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## Kişisel Bilgiler

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## Araştırma Alanları

Matematik, Temel Bilimler

## Akademik Unvanlar / Görevler

Dr.Öğr.Üyesi, Yıldız Teknik Üniversitesi, Fen-Edebiyat Fakültesi, Matematik Bölümü, 2024 - Devam Ediyor

Dr.Öğr.Üyesi, İstanbul Gelişim Üniversitesi, Mühendislik Ve Mimarlık Fakültesi, Yazılım Mühendisliği , 2021 - 2024

Araştırma Görevlisi, Yıldız Teknik Üniversitesi, Kimya-Metalurji Fakültesi, Matematik Müh.Bölümü, 2013 - 2019

## SCI, SSCI ve AHCI İndekslerine Giren Dergilerde Yayınlanan Makaleler

- I. **Bright soliton of the third-order nonlinear Schrödinger equation with power law of self-phase modulation in the absence of chromatic dispersion**  
Durmus S. A., ÖZDEMİR N., SEÇER A., ÖZIŞIK M., BAYRAM M.  
Optical and Quantum Electronics, cilt.56, sa.5, 2024 (SCI-Expanded)
- II. **Nonlinear complex generalized zakharov dynamical system in conformal sense utilizing new kudryashov method**  
SEÇER A., BAYRAM M., ÖZDEMİR N., ÖNDER İ., ESEN H., ÇINAR M., Aydin H.  
Physica Scripta, cilt.99, sa.2, 2024 (SCI-Expanded)
- III. **Investigation of soliton solutions to the Peyrard-Bishop-Deoxyribo-Nucleic-Acid dynamic model with beta-derivative**  
SEÇER A., ÖZIŞIK M., BAYRAM M., ÖZDEMİR N., ÇINAR M.  
Modern Physics Letters B, 2024 (SCI-Expanded)
- IV. **Bright soliton of Stochastic perturbed Biswas-Milovic equation with cubic-quintic-septic law having multiplicative white noise**  
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Revista Mexicana de Fisica, cilt.70, sa.2, 2024 (SCI-Expanded)
- V. **Revealing optical soliton solutions of Schrödinger equation having parabolic law and anti-cubic law with weakly nonlocal nonlinearity**  
Ozdemir N., Altun S., Secer A., Ozisik M., Bayram M.  
Journal of Taibah University for Science, cilt.18, sa.1, 2024 (SCI-Expanded)

- VI. Bright soliton of the perturbed Schrödinger–Hirota equation with cubic–quintic–septic law of self-phase modulation in the presence of spatiotemporal dispersion  
 ÖZDEMİR N., Altun S., SEÇER A., ÖZİŞIK M., BAYRAM M.  
 European Physical Journal Plus, cilt.139, sa.1, 2024 (SCI-Expanded)
- VII. Optical soliton solutions of the nonlinear Schrödinger equation in the presence of chromatic dispersion with cubic-quintic-septic-nonic nonlinearities  
 Ozdemir N., Secer A., Özışık M., Bayram M.  
 Physica Scripta, cilt.98, sa.11, 2023 (SCI-Expanded)
- VIII. On the soliton solutions to the density-dependent space time fractional reaction-diffusion equation with conformable and M-truncated derivatives  
 ESEN H., ÖZDEMİR N., SEÇER A., BAYRAM M., Sulaiman T. A., Ahmad H., Yusuf A., Albalwi M. D.  
 Optical and Quantum Electronics, cilt.55, sa.10, 2023 (SCI-Expanded)
- IX. Optical solitons for the Biswas-Milovic equation with anti-cubic law nonlinearity in the presence of spatio-temporal dispersion  
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 Physica Scripta, cilt.98, sa.8, 2023 (SCI-Expanded)
- X. Soliton solutions of Heisenberg spin chain equation with parabolic law nonlinearity  
 Altun S., ÖZDEMİR N., ÖZİŞIK M., SEÇER A., BAYRAM M.  
 Optical and Quantum Electronics, cilt.55, sa.8, 2023 (SCI-Expanded)
- XI. Optical solitons for the dispersive Schrödinger–Hirota equation in the presence of spatio-temporal dispersion with parabolic law  
 ÖZDEMİR N., SEÇER A., ÖZİŞIK M., BAYRAM M.  
 European Physical Journal Plus, cilt.138, sa.6, 2023 (SCI-Expanded)
- XII. Extraction of soliton waves from the longitudinal wave equation with local M-truncated derivatives  
 Ozdemir N., SEÇER A., Bayram M.  
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- XIII. Investigation of optical soliton solutions of higher-order nonlinear Schrödinger equation having Kudryashov nonlinear refractive index  
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 Optik, cilt.274, 2023 (SCI-Expanded)
- XIV. Traveling wave structures of some fourth-order nonlinear partial differential equations  
 ESEN H., Ozdemir N., SEÇER A., Bayram M.  
 Journal of Ocean Engineering and Science, cilt.8, sa.2, ss.124-132, 2023 (SCI-Expanded)
- XV. On the investigation of optical soliton solutions of cubic-quartic Fokas–Lenells and Schrödinger–Hirota equations  
 ÖZİŞIK M., ÖNDER İ., ESEN H., ÇINAR M., Ozdemir N., SEÇER A., Bayram M.  
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- XVI. Soliton and other solutions of the (2+1)-dimensional Date-Jimbo-Kashiwara-Miwa equation with conformable derivative  
 Ozdemir N., SEÇER A., ÖZİŞIK M., Bayram M.  
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- XVII. Obtaining the soliton solutions of local M-fractional magneto-electro-elastic media  
 Ozdemir N., SEÇER A., ÖZİŞIK M., Bayram M.  
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- XVIII. Optical solitons for Radhakrishnan–Kundu–Lakshmanan equation in the presence of perturbation term and having Kerr law  
 ÖZDEMİR N.  
 Optik, cilt.271, 2022 (SCI-Expanded)
- XIX. Two Analytical Schemes for the Optical Soliton Solution of the (2+1)-dimensional Nonlinear Schrödinger Equation with Kerr Law Nonlinearity  
 Ozdemir N., SEÇER A., ÖZİŞIK M., BAYRAM M.  
 UNIVERSE, cilt.8, sa.11, 2022 (SCI-Expanded)

- XX. **Original Perturbation of dispersive optical solitons with Schrodinger-Hirota equation with Kerr law and spatio-temporal dispersion**  
 Ozdemir N., SEÇER A., ÖZİŞİK M., Bayram M.  
 OPTIK, cilt.265, 2022 (SCI-Expanded)
- XXI. **<math>\langle p \rangle</math>Novel soliton solutions of Sasa-Satsuma model with local derivative via an analytical technique</math>**  
 Ozdemir N., ESEN H., SEÇER A., BAYRAM M.  
 JOURNAL OF LASER APPLICATIONS, cilt.34, sa.2, 2022 (SCI-Expanded)
- XXII. **Optical solitons and other solutions to the Hirota-Maccari system with conformable, M-truncated and beta derivatives**  
 Ozdemir N., ESEN H., SEÇER A., Bayram M., Yusuf A., Sulaiman T. A.  
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- XXIII. **On solitary wave solutions for the perturbed Chen-Lee-Liu equation via an analytical approach**  
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- XXIV. **An algorithm for numerical solution of some nonlinear multi-dimensional parabolic partial differential equations**  
 Ozdemir N., SEÇER A., Bayram M.  
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- XXV. **Optical Soliton Solutions to Chen Lee Liu model by the modified extended tanh expansion scheme**  
 ÖZDEMİR N., ESEN H., SEÇER A., Bayram M., Yusuf A., Sulaiman T. A.  
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- XXVI. **Solitary wave solutions of chiral nonlinear Schrödinger equations**  
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- XXVII. **Optical solitons and other solutions to the Radhakrishnan-Kundu-Lakshmanan equation**  
 ÖZDEMİR N., ESEN H., SEÇER A., Bayram M., Sulaiman T. A., Yusuf A., AYDIN H.  
 OPTIK, cilt.242, 2021 (SCI-Expanded)
- XXVIII. **An effective computational approach based on Gegenbauer wavelets for solving the time-fractional Kdv-Burgers-Kuramoto equation**  
 Seçer A., Özdemir N.  
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- XXIX. **The Gegenbauer wavelets-based computational methods for the coupled system of Burgers' equations with time-fractional derivative**  
 Özdemir N., Seçer A., Bayram M.  
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- XXX. **MODIFIED LAGUERRE WAVELET BASED GALERKIN METHOD FOR FRACTIONAL AND FRACTIONAL-ORDER DELAY DIFFERENTIAL EQUATIONS**  
 Seçer A., Özdemir N.  
 THERMAL SCIENCE, cilt.23, 2019 (SCI-Expanded)
- XXXI. **A Hermite Polynomial Approach for Solving the SIR Model of Epidemics**  
 Seçer A., Özdemir N., Bayram A. M.  
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## Diger Dergilerde Yayınlanan Makaleler

- I. **M-truncated soliton solutions of the fractional (4+1)-dimensional Fokas equation**  
 ÖZDEMİR N.  
 International Journal of Optimization and Control: Theories and Applications, cilt.13, sa.1, ss.123-129, 2023 (ESCI)
- II. **Wavelet-based Numerical Approaches for Solving the Korteweg-de Vries (KdV) Equation**

ÖZDEMİR N., SEÇER A.

Turkish Journal of Mathematics and Computer Science, cilt.14, sa.1, ss.44-55, 2022 (Hakemli Dergi)

**III. A NUMERICAL ALGORITHM BASED ON ULTRASPHERICAL WAVELETS FOR SOLUTION OF LINEAR AND NONLINEAR KLEIN-GORDON EQUATIONS**

ÖZDEMİR N., SEÇER A.

SIGMA JOURNAL OF ENGINEERING AND NATURAL SCIENCES-SIGMA MUHENDISLIK VE FEN BİLİMLERİ DERGİSİ, cilt.38, sa.3, ss.1307-1319, 2020 (ESCI)

**Hakemli Kongre / Sempozyum Bildiri Kitaplarında Yer Alan Yayınlar**

**I. Reveal of optical pulse envelop of the perturbed Schrödinger-Hirota equation with anti-cubic law nonlinearity**

Altun S., Özdemir N., Seçer A., Özışık M., Bayram M.

(hybrid ) International Conference on Nonlinear Science and Complexity (ICNSC23,) July 10-15, 2023, İstanbul-Turkey, İstanbul, Türkiye, 10 - 15 Temmuz 2023, ss.98

**II. Bright soliton structure of Perturbed Schrödinger-Hirota equation with cubic-quintic-septic law of self-phase modulation**

Özdemir N., Seçer A., Özışık M., Bayram M.

(hybrid ) International Conference on Nonlinear Science and Complexity (ICNSC23,) July 10-15, 2023, İstanbul-Turkey, İstanbul, Türkiye, 10 - 15 Temmuz 2023, ss.102

**III. Soliton Solutions of the Boiti-Leon-Manna-Pempinelli Equation**

ÖZDEMİR N.

11TH INTERNATIONAL EURASIAN CONFERENCE ON MATHEMATICAL SCIENCES AND APPLICATIONS, İstanbul, Türkiye, 29 Ağustos - 01 Eylül 2022, ss.137

**IV. An investigation on nonlinear higher order Schrödinger equation having refractive indices and chromatic dispersion**

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10th (Online) International Conference on Applied Analysis and Mathematical Modeling (ICAAMM22), İstanbul, Türkiye, 1 - 03 Temmuz 2022, ss.60

**V. An investigation of the DNA Peyrard–Bishop equation with beta-derivative**

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10th (Online) International Conference on Applied Analysis and Mathematical Modeling (ICAAMM22), İstanbul, Türkiye, 1 - 03 Temmuz 2022, ss.48

**VI. Optical soliton solutions of nonlinear Schrödinger-Hirota model involving nonlinear chromatic dispersion**

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**VII. Study on the Mikhailov-Novikov-Wang equation to Find the Exact Soliton Solutions**

ÖZDEMİR N., SEÇER A.

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**VIII. Numerical schemes based on Legendre wavelets for Solving Nonlinear Partial Differential Equations**

ÖZDEMİR N., SEÇER A.

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**IX. On the Approximation of Partial Differential Equations using the Three-Step Wavelet Galerkin Method**

ÖZDEMİR N., SEÇER A.

4th International Conference On Mathematics, İstanbul, Türkiye, 27 - 30 Ekim 2020, ss.136

- X. **Numerical Approaches for solving the Coupled System of Burgers' Equations with Time-Fractional Derivative using Gegenbauer wavelet**  
 ÖZDEMİR N., SEÇER A., BAYRAM M.  
 International Conference on Computational Methods in Applied Sciences, İstanbul, Türkiye, 12 - 16 Temmuz 2019,  
 ss.202-203
- XI. **Approximate Solutions of Linear and Nonlinear Klein-Gordon Equations**  
 Özdemir N., Seçer A.  
 International Conference on Computational Methods in Applied Sciences, İstanbul, Türkiye, 12 - 16 Temmuz 2019,  
 ss.201
- XII. **An Efficient Legendre Wavelet-Galerkin Based Approximation for the One-Dimensional Heat Equation**  
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 International Conference on Computational Methods in Applied Sciences, İstanbul, Türkiye, 12 - 16 Temmuz 2019,  
 ss.205-211
- XIII. **Numerical Approaches for solving the Coupled System of Burgers' Equations with Time-Fractional Derivative using Gegenbauer wavelets**  
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- XIV. **Wavelets Galerkin Method for the Kdv- Burgers- Kuramoto Equation**  
 Özdemir N., Seçer A.  
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- XV. **Solution of the Epidemic Model by Hermite Collocation Method**  
 Seçer A., Özdemir N.  
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 ss.315
- XVI. **Galerkin analysis for Fractional Delay Differential Equations by Modified Laguerre wavelets**  
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 7th International Conference on Applied Analysis and Mathematical Modeling, İstanbul, Türkiye, 20 - 24 Haziran  
 2018, ss.167
- XVII. **Three-Step Wavelet Galerkin Method for Numerical solutions of PDEs Using Daubechies Wavelets**  
 ÖZDEMİR N., SEÇER A.  
 3rd International Conference in Pure and Applied Sciences, Dubai, Birleşik Arap Emirlikleri, 2 - 06 Şubat 2017,  
 ss.20
- XVIII. **A Numerical Study for Fisher's equation by three step wavelet Galerkin method**  
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- XIX. **Generalized polynomial chaos approaches for stochastic system of equations**  
 ÖZDEMİR N., AKINLAR M. A.  
 International Conference on Applied Analysis and Mathematical Modeling, İstanbul, Türkiye, 08 Haziran 2015,  
 ss.241
- XX. **Analysis of chaotic behaviors of random dynamical systems,**  
 Bayram M., Akinlar M. A., Özdemir N.  
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## Metrikler

Yayın: 54

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H-İndeks (Scopus): 12