

Prof. NURCAN BAYKUŞ SAVAŞANERİL

Personal Information

Email: nurcan.savasaneril@deu.edu.tr

Web: <https://avesis.deu.edu.tr/nurcan.savasaneril>

International Researcher IDs

ORCID: 0000-0002-3098-2936

ScopusID: 50123456789

Yoksis Researcher ID: 143027

Education Information

Associate Degree, Ataturk University, Açıköğretim Fakültesi, -, Turkey 2022 - Continues

Undergraduate, Istanbul University, Open And Distance Education Faculty, Turkey 2022 - Continues

Associate Degree, Ataturk University, Açıköğretim Fakültesi, -, Turkey 2022 - Continues

Associate Degree, Anadolu University, Open Education Faculty, Department Of Hotel, Restaurant And Catering Services, Turkey 2020 - 2022

Doctorate, Dokuz Eylul University, Fen Bilimleri Enstitüsü, Matematik Eğitimi (Dr), Turkey 1997 - 2003

Postgraduate, Dokuz Eylul University, Fen Bilimleri Enstitüsü, Matematik Eğitimi (YI), Turkey 1991 - 1995

Undergraduate, Ege University, Faculty Of Science, Matematik Bölümü, Turkey 1987 - 1991

Certificates, Courses and Trainings

Vocational Training, Pro Şeflik, Akademi, 2021

Vocational Training, Butik Pastacılık , Akademi, 2020

Vocational Training, Pro Ustalık, Akademi, 2020

Dissertations

Doctorate, Dirichlet Probleminin Eliptik Fonksiyonlar Cinsinden Çözümü, Dokuz Eylul University, Fen Bilimleri Enstitüsü, Matematik Eğitimi (Dr), 2003

Postgraduate, The Isotrop Congruences, Dokuz Eylul University, Fen Bilimleri Enstitüsü, Matematik Eğitimi (YI), 1995

Research Areas

Differential Equations, General Mathematics, Integral Equations, Functions of a Complex Variable, Partial Differential Equations, Special Functions

Academic Titles / Tasks

Professor, Dokuz Eylul University, İzmir Meslek Yüksekokulu, Makine ve Metal Teknolojileri Bölümü, 2017 - Continues

Associate Professor, Dokuz Eylul University, İzmir Meslek Yüksekokulu, Makine ve Metal Teknolojileri Bölümü, 2011 - 2017

Associate Professor, Selcuk University, Faculty Of Science, 2013 - 2016

Academic and Administrative Experience

- Head of Department, Dokuz Eylul University, İzmir Meslek Yüksekokulu, Makine ve Metal Teknolojileri Bölümü, 2023 - Continues
- Head of Department, Dokuz Eylul University, İzmir Meslek Yüksekokulu, Makine Ve Metal Teknolojileri Bölümü, 2023 - Continues
- Bölüm Akademik Teşvik Değerlendirme Komisyonu Başkanı, Dokuz Eylul University, İzmir Meslek Yüksekokulu, Makine ve Metal Teknolojileri Bölümü, 2020 - Continues
- Bölüm Akademik Teşvik Değerlendirme Komisyonu Üyesi, Dokuz Eylul University, İzmir Meslek Yüksekokulu, Makine ve Metal Teknolojileri Bölümü, 2020 - Continues
- ÜAK Member, Dokuz Eylul University, İzmir Meslek Yüksekokulu, Makine ve Metal Teknolojileri Bölümü, 2018 - Continues
- Dokuz Eylul University, 2018 - Continues
- Meslek Yüksekokulu Kurulu Üyesi, Dokuz Eylul University, İzmir Meslek Yüksekokulu, Makine ve Metal Teknolojileri Bölümü, 2020 - 2023
- Head of Department, Dokuz Eylul University, 2020 - 2023
- Director of Vocational School, Dokuz Eylul University, 2018 - 2019
- Dokuz Eylul University, 2017 - 2017

Courses

- Genel Matematik II, Undergraduate, 2020 - 2021
- İŞLETME MATEMATİĞİ, Undergraduate, 2021 - 2022
- İŞLETME MATEMATİĞİ, Undergraduate, 2021 - 2022
- Genel Matematik I, Undergraduate, 2020 - 2021
- Genel Matematik II, Undergraduate, 2019 - 2020
- Genel Matematik II, Undergraduate, 2019 - 2020
- Genel Matematik I, Undergraduate, 2019 - 2020
- Genel Matematik I, Undergraduate, 2019 - 2020
- Genel Matematik II, Undergraduate, 2018 - 2019
- Genel Matematik I, Undergraduate, 2017 - 2018
- Genel Matematik II, Undergraduate, 2016 - 2017
- Genel Matematik I, Undergraduate, 2016 - 2017
- Matematik 2, Undergraduate, 2013 - 2014
- Matematik I, Undergraduate, 2013 - 2014

Advising Theses

- BAYKUŞ SAVAŞANERİL N., Euler polinomlarının matris özellikleri ve fonksiyonel integro-diferansiyel denklemlere uygulamaları, Doctorate, D.ELMACI(Student), 2020
- BAYKUŞ SAVAŞANERİL N., Kare bölge için Dirichtlet probleminin eliptik fonksiyonlar ve Bernstein polinomlar cinsinden çözümü, Postgraduate, Z.HACIOĞLU(Student), 2016
- BAYKUŞ SAVAŞANERİL N., Dikdörtgen bölge için iki boyutlu ısı denkleminin eliptik fonksiyonlar ve Chebyshev polinomları cinsinden çözümü, Postgraduate, E.KURUL(Student), 2016

Jury Memberships

Doctorate, Doctorate, Akdeniz Üniversitesi, July, 2024

Doctorate, Doctorate, Manisa Celal Bayar Üniversitesi, June, 2024

Doctorate, Doctorate, Manisa Celal Bayar Üniversitesi, June, 2024

Doctorate, Doctorate, Manisa Celal Bayar Üniversitesi, May, 2024

Doctorate, Doctorate, Manisa Celal Bayar Üniversitesi, March, 2024

Doctoral Examination, Doctoral Examination, Dokuz Eylül Üniversitesi, January, 2024

Appointment to Academic Staff-Professorship, Appointment to Academic Staff-Professorship, Manisa Celal Bayar Üniversitesi, January, 2024

PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Manisa Celal Bayar Üniversitesi, January, 2024

Doctorate, Doctorate, Dokuz Eylül Üniversitesi, January, 2024

PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Manisa Celal Bayar Üniversitesi, December, 2023

PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Manisa Celal Bayar Üniversitesi, December, 2023

Doctoral Examination, Doctoral Examination, Manisa Celal Bayar Üniversitesi, December, 2023

Doctoral Examination, Doctoral Examination, Manisa Celal Bayar Üniversitesi, September, 2023

Doctoral Examination, Doctoral Examination, Manisa Celal Bayar Üniversitesi, September, 2023

Post Graduate, Post Graduate, Manisa Celal Bayar Üniversitesi, July, 2023

Doctoral Examination, Doctoral Examination, Akdeniz Üniversitesi, July, 2023

PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Manisa Celal Bayar Üniversitesi, June, 2023

Doctorate, Doctorate, Manisa Celal Bayar Üniversitesi, June, 2023

PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Manisa Celal Bayar Üniversitesi, June, 2023

Associate Professor Exam, Associate Professor Exam, Dokuz Eylül Üniversitesi, May, 2023

Appointment to Academic Staff-Assistant Professorship, Appointment to Academic Staff-Assistant Professorship, Dokuz Eylül Üniversitesi, January, 2023

PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Manisa Celal Bayar Üniversitesi, December, 2022

PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Manisa Celal Bayar Üniversitesi, December, 2022

PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Manisa Celal Bayar Üniversitesi, December, 2022

Doctorate, Doctorate, Manisa Celal Bayar Üniversitesi, August, 2022

Appointment to Academic Staff-Professorship, Appointment to Academic Staff-Professorship, Muğla Sıtkı Koçman Üniversitesi, August, 2022

PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Manisa Celal Bayar Üniversitesi, June, 2022

PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Manisa Celal Bayar Üniversitesi, June, 2022

PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Manisa Celal Bayar Üniversitesi, June, 2022

PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Manisa Celal Bayar Üniversitesi, June, 2022

Appointment to Academic Staff-Assistant Professorship, Appointment to Academic Staff-Assistant Professorship, Muğla Sıtkı Koçman Üniversitesi, June, 2022

Appointment to Academic Staff-Assistant Professorship, Appointment to Academic Staff-Assistant Professorship, Diğer (Kurumlar,hastaneler Vb.), May, 2022

Appointment to Academic Staff - Associate Professorship, Appointment to Academic Staff - Associate Professorship,

Muğla Sıtkı Koçman Üniversitesi, April, 2022

Doctoral Examination, Doctoral Examination, Manisa Celal Bayar Üniversitesi, April, 2022

Appointment to Academic Staff - Associate Professorship, Appointment to Academic Staff - Associate Professorship,

Akdeniz Üniversitesi, March, 2022

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Shifted Legendre method for solutions of Riccati type functional differential equations and application of RL circuit model**
Elmacı D., Yüzbaşı Ş., Baykuş Savaşaneril N.
INTERNATIONAL JOURNAL OF NUMERICAL MODELLING: ELECTRONIC NETWORKS, DEVICES AND FIELDS, vol.36, no.6, 2023 (SCI-Expanded)
- II. **On the application of Euler's method to linear integro differential equations and comparison with existing methods**
Elmacı D., Baykuş Savaşaneril N., Dal F., Sezer M.
TURKISH JOURNAL OF MATHEMATICS, vol.46, no.1, pp.99-122, 2022 (SCI-Expanded)
- III. **A matrix-collocation method for solutions of singularly perturbed differential equations via Euler polynomials**
Elmacı D., Yüzbaşı Ş., Baykuş Savaşaneril N.
TURKISH JOURNAL OF MATHEMATICS, vol.46, no.8, pp.3260-3275, 2022 (SCI-Expanded)
- IV. **On the application of Euler's method to linear integro differential equations and comparison with existing methods**
Elmacı D., Baykuş Savaşaneril N., Dal F., Sezer M.
TURKISH JOURNAL OF MATHEMATICS, vol.46, no.1, pp.99-122, 2021 (SCI-Expanded)
- V. **Introduction to the Special Issue on Numerical Methods for Differential and Integral Equations**
YÜZBAŞI Ş., Al-Khaled K., BAYKUŞ SAVAŞANERİL N., Kumar D.
CMES-COMPUTER MODELING IN ENGINEERING & SCIENCES, vol.123, no.3, pp.913-915, 2020 (SCI-Expanded)
- VI. **Lucas polynomial solution of nonlinear differential equations with variable delays**
Gumgum S., BAYKUŞ SAVAŞANERİL N., KÜRKÇÜ Ö. K., SEZER M.
HACETTEPE JOURNAL OF MATHEMATICS AND STATISTICS, vol.49, no.2, pp.553-564, 2020 (SCI-Expanded)
- VII. **Hybrid Taylor-Lucas collocation method for numerical solution of high-order pantograph type delay differential equations with variables delays**
Bayku N., Sezer M.
Applied Mathematics and Information Sciences, vol.11, no.6, pp.1795-1801, 2017 (SCI-Expanded)
- VIII. **Solution of High-Order Linear Fredholm Integro-Differential Equations with Piecewise Intervals**
BAYKUŞ SAVAŞANERİL N., Sezer M.
NUMERICAL METHODS FOR PARTIAL DIFFERENTIAL EQUATIONS, vol.27, no.5, pp.1327-1339, 2011 (SCI-Expanded)
- IX. **Polynomial solution of the single degree of freedom system by Taylor matrix method**
Kurt N., Cevik M.
MECHANICS RESEARCH COMMUNICATIONS, vol.35, no.8, pp.530-536, 2008 (SCI-Expanded)
- X. **Polynomial solution of high-order linear Fredholm integro-differential equations with constant coefficients**
Kurt N., Sezer M.
JOURNAL OF THE FRANKLIN INSTITUTE-ENGINEERING AND APPLIED MATHEMATICS, vol.345, no.8, pp.839-850, 2008 (SCI-Expanded)
- XI. **Solution of the two-dimensional heat equation for a square in terms of elliptic functions**
Kurt N.
JOURNAL OF THE FRANKLIN INSTITUTE-ENGINEERING AND APPLIED MATHEMATICS, vol.345, no.3, pp.303-317, 2008 (SCI-Expanded)

- XII. **Solution of Dirichlet problem for a triangle region in terms of elliptic functions**
Kurt N., Sezer M.
APPLIED MATHEMATICS AND COMPUTATION, vol.182, no.1, pp.73-81, 2006 (SCI-Expanded)
- XIII. **Solution of Dirichlet problem for a rectangular region in terms of elliptic functions**
Kurt N., Sezer M., Celik A.
INTERNATIONAL JOURNAL OF COMPUTER MATHEMATICS, vol.81, no.11, pp.1417-1426, 2004 (SCI-Expanded)

Articles Published in Other Journals

- I. **Article Innovative Approaches to Modeling Economic Dynamics: Taylor Matrix Methods in Solving Budget Constraint Differential Equations**
BAYKUŞ SAVAŞANERİL N.
Scientific Research Communications, vol.4, no.1, pp.35-43, 2024 (Peer-Reviewed Journal)
- II. **Lucas Polynomial Solution of a Single Degree of Freedom System**
BAYKUŞ SAVAŞANERİL N.
Scientific Research Communications, vol.3, no.1, pp.1-10, 2023 (Peer-Reviewed Journal)
- III. **Solutions of high-order linear Volterra integro-differential equations via Lucas polynomials**
Elmacı D., Baykuş Savaşaneril N.
Montes Taurus Journal of Pure and Applied Mathematics, vol.5, no.2, pp.22-33, 2023 (Peer-Reviewed Journal)
- IV. **Numerical Solution of High-Order Linear Fredholm Integro-Differential Equations by Lucas Collocation Method**
Elmacı D., Baykuş Savaşaneril N.
International Journal of Informatics and Applied Mathematics, vol.5, no.2, pp.23-40, 2023 (Peer-Reviewed Journal)
- V. **The Lucas Polynomial Solution of Linear Volterra-Fredholm Integral Equations**
Elmacı D., Baykuş Savaşaneril N.
Matrix Science Mathematic, vol.6, no.1, pp.21-25, 2022 (Peer-Reviewed Journal)
- VI. **Lucas Collocation Method for the Solution of Differential Difference Equations**
Elmacı D., Baykuş Savaşaneril N.
New Trends in Mathematical Sciences, vol.10, no.4, pp.115-127, 2022 (Peer-Reviewed Journal)
- VII. **Delay integro differential equations solutions with Euler polynomials method**
ELMACI D., BAYKUŞ SAVAŞANERİL N.
New Trends in Mathematical Science, vol.9, no.3, pp.7-20, 2021 (Peer-Reviewed Journal)
- VIII. **Euler polynomials method for solving linear integro differential equations**
Elmacı D., Baykuş Savaşaneril N.
New Trends in Mathematical Science, vol.9, no.3, pp.21-34, 2021 (Peer-Reviewed Journal)
- IX. **EULER AND TAYLOR POLYNOMIALS METHOD FOR SOLVING VOLTERRA TYPE INTEGRO DIFFERENTIAL EQUATIONS WITH NONLINEAR TERMS**
Elmacı D., Baykuş Savaşaneril N., Dal F., Sezer M.
JOURNAL OF SCIENCE AND ARTS, no.2, pp.395-406, 2021 (ESCI)
- X. **Lucas Polynomial Approach for Second Order Nonlinear Differential Equations**
GÜMGÜM S., BAYKUŞ SAVAŞANERİL N., KÜRKÇÜ Ö. K., SEZER M.
Süleyman Demirel Üniversitesi Fen Bilimleri Enstitüsü Dergisi, vol.24, no.1, pp.230-236, 2020 (Peer-Reviewed Journal)
- XI. **Lucas Polynomial Solution for Neutral Differential Equations with Proportional**
GÜMGÜM S., BAYKUŞ SAVAŞANERİL N., KÜRKÇÜ Ö. K., SEZER M.
TMWMS Journal of Applied and Engineering Mathematics, vol.10, no.1, pp.259-269, 2020 (Peer-Reviewed Journal)
- XII. **LUCAS POLYNOMIAL SOLUTION FOR NEUTRAL DIFFERENTIAL EQUATIONS WITH PROPORTIONAL DELAYS**
Gumgum S., Savasaneril N., Kurkcu O. K., Sezer M.
TWMS JOURNAL OF APPLIED AND ENGINEERING MATHEMATICS, vol.10, no.1, pp.259-269, 2020 (ESCI)

- XIII. **HERMITE POLYNOMIAL APPROACH FOR SOLVING SINGULAR PERTURBATED DELAY DIFFERENTIAL EQUATIONS**
YÜZBAŞI Ş., BAYKUŞ SAVAŞANERİL N.
JOURNAL OF SCIENCE AND ARTS, no.4, pp.845-854, 2020 (ESCI)
- XIV. **Analytic Solution for the Dirichlet Problem in 2-D**
BAYKUŞ SAVAŞANERİL N., Delibaş H.
Journal Of Computational And Theoretical Nanoscience, vol.15, 2018 (Scopus)
- XV. **Laguerre Series Solutions of the Delayed Single Degree-of-Freedom Oscillator Excited by an External Excitation and Controlled by a Control Force**
BAYKUŞ SAVAŞANERİL N.
Journal Of Computational And Theoretical Nanoscience, 2018 (Scopus)
- XVI. **A numerical technique based on Lucas polynomials together with standard and Chebyshev-Lobatto collocation points for solving functional integro-differential equations involving variable delays**
GÜMGÜM S., BAYKUŞ SAVAŞANERİL N., KÜRKÇÜ Ö. K., SEZER M.
Sakarya University Journal of Science, vol.22, pp.1, 2018 (Peer-Reviewed Journal)
- XVII. **Chebyshev collocation method for the two-dimensional heat equation**
GÜMGÜM S., Kurul E., BAYKUŞ SAVAŞANERİL N.
Communication in Mathematical Modeling and Applications, vol.3, no.2, pp.1-8, 2018 (Peer-Reviewed Journal)
- XVIII. **Bernstein Series Approximation for Dirichlet Problem**
BAYKUŞ SAVAŞANERİL N., Hacioglu Z.
GAZI UNIVERSITY JOURNAL OF SCIENCE, vol.31, no.2, pp.544-553, 2018 (ESCI)
- XIX. **Bernstein Series Solution of the Heat Equation in 2-D**
BAYKUŞ SAVAŞANERİL N.
New Trends in Mathematical Sciences, vol.5, no.4, pp.220-231, 2017 (Peer-Reviewed Journal)
- XX. **Laguerre polynomial solution of high order linear Fredholm integro differential equations**
BAYKUŞ SAVAŞANERİL N., SEZER M.
New Trends in Mathematical Sciences <http://dx.doi.org/10.20852/ntmsci.2016218534>, vol.4, no.2, pp.273-284, 2016 (Peer-Reviewed Journal)
- XXI. **Analytic solution for two dimensional heat equation for an ellipse region**
BAYKUŞ SAVAŞANERİL N., Havva D.
New Trends in Mathematical Sciences, vol.4, no.1, pp.65-70, 2016 (Peer-Reviewed Journal)
- XXII. **Solution of the two dimensional heat equation for a rectangular plate**
Emel K., BAYKUŞ SAVAŞANERİL N.
new trends in mathematics science, vol.3, no.4, pp.76-82, 2015 (Peer-Reviewed Journal)
- XXIII. **Solution of Dirichlet problem for a square region in terms of elliptic functions**
Zeynep H., BAYKUŞ SAVAŞANERİL N., KÖSE H.
New Trends in Mathematical Science, vol.3, no.4, pp.98-103, 2015 (Peer-Reviewed Journal)

Books & Book Chapters

- I. **Scientific Research Reports**
Baykuş Savaşaneril N.
Duvar Publications, İzmir, 2024
- II. **Analysis of Single Degree of Freedom Systems Solved by Taylor, Euler, and Lucas Polynomials**
BAYKUŞ SAVAŞANERİL N.
in: Scientific Research Reports, ÇEVİK MEHMET, Editor, Duvar Publications, pp.34-46, 2024
- III. **Meslek Yüksekokulları İçin Matematik**
BAYKUŞ SAVAŞANERİL N., KAYNAK M.
KANYILMAZ Matbaacılık, 2018
- IV. **Calculus2**

BAYKUŞ SAVAŞANERİL N., SEZER M.

Atlas, 2016

V. **Kalkülüs Cilt II**

SEZER M., BAYKUŞ SAVAŞANERİL N.

Atlas Akademi, Konya, 2016

VI. **Kalkülüs Cilt1**

SEZER M., BAYKUŞ SAVAŞANERİL N.

DORA Basım Yayın Dağıtım Ltd.Şti BURSA, Bursa, 2015

VII. **Genel Matematik II FEN MÜHENDİSLİK İKTİSAT ÖĞRENCİLERİ İÇİN MATEMATİK YÖNTEMLER ÇÖZÜMLÜ PROBLEMLER**

SEZER M., BAYKUŞ SAVAŞANERİL N.

Kan Yılmaz Matbaa, İZMİR, İzmir, 2010

VIII. **Genel Matematik I FEN MÜHENDİSLİK İKTİSAT ÖĞRENCİLERİ İÇİN MATEMATİK YÖNTEMLER ÇÖZÜMLÜ PROBLEMLER**

SEZER M., BAYKUŞ SAVAŞANERİL N.

Mengithan, İzmir, İzmir, 2009

IX. **MATEMATİK 1 Meslek Yüksekokulları İçin Matematik I**

BAYKUŞ SAVAŞANERİL N., KAYNAK M.

Lider yayın ve eğitim hiz.san.ve tic.ltd.şti, İstanbul, 2004

X. **MATEMATİK 2 Meslek Yüksekokulları İçin Matematik II**

BAYKUŞ SAVAŞANERİL N., KAYNAK M.

Lider Yayın ve Eğitim Hizmetleri San. Tic.Ltd.Şti., İzmir, 2003

Refereed Congress / Symposium Publications in Proceedings

I. **A NEW APPROACH FOR SOLVING BRATU'S PROBLEM**

BAYKUŞ SAVAŞANERİL N.

7th INTERNATIONAL AZERBAIJAN CONGRESS ON LIFE, ENGINEERING, MATHEMATICAL, AND APPLIED SCIENCES, Baku, Azerbaijan, 25 - 27 June 2024

II. **A Novel Method for Solving Telegraph Equations Used in Voltage Monitoring of Electric Transmission Lines**

BAYKUŞ SAVAŞANERİL N.

6TH INTERNATIONAL AZERBAIJAN CONGRESS ON LIFE, ENGINEERING, MATHEMATICAL, AND APPLIED SCIENCES, İzmir, Turkey, 20 - 22 March 2024, pp.497-505

III. **A NEW METHOD FOR SOLUTION OF THE BIHARMONIC EQUATION**

BAYKUŞ SAVAŞANERİL N.

11TH INTERNATIONAL CONGRESS ON LIFE, ENGINEERING, AND APPLIED SCIENCES IN A CHANGING WORLD, Portugal, 25 November 2023, vol.1, pp.1

IV. **EULER POLYNOMIALS METHOD FOR SOLVING THE SINGLE DEGREE OF FREEDOM SYSTEM**

BAYKUŞ SAVAŞANERİL N.

10TH INTERNATIONAL CONGRESS ON LIFE, ENGINEERING, AND APPLIED SCIENCES IN A CHANGING WORLD, İzmir, Turkey, 12 August 2023, pp.183-190

V. **Numerical Solutions of Hyperbolic Partial Differential Equations**

Baykuş Savaşaneril N.

7th International Students Science Congress, İzmir, Turkey, 12 - 13 May 2023, pp.131-140

VI. **A New Method for Elliptic Partial Differential Equations**

Baykuş Savaşaneril N.

7 th International Students Science Congress, İzmir, Turkey, 12 - 13 May 2023, pp.141-150

VII. **A Numerical Method for Parabolic Partial Differential Equations**

BAYKUŞ SAVAŞANERİL N.

9TH INTERNATIONAL CONGRESS ON LIFE, ENGINEERING, AND APPLIED SCIENCES IN A CHANGING WORLD,
İzmir, Turkey, 08 April 2023

- VIII. **Haydar Aliyev'in Atatürk Sevgisi**
BAYKUŞ SAVAŞANERİL N.
Qlobal Çağırışlar ve Türk Dünyası, Baku, Azerbaijan, 12 April 2023
- IX. **A New Computational Method to Solve the Boundary Value Problems Associated with Elliptic Partial Differential Equations**
Elmacı D., Baykuş Savaşaneril N.
8TH INTERNATIONAL CONGRESS ON LIFE, ENGINEERING, AND APPLIED SCIENCES IN A CHANGING WORLD, 07 January 2023
- X. **MODELING WITH DELAYED DIFFERENTIAL EQUATIONS**
Baykuş Savaşaneril N.
8TH INTERNATIONAL CONGRESS ON LIFE, ENGINEERING, AND APPLIED SCIENCES IN A CHANGING WORLD, 07 January 2023
- XI. **NUMERICAL SOLUTION FOR NONLINEAR DIFFERENTIAL EQUATIONS HAVING PIECEWISE CONTINUOUS SOLUTION**
Baykuş Savaşaneril N.
8TH INTERNATIONAL CONGRESS ON LIFE, ENGINEERING, AND APPLIED SCIENCES IN A CHANGING WORLD, 07 January 2023
- XII. **MATRIX METHOD FOR SOLVE SYSTEMS OF DELAY DIFFERENTIAL EQUATIONS WITH VARIABLE COEFFICIENTS**
Baykuş Savaşaneril N.
3RD INTERNATIONAL AZERBAIJAN CONGRESS ON LIFE, ENGINEERING, AND APPLIED SCIENCES, Baku, Azerbaijan, 26 - 28 November 2022, pp.79-86
- XIII. **A NEW METHOD FOR RICCATI-LIKE PARTIAL DIFFERENTIAL EQUATIONS**
Baykuş Savaşaneril N.
3RD INTERNATIONAL AZERBAIJAN CONGRESS ON LIFE, ENGINEERING, AND APPLIED SCIENCES, Baku, Azerbaijan, 26 - 28 November 2022, pp.71-78
- XIV. **NUMERICAL SOLUTION OF TELEGRAPH EQUATION USING MATRIX METHOD**
Baykuş Savaşaneril N.
3RD INTERNATIONAL AZERBAIJAN CONGRESS ON LIFE, ENGINEERING, AND APPLIED SCIENCES, Baku, Azerbaijan, 26 - 28 November 2022, pp.87-94
- XV. **A COMPUTATIONAL METHOD FOR SOLVING A CLASS OF VOLTERRA TYPE INTEGRO DIFFERENTIAL EQUATIONS WITH NONLINEAR TERMS BY MEANS OF EULER AND TAYLOR POLYNOMIALS**
ELMACI D., BAYKUŞ SAVAŞANERİL N., SEZER M.
9th INTERNATIONAL EUROPEAN CONFERENCE ON MATHEMATICS, ENGINEERING, NATURAL MEDICAL SCIENCES, Bursa, Turkey, 8 - 10 November 2019, pp.1-9
- XVI. **EULER POLYNOMIAL SOLUTIONS OF FIRST ORDER NEUTRAL TYPE INTEGRO DIFFERENTIAL EQUATIONS WITH VARIABLE DELAYS**
ELMACI D., BAYKUŞ SAVAŞANERİL N., SEZER M.
9th INTERNATIONAL EUROPEAN CONFERENCE ON MATHEMATICS, ENGINEERING, NATURAL MEDICAL SCIENCES, Bursa, Turkey, 8 - 10 November 2019, pp.87-95
- XVII. **Euler Polynomial Approach for Solving System of Linear of Linear Delay Differential Equations with Variable Coefficients**
ELMACI D., BAYKUŞ SAVAŞANERİL N., SEZER M.
Uluslararası 30 Ağustos Bilimsel Araştırmalar Sempozyumu, 28 - 31 August 2019
- XVIII. **EULER MATRIX METHOD BASED ON RESIDUAL FUNCTION FOR SOLVING ABEL-TYPE NONLINEAR DIFFERENTIAL EQUATIONS**
ELMACI D., BAYKUŞ SAVAŞANERİL N., SEZER M.
ULUSLARARASI 30 AĞUSTOS BİLİMSEL ARAŞTIRMALAR SEMPOZYUMU, İzmir, Turkey, 28 - 31 August 2019, pp.295-300

- XIX. **EULER POLYNOMIAL APPROACH FOR SOLVING SYSTEM OF LINEAR DELAY DIFFERENTIAL EQUATIONS WITH VARIABLE COEFFICIENTS**
ELMACI D., BAYKUŞ SAVAŞANERİL N., SEZER M.
ULUSLARARASI 30 AĞUSTOS BİLİMSEL ARAŞTIRMALAR SEMPOZYUMU, İzmir, Turkey, 28 - 31 August 2019, pp.301-310
- XX. **Stirling Matrix-Collocation Method to Solve Systems of Functional Differential Equations with Deviating Argument**
BAŞAR Ü., SEZER M., BAYKUŞ SAVAŞANERİL N.
3rd International Students Science Congress 3-4 May 2019, İzmir - Turkey, İzmir, Turkey, 3 - 04 May 2019, pp.309-316
- XXI. **An Euler Matrix Technique for Solving Nonlinear Duffing Differential Equation by Using Euler Polynomials**
ELMACI D., BAYKUŞ SAVAŞANERİL N., SEZER M.
3rd International Student Science Congress, İzmir, Turkey, 3 - 04 May 2019, pp.386-393
- XXII. **Euler-Taylor Matrix Technique for Solving a Class of High Order Delay Differential Equations with Nonlinear Terms**
ELMACI D., BAYKUŞ SAVAŞANERİL N., SEZER M.
3rd International Student Science Congress, İzmir, Turkey, 3 - 04 May 2019, pp.394-401
- XXIII. **Euler - Taylor Matrix Technique for Solving a Class of High Order Delay Differential Equations with Nonlinear Terms**
ELMACI D., BAYKUŞ SAVAŞANERİL N., SEZER M.
3rd International Students Science Congress, 3 - 04 May 2019
- XXIV. **Matrix method for solving a class of Volterra type integro differential equations with variable delays by means of Lucas and Taylor polynomials**
BAYKUŞ SAVAŞANERİL N., SEZER M.
V. Uluslararası Multidisipliner Çalışmaları Sempozyumu (ISMS), 16 - 17 November 2018
- XXV. **Lucas polynomial approach for solving a class of nonlinear differential equations with mixed delays**
BAYKUŞ SAVAŞANERİL N., SEZER M.
V. Uluslararası Multidisipliner Çalışmaları Sempozyumu (ISMS), Ankara, Turkey, 16 - 17 November 2018
- XXVI. **Lucas matrix-collocation method for solving Abel-type nonlinear differential equations with residual error estimation**
BAYKUŞ SAVAŞANERİL N., SEZER M.
V. Uluslararası Multidisipliner Çalışmaları Sempozyumu (ISMS), Ankara, Turkey, 16 - 17 November 2018
- XXVII. **Lucas Matrix Method for a Class of Nonlinear Delay Fredholm Integro-Differential Equations**
BAYKUŞ SAVAŞANERİL N., SEZER M.
INTERNATIONAL CONFERENCE ON MATHEMATICS, 4 - 06 July 2018
- XXVIII. **Numerical Solution of Nonlinear Second-Order Pantograph Equations by Means of Lucas Matrix-Collocation**
BAYKUŞ SAVAŞANERİL N., SEZER M.
INTERNATIONAL CONFERENCE ON MATHEMATICS, 4 - 06 July 2018
- XXIX. **Taylor-Lucas Matrix-Collocation Method for Solving a Class of Neutral Functional Differential Equations**
BAYKUŞ SAVAŞANERİL N., SEZER M.
ICAAMM 2018, 22 June 2018
- XXX. **A Numerical Algorithm for Solution of First Order Nonlinear Differential Equations with Variable Delay**
BAYKUŞ SAVAŞANERİL N., SEZER M.
ICAAMM 2018, 22 - 24 June 2018
- XXXI. **A Numerical Approach Based on Abel Polynomials for Solving Nonlinear Duffing Differential Equations**
Güleç İ., SEZER M., BAYKUŞ SAVAŞANERİL N.

2nd International Students Science Congress, İzmir, Turkey, 4 - 05 May 2018

- XXXII. **Lucas Polynomial Solutions of a Class of Neutral Type Functional Differential Equations with Several Delays**
BAYKUŞ SAVAŞANERİL N., SEZER M.
International Conference on Applied Analysis and Mathematical Modeling, İstanbul, Turkey, 7 - 09 July 2017
- XXXIII. **A Combined Operational Matrix Method Based on Lucas Polynomials for Solving Pantograph -Type Functional Differential Equations with Mixed Delays**
BAYKUŞ SAVAŞANERİL N., SEZER M.
International Conference on Applied Analysis and Mathematical Modeling, İstanbul, Turkey, 7 - 09 July 2017
- XXXIV. **An efficient method based on Lucas polynomials for solution of Lane-Emden type functional differential equations with delays**
BAYKUŞ SAVAŞANERİL N., SEZER M.
International Conference on Mathematics and Engineering, İstanbul, Turkey, 10 - 12 May 2017
- XXXV. **Hybrid Taylor-Lucas matrix method for solving a neutral functional differential equation with constant coefficients and proportional delays**
BAYKUŞ SAVAŞANERİL N., SEZER M.
International Conference on Mathematics and Engineering, İstanbul, Turkey, 10 - 12 May 2017
- XXXVI. **Bernstein Series Approximation for Dirichlet Problem**
Hacıoğlu Z., BAYKUŞ SAVAŞANERİL N.
2nd International Conference on Pure & Applied Science, 1 - 05 June 2016
- XXXVII. **Chebyshev collocation method for the two dimensional heat equation**
KURUL E., BAYKUŞ SAVAŞANERİL N.
2nd International Conference on Pure & Applied Science, 1 - 05 June 2016
- XXXVIII. **Bernstein Series Solution of the Heat Equation in 2 D**
DELİBAŞ H., BAYKUŞ SAVAŞANERİL N.
2nd International Conference on Pure & Applied Science, 1 - 05 June 2016
- XXXIX. **A new numerical method based on hybrid Taylor and Lucas polynomials for solving a class of linear Volterra type functional integro differential equations with proportional and variable delays**
BAYKUŞ SAVAŞANERİL N., SEZER M.
International Conference on Regent Advances in Pure and Applied Mathematics, 19 - 23 May 2016
- XL. **Analytic Solution for The Dirichlet Problem in 2 D**
BAYKUŞ SAVAŞANERİL N., Havva D.
International Conference on Applied Analysis and Mathematical Modeling 2015, İstanbul, Turkey, 8 - 12 June 2015, pp.142
- XLI. **Solution of the two dimensional heat equation for an ellipse in terms of elliptic functions**
BAYKUŞ SAVAŞANERİL N., Havva D.
International Conference on Advances in Applied Mathematics and Mathematical Physics, 19 - 21 August 2014
- XLII. **Laguerre Series Solutions of The Single Degree of Freedom System Oscillator Excited by an External Excitation $f(t)$ and Controlled by a Control Force**
BAYKUŞ SAVAŞANERİL N.
4th INTERNATIONAL CONFERENCE ON MATRIX ANALYSIS AND APPLICATIONS ICMAA 2013, 2 - 04 July 2013
- XLIII. **Tek Serbestlik Dereceli Titreşim Sisteminin Laguerre Polinomları ile Matris Çözümü**
ÇEVİK M., BAYKUŞ SAVAŞANERİL N.
XVII. Ulusal Mekanik Kongresi, Turkey, 5 - 09 September 2011
- XLIV. **Laguerre Polynomial Solution of Fredholm Integro Differential Equations by a Practical Matrix Method**
BAYKUŞ SAVAŞANERİL N., ÇEVİK M., SEZER M.
International Conference on Applied Analysis and Algebra, 29 June - 02 July 2011, pp.178
- XLV. **Numerical Solution of the Single Degree of Freedom System by a Practical Collocation Method Based on the Chebyshev Polynomials**
ÇEVİK M., BAYKUŞ SAVAŞANERİL N., SEZER M.

Computing in Science and Engineering, Aydın, Turkey, 1 - 03 June 2011, pp.427-429

XLVI. Tek Serbestlik Dereceli Titreşim Sisteminin Taylor Matris Yöntemi ile Polinom Çözümü

ÇEVİK M., BAYKUŞ SAVAŞANERİL N.

XVI. Ulusal Mekanik Kongresi, Turkey, 22 - 26 June 2009, pp.427-431

XLVII. Laguerre Polynmial Solution of High Order Linear Fredholm Integro Differential Equations

BAYKUŞ SAVAŞANERİL N., SEZER M.

IX. Dinamik Sistemler Çalıştayı, Turkey, 18 - 19 June 2009, pp.21

XLVIII. Yüksek Mertebeden Parçalı Aralıklı Fredholm İntegro Diferansiyel Denklemlerin Çözümü

BAYKUŞ SAVAŞANERİL N., SEZER M.

2. Türk Dünyası matematik Sempozyumu, 4 - 07 July 2007, pp.130

XLIX. Yüksek Mertebeden Sabit Katsayılı Fredholm İntegro Diferansiyel Denklemlerin Çözümü

BAYKUŞ SAVAŞANERİL N., SEZER M.

II.Ankara Matematik Günleri Sempozyumu, Turkey, 14 - 15 June 2007, pp.28

Supported Projects

Baykuş Savaşaneril N., TUBITAK Project, Dirichlet Probleminin Eşkenar Dörtgen Bölgede Eliptik Fonksiyonlar Cinsinden Çözümü, 2005 - 2006

Activities in Scientific Journals

CMES - COMPUTER MODELING IN ENGINEERING AND SCIENCES, Editor, 2019 - 2019

INTERNATIONAL JOURNAL OF DIFFERENTIAL EQUATIONS, Editor, 2018 - 2018

Memberships / Tasks in Scientific Organizations

7th International Congress on Life, Engineering, Mathematical, and Applied Sciences, Member of Science Committee, 2024 - 2024, Azerbaijan

7TH INTERNATIONAL AZERBAIJAN CONGRESS ON LIFE, ENGINEERING, MATHEMATICAL AND APPLIED SCIENCES, Member of Science Committee, 2024 - 2024, Azerbaijan

7.International Students Science Congress, Member of Science Committee, 2023 - 2023, Turkey

6.International Students Science Congress, Member of Science Committee, 2022 - 2022, Turkey

5.International Students Science Congress, Member of Science Committee, 2021 - 2021, Turkey

4.International Students Science Congress, Member of Science Committee, 2020 - 2020, Turkey

3.International Students Science Congress, Member of Science Committee, 2019 - 2019, Turkey

2.International Students Science Congress, Member of Science Committee, 2018 - 2018, Turkey

International Students Science Congress, Member of Science Committee, 2017 - 2017, Turkey

Scientific Refereeing

JOURNAL OF SCIENCE AND ARTS, Journal Indexed in ESCI, December 2023

TURKISH JOURNAL OF MATHEMATICS, SCI Journal, December 2022

Scientific Consultations

Bartın Üniversitesi Fen Fakültesi Matematik Bölümü, Scientific Consultancy, Dokuz Eylül University, İzmir Meslek Yüksekokulu, Makine Ve Metal Teknolojileri Bölümü, Turkey, 2023 - 2023

Tasks In Event Organizations

Baykuş Savaşaneri N., 7TH INTERNATIONAL AZERBAIJAN CONGRESS ON LIFE, ENGINEERING, MATHEMATICAL, AND APPLIED SCIENCES, Scientific Congress, Baku, Azerbaijan, Haziran 2024

Baykuş Savaşaneri N., 7 th International Students Science Congress, Scientific Congress, İzmir, Turkey, Mayıs 2023

Mertgenç Yoldaş D., Ay İ., Baykuş Savaşaneri N., Makine Resim ve Konstrüksiyonu Programı Öğrenci Projeleri, Art Activities, İzmir, Turkey, Mayıs 2022

Yiğittürk N., Ergül E., Baykuş Savaşaneri N., Makine Programı öğrencilerinin projelerinin sergisi, Art Activities, İzmir, Turkey, Mayıs 2022

Metrics

Publication: 95

Citation (WoS): 123

Citation (Scopus): 133

H-Index (WoS): 10

H-Index (Scopus): 6

Congress and Symposium Activities

7th International Congress on Life, Engineering, Mathematical, and Applied Sciences, Invited Speaker, Baku, Azerbaijan, 2024

6TH INTERNATIONAL AZERBAIJAN CONGRESS ON LIFE, ENGINEERING, MATHEMATICAL AND APPLIED SCIENCES, Invited Speaker, Baku, Azerbaijan, 2024

11 TH INTERNATIONAL CONGRESS ON LIFE, ENGINEERING, AND APPLIED SCIENCES IN A CHANGING WORLD, Invited Speaker, İzmir, Turkey, 2023

10TH INTERNATIONAL CONGRESS ON LIFE, ENGINEERING, AND APPLIED SCIENCES IN A CHANGING WORLD, Invited Speaker, İzmir, Turkey, 2023

7 th International Students Science Congress, Attendee, İzmir, Turkey, 2023

7 th International Students Science Congress, Attendee, Manisa, Turkey, 2023

QLOBAL ÇAĞIRIŞLAR VE TÜRK DÜNYASI, Invited Speaker, Baku, Azerbaijan, 2023

8th International Congress on Life, Engineering, and Applied Sciences in a Changing World, Attendee, İzmir, Turkey, 2023

8TH INTERNATIONAL CONGRESSES ON LIFE, SOCIAL, AND HEALTH SCIENCES IN A CHANGING WORLD, Invited Speaker, İzmir, Turkey, 2023

8TH INTERNATIONAL CONGRESS ON LIFE, ENGINEERING, AND APPLIED SCIENCES IN A CHANGING WORLD, Attendee, Amora, Portugal, 2023

INTERNATIONAL STUDENTS SCIENCE CONFERENCE, Invited Speaker, İzmir, Turkey, 2017

Awards

Baykuş Savaşaneri N., Akademik Teşvik, Tübitak, July 2023

Baykuş Savaşaneri N., The Best Paper Awards Stars in Life, Engineering and Applied Sciences of 2023, 8Th International Congress On Life, Engineering, And Applied Sciences In A Changing World Proceedings Book, January 2023

Baykuş Savaşaneri N., Fen Fakültesi Fakülte İkinciliği, Ege Üniversitesi, June 1991

Baykuş Savaşaneri N., Fen Fakültesi Matematik Bölümü Bölüm Birinciliği, Ege Üniversitesi, June 1991