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## Kişisel Bilgiler

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Publons / Web Of Science ResearcherID: GZN-2279-2022

ScopusID: 57205299953

Yoksis Araştırmacı ID: 44044

## Eğitim Bilgileri

Doktora, Yıldız Teknik Üniversitesi, Kimya-Metalurji Fakültesi, Matematik Mühendisliği Bölümü, Türkiye 2013 - 2019

Yüksek Lisans, Balıkesir Üniversitesi, Fen Bilimleri Enstitüsü, Matematik (YL) (Tezli), Türkiye 2011 - 2013

Lisans, Afyon Kocatepe Üniversitesi, Fen-Edebiyat Fakültesi, Matematik Bölümü, Türkiye 2007 - 2011

## Yaptığı Tezler

Doktora, Kısmi Diferansiyel Denklemlerin Nümerik Çözümleri için Gegenbauer Dalgacık Galerkin Yöntemi, Yıldız Teknik Üniversitesi, Kimya-Metalurji Fakültesi, Matematik Mühendisliği Bölümü, 2019

Yüksek Lisans, Kompleks Bölgelerde Tanımlı Fonksiyon Uzaylarında Yaklaşım Problemleri, Balıkesir Üniversitesi, Fen Bilimleri Enstitüsü, Matematik (YL) (Tezli), 2013

## Akademik Unvanlar / Görevler

Dr. Öğr. Üyesi, İstanbul Gelişim Üniversitesi, MÜHENDİSLİK VE MİMARLIK FAKÜLTESİ, YAZILIM MÜHENDİSLİĞİ , 2021 - Devam Ediyor

Araştırma Görevlisi, Yıldız Teknik Üniversitesi, Kimya-Metalurji Fakültesi, Matematik Mühendisliği 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., ÖZİŞIK 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. Revealing optical soliton solutions of Schrödinger equation having parabolic law and anti-cubic law with weakly nonlocal nonlinearity

Özdemir N., Altun S., Secer A., Ozisik M., Bayram M.

Journal of Taibah University for Science, cilt.18, sa.1, 2024 (SCI-Expanded)

- IV. Bright soliton of Stochastic perturbed Biswas-Milovic equation with cubic-quintic-septic law having multiplicative white noise  
ÖZDEMİR N., Altun S., ÖZİŞİK M., SEÇER A., BAYRAM M.  
Revista Mexicana de Fisica, cilt.70, sa.2, 2024 (SCI-Expanded)
- V. Investigation of soliton solutions to the Peyrard-Bishop-Deoxyribo-Nucleic-Acid dynamic model with beta-derivative  
SEÇER A., ÖZİŞİK M., BAYRAM M., ÖZDEMİR N., ÇINAR M.  
Modern Physics Letters B, 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., ÖZİŞİK M., BAYRAM M.  
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- VII. Optical soliton solutions of the nonlinear Schrödinger equation in the presence of chromatic dispersion with cubic-quintic-septic-nonic nonlinearities  
Ozdemir N., Seçer A., Ozisik M., Bayram M.  
PHYSICA SCRIPTA, cilt.98, sa.11, ss.1-10, 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. Soliton solutions of Heisenberg spin chain equation with parabolic law nonlinearity  
Altun S., ÖZDEMİR N., ÖZİŞİK M., SEÇER A., BAYRAM M.  
Optical and Quantum Electronics, cilt.55, sa.8, 2023 (SCI-Expanded)
- X. Optical solitons for the Biswas-Milovic equation with anti-cubic law nonlinearity in the presence of spatio-temporal dispersion  
Ozdemir N.  
Physica Scripta, cilt.98, 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., ÖZİŞİK 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.  
Optical and Quantum Electronics, cilt.55, sa.4, 2023 (SCI-Expanded)
- XIII. Investigation of optical soliton solutions of higher-order nonlinear Schrödinger equation having Kudryashov nonlinear refractive index  
Özışık M., Seçer A., Bayram M., Çınar M., Ozdemir N., Esen H., Önder İ.  
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- XIV. On the investigation of optical soliton solutions of cubic-quartic Fokas–Lenells and Schrödinger–Hirota equations  
Özışık M., Önder İ., Esen H., Çınar M., Ozdemir N., Seçer A., Bayram M.  
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- XV. Obtaining the soliton solutions of local M-fractional magneto-electro-elastic media  
Ozdemir N., Seçer A., Özışık M., 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., Özışık M., Bayram M.  
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- XVII. Optical solitons for Radhakrishnan–Kundu–Lakshmanan equation in the presence of perturbation term and having Kerr law

- Ozdemir N.  
Optik, cilt.271, 2022 (SCI-Expanded)
- XVIII. **Two Analytical Schemes for the Optical Soliton Solution of the (2 + 1) Hirota–Maccari System Observed in Single-Mode Fibers**  
Ozdemir N., Secer A., Ozisik M., Bayram M.  
UNIVERSE, cilt.8, sa.11, ss.1-12, 2022 (SCI-Expanded)
- XIX. **Perturbation of dispersive optical solitons with Schrödinger–Hirota equation with Kerr law and spatio-temporal dispersion**  
Ozdemir N., Seçer A., Özışık M., Bayram M.  
Optik, cilt.265, 2022 (SCI-Expanded)
- XX. **Novel soliton solutions of Sasa-Satsuma model with local derivative via an analytical technique**  
Ozdemir N., Esen H., Seçer A., Bayram M.  
Journal of Laser Applications, cilt.34, sa.2, 2022 (SCI-Expanded)
- XXI. **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.  
Modern Physics Letters B, cilt.36, sa.11, 2022 (SCI-Expanded)
- XXII. **On solitary wave solutions for the perturbed Chen–Lee–Liu equation via an analytical approach**  
ESEN H., Ozdemir N., SEÇER A., Bayram M.  
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- XXIII. **Optical Soliton Solutions to Chen Lee Liu model by the modified extended tanh expansion scheme**  
Ozdemir N., ESEN H., SEÇER A., Bayram M., Yusuf A., Sulaiman T. A.  
Optik, cilt.245, 2021 (SCI-Expanded)
- XXIV. **An algorithm for numerical solution of some nonlinear multi-dimensional parabolic partial differential equations[Formula presented]**  
Ozdemir N., Seçer A., Bayram M.  
Journal of Computational Science, cilt.56, 2021 (SCI-Expanded)
- XXV. **Solitary wave solutions of chiral nonlinear Schrödinger equations**  
Esen H., Ozdemir N., Seçer A., Bayram M., Sulaiman T. A., Yusuf A.  
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- XXVI. **Optical solitons and other solutions to the Radhakrishnan-Kundu-Lakshmanan equation**  
Ozdemir N., ESEN H., SEÇER A., Bayram M., Sulaiman T. A., Yusuf A., Aydin H.  
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- XXVII. **An effective computational approach based on Gegenbauer wavelets for solving the time-fractional Kdv-Burgers-Kuramoto equation**  
SEÇER A., Ozdemir N.  
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- XXVIII. **The Gegenbauer wavelets-based computational methods for the coupled system of Burgers' equations with time-fractional derivative**  
Ozdemir N., SEÇER A., BAYRAM M.  
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- XXIX. **Modified laguerre wavelet based galerkin method for fractional and fractional-order delay differential equations**  
SEÇER A., Ozdemir N.  
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- XXX. **A hermite polynomial approach for solving the SIR model of epidemics**  
SEÇER A., Ozdemir N., BAYRAM M.  
Mathematics, cilt.6, sa.12, 2018 (SCI-Expanded)

## **Düzenlenen Dergilerde Yayınlanan Makaleler**

- I. **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 (Scopus)
- II. **M-truncated soliton solutions of the fractional (4+1)-dimensional Fokas equation**  
Özdemir N.  
International Journal of Optimization and Control: Theories and Applications, cilt.13, sa.1, ss.123-129, 2023 (ESCI)
- III. **Wavelet-based Numerical Approaches for Solving the Korteweg-de Vries (KdV) Equation**  
Özdemir N., Seçer A.  
Turkish Journal of Mathematics and Computer Science, cilt.14, sa.1, ss.44-55, 2022 (Hakemli Dergi)
- IV. **A NUMERICAL ALGORITHM BASED ON ULTRASPHERICAL WAVELETS FOR SOLUTION OF LINEAR AND NONLINEAR KLEIN-GORDON EQUATIONS**  
Özdemir N., Seçer A.  
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## **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**  
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- II. **On optical soliton solution of the nonlinear Schrödinger's equation having Quadrupled Power-Law Non-linearity**  
Özdemir N.  
International Conference on Nonlinear Science and Complexity, İstanbul, Türkiye, 10 - 15 Temmuz 2023, ss.110
- III. **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.  
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- IV. **Investigation of optical soliton solutions of higher order nonlinear Schrödinger equations with Kudryashov nonlinear refractive index**  
ÇINAR M., ÖNDER İ., ÖZDEMİR N., ESEN H., ÖZIŞIK M., SEÇER A., BAYRAM M.  
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- V. **Soliton Solutions of the Boiti-Leon-Manna-Pempinelli Equation**  
ÖZDEMİR N.  
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- VI. **Optical soliton solutions of nonlinear Schrödinger-Hirota model involving nonlinear chromatic dispersion**  
ÖZİŞİK M., SEÇER A., BAYRAM M., ÖZDEMİR N., ÇINAR M., ESEN H., ÖNDER İ.  
10th (Online) International Conference on Applied Analysis and Mathematical Modeling (ICAAMM22), İstanbul, Türkiye, 01 Temmuz 2022, ss.33
- VII. **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, 01 Temmuz 2022, ss.47
- VIII. **An investigation on nonlinear higher order Schrödinger equation having refractive indices and chromatic dispersion**

- ÖZİŞİK M., SEÇER A., BAYRAM M., ÖZDEMİR N., ÇINAR M., ESEN H., ÖNDER İ.  
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- IX. **Study on the Mikhailov-Novikov-Wang equation to Find the Exact Soliton Solutions**  
ÖZDEMİR N., SEÇER A.  
Online International Symposium on Applied Mathematics and Engineering (ISAME22), İstanbul, Türkiye, 21 Ocak  
2022
- X. **Numerical schemes based on Legendre wavelets for Solving Nonlinear Partial Differential Equations**  
ÖZDEMİR N., SEÇER A.  
9th (Online) International Conference on Applied Analysis and Mathematical Modeling, İstanbul, Türkiye, 11  
Haziran 2021
- XI. **On the Approximation of Partial Differential Equations using the Three-Step Wavelet Galerkin  
Method**  
ÖZDEMİR N., SEÇER A.  
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- XII. **Approximate Solutions of Linear and Nonlinear Klein-Gordon Equations**  
SEÇER A., ÖZDEMİR N.  
International Conference on Computational Methods in Applied Sciences, İstanbul, Türkiye, 12 - 16 Temmuz 2019,  
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- XIII. **Numerical Approaches for solving the Coupled System of Burgers' Equations with Time-Fractional  
Derivative using Gegenbauer wavelets**  
ÖZDEMİR N., SEÇER A., BAYRAM M.  
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ss.202-203
- XIV. **An Efficient Legendre Wavelet-Galerkin Based Approximation for the One-Dimensional Heat  
Equation**  
ÖZDEMİR N., SEÇER A., BAYRAM M.  
International Conference on Computational Methods in Applied Sciences, İstanbul, Türkiye, 12 - 16 Temmuz 2019,  
ss.205-211
- XV. **Wavelets Galerkin Method for the Kdv-Burgers- Kuramoto Equation**  
ÖZDEMİR N., SEÇER A.  
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- XVI. **Solution of the epidemic model by Hermite collocation method**  
SEÇER A., ÖZDEMİR N.  
7th International Conference on Applied Analysis and Mathematical Modeling, İstanbul, Türkiye, 20 - 24 Haziran  
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- XVII. **Galerkin analysis for Fractional Delay Differential Equations by Modified Laguerre wavelets**  
ÖZDEMİR N., SEÇER A.  
7th International Conference on Applied Analysis and Mathematical Modeling, İstanbul, Türkiye, 20 - 24 Haziran  
2018, ss.167
- XVIII. **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
- XIX. **A Numerical Study for Fisher's equation by three step wavelet Galerkin method**  
ÖZDEMİR N., SEÇER A., BAYRAM M.  
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- XX. **Generalized polynomial chaos approaches for stochastic system of equations**  
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**XXI. Analysis of chaotic behaviours of random dynamical systems**

ÖZDEMİR N., AKINLAR M. A., BAYRAM M.

4th International Conference on Mathematics and Information Science, ZEWAIL CITY, Mısır, 5 - 07 Şubat 2015,

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