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Education Information

Doctorate, Yildiz Technical University, Graduate School Of Natural And Applied Sciences, Turkey 2013 - 2019

Postgraduate, Balikesir University, Fen Bilimleri Enstitüsü , Turkey 2011 - 2013

Undergraduate, Afyon Kocatepe University, Fen Edebiyat Fakültesi , Turkey 2007 - 2011

Research Areas

Mathematics, Natural Sciences

Academic Titles / Tasks

Assistant Professor, Yildiz Technical University, Faculty Of Arts & Science, Department Of Mathemeatics, 2024 - Continues

Assistant Professor, Istanbul Gelisim University, Faculty Of Engineering And Architecture, Software Engineering, 2021 - 2024

Research Assistant, Yildiz Technical University, Faculty Of Chemical And Metallurgical Engineering, Department Of Mathematics Engineering, 2013 - 2019

Published journal articles indexed by SCI, SSCI, and AHCI

- 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., ÖZİŞİK M., BAYRAM M.
Optical and Quantum Electronics, vol.56, no.5, 2024 (SCI-Expanded)
- II. **Nonlinear complex generalized zakharov dynamical system inconformal sense utilizing new kudryashov method**
SEÇER A., BAYRAM M., ÖZDEMİR N., ÖNDER İ., ESEN H., ÇINAR M., Aydın H.
Physica Scripta, vol.99, no.2, 2024 (SCI-Expanded)
- III. **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)

- 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, vol.70, no.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., Özışık M., Bayram M.
Journal of Taibah University for Science, vol.18, no.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., ÖZİŞİK M., BAYRAM M.
European Physical Journal Plus, vol.139, no.1, 2024 (SCI-Expanded)
- VII. **Optical soliton solutions of the nonlinear Schrödinger equation in the presence of chromatic dispersion with cubic-quintic-septic-nonlinearities**
Ozdemir N., Secer A., Özışık M., Bayram M.
Physica Scripta, vol.98, no.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, vol.55, no.10, 2023 (SCI-Expanded)
- IX. **Optical solitons for the Biswas-Milovic equation with anti-cubic law nonlinearity in the presence of spatio-temporal dispersion**
ÖZDEMİR N.
Physica Scripta, vol.98, no.8, 2023 (SCI-Expanded)
- X. **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, vol.55, no.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, vol.138, no.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, vol.55, no.4, 2023 (SCI-Expanded)
- XIII. **Investigation of optical soliton solutions of higher-order nonlinear Schrödinger equation having Kudryashov nonlinear refractive index**
ÖZİŞİK M., SEÇER A., Bayram M., ÇINAR M., ÖZDEMİR N., ESEN H., ÖNDER İ.
Optik, vol.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, vol.8, no.2, pp.124-132, 2023 (SCI-Expanded)
- XV. **On the investigation of optical soliton solutions of cubic–quartic Fokas–Lenells and Schrödinger–Hirota equations**
ÖZİŞİK M., ÖNDER İ., ESEN H., ÇINAR M., Ozdemir N., SEÇER A., Bayram M.
Optik, vol.272, 2023 (SCI-Expanded)
- XVI. **Soliton and other solutions of the (2+1)-dimensional Date-Jimbo-Kashiwara-Miwa equation with conformable derivative**
Ozdemir N., SEÇER A., ÖZİŞİK M., Bayram M.
Physica Scripta, vol.98, no.1, 2023 (SCI-Expanded)
- XVII. **Obtaining the soliton solutions of local M-fractional magneto-electro-elastic media**

- Ozdemir N., SEÇER A., ÖZİŞİK M., Bayram M.
Heliyon, vol.9, no.1, 2023 (SCI-Expanded)
- XVIII. **Optical solitons for Radhakrishnan–Kundu–Lakshmanan equation in the presence of perturbation term and having Kerr law**
ÖZDEMİR N.
Optik, vol.271, 2022 (SCI-Expanded)
- XIX. **Two Analytical Schemes for the Optical Soliton Solution of the (2**
Ozdemir N., SEÇER A., ÖZİŞİK M., BAYRAM M.
UNIVERSE, vol.8, no.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, vol.265, 2022 (SCI-Expanded)
- XXI. **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, vol.34, no.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.
MODERN PHYSICS LETTERS B, vol.36, no.11, 2022 (SCI-Expanded)
- XXIII. **On solitary wave solutions for the perturbed Chen-Lee-Liu equation via an analytical approach**
Esen H., Özdemir N., Seçer A., Bayram M.
OPTIK, vol.245, 2021 (SCI-Expanded)
- XXIV. **An algorithm for numerical solution of some nonlinear multi-dimensional parabolic partial differential equations**
Ozdemir N., SEÇER A., Bayram M.
JOURNAL OF COMPUTATIONAL SCIENCE, vol.56, 2021 (SCI-Expanded)
- 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.
OPTIK, vol.245, 2021 (SCI-Expanded)
- XXVI. **Solitary wave solutions of chiral nonlinear Schrödinger equations**
ESEN H., Ozdemir N., SEÇER A., Bayram M., Sulaiman T. A., Yusuf A.
Modern Physics Letters B, vol.35, 2021 (SCI-Expanded)
- 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, vol.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.
ADVANCES IN DIFFERENCE EQUATIONS, vol.2019, no.1, 2019 (SCI-Expanded)
- XXIX. **The Gegenbauer wavelets-based computational methods for the coupled system of Burgers' equations with time-fractional derivative**
Özdemir N., Seçer A., Bayram M.
Mathematics, vol.7, 2019 (SCI-Expanded)
- XXX. **MODIFIED LAGUERRE WAVELET BASED GALERKIN METHOD FOR FRACTIONAL AND FRACTIONAL-ORDER DELAY DIFFERENTIAL EQUATIONS**
Seçer A., Özdemir N.
THERMAL SCIENCE, vol.23, 2019 (SCI-Expanded)
- XXXI. **A Hermite Polynomial Approach for Solving the SIR Model of Epidemics**
Seçer A., Özdemir N., Bayram A. M.

Articles Published in Other Journals

- I. **M-truncated soliton solutions of the fractional (4+1)-dimensional Fokas equation**
ÖZDEMİR N.
International Journal of Optimization and Control: Theories and Applications, vol.13, no.1, pp.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, vol.14, no.1, pp.44-55, 2022 (Peer-Reviewed Journal)
- 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 BILIMLERI DERGISI, vol.38, no.3, pp.1307-1319, 2020 (ESCI)

Refereed Congress / Symposium Publications in Proceedings

- 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, Istanbul-Turkey, İstanbul, Turkey, 10 - 15 July 2023, pp.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, Istanbul-Turkey, İstanbul, Turkey, 10 - 15 July 2023, pp.102
- III. **Soliton Solutions of the Boiti-Leon-Manna-Pempinelli Equation**
ÖZDEMİR N.
11TH INTERNATIONAL EURASIAN CONFERENCE ON MATHEMATICAL SCIENCES AND APPLICATIONS, İstanbul, Turkey, 29 August - 01 September 2022, pp.137
- IV. **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.
10th (Online) International Conference on Applied Analysis and Mathematical Modeling (ICAAMM22), İstanbul, Turkey, 1 - 03 July 2022, pp.60
- V. **An investigation of the DNA Peyrard-Bishop equation with beta-derivative**
SEÇER A., ÖZİŞİK M., ÖZDEMİR N., ÇINAR M., BAYRAM M.
10th (Online) International Conference on Applied Analysis and Mathematical Modeling (ICAAMM22), İstanbul, Turkey, 1 - 03 July 2022, pp.48
- 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, Turkey, 1 - 03 July 2022, pp.34-35
- VII. **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, Turkey, 21 - 23

January 2022, pp.65

- VIII. **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, Turkey, 11 - 13 June 2021, pp.38
- 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, Turkey, 27 - 30 October 2020, pp.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, Turkey, 12 - 16 July 2019, pp.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, Turkey, 12 - 16 July 2019, pp.201
- XII. **An Efficient Legendre Wavelet-Galerkin Based Approximation for the One-Dimensional Heat Equation**
Özdemir N., Seçer A., Bayram M.
International Conference on Computational Methods in Applied Sciences, İstanbul, Turkey, 12 - 16 July 2019, pp.205-211
- XIII. **Numerical Approaches for solving the Coupled System of Burgers' Equations with Time-Fractional Derivative using Gegenbauer wavelets**
Özdemir N., Seçer A., Bayram M.
International Conference on Computational Methods in Applied Sciences, İstanbul, Turkey, 12 - 16 July 2019, pp.202-203
- XIV. **Wavelets Galerkin Method for the Kdv- Burgers- Kuramoto Equation**
Özdemir N., Seçer A.
International Conference on Applied Analysis and Mathematical Modeling, İstanbul, Turkey, 10 March 2019, pp.163
- XV. **Solution of the Epidemic Model by Hermite Collocation Method**
Seçer A., Özdemir N.
7th International Conference on Applied Analysis and Mathematical Modeling, İstanbul, Turkey, 20 June 2018, pp.315
- XVI. **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, Turkey, 20 - 24 June 2018, pp.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, United Arab Emirates, 2 - 06 February 2017, pp.20
- XVIII. **A Numerical Study for Fisher's equation by three step wavelet Galerkin method**
ÖZDEMİR N., SEÇER A., BAYRAM M.
2nd International Conference on Pure & Applied Science, İstanbul, Turkey, 1 - 05 June 2016
- XIX. **Generalized polynomial chaos approaches for stochastic system of equations**
ÖZDEMİR N., AKINLAR M. A.
International Conference on Applied Analysis and Mathematical Modeling, İstanbul, Turkey, 08 June 2015, pp.241
- XX. **Analysis of chaotic behaviors of random dynamical systems,**
Bayram M., Akinlar M. A., Özdemir N.

Metrics

Publication: 54

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