIONAL JOURNAL OF APPLIED MATHEMATICS & STATISTICS, no.3, pp.51-59, 2005 (ESCI)
- IX. **Power series of non- Linear first order differential equations systems**
GÜZEL N., BAYRAM M.
TRAKYA UNİVERSİTY JOURNAL OF NATURAL SCIENCES, no.1, pp.97-107, 2005 (ESCI)
- X. **Proposal of a Solution to Multi Objective Linear Fractional Programming Problem**
GÜZEL N.
Sigma Journal of Engineering and Natural Sciences, pp.43-50, 2005 (ESCI)
- XI. **Taylor Series Solution of Multi Objective Linear Fractional Programming Problem**
GÜZEL N.
Trakya Üniversitesi Fen Bilimleri Dergisi, vol.6, no.2, pp.91-98, 2005 (Peer-Reviewed Journal)
- XII. **Dengeli- Seçme ve Seçtirmeli-Ekonomik Beslenme**
AHLATCIOĞLU M., GÜZEL N., SİVRİ M.
Sigma Journal of Engineering and Natural Sciences, no.3, pp.94-100, 2004 (ESCI)
- XIII. **Transportation of the Fuzzy Amounts using the Fuzzy Cost**
AHLATCIOĞLU M., SİVRİ M., GÜZEL N.
Journal of Marmara for Pure and Applied Sciences, no.18, pp.139-155, 2002 (Peer-Reviewed Journal)
- XIV. **Transportation of the fuzzy amounts using the fuzzy costs**
AHLATCIOĞLU M., SİVRİ M., GÜZEL N.
Marmara Journal of Pure & Applied Sciences, 2002 (Peer-Reviewed Journal)
- XV. **Linear Programming with Fuzzy Resources and Its Applications**
GÜZEL N., KURUÜZÜM A.
Journal of Kocaeli University, no.4, pp.50-56, 1997 (Peer-Reviewed Journal)

Books

- I. **OLMAK YADA OLMAMAK: OLASILIK; İŞTE BÜTÜN MESELE!**
GÜZEL N., ÜNAL H.
in: TANIMLARI VE TARİHSEL GELİŞİMLERİYLE MATEMATİKSEL KAVRAMLAR, İsmail özgür Zembat, Mehmet Fatih Özmantar , Editor, Pegem Akademi, Karanfil Sokak No:45 Kızılay Ankara, pp.709-720, 2013

Papers Published in Refereed Scientific Meetings

- I. **A Discussion on Stochastic Behaviour of Some Stiff Equations**
Sarı M., Güzel N., Özdemir Y. B.
3rd International E-Conference on Mathematical Advances and Applications (ICOMAA-2020), İstanbul, Turkey, 24 - 27 June 2020
- II. **Comparison of solution methods of transportation problems and their application differences via QM programming**

Güzel N., Demirel Y. E.

INTERNATIONAL CONFERENCE ON APPLIED ANALYSIS AND MATHEMATICAL MODELLING (ICAAMM2019),
İstanbul, Turkey, 10 - 13 March 2019, vol.1

III. **On The Bifurcation Diagrams of Fractional Logistic Map**

Güzel N., Yavcın F.

International Conference on Mathematical Advances and Applications, İstanbul, Turkey, 11 - 13 May 2018, vol.1,
pp.60

IV. **A Proposal to Determine Weights for Solving Multi-Objective Programming Problems**

Güzel N., Demirel Y.

4th International Conference on Pure and Applied Sciences: Renewable Energy, İstanbul, Turkey, 23 - 25
November 2017, vol.1

V. **Nonlinear Solutions of the Space and Time Fractional Coupled Burgers Equations**

Turut V., Güzel N., Çelik E.

International Conference on Applied Analysis and Mathematical Modeling, ICAAMM 2017, İstanbul, Turkey, 3 - 07
July 2017, vol.1, pp.100

VI. **Multivariate Padé Approximations For Solving Nonlinear Diffusion Equations**

Turut V., Çelik E., Güzel N.

International Conference on Applied Analysis and Mathematical Modeling ICAAMM 2015, İstanbul, Turkey, 8 - 12
June 2015, vol.1, pp.1

VII. **Uncertain Programming Model for Multi Objective Solid Transportation Problem**

Dalman H., Güzel N., Sivri M.

The sixth International Conference on Modelling, Simulation and Applied Optimization, İstanbul, Turkey, 27 - 29
May 2015, pp.100

VIII. **A Pareto Optimal Solution of Fuzzy Solid Transportation Problem**

Dalman H., Güzel N., Sivri M.

4th Fuzzy Systems Symposium, İstanbul, Turkey, 5 - 08 November 2015, vol.1, pp.1

IX. **A New Algorithm to the Solution of Multi Objective Linear Fractional Programming Problem with Interval Cost Coefficients Method**

SİVRİ M., TAŞCI F., GÜLER C., DALMAN H., GÜZEL N.

International Conference and Workshop on Mathematical Analysis, Putrajaya, Malaysia, 27 May 2014, pp.10

X. **Chaos Control of Fractional Model for weakly Nonlinear Double Convection**

Güzel N., Akınlar M. A., Seçer A., Bayram M.

International Conference and workshop on Mathematical Analysis 2014, Kuala-Lumpur, Malaysia, 27 - 30 May
2014, pp.150

XI. **Finite Difference Methods Solution and Analysis for Klein Gordon Equation**

B.H. K., Kurulay M., Güzel N., Uzun M., Bayram M.

International Conference on Applied Analysis Mathematical Modelling I, İstanbul, Turkey, 2 - 05 June 2013, pp.175

XII. **A solution Proposal to the Interval Fractional Transportation Problem**

Güzel N., Emiroğlu İ., Taşçı F., Güler C., Sivri M.

2. International Conference on Mathematics and Information Science, Sawhaj, Egypt, 10 - 13 September 2011,
pp.155

XIII. **Mathematics Students Misconception in Conditional Probability**

Güzel N., Dayanova E.

The 5 th International Balkan Education and Science Congress, Edirne, Turkey, 1 - 03 October 2009, pp.173-174

XIV. **High school students' spatial ability and creativity in geometry**

GÜZEL N., SENER E.

World Conference on Educational Sciences, Nicosia, CYPRUS, 4 - 07 February 2009, vol.1, pp.1763-1766

XV. **Numerical Solution of Stiff Systems using the Differential Transform Method**

Güzel N., Kurulay M.

XX. Ulusal Matematik Sempozyumu, Erzurum, Turkey, 3 - 06 September 2007, vol.1, pp.1

XVI. **"Bulanık Programlama ile Çok amaçlı Taşıma Problemine Çözüm Yöntemi**

Güzel N., Tabuk M.

İTÜ-KÜ Bilimde Modern Yöntemler Sempozyumu BMYS'2005, Kocaeli, Turkey, 16 - 18 November 2005, vol.1, pp.139-146

XVII. Çok Amaçlı Bulanık Taşıma Problemine bir Çözüm Önerisi

Güzel N., Tabuk M.

Koç Üniversitesi YA/EM 2005- 25. Ulusal kongresi Yöneylem Araştırması ve Endüstri Mühendisliği, İstanbul, 04-06 Temmuz 2005, İstanbul, Turkey, 4 - 07 July 2005, vol.1, pp.1

XVIII. Duality for Multiobjective Optimal Control Problems

Azimov A., Tepecik A., Güzel N., Demir İ.

International Mathematics Congress, Kyiv, Ukraine, 9 - 10 September 2002, pp.104

Other Publications

I. Thomas Calculus 12 Edition, 9 .Section First-Order Differential Equations Çevirisi, 496-536,

GÜZEL N.

Other, 2011

Peer Reviews in Scientific Publications

PRE-SERVICE MATHEMATICS TEACHERS' ATTITUDES TOWARDS THE PROFESSION OF TEACHING, SCI Journal, April 2014

PRE-SERVICE MATHEMATICS TEACHERS' ATTITUDES TOWARDS THE PROFESSION OF TEACHING, SCI Journal, April 2014

Determining the Level of Familiarity with and the Use of Course Equipment among Pre-Service Mathematics Teachers , SCI Journal, January 2013

Numerical Solution of Stochastic Hyperbolic Equations, SCI Journal, April 2012

Explicit appropriate basis function method for numerical solution of stiff systems Applied Mathematics and Computation, SCI Journal, February 2012

"Repertuar Çizelge Tekniği ile Matematikteki Limit Kavramı ile İlgili Anlayışların Belirlenmesi" , SCI Journal, December 2011

Metrics

Publication: 46

Citation (WoS): 85

Citation (Scopus): 98

H-Index (WoS): 6

H-Index (Scopus): 6