

ÖZGEÇMİŞ VE ESERLER LİSTESİ



ÖZGEÇMİŞ

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Bildiği Yabancı Diller (Puan ve Yılı): İngilizce, C2 Ustalık, 2024
Uzmanlık Alanı: Bilgisayar Bilimleri
Diferansiyel denklemler
Genel Matematik

Derece	Bölüm/Program	Üniversite	Yıl
Doktora	Bilgisayar Bilimleri	Atatürk Üniversitesi	2011
Yüksek Lisans	Uygulamalı Matematik	Atatürk Üniversitesi	2006
Lisans	Matematik	Atatürk Üniversitesi	2001

ESERLER

A. Uluslararası hakemli dergilerde yayımlanan makaleler:

- A1. "On the optical soliton solutions of the concatenation model having parabolic law with nonlocal nonlinearity and modulation instability", European Physical Journal Plus, 2025.
- A2. "Investigating broadly dispersive solitons in optical couplers for metamaterials with nonlinear cubic-quintic-septic dynamics and white noise using distinct integration approaches", Physics Letters, Section A: General, Atomic and Solid State Physics, 2025.
- A3. "Concatenation model: having the parabolic law in the presence of chromatic and spatio-temporal dispersion and investigation of multiplicative white noise effect via Itô calculus", European Physical Journal Plus, 2025.
- A4. "Pure-Cubic Optical Soliton Solutions of the Nonlinear Schrödinger Equation Including Parabolic Law Nonlinearity in the Absence of the Group Velocity Dispersion", International Journal of Theoretical Physics, 2025.
- A5. "Unveiling new quiescent dark and singular solitary solutions of the Fokas–Lenells equation", European Physical Journal Plus, 2025.
- A6. "Perturbations of optical solitons in magneto-optic waveguides incorporating multiplicative white noise and sixth-order dispersion: a study of the Sasa–Satsuma equation", Pramana - Journal of Physics, 2025.
- A7. "Retrieval of the optical soliton solutions of the perturbed Schrödinger–Hirota equation with generalized anti-cubic law nonlinearity having the spatio-temporal dispersion", Mathematical Methods in the Applied Sciences, 2025.
- A8. "Investigating the effects of multiplicative white noise on solitons in birefringent fibers through the perturbed Kundu-Eckhaus equation with high dispersion", Indian Journal of Physics, 2025.
- A9. "On the soliton solutions of the stochastic Schrödinger–Hirota equation with Kerr law and spatio-temporal dispersion", International Journal of Geometric Methods in Modern Physics, 2025.
- A10. "Quiescent Optical Solitons for Radhakrishnan-Kundu-Lakshmanan Equation with Linear Temporal Evolution", Contemporary Mathematics (Singapore), 2025.
- A11. "Highly dispersive gap solitons with the Kaup–Newell in π -band Bragg grating with white noise effects", Modern Physics Letters B, 2025.

- A12. "Stochastic optical soliton perturbations in optical metamaterial couplers with parabolic nonlocal nonlinearity and advanced dispersion analysis", *Journal of Nonlinear Optical Physics and Materials*, 2025.
- A13. "Chirped and chirp-free optical soliton solutions for stochastic long-short wave resonant equations with multiplicative white noise", *Physica Scripta*, 2025.
- A14. "Investigating dispersive optical soliton dynamics in birefringent fibers with cubic nonlinearity through quintic-order concatenation model", *Optical Fiber Technology*, 2024.
- A15. "Effects of white noise on straddle and soliton dynamics in birefringent fibers using the novel Kaup-Newell equation approach", *European Physical Journal Plus*, 2024.
- A16. "Optical soliton solution of the perturbed Fokas–Lenells equation having the cubic–quintic–septic law of self-phase modulation in the presence of chromatic and spatiotemporal dispersions", *European Physical Journal Plus*, 2024.
- A17. "Investigation of soliton solutions to the Peyrard-Bishop-Deoxyribo-Nucleic-Acid dynamic model with beta-derivative", *Modern Physics Letters B*, 2024.
- A18. "Impact of high dispersion and cubic-quintic-septic nonlinearity on optical solitons perturbations of the resonant nonlinear Schrödinger equation with multiplicative white noise", *Ain Shams Engineering Journal*, 2024.
- A19. "Optical soliton solutions of the nonlinear complex Ginzburg-Landau equation with the generalized quadratic-cubic law nonlinearity having the chromatic dispersion", *Physica Scripta*, 2024.
- A20. "On Stochastic Pure-Cubic Optical Soliton Solutions of Nonlinear Schrödinger Equation Having Power Law of Self-Phase Modulation", *International Journal of Theoretical Physics*, 2024.
- A21. "Optical soliton solution of the perturbed Biswas-Milovic equation having cubic-quintic-septic law nonlinearity in the presence of spatio-temporal and chromatic dispersion", *Physica Scripta*, 2024.
- A22. "Obtaining analytical solutions of (2+1)-dimensional nonlinear Zoomeron equation by using modified F-expansion and modified generalized Kudryashov methods", *Engineering Computations (Swansea, Wales)*, 2024.
- A23. "On the analytical soliton solutions of (1 + 1)-dimensional complex coupled nonlinear Higgs field model", *European Physical Journal: Special Topics*, 2024.
- A24. "Analytical solutions of simplified modified Camassa-Holm equation with conformable and M-truncated derivatives: A comparative study", *Journal of Ocean Engineering and Science*, 2024.
- A25. "On the soliton solutions to some system of complex coupled nonlinear models and the effect of the coupling coefficients", *Optical and Quantum Electronics*, 2024.
- A26. "Optical soliton solutions of complex Ginzburg–Landau equation with triple power law and modulation instability", *Optical and Quantum Electronics*, 2024.
- A27. "Optical soliton solutions of the perturbed fourth-order nonlinear Schrödinger-Hirota equation with parabolic law nonlinearity of self-phase modulation", *Physica Scripta*, 2024.
- A28. "On optical soliton solutions of the higher-order Lakshmanan-Porsezian-Daniel model having the cubic-quintic-septic law in the presence of spatio-temporal and chromatic dispersion", *Physica Scripta*, 2024.
- A29. "Examination of optical soliton solutions for the perturbed Schrödinger–Hirota equation with anti-cubic law in the presence of spatiotemporal dispersion", *European Physical Journal Plus*, 2024.
- A30. "Optical solitons of stochastic perturbed Radhakrishnan–Kundu–Lakshmanan model with Kerr law of self-phase-modulation", *Modern Physics Letters B*, 2024.
- A31. "From Halley to Secant: Redefining root finding with memory-based methods including convergence and stability", *Mathematical Methods in the Applied Sciences*, 2024.
- A32. "A comprehensive analysis of Fokas–Lenells equation using Lie symmetry method", *Mathematical Methods in the Applied Sciences*, 2024.
- A33. "Bright soliton of the third-order nonlinear Schrödinger equation with power law of self-phase modulation in the absence of chromatic dispersion", *Optical and Quantum Electronics*, 2024.
- A34. "Examining the (1 + 1)-dimensional Schrödinger–Hirota equation with Kerr effect under inter-modal dispersion using the invariance theory", *Optical and Quantum Electronics*, 2024.
- A35. "Soliton solutions of the improved perturbed nonlinear Schrödinger equation having parabolic law with non-local nonlinearity in the presence of chromatic and spatio-temporal dispersion terms", *Physica Scripta*, 2024.
- A36. "Investigation of the optical solitons for the Lakshmanan–Porsezian–Daniel equation having parabolic law", *Optical and Quantum Electronics*, 2024.
- A37. "High dispersion and cubic–quintic–septic–nonic nonlinearity effects on optical solitons in the complex Ginzburg–Landau equation of eighth-order with multiplicative white noise in the Itô sense", *Results in Physics*, 2024.
- A38. "On soliton solutions for higher-order nonlinear Schrödinger equation with cubic-quintic-septic law", *International Journal of Geometric Methods in Modern Physics*, 2024.
- A39. "On obtaining optical solitons of the perturbed cubic-quartic model having the Kudryashov's law of refractive index", *Optical and Quantum Electronics*, 2024.
- A40. "Davey-Stewartson system and investigation of the impacts of the nonlinearity", *Optical and Quantum Electronics*, 2024.

- A41. "Nonlinear complex generalized zakharov dynamical system inconformal sense utilizing new kudryashov method", *Physica Scripta*, 2024.
- A42. "Obtaining soliton solutions of the nonlinear (4+1)-dimensional Boiti–Leon–Manna–Pempinelli equation via two analytical techniques", *International Journal of Modern Physics B*, 2024.
- A43. "Analyzing the influence of multiplicative white noise on optical solitons in birefringent fibers through the perturbed Gerdjikov-Ivanov model", *OPTICAL AND QUANTUM ELECTRONICS*, 2024.
- A44. "Revealing optical soliton solutions of Schrödinger equation having parabolic law and anti-cubic law with weakly nonlocal nonlinearity", *Journal of Taibah University for Science*, 2024.
- A45. "Retrieval of optical soliton solutions of stochastic perturbed Schrödinger-Hirota equation with Kerr law in the presence of spatio-temporal dispersion", *Optical and Quantum Electronics*, 2024.
- A46. "On obtaining analytical soliton solutions of Drinfeld-Sokolov-Satsuma-Hirota equation via two efficient methods", *Physica Scripta*, 2024.
- A47. "Soliton solutions of time-fractional modified Korteweg-de-Vries Zakharov-Kuznetsov equation and modulation instability analysis", *Physica Scripta*, 2024.
- A48. "Optical solitons for the dispersive concatenation model with spatio-temporal dispersion having multiplicative white noise", *Results in Physics*, 2024.
- A49. "Bright soliton of the perturbed Schrödinger–Hirota equation with cubic–quintic–septic law of self-phase modulation in the presence of spatiotemporal dispersion", *European Physical Journal Plus*, 2024.
- A50. "Bright soliton of Stochastic perturbed Biswas-Milovic equation with cubic-quintic-septic law having multiplicative white noise", *Revista Mexicana de Fisica*, 2024.
- A51. "Stochastic higher-order Lakshmanan-Porsezian-Daniel model with cubic-quintic law nonlinearities in the presence of spatio-temporal and chromatic dispersion terms", *Journal of Nonlinear Optical Physics and Materials*, 2024.
- A52. "Optical soliton solutions of the third-order nonlinear Schrödinger equation in the absence of chromatic dispersion", *Modern Physics Letters B*, 2024.
- A53. "On the optical soliton solutions of the perturbed Fokas{Lenells equation having parabolic law of self-phase modulation in the presence of spatio-temporal dispersion", *Modern Physics Letters B*, 2024.
- A54. "Optical solitons of the (1 + 1)-dimensional perturbed complex Ginzburg{Landau equation having the Kerr law in the absence of the chromatic dispersion", *Modern Physics Letters B*, 2024.
- A55. "Stochastic perturbed Fokas-Lenells equation having the polynomial law of self-phase modulation in the presence of spatio-temporal dispersion", *Journal of Optics (India)*, 2024.
- A56. "Highly dispersive optical solitons in fiber Bragg gratings for stochastic Lakshmanan–Porsezian–Daniel equation with spatio-temporal dispersion and multiplicative white noise", *Results in Physics*, 2023.
- A57. "Optical solitons of a cubic-quartic nonlinear Schrödinger equation with parabolic law nonlinearity in optical metamaterials", *International Journal of Geometric Methods in Modern Physics*, 2023.
- A58. "Investigating of the pure-cubic optical solitons in the presence of spatio-temporal and inter-modal dispersions", *European Physical Journal Plus*, 2023.
- A59. "Optical soliton solutions of the nonlinear Schrödinger equation in the presence of chromatic dispersion with cubic-quintic-septic-nonlinearities", *Physica Scripta*, 2023.
- A60. "On the soliton solutions to the density-dependent space time fractional reaction–diffusion equation with conformable and M-truncated derivatives", *Optical and Quantum Electronics*, 2023.
- A61. "Resonant NLSE in the presence of spatio-temporal and intermodal dispersion is dominated by a myriad of nonlinearities", *Physica Scripta*, 2023.
- A62. "On solution of Schrödinger–Hirota equation with Kerr law via Lie symmetry reduction", *Nonlinear Dynamics*, 2023.
- A63. "Soliton solutions of the (2 + 1)-dimensional Kadomtsev-Petviashvili equation via two different integration schemes", *International Journal of Modern Physics B*, 2023.
- A64. "Discovering optical soliton solutions in the Biswas–Milovic equation through five innovative approaches", *Optik*, 2023.
- A65. "Stochastic optical solitons of the perturbed nonlinear Schrödinger equation with Kerr law via Ito calculus", *European Physical Journal Plus*, 2023.
- A66. "Soliton solutions of Heisenberg spin chain equation with parabolic law nonlinearity", *Optical and Quantum Electronics*, 2023.
- A67. "Optical soliton solutions of dispersive Schrödinger–Hirota equation with chromatic and inter-modal dispersion in a couple of law medium", *Optical and Quantum Electronics*, 2023.
- A68. "On soliton solutions of the modified equal width equation", *Engineering Computations (Swansea, Wales)*, 2023.
- A69. "Optical solitons of improved perturbed nonlinear Schrödinger equation with cubic-quintic-septic and triple-power laws in optical metamaterials", *Physica Scripta*, 2023.
- A70. "On the investigation of chiral solitons via modified new Kudryashov method", *International Journal of Geometric Methods in Modern Physics*, 2023.

- A71. "Optical solitons for the dispersive Schrödinger–Hirota equation in the presence of spatio-temporal dispersion with parabolic law", *European Physical Journal Plus*, 2023.
- A72. "Optical soliton solutions of Schrödinger–Hirota equation with parabolic law nonlinearity via generalized Kudryashov algorithm", *Optical and Quantum Electronics*, 2023.
- A73. "Optical solitons for Kundu–Mukherjee–Naskar equation via enhanced modified extended tanh method", *Optical and Quantum Electronics*, 2023.
- A74. "Stochastic dispersive Schrödinger–Hirota equation having parabolic law nonlinearity with multiplicative white noise via Ito calculus", *Optik*, 2023.
- A75. "Kink Soliton Dynamic of the (2+1)-Dimensional Integro-Differential Jaulent–Miodek Equation via a Couple of Integration Techniques", *Symmetry*, 2023.
- A76. "Generalized Gegenbauer–Humbert wavelets for solving fractional partial differential equations", *Engineering with Computers*, 2023.
- A77. "Extraction of soliton waves from the longitudinal wave equation with local M-truncated derivatives", *Optical and Quantum Electronics*, 2023.
- A78. "Traveling wave structures of some fourth-order nonlinear partial differential equations", *Journal of Ocean Engineering and Science*, 2023.
- A79. "On solitary wave solutions for the extended nonlinear Schrödinger equation via the modified F-expansion method", *Optical and Quantum Electronics*, 2023.
- A80. "(3+1)-dimensional Sasa–Satsuma equation under the effect of group velocity dispersion, self-frequency shift and self-steepening", *Optik*, 2023.
- A81. "Soliton solutions of coupled resonant Davey–Stewartson system and modulation instability analysis", *Physica Scripta*, 2023.
- A82. "Retrieval of Optical Solitons with Anti-Cubic Nonlinearity", *Mathematics*, 2023.
- A83. "On the investigation of optical soliton solutions of cubic–quartic Fokas–Lenells and Schrödinger–Hirota equations", *Optik*, 2023.
- A84. "Solitons in dual-core optical fibers with chromatic dispersion", *Optical and Quantum Electronics*, 2023.
- A85. "On the optical soliton solutions of time-fractional Biswas–Arshed equation including the beta or M-truncated derivatives", *Optical and Quantum Electronics*, 2023.
- A86. "Investigation of optical soliton solutions for the perturbed Gerdjikov–Ivanov equation with full-nonlinearity", *Heliyon*, 2023.
- A87. "Optical soliton solutions of (1 + 1)-and (2 + 1)-dimensional generalized Sasa–Satsuma equations using new Kudryashov method", *International Journal of Geometric Methods in Modern Physics*, 2023.
- A88. "Optical soliton solutions of time-fractional coupled nonlinear Schrödinger system via Kudryashov-based methods", *Optik*, 2023.
- A89. "COMPLEX MATHEMATICAL MODELING FOR ADVANCED FRACTAL-FRACTIONAL DIFFERENTIAL OPERATORS WITHIN SYMMETRY", *Fractals*, 2023.
- A90. "Pure-Cubic Optical Solitons and Stability Analysis with Kerr Law Nonlinearity", *Contemporary Mathematics (Singapore)*, 2023.
- A91. "Soliton and other solutions of the (2+1)-dimensional Date–Jimbo–Kashiwara–Miwa equation with conformable derivative", *Physica Scripta*, 2023.
- A92. "Obtaining the soliton solutions of local M-fractional magneto-electro-elastic media", *Heliyon*, 2023.
- A93. "Soliton Waves with the (3+1)-Dimensional Kadomtsev–Petviashvili–Boussinesq Equation in Water Wave Dynamics", *Symmetry*, 2023.
- A94. "Acquiring the solitons of inhomogeneous Murnaghan's rod using extended Kudryashov method with Bernoulli–Riccati approach", *International Journal of Modern Physics B*, 2022.
- A95. "Obtaining optical soliton solutions of the cubic–quartic Fokas–Lenells equation via three different analytical methods", *Optical and Quantum Electronics*, 2022.
- A96. "Optical soliton solutions of the Chen–Lee–Liu equation in the presence of perturbation and the effect of the inter-modal dispersion, self-steepening and nonlinear dispersion", *Optical and Quantum Electronics*, 2022.
- A97. "Optical solitons for Biswas–Milovic equation using the new Kudryashov's scheme", *Optik*, 2022.
- A98. "Soliton solutions to the nonlinear higher dimensional Kadomtsev–Petviashvili equation through the new Kudryashov's technique", *Physica Scripta*, 2022.
- A99. "Two Analytical Schemes for the Optical Soliton Solution of the (2 + 1) Hirota–Maccari System Observed in Single-Mode Fibers", *Universe*, 2022.
- A100. "Soliton solutions of the Boussinesq equation via an efficient analytical technique", *Modern Physics Letters B*, 2022.
- A101. "Stochastic optical solitons with multiplicative white noise via Itô calculus", *Optik*, 2022.
- A102. "Optical soliton perturbation with Fokas–Lenells equation via enhanced modified extended tanh-expansion approach", *Optik*, 2022.

- A103. "The bell-shaped perturbed dispersive optical solitons of Biswas–Arshed equation using the new Kudryashov's approach", *Optik*, 2022.
- A104. "On the examination of optical soliton pulses of Manakov system with auxiliary equation technique", *Optik*, 2022.
- A105. "Comparative analysis for the nonlinear mathematical equation with new wave structures", *European Physical Journal Plus*, 2022.
- A106. "Dispersive optical solitons of Biswas–Arshed equation with a couple of novel approaches", *Optik*, 2022.
- A107. "Perturbation of dispersive optical solitons with Schrödinger–Hirota equation with Kerr law and spatio-temporal dispersion", *Optik*, 2022.
- A108. "An encyclopedia of Kudryashov's integrability approaches applicable to optoelectronic devices", *Optik*, 2022.
- A109. "Optical solitons to the (1+2)-dimensional Chiral non-linear Schrödinger equation", *Optical and Quantum Electronics*, 2022.
- A110. "Analytical solutions of (2+1)-dimensional Calogero–Bogoyavlenskii–Schiff equation in fluid mechanics/plasma physics using the New Kudryashov method", *Physica Scripta*, 2022.
- A111. "Analytical soliton solutions of the higher order cubic-quintic nonlinear Schrödinger equation and the influence of the model's parameters", *Journal of Applied Physics*, 2022.
- A112. "Dark, bright and singular optical solutions of the Kaup–Newell model with two analytical integration schemes", *Optik*, 2022.
- A113. "Optical solitons with Kudryashov's sextic power-law nonlinearity", *Optik*, 2022.
- A114. "Derivation of optical solitons of dimensionless Fokas–Lenells equation with perturbation term using Sardar sub-equation method", *Optical and Quantum Electronics*, 2022.
- A115. "On the analytical optical soliton solutions of perturbed Radhakrishnan–Kundu–Lakshmanan model with Kerr law nonlinearity", *Optical and Quantum Electronics*, 2022.
- A116. "On the optical soliton solutions of Kundu–Mukherjee–Naskar equation via two different analytical methods", *Optik*, 2022.
- A117. "Novel soliton solutions of Sasa–Satsuma model with local derivative via an analytical technique", *Journal of Laser Applications*, 2022.
- A118. "Optical solitons and other solutions to the Hirota–Maccari system with conformable, M-truncated and beta derivatives", *Modern Physics Letters B*, 2022.
- A119. "A comparison of analytical solutions of nonlinear complex generalized Zakharov dynamical system for various definitions of the differential operator", *Electronic Research Archive*, 2022.
- A120. "Solving the fractional Jaulent–Miodek system via a modified Laplace decomposition method", *Waves in Random and Complex Media*, 2022.
- A121. "An application of Genocchi wavelets for solving the fractional Rosenau–Hyman equation☆", *Alexandria Engineering Journal*, 2021.
- A122. "Optical solitons of the (2+1)-dimensional Biswas–Milovic equation using modified extended tanh-function method", *Optik*, 2021.
- A123. "On solitary wave solutions for the perturbed Chen–Lee–Liu equation via an analytical approach", *Optik*, 2021.
- A124. "Optical Soliton Solutions to Chen Lee Liu model by the modified extended tanh expansion scheme", *Optik*, 2021.
- A125. "An algorithm for numerical solution of some nonlinear multi-dimensional parabolic partial differential equations[Formula presented]", *Journal of Computational Science*, 2021.
- A126. "Solitary wave solutions of chiral nonlinear Schrödinger equations", *Modern Physics Letters B*, 2021.
- A127. "Optical solitons and other solutions to the Radhakrishnan–Kundu–Lakshmanan equation", *Optik*, 2021.
- A128. "The analytical solutions of Zoomeron equation via extended rational sin-cos and sinh-cosh methods", *Physica Scripta*, 2021.
- A129. "An improved bees algorithm for training deep recurrent networks for sentiment classification", *Symmetry*, 2021.
- A130. "A new operational matrix of fractional derivative based on the generalized Gegenbauer–Humbert polynomials to solve fractional differential equations", *Alexandria Engineering Journal*, 2021.
- A131. "Sinc-Galerkin method for solving system of singular perturbed reaction-diffusion problems", *Sigma Journal of Engineering and Natural Sciences*, 2021.
- A132. "MS-TR: A Morphologically enriched sentiment Treebank and recursive deep models for compositional semantics in Turkish", *Cogent Engineering*, 2021.
- A133. "The asymptotic behavior of solutions of discrete nonlinear fractional equations", *Fractional Calculus and Applied Analysis*, 2020.
- A134. "A JACOBI WAVELET COLLOCATION METHOD FOR FRACTIONAL FISHER'S EQUATION IN TIME", *Thermal Science*, 2020.
- A135. "THE GENERALIZED GEGENBAUER-HUMBERTS WAVELET FOR SOLVING FRACTIONAL DIFFERENTIAL EQUATIONS", *Thermal Science*, 2020.
- A136. "An effective computational approach based on Gegenbauer wavelets for solving the time-fractional Kdv-Burgers–Kuramoto equation", *Advances in Difference Equations*, 2019.

- A137. "The Gegenbauer wavelets-based computational methods for the coupled system of Burgers' equations with time-fractional derivative", Mathematics, 2019.
- A138. "A reliable analytical approach for a fractional model of advection-dispersion equation", Nonlinear Engineering, 2019.
- A139. "Chebyshev wavelet collocation method for Ginzburg-Landau equation", Thermal Science, 2019.
- A140. "Modified laguerre wavelet based galerkin method for fractional and fractional-order delay differential equations", Thermal Science, 2019.
- A141. "Legendre wavelet operational matrix method for solving fractional differential equations in some special conditions", Thermal Science, 2019.
- A142. "Oscillation properties of solutions of fractional difference equations", Thermal Science, 2019.
- A143. "A hermite polynomial approach for solving the SIR model of epidemics", Mathematics, 2018.
- A144. "A new operational matrix of fractional derivatives to solve systems of fractional differential equations via Legendre wavelets", Mathematics, 2018.
- A145. "A new numerical approach for solving high-order linear and non-linear differential equations", Thermal Science, 2018.
- A146. "An efficient scheme for solving a system of fractional differential equations with boundary conditions", Advances in Difference Equations, 2017.
- A147. "Oscillation criteria for nonlinear fractional differential equation with damping term", Open Physics, 2016.
- A148. "An efficient algorithm for solving fractional differential equations with boundary conditions", Open Physics, 2016.
- A149. "Application of sinc-galerkin method for solving space-fractional boundary value problems", Mathematical Problems in Engineering, 2015.
- A150. "Solution of nonlinear fractional boundary value problems with nonhomogeneous boundary conditions", Applied and Computational Mathematics, 2015.
- A151. "On generalized fractional kinetic equations involving generalized bessel function of the first kind", Mathematical Problems in Engineering, 2015.
- A152. "Solving nonlinear boundary value problems by the Galerkin method with sinc functions", Open Physics, 2015.
- A153. "The common solution for a generalized equilibrium problem, a variational inequality problem and a hierarchical fixed point problem", Journal of Inequalities and Applications, 2015.
- A154. "Stability, synchronization control and numerical solution of fractional Shimizu-Morioka dynamical system", Applied Mathematics and Information Sciences, 2014.
- A155. "Numerical solution of fractional benney equation", Applied Mathematics and Information Sciences, 2014.
- A156. "Theory, methods, and applications of fractional calculus", Scientific World Journal, 2014.
- A157. "Majorization for a class of analytic functions defined by q -differentiation", Mathematical Problems in Engineering, 2014.
- A158. "A generalized q -Grüss inequality involving the Riemann-Liouville fractional q -integrals", Journal of Applied Mathematics, 2014.
- A159. "Numerical solution and simulation of second-order parabolic pdes with sinc-galerkin method using maple", Abstract and Applied Analysis, 2013.
- A160. "A novel matching of MR images using gabor wavelets", IETE Technical Review (Institution of Electronics and Telecommunication Engineers, India), 2013.
- A161. "Sinc-Galerkin method for approximate solutions of fractional order boundary value problems", Boundary Value Problems, 2013.
- A162. "Efficient solutions of systems of fractional PDEs by the differential transform method", Advances in Difference Equations, 2012.
- A163. "Approximate analytic solution of fractional heat-like and wave-like equations with variable coefficients using the differential transforms method", Advances in Difference Equations, 2012.
- A164. "Curvature-driven diffusion-based mathematical image registration models", Advances in Difference Equations, 2012.
- A165. "The sinc-Galerkin method and its applications on singular Dirichlet-type boundary value problems", Boundary Value Problems, 2012.
- A166. "A computational method using multiresolution for volumetric data integration", Boundary Value Problems, 2012.
- A167. "An efficient computer application of the sinc-Galerkin approximation for nonlinear boundary value problems", Boundary Value Problems, 2012.

B. Uluslararası bilimsel toplantılarda sunulan ve bildiri kitaplarında (proceedings) basılan bildiriler:

- B1. "An Efficient Legendre Wavelet-Galerkin Based Approximation for the One-Dimensional Heat Equation", International Conference on Computational Methods in Applied Sciences, 2019.
- B2. "Numerical Approaches for solving the Coupled System of Burgers' Equations with Time-Fractional Derivative using Gegenbauer wavelet", International Conference on Computational Methods in Applied Sciences, 2019.

- B3. "Oscillation theorems for q-fractional difference equations", 7th International Conference on Applied Analysis and Mathematical Modeling, 2018.
- B4. "Estimating Enzyme Kinetic Parameters using Computer Algebra Techniques", 4th International Conference on Pure and Applied Sciences, 2017.
- B5. "On the oscillation of fractional nonlinear difference equations", 4nd International Conference on Pure Applied Science: Renewable Energy, 2017.
- B6. "Some Oscillation Theorems for Second Order Neutral Delay Differential Equations", 4nd International Conference on Pure Applied Science: Renewable Energy, 2017.
- B7. "Oscillation Behavior of Solution of Nonlinear Fractional Neutral Differential Equations", International Conference on Applied Analysis and Mathematical Modeling, 2017.
- B8. "Oscillation Properties of Second-Order Neutral Functional Dynamic Equations on Time Scales", International Conference on Applied Analysis and Mathematical Modeling, 2017.
- B9. "Oscillation Results for Fractional Partial Differential Equations", International Conference on Applied Analysis and Mathematical Modeling, 2017.
- B10. "Application of Sinc-Galerkin Method for Solving Fractional Partial Differential Equations", International Conference on Applied Analysis and Mathematical Modeling, 2017.
- B11. "Application of Wavelet-Galerkin Approximation Techniques on the Partial Differential Equations via Maple", International Conference on Applied Analysis and Mathematical Modeling, 2017.
- B12. "The Legendre Wavelet Operational Matrix Method and Its Applications on High Order Non-Linear Differential Equations", International Conference on Applied Analysis and Mathematical Modeling, 2017.
- B13. "Numerical Solution of Fractional Bagley-Torvik Equation by the Legendre Wavelet Operational Matrix Method", International Conference on Applied Analysis and Mathematical Modeling, 2017.
- B14. "Wavelet-petrov-galerkin method for numerical solution of boussinesq equation", 2nd International Conference on Chemical, Mechanical and Materials Engineering, CMME 2013, 2013.

C. Yazılan ulusal/uluslararası kitaplar veya kitaplardaki bölümler:

C1. Yazılan ulusal/uluslararası kitaplar:

- C1.1. "Diferensiyel Denklemler", Aktif Yayınları, 2022.

D. Ulusal hakemli dergilerde yayımlanan makaleler:

- D1. "Optical soliton solutions of the stochastic perturbed Fokas-Lenells equation having the parabolic law of self-phase modulation in the presence of spatio-temporal dispersion with multiplicative white noise", Modern Physics Letters A, 2025.
- D2. "Investigating the potential of optical metamaterials with highly dispersive solitons in twin couplers with stochastic perturbations and white noise effects", Ain Shams Engineering Journal, 2024.
- D3. "Computational method to solve Davey-Stewartson model and Maccari's system", Sigma Journal of Engineering and Natural Sciences, 2024.
- D4. "Soliton Solutions of Some Ocean Waves Supported by Physics Informed Neural Network Method", Artificial Intelligence and Applications, 2024.
- D5. "Investigating dispersive optical solitons with the generalized stochastic perturbed Schrödinger–Hirota equation incorporating power-law nonlinearity and multiplicative white noise", Optik, 2024.
- D6. "Optical solitons of (2+1)-dimensional Biswas–Milovic model with Kerr and parabolic laws of self-phase modulation", Optik, 2023.
- D7. "Retrieval of optical solitons: Complex cubic–quintic Ginzburg–Landau equation augmented with the anti-cubic law", Optik, 2023.
- D8. "Investigation of optical soliton solutions of higher-order nonlinear Schrödinger equation having Kudryashov nonlinear refractive index", Optik, 2023.
- D9. "Wavelet-based Numerical Approaches for Solving the Korteweg-de Vries (KdV) Equation", Turkish Journal of Mathematics and Computer Science, 2022.
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- D11. "A NUMERICAL ALGORITHM BASED ON ULTRASPHERICAL WAVELETS FOR SOLUTION OF LINEAR AND NONLINEAR KLEIN-GORDON EQUATIONS", Sigma Journal of Engineering and Natural Sciences, 2020.
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