

## Assoc. Prof. ORKUN TAŞBOZAN

### Personal Information

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### International Researcher IDs

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Publons / Web Of Science ResearcherID: KYG-2624-2024

Yoksis Researcher ID: 112385

### Education Information

Doctorate, Inonu University, Fen Bilimleri Enstitüsü, Turkey 2011 - 2015

Postgraduate, Inonu University, Fen Bilimleri Enstitüsü, Turkey 2010 - 2011

Undergraduate, Afyon Kocatepe University, Turkey 2004 - 2008

### Foreign Languages

English

### Dissertations

Doctorate, Kesirli mertebeden kısmi diferansiyel denklemlerin B-spline sonlu eleman yöntemleri ile çözümleri, Inonu University, Fen Bilimleri Enstitüsü, 2015

Postgraduate, Lineer olmayan kesirli mertebeden türevli kısmi diferansiyel denklemlerin homotopi analiz yöntemi ile çözümü, Inonu University, Fen Bilimleri Enstitüsü, 2011

### Research Areas

Natural Sciences

### Academic Titles / Tasks

Associate Professor, Hatay Mustafa Kemal University, 2020 - Continues  
2017 - 2020

Research Assistant, 2014 - 2017

Research Assistant, Inonu University, Fen-Edebiyat Fakültesi, 2009 - 2014

### Courses

1207505 Kompleks Fonksiyonlar Teorisi I, Undergraduate, 2023-2024

1207204 Doğrusal Cebir II, Undergraduate, 2023-2024, 2022-2023, 2021-2022, 2020-2021  
1207610 Sayısal Analiz II, Undergraduate, 2023-2024, 2022-2023, 2021-2022, 2020-2021  
MAT-5236 İleri Nümerik Analiz II, Undergraduate Double Major, 2023-2024, 2021-2022  
1207509 Sayısal Analiz I, Undergraduate, 2023-2024, 2022-2023, 2021-2022, 2020-2021  
1210309 Bilgisayara Giriş I, Undergraduate, 2023-2024, 2022-2023, 2021-2022, 2020-2021  
1207802 Mezuniyet Çalışması II, Undergraduate, 2023-2024, 2022-2023, 2021-2022, 2020-2021  
1207608 Kısmi Tür. Dif. Denklemler II, Undergraduate, 2023-2024, 2020-2021  
1207701 Mezuniyet Çalışması I, Undergraduate, 2023-2024, 2022-2023, 2021-2022, 2020-2021  
1207109 Doğrusal Cebir I, Undergraduate, 2023-2024, 2022-2023, 2021-2022, 2020-2021  
MAT-5207 Nümerik Analize Giriş I, Undergraduate Double Major, 2023-2024  
MAT-5213 İleri Diferansiyel Denklemler I, Undergraduate Double Major, 2023-2024  
MAT-5214 İleri Diferansiyel Denk. II, Undergraduate Double Major, 2023-2024  
1207507 Kısmi Türevli Diferansiyel Denklemler I, Undergraduate, 2023-2024, 2021-2022  
1207608 Kısmi Türevli Diferansiyel Denklemler II, Undergraduate, 2022-2023, 2021-2022  
MAT-5214 İleri Diferansiyel Denklemler II, Undergraduate Double Major, 2022-2023  
1207606 Kompleks Fonksiyonlar Teorisi II, Undergraduate, 2022-2023  
1210410 Bilgisayara Giriş II, Undergraduate, 2022-2023, 2021-2022  
MAT-5202 Nümerik Analize Giriş I, Undergraduate Double Major, 2022-2023  
MAT-5237 İleri Nümerik Analiz I, Undergraduate Double Major, 2022-2023  
1207507 Kısmi Türevli Diferansiyel Denklemler I, Undergraduate, 2022-2023  
ENF-5265 Kesirli Hesap ve Kesirli Diferansiyel Denklemlere Giriş I, Undergraduate Double Major, 2020-2021  
1207404 Diferansiyel Denklemler II, Undergraduate, 2020-2021  
ENF-5266 Kesirli Hesap ve Kesirli Diferansiyel Denklemlere Giriş II, Undergraduate Double Major, 2020-2021  
1207507 Kısmi Tür. Dif. Denklemler I, Undergraduate, 2020-2021  
1207303 Diferansiyel Dneklemler I, Undergraduate, 2020-2021  
1210309 Bilgisayara Giriş I, Undergraduate, 2019-2020, 2017-2018  
1202432 Temel Bilgi Teknolojileri, Undergraduate, 2019-2020  
1207610 Sayısal Analiz II, Undergraduate, 2019-2020, 2017-2018, 2016-2017  
1207109 Doğrusal Cebir I, Undergraduate, 2019-2020, 2018-2019, 2017-2018  
1207501 Cebir ve Sayılar Teorisi I, Undergraduate, 2019-2020, 2018-2019, 2017-2018  
1207204 Doğrusal Cebir II, Undergraduate, 2019-2020, 2018-2019, 2017-2018, 2016-2017  
1207608 Kısmi Tür. Dif. Denklemler II, Undergraduate, 2019-2020  
1207802 Mezuniyet Çalışması II, Undergraduate, 2019-2020, 2018-2019, 2017-2018, 2016-2017  
1207701 Mezuniyet Çalışması I, Undergraduate, 2019-2020, 2018-2019, 2017-2018  
ENF-5266 Kesirli Hesap ve Kesirli Diferansiyel Denklemlere Giriş II, Undergraduate Double Major, 2019-2020, 2018-2019  
1210410 Bilgisayara Giriş II, Undergraduate, 2019-2020, 2017-2018, 2016-2017  
ENF-5265 Kesirli Hesap ve Kesirli Diferansiyel Denklemlere Giriş I, Undergraduate Double Major, 2019-2020, 2018-2019  
1207507 Kısmi Tür. Dif. Denklemler I, Undergraduate, 2019-2020  
1207828 Galois Teorisi, Undergraduate, 2018-2019, 2017-2018, 2016-2017  
1206311 Diferansiyel Denklemler, Undergraduate, 2018-2019  
1207741 Cisim Genişlemleri, Undergraduate, 2018-2019, 2017-2018  
1207602 Cebir ve Sayılar Teorisi II, Undergraduate, 2018-2019  
1207507 Kısmi Türevli Diferansiyel Denklemler I, Undergraduate, 2018-2019, 2017-2018  
1207608 Kısmi Türevli Diferansiyel Denklemler II, Undergraduate, 2018-2019, 2017-2018  
1207509 Sayısal Analiz I, Undergraduate, 2017-2018  
1206412 Kısmi Türevli Diferansiyel Denklemler, Undergraduate, 2017-2018, 2016-2017  
1207602 Cebir ve Sayılar Teorisi II, Undergraduate, 2017-2018, 2016-2017  
1206208 Matematik II, Undergraduate, 2016-2017  
1207608 Kısmi Türevli Diferansiyel Denklemler II, Undergraduate, 2016-2017

## Supervised Theses

- TAŞBOZAN O., Yardımcı denklem yöntemi ile kesirli mertebeden kısmi diferansiyel denklemlerin analitik çözümleri üzerine, Postgraduate, A.MÜCAHİD(Student), 2023
- TAŞBOZAN O.,  $(G'/G, 1/G)$  açılım yöntemi ile kesirli mertebeden kısmî diferansiyel denklemlerin tam çözümleri, Postgraduate, E.BOZDOĞAN(Student), 2023
- TAŞBOZAN O., Conformable kesirli mertebeden kısmi diferansiyel denklemlerin genelleştirilmiş homotopi analiz yöntemi ile yarı analitik çözümleri, Postgraduate, M.ÇOLAEL(Student), 2023
- TAŞBOZAN O., Conformable kesirli mertebeden kısmi diferansiyel denklemlerin tam çözümleri, Postgraduate, D.UĞUN(Student), 2022
- TAŞBOZAN O., Yeni genişletilmiş doğrudan cebirsel yöntem ile conformablekesirli mertebeden kısmi diferansiyel denklemlerin analitikçözümleri, Postgraduate, D.ESKİOCAK(Student), 2022
- TAŞBOZAN O., Kesirli mertebeden diferansiyel denklemlerin fonksiyonel değişken yöntemi ile tam çözümleri, Postgraduate, M.BATMAZ(Student), 2021
- TAŞBOZAN O., Yardımcı denklem yöntemi yardımı ile bazı kesirli mertebeden kısmi diferansiyel denklemlerin analitik çözümleri, Postgraduate, S.YILMAZ(Student), 2019
- TAŞBOZAN O., Bazı kesirli türevli diferansiyel denklemlerin çözümleri üzerine, Postgraduate, A.AYDOĞDU(Student), 2019
- TAŞBOZAN O., Kesirli mertebeden kısmi diferansiyel denklemlerin analitik çözümleri, Postgraduate, F.SERAP(Student), 2019
- TAŞBOZAN O., Kesirli mertebeden kısmi diferansiyel denklemlerin üstel fonksiyon yönetmi ile analitik çözümleri, Postgraduate, S.MERVE(Student), 2019
- TAŞBOZAN O., Konveks fonksiyonlar için bazı post kuantum eşitsizlikler, Doctorate, E.GÖV(Student), 2018
- TAŞBOZAN O., Kesirli mertebeden kısmi diferansiyel denklemlerin nümerik çözümleri, Postgraduate, G.BAYASLI(Student), 2017

## Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Investigation on the new exact solutions of generalized Rosenau-Kawahara-RLW equation with p-th order nonlinearity occurring in ocean engineering models**  
Taşbozan O., Çelik E., Kurt A., Akinyemi L.  
Applied Mathematics-A Journal of Chinese Universities, vol.39, no.4, pp.642-653, 2024 (SCI-Expanded)
- II. **Solution approximations for a mathematical model of relativistic electrons with beta derivative**  
Yalcinkaya I., TAŞBOZAN O., Kurt A., Ahmad H.  
Applied Mathematics, vol.39, no.3, pp.469-485, 2024 (SCI-Expanded)
- III. **Novel solitary wave solutions to the fractional new (3+1)-dimensional Mikhailov-Novikov-Wang equation**  
Gençyiğit M., Şenol M., Kurt A., TAŞBOZAN O.  
International Journal of Geometric Methods in Modern Physics, vol.21, no.4, 2024 (SCI-Expanded)
- IV. **Multiple-solitons for generalized (2+1)-dimensional conformable Korteweg-de Vries-Kadomtsev-Petviashvili equation**  
Akinyemi L., Şenol M., TAŞBOZAN O., Kurt A.  
Journal of Ocean Engineering and Science, vol.7, no.6, pp.536-542, 2022 (SCI-Expanded)
- V. **Soliton solutions for time fractional ocean engineering models with Beta derivative**  
Yalcinkaya I., Ahmad H., TAŞBOZAN O., Kurt A.  
Journal of Ocean Engineering and Science, vol.7, no.5, pp.444-448, 2022 (SCI-Expanded)
- VI. **Comparison of two reliable methods to solve fractional Rosenau-Hyman equation**  
Senol M., TAŞBOZAN O., Kurt A.  
Mathematical Methods in the Applied Sciences, vol.44, no.10, pp.7904-7914, 2021 (SCI-Expanded)
- VII. **Wave behaviors of Kundu–Mukherjee–Naskar model arising in optical fiber communication systems with complex structure**

Rezazadeh H., Kurt A., TOZAR A., TAŞBOZAN O., Mirhosseini-Alizamini S. M.

Optical and Quantum Electronics, vol.53, no.6, 2021 (SCI-Expanded)

- VIII. **Optical soliton solutions for the (1+1)-dimensional resonant nonlinear Schrödinger's equation arising in optical fibers**  
TOZAR A., TAŞBOZAN O., Kurt A.  
Optical and Quantum Electronics, vol.53, no.6, 2021 (SCI-Expanded)
- IX. **A popular reaction-diffusion model fractional Fitzhugh-Nagumo equation: analytical and numerical treatment**  
TAŞBOZAN O.  
Applied Mathematics, vol.36, no.2, pp.218-228, 2021 (SCI-Expanded)
- X. **Applying the New Extended Direct Algebraic Method to Solve the Equation of Obliquely Interacting Waves in Shallow Waters**  
Kurt A., TOZAR A., TAŞBOZAN O.  
Journal of Ocean University of China, vol.19, no.4, pp.772-780, 2020 (SCI-Expanded)
- XI. **Analytical solutions of Cahn-Hillard phase-field model for spinodal decomposition of a binary system**  
TOZAR A., TAŞBOZAN O., Kurt A.  
EPL, vol.130, no.2, 2020 (SCI-Expanded)
- XII. **New wave solutions of an integrable dispersive wave equation with a fractional time derivative arising in ocean engineering models**  
TOZAR A., Kurt A., TAŞBOZAN O.  
Kuwait Journal of Science, vol.47, no.2, pp.22-33, 2020 (SCI-Expanded)
- XIII. **New Analytical Solutions for Time Fractional Benjamin-Ono Equation Arising Internal Waves in Deep Water**  
TAŞBOZAN O.  
China Ocean Engineering, vol.33, no.5, pp.593-600, 2019 (SCI-Expanded)
- XIV. **New Wave Solutions of Time-Fractional Coupled Boussinesq-Whitham-Broer-Kaup Equation as A Model of Water Waves**  
ATILGAN E., Senol M., Kurt A., TAŞBOZAN O.  
China Ocean Engineering, vol.33, no.4, pp.477-483, 2019 (SCI-Expanded)
- XV. **New optical solutions of complex Ginzburg-Landau equation arising in semiconductor lasers**  
TAŞBOZAN O., Kurt A., TOZAR A.  
Applied Physics B: Lasers and Optics, vol.125, no.6, 2019 (SCI-Expanded)
- XVI. **Numerical Solutions of Fractional Burgers' Type Equations with Conformable Derivative**  
Senol M., TAŞBOZAN O., Kurt A.  
Chinese Journal of Physics, vol.58, pp.75-84, 2019 (SCI-Expanded)
- XVII. **New solutions of fractional Drinfeld-Sokolov-Wilson system in shallow water waves**  
TAŞBOZAN O., Şenol M., Kurt A., Özkan O.  
Ocean Engineering, vol.161, pp.62-68, 2018 (SCI-Expanded)
- XVIII. **New solutions for conformable fractional Nizhnik-Novikov-Veselov system via  $G'/G$  expansion method and homotopy analysis methods**  
Kurt A., TAŞBOZAN O., Baleanu D.  
Optical and Quantum Electronics, vol.49, no.10, 2017 (SCI-Expanded)
- XIX. **New exact solutions of Burgers' type equations with conformable derivative**  
Çenesiz Y., Baleanu D., Kurt A., TAŞBOZAN O.  
Waves in Random and Complex Media, vol.27, no.1, pp.103-116, 2017 (SCI-Expanded)
- XX. **On the analytical solutions of the system of conformable time-fractional Robertson equations with 1-D diffusion**  
Iyiola O., TAŞBOZAN O., Kurt A., Çenesiz Y.  
Chaos, Solitons and Fractals, vol.94, pp.1-7, 2017 (SCI-Expanded)
- XXI. **New analytical solutions for conformable fractional PDEs arising in mathematical physics by exp-**

### **function method**

TAŞBOZAN O., Çenesiz Y., Kurt A., Baleanu D.

Open Physics, vol.15, no.1, pp.647-651, 2017 (SCI-Expanded)

- XXII. **New solutions for conformable fractional Boussinesq and combined KdV-mKdV equations using Jacobi elliptic function expansion method**  
TAŞBOZAN O., Çenesiz Y., Kurt A.  
European Physical Journal Plus, vol.131, no.7, 2016 (SCI-Expanded)
- XXIII. **Double exp-function method for multisoliton solutions of the Tzitzeica-Dodd-Bullough equation**  
ESEN A., YAĞMURLU N. M., Tasbozan O.  
Acta Mathematicae Applicatae Sinica, vol.32, no.2, pp.461-468, 2016 (SCI-Expanded)
- XXIV. **Numerical Solution of Time Fractional Burgers Equation by Cubic B-spline Finite Elements**  
ESEN A., TAŞBOZAN O.  
Mediterranean Journal of Mathematics, vol.13, no.3, pp.1325-1337, 2016 (SCI-Expanded)
- XXV. **An approach to time fractional gas dynamics equation: Quadratic B-spline Galerkin method**  
ESEN A., TAŞBOZAN O.  
Applied Mathematics and Computation, vol.261, pp.330-336, 2015 (SCI-Expanded)
- XXVI. **On the Solution of Burgers' Equation with the New Fractional Derivative**  
Kurt A., Çenesiz Y., TAŞBOZAN O.  
Open Physics, vol.13, no.1, pp.355-360, 2015 (SCI-Expanded)
- XXVII. **Approximate analytical solution to time-fractional damped burger and cahn-allen equations**  
ESEN A., YAĞMURLU N. M., Tasbozan O.  
Applied Mathematics and Information Sciences, vol.7, no.5, pp.1951-1956, 2013 (SCI-Expanded)
- XXVIII. **A numerical solution to fractional diffusion equation for force-free case**  
Tasbozan O., ESEN A., YAĞMURLU N. M., UÇAR Y.  
Abstract and Applied Analysis, vol.2013, 2013 (SCI-Expanded)
- XXIX. **A Galerkin Finite Element Method to Solve Fractional Diffusion and Fractional Diffusion-Wave Equations**  
ESEN A., UÇAR Y., YAĞMURLU N. M., Tasbozan O.  
Mathematical Modelling and Analysis, vol.18, no.2, pp.260-273, 2013 (SCI-Expanded)
- XXX. **The  $(G'/G)$ -expansion method for some nonlinear evolution equations**  
KUTLUAY S., ESEN A., Tasbozan O.  
Applied Mathematics and Computation, vol.217, no.1, pp.384-391, 2010 (SCI-Expanded)

### **Articles Published in Other Journals**

- I. **Application of Functional Variable Method for Heisenberg Ferromagnetic Spin Chain Equation**  
TOZAR A., TAŞBOZAN O., KURT A.  
Journal of Innovative Science and Engineering (JISE), vol.8, no.2, pp.243-250, 2024 (Peer-Reviewed Journal)
- II. **Approximate Solutions for A Fractional Shallow Water Flow Model**  
TARIQ H., REZZAZADEH H., ŞENOL M., TAŞBOZAN O., KURT A.  
Ikonion Journal of Mathematics, vol.5, no.2, pp.65-75, 2023 (Peer-Reviewed Journal)
- III. **Analytical Solutions of Coupled Boiti-Leon-Pempinelli Equation with Fractional Derivative**  
TAŞBOZAN O., KURT A.  
Turkish Journal of Science, vol.8, no.1, pp.19-23, 2023 (Peer-Reviewed Journal)
- IV. **ANALYTICAL SOLUTIONS OF (1+1)- DIMENSIONAL DISTRIBUTED LONG WAVE (DLW) EQUATION WITH AUXILIARY EQUATION METHOD**  
GÖKTAŞ A. M., YILMAZ K., TAŞBOZAN O.  
Journal of Universal Mathematics, vol.5, no.2, pp.88-94, 2022 (Peer-Reviewed Journal)
- V. **Hadamard-Simpson Type Integral Inequalities In Post Quantum Calculus For tgs-Convex Functions**  
GÖV E., TAŞBOZAN O.

Sohag Journal of Mathematics, vol.8, no.2, pp.61-72, 2021 (Peer-Reviewed Journal)

- VI. **Analytical Approximation for Cahn-Hillard Phase-Field Model for Spinodal Decomposition of a Binary System**  
TOZAR A., Tasbozan O., Kurt A.  
Journal of New Theory, vol.2021, no.36, pp.11-17, 2021 (Peer-Reviewed Journal)
- VII. **Generalized Sub-Equation Method for the (1+1)-Dimensional Resonant Nonlinear Schrodinger Equation**  
TAŞBOZAN O., TOZAR A., Kurt A.  
Bilecik Şeyh Edebali Üniversitesi Fen Bilimleri Dergisi, vol.8, no.2, pp.547-552, 2021 (Peer-Reviewed Journal)
- VIII. **Analytical Solutions of Conformable Boussinesq-Double-Sinh-Gordon and First Boussinesq-Liouville Equations with the Help of Auxiliary Equation Method**  
YILMAZ S., TAŞBOZAN O.  
Ikonion Journal of Mathematic, vol.2, no.2, pp.40-54, 2020 (Peer-Reviewed Journal)
- IX. **A New Concept for Fractional Quantum Calculus: (beta q)-Calculus and Its Properties**  
KURT A., TAŞBOZAN O.  
Ikonion Journal of Mathematics, vol.2, no.1, pp.44-48, 2020 (Peer-Reviewed Journal)
- X. **The New Travelling Wave Solutions of Time Fractional Fitzhugh-Nagumo Equation with Sine-Gordon Expansion Method Zaman Kesirli Fitzhugh-Nagumo Denkleminin Sine-Gordon Açılım Yöntemi İle Yeni Yürüyen Dalga Çözümleri**  
TAŞBOZAN O., Kurt A.  
Adiyaman University Journal of Science, vol.10, no.1, pp.256-263, 2020 (Scopus)
- XI. **Approximate Analytical Solutions of Conformable Time Fractional Clannish Random Walker's Parabolic(CRWP) Equation and Modified Benjamin-Bona-Mahony(BBM) equation**  
ATILGAN E., TAŞBOZAN O., Kurt A., Mohyud-Din S. T.  
Universal Journal of Mathematics and Applications, vol.3, no.2, pp.61-68, 2020 (Scopus)
- XII. **New Solutions For Conformable Fractional Partial Differential Equations Using First Integral Method**  
KARATAŞ T., TAŞBOZAN O., KURT A.  
Journal of Fractional Calculus and Applications, vol.11, no.1, pp.145-150, 2020 (Peer-Reviewed Journal)
- XIII. **New Exact Solutions of the MkdV-Sine-Gordon Equation**  
TAŞBOZAN O., KURT A.  
Sohag Journal of Mathematics, vol.7, no.1, pp.1-4, 2020 (Peer-Reviewed Journal)
- XIV. **New Travelling Wave Solutions for KdV6 Equation Using Sub Equation Method**  
Durur H., Kurt A., TAŞBOZAN O.  
Applied Mathematics and Nonlinear Sciences, vol.5, no.1, pp.455-460, 2020 (Scopus)
- XV. **New Travelling Wave Solutions For Time-Space Fractional Equations Arising in Nonlinear Optics**  
KURT A., ATILGAN E., ŞENOL M., TAŞBOZAN O., BALEANU D.  
Journal of Fractional Calculus and Applications, vol.11, no.1, pp.138-144, 2020 (Peer-Reviewed Journal)
- XVI. **New Analytical Solutions of Conformable Time Fractional Bad and Good Modified Boussinesq Equations**  
Durur H., TAŞBOZAN O., Kurt A.  
Applied Mathematics and Nonlinear Sciences, vol.5, no.1, pp.447-454, 2020 (Scopus)
- XVII. **Implementation of New Sub Equation Method to Time Fractional Partial Differential Equations**  
TAŞBOZAN O., KURT A., DURUR H.  
International Journal of Engineering Mathematics Physics, vol.1, no.1, pp.1-12, 2019 (Peer-Reviewed Journal)
- XVIII. **Collocation solutions for the time fractional telegraph equation using cubic B-spline finite elements**  
TAŞBOZAN O., ESEN A.  
Annals of West University of Timisoara - Mathematics and Computer Science, vol.57, no.2, pp.131-144, 2019 (Peer-Reviewed Journal)
- XIX. **Analytical Solutions of Fractional Order Partial Diferantial Equations with the Help of Auxiliary Equation Method**  
YILMAZ S., TAŞBOZAN O.

Afyon Kocatepe Üniversitesi Fen ve Mühendislik Bilimleri Dergisi, vol.19, no.3, pp.626-634, 2019 (Peer-Reviewed Journal)

- XX. **Two Reliable Methods for The Solution of Fractional Coupled Burgers' Equation Arising as a Model of Polydispersive Sedimentation**  
KURT A., ŞENOL M., TAŞBOZAN O., CHAND M.  
APPLIED MATHEMATICS AND NONLINEAR SCIENCES, vol.4, no.2, pp.523-534, 2019 (Peer-Reviewed Journal)
- XXI. **Approximate Analytical Solutions to Conformable Modified Burgers Equation Using Homotopy Analysis Method**  
KURT A., TAŞBOZAN O.  
Annales Mathematicae Silesianae, vol.33, no.1, pp.159-167, 2019 (Scopus)
- XXII. **Numerical solutions of fractional Boussinesq-Whitham-Broer-Kaup and diffusive Predator-Prey equations with conformable derivative**  
ŞENOL M., KURT A., ATILGAN E., TAŞBOZAN O.  
New Trends in Mathematical Science, vol.3, no.7, pp.286-300, 2019 (Peer-Reviewed Journal)
- XXIII. **The New Exact and Approximate Solution for the Nonlinear Fractional Diffusive Predator-Prey system Arising in Mathematical Biology**  
KURT A., ESLAMÍ M., REZAZADEH H., TAŞBOZAN O., ÖZKAN O.  
Journal of New Theory, vol.28, pp.33-43, 2019 (Peer-Reviewed Journal)
- XXIV. **The Exact Solutions of Conformable Fractional Partial Differential Equations Using New Sub Equation Method**  
Kurt A., TAŞBOZAN O., DURUR H.  
Fundamental journal of mathematics and applications (Online), vol.2, no.2, pp.173-179, 2019 (Peer-Reviewed Journal)
- XXV. **Approximate Solutions of the Time-Fractional Kadomtsev-Petviashvili Equation with Conformable Derivative**  
DURUR H., ŞENOL M. S., Kurt A., TAŞBOZAN O.  
Erzincan Üniversitesi Fen Bilimleri Enstitüsü Dergisi, vol.12, no.2, pp.796-806, 2019 (Peer-Reviewed Journal)
- XXVI. **New Wave Solutions of Time Fractional Kadomtsev-Petviashvili Equation Arising in the Evolution of Nonlinear Long Waves of Small Amplitude**  
DURUR H., TAŞBOZAN O., Kurt A., ŞENOL M. S.  
Erzincan Üniversitesi Fen Bilimleri Enstitüsü Dergisi, vol.12, no.2, pp.807-815, 2019 (Peer-Reviewed Journal)
- XXVII. **New Exact Solutions of Fractional Fitzhugh-Nagumo Equation**  
Tasbozan O., Kurt A.  
Iğdır Üniversitesi Fen Bilimleri Enstitüsü Dergisi, vol.9, no.3, pp.1633-1645, 2019 (Peer-Reviewed Journal)
- XXVIII. **A Finite Element Method to Solve the System of Two-dimensional Burger' Equations**  
KUTLUAY S., YAĞMURLU N. M., UÇAR Y., TAŞBOZAN O.  
International Journal of Engineering Mathematics Physics, vol.1, pp.1-10, 2019 (Peer-Reviewed Journal)
- XXIX. **Two effective approaches for solving fractional generalized Hirota-Satsuma coupled KdV system arising in interaction of long waves**  
KURT A., REZAZADEH H., ŞENOL M., NEİRAMEH A., TAŞBOZAN O., MOSTAFA E., MOHAMMED M.  
Journal of Ocean Engineering and Science, vol.4, no.1, pp.24-32, 2019 (Scopus)
- XXX. **The New Travelling Wave Solutions of Conformable Partial Differential Equations**  
TAŞBOZAN O., KURT A.  
Asia Pacific Journal of Mathematics, vol.6, 2019 (Scopus)
- XXXI. **Analytical and Numerical Solutions for Time-Fractional New Coupled mKdV Equation Arising in Interaction of Two Long Waves**  
TAŞBOZAN O., ŞENOL M., KURT A., BALEANU D.  
Asia Pacific Journal of Mathematics, vol.6, 2019 (Scopus)
- XXXII. **The New Sub-Equation Method for General Kaup-Kupershmidt Equation from Capillary Gravity Waves with Conformable Derivative**  
REZAZADEH H., KURT A., ESLAMÍ M., MİRZAZADEH M., TAŞBOZAN O., ÖZKAN O.

- Asia Pacific Journal of Mathematics, vol.6, 2019 (Scopus)
- XXXIII. **New Exact and Numerical Solutions of Fractional Kaup-Kupershmidt Equation**  
ŞENOL M., TAŞBOZAN O., KURT A., ATA A.  
Asia Pacific Journal of Mathematics, vol.6, 2019 (Scopus)
- XXXIV. **New Travelling Wave Solutions for Time-Space Fractional Liouville and Sine-Gordon Equations**  
TAŞBOZAN O., KURT A.  
İğdir Üniversitesi Fen Bilimleri Enstitüsü Dergisi, vol.8, no.4, pp.295-303, 2018 (Peer-Reviewed Journal)
- XXXV. **Numerical Solutions of Conformable Partial Differential Equations By Homotopy Analysis Method**  
TAŞBOZAN O., BAYASLI G.  
Afyon Kocatepe Üniversitesi Fen ve Mühendislik Bilimleri Dergisi, vol.18, pp.842-851, 2018 (Peer-Reviewed Journal)
- XXXVI. **New Analytical Solutions and Approximate Solution of the Space-Time Conformable Sharma-Tasso-Olver**  
TAŞBOZAN O., ÇENESİZ Y., KURT A., SAMUEL IYIOLA O.  
Progress in Fractional Differentiation and Applications, vol.4, no.4, pp.519-531, 2018 (Scopus)
- XXXVII. **A New Method to Solve Time Fractional Diffusion Equations Arising in Chaos and Heat Conduction**  
ÖZKAN O., KURT A., TAŞBOZAN O.  
Journal of Advanced Physics, vol.7, no.3, pp.399-403, 2018 (Peer-Reviewed Journal)
- XXXVIII. **Some quantum estimates of opial inequality and some of its generalizations**  
GÖV E., TAŞBOZAN O.  
New Trends in Mathematical Science, vol.1, no.6, pp.76-84, 2018 (Peer-Reviewed Journal)
- XXXIX. **Numerical Solutions of the Modified Burgers' Equation by Finite Difference Methods**  
UÇAR Y., YAĞMURLU N. M., TAŞBOZAN O.  
Journal of Applied Mathematics, Statistics and Informatics, vol.13, no.1, pp.19-30, 2017 (ESCI)
- XL. **Quadratic B-Spline Galerkin Method for Numerical Solutions of Fractional Telegraph Equations**  
TAŞBOZAN O., ESEN A.  
BULLETIN OF MATHEMATICAL SCIENCES AND APPLICATIONS, vol.18, pp.23-39, 2017 (Peer-Reviewed Journal)
- XLI. **Functional Variable Method for conformable fractional modified KdV-ZK equation and Maccari system**  
ÇENESİZ Y., TAŞBOZAN O., KURT A.  
TBILISI MATHEMATICAL JOURNAL, vol.10, no.1, pp.117-125, 2017 (ESCI)
- XLII. **Numerical Solution of Time Fractional Schrödinger Equation by Using Quadratic B-Spline Finite Elements**  
ESEN A., TAŞBOZAN O.  
Annales Mathematicae Silesianae, vol.31, no.1, pp.83-98, 2017 (Peer-Reviewed Journal)
- XLIII. **On the New Solutions of the Conformable Time Fractional Generalized Hirota-Satsuma Coupled KdV System**  
ÇENESİZ Y., KURT A., TAŞBOZAN O.  
Annals of West University of Timisoara - Mathematics and Computer Science, vol.55, no.1, pp.37-49, 2017 (Peer-Reviewed Journal)
- XLIV. **New Exact Solution for The Comformable Time Fractional Burgers Equation by Hopf Cole Transform**  
KURT A., ÇENESİZ Y., TAŞBOZAN O.  
Çankaya University Journal of Science and Engineering, vol.13, no.2, pp.18-23, 2016 (Peer-Reviewed Journal)
- XLV. **Numerical Solutions of the Combined KdV MKdV Equation by a Quintic B spline Collocation Method**  
YAĞMURLU N. M., TAŞBOZAN O., UÇAR Y., ESEN A.  
Applied Mathematics Information Sciences Letters, vol.4, no.1, pp.19-24, 2016 (Peer-Reviewed Journal)
- XLVI. **Numerical Solutions of the Sine Gordon Equation by Collocation Method**  
TAŞBOZAN O., YAĞMURLU N. M., UÇAR Y., ESEN A.  
Sohag Journal of Mathematics, vol.3, no.1, pp.1-6, 2016 (Peer-Reviewed Journal)
- XLVII. **Finite Difference Methods for Fractional Gas Dynamics Equation**  
ESEN A., KARAAĞAÇ B., TAŞBOZAN O.

- Applied Mathematics Information Sciences Letters, vol.4, no.1, pp.1-4, 2016 (Peer-Reviewed Journal)
- XLVIII. **Numerical solution of time fractional nonlinear Schrödinger equation arising in quantum mechanics by cubic B spline finite elements**  
ESEN A., TAŞBOZAN O.  
Malaya Journal Of Matematik, vol.3, no.4, pp.387-397, 2015 (Peer-Reviewed Journal)
- XLIX. **Analytic Solutions of Liouville Equation Using Extended Trial Equation Method and The Functional Variable Method**  
KURT A., TAŞBOZAN O.  
Applied Mathematics Information Sciences Letters, vol.3, no.3, pp.93-96, 2015 (Peer-Reviewed Journal)
- L. **Numerical Solution of Some Fractional Partial Differential Equations using Collocation Finite Element Method**  
UÇAR Y., YAĞMURLU N. M., TAŞBOZAN O., ESEN A.  
Progress in Fractional Differentiation and Applications, vol.1, no.3, pp.157-164, 2015 (Scopus)
- LI. **Approximate analytical solution of ZK BBM equation**  
TAŞBOZAN O., KURT A.  
Sohag Journal of Mathematic, vol.2, no.2, pp.57-60, 2015 (Peer-Reviewed Journal)
- LII. **APPROXIMATE ANALYTICAL SOLUTION OF THE TIME FRACTIONAL WHITHAM BROER KAUP EQUATION USING THE HOMOTOPY ANALYSIS METHOD**  
KURT A., TAŞBOZAN O.  
INTERNATIONAL JOURNAL OF PURE AND APPLIED MATHEMATICS, vol.98, no.4, pp.503-510, 2015 (Scopus)
- LIII. **Numerical solution of time fractional Burgers equation**  
ESEN A., TAŞBOZAN O.  
ACTA UNIVERSITATIS SAPIENTIAE, MATHEMATICA, vol.7, no.2, pp.167-185, 2015 (Scopus)
- LIV. **Cubic B spline collocation method for solving time fractional gas dynamics equation**  
ESEN A., TAŞBOZAN O., TAŞPINAR B. B.  
TBILISI MATHEMATICAL JOURNAL, vol.8, no.2, pp.221-231, 2015 (Peer-Reviewed Journal)
- LV. **A B spline collocation method for solving fractional diffusion and fractional diffusion wave equations**  
ESEN A., TAŞBOZAN O., UÇAR Y., YAĞMURLU N. M.  
TBILISI MATHEMATICAL JOURNAL, vol.8, no.2, pp.221-231, 2015 (Peer-Reviewed Journal)
- LVI. **SOLVING FRACTIONAL DIFFUSION AND FRACTIONAL DIFFUSION WAVE EQUATIONS BY PETROV GALERKIN FINITE ELEMENT METHOD**  
ESEN A., UÇAR Y., YAĞMURLU N. M., TAŞBOZAN O.  
Turkish World Mathematical Society Journal of Applied and Engineering Mathematics, vol.4, no.2, pp.155-168, 2014 (Peer-Reviewed Journal)
- LVII. **Approximate Analytical Solutions of the Damped Burgers and Boussinesq Burgers Equations**  
ESEN A., TAŞBOZAN O., KUTLUAY S.  
Çankaya University Journal of Science and Engineering, vol.11, no.1, pp.65-76, 2014 (Peer-Reviewed Journal)
- LVIII. **The functional variable method for some nonlinear 2 1 dimensional equations**  
Taşbozan O., Yağmurlu N. M., Esen A.  
Selçuk Üniversitesi Fen Edebiyat Fakültesi Fen Dergisi, vol.14, no.1, pp.37-46, 2013 (Peer-Reviewed Journal)
- LIX. **Applications of the Exp Function method for the MKdV sine Gordon and Boussinesq double sine Gordon equations**  
ESEN A., TAŞBOZAN O., KUTLUAY S.  
World Applied Sciences Journal, vol.22, no.1, pp.147-151, 2013 (Peer-Reviewed Journal)
- LX. **Approximate Analytical Solutions of the Fractional Sharmo Tasso Olver Equation Using Homotopy Analysis Method and a Comparison with Other Methods**  
ESEN A., TAŞBOZAN O., YAĞMURLU N. M.  
Çankaya University Journal of Science and Engineering, vol.9, no.2, pp.139-147, 2012 (Peer-Reviewed Journal)
- LXI. **Approximate Analytical Solutions of Fractional Coupled mKdV Equation by Homotopy Analysis Method**

## Refereed Congress / Symposium Publications in Proceedings

- I. **Hızlı Okuma Tekniklerinin Öğretmenlerin Okuma Hızlarına ve Okuduğunu Anlama Düzeylerine Etkisi**  
ATAMAN Ü., TAŞBOZAN O.  
Proceedings of The Thirteenth International Congress of Educational Research, 3 - 06 September 2020
- II. **Approximate Solution Procedure for Conformable Fractional Order (31)-Dimensional Telegraph Differential Equation by Residual Power Series Method**  
ŞENOL M., TAŞBOZAN O., KURT A.  
3. International Conference on Mathematics: "An Istanbul Meeting for World Mathematicians", 3 - 05 May 2019
- III. **Analytical Solutions for Conformable Fractional Order (31) Dimensional Telegraph Differential Equation**  
ŞENOL M., TAŞBOZAN O., KURT A.  
3. International Conference on Mathematics: "An Istanbul Meeting for World Mathematicians", 3 - 05 May 2019
- IV. **An Analytical Approach For Time Fractional Bad and Good Boussinesq Equation**  
KURT A., TAŞBOZAN O., DURUR H.  
4th International Conference on Computational Mathematics and Engineering Sciences (CMES 2019), 20 - 22 April 2019
- V. **The Exact Solutions of Conformable Fractional Partial Differential Equations Using New Sub Equation Method**  
KURT A., TAŞBOZAN O., DURUR H.  
4th International Conference on Computational Mathematics and Engineering Sciences (CMES 2019), 20 - 22 April 2019
- VI. **Implementation of New Sub Equation Method To Time Fractional Partial Differential Equations**  
KURT A., TAŞBOZAN O., DURUR H.  
4th International Conference on Computational Mathematics and Engineering Sciences (CMES 2019), 20 - 22 April 2019
- VII. **New Travelling Wave Solutions For Kdv6 Equation Using Sub Equation Method**  
KURT A., TAŞBOZAN O., DURUR H.  
4th International Conference on Computational Mathematics and Engineering Sciences (CMES 2019), 20 - 22 April 2019
- VIII. **NEW TRAVELLING WAVE SOLUTIONS FOR CONFORMABLE FRACTIONAL PARTIAL DIFFERENTIAL EQUATIONS**  
ÖZKAN O., TAŞBOZAN O., KURT A.  
International Conference on Mathematical Studies and Applications, 4 - 06 October 2018
- IX. **NEW TRAVELLING WAVE SOLUTIONS FOR TIME-SPACE FRACTIONAL EQUATIONS**  
TAŞBOZAN O., KURT A., ATILGAN E., ŞENOL M.  
International Conference on Mathematical Studies and Applications, 4 - 06 October 2018
- X. **ANALYTICAL AND NUMERICAL SOLUTIONS FOR TIME FRACTIONAL NEW COUPLED mKdV EQUATION**  
TAŞBOZAN O., ŞENOL M., KURT A.  
International Conference on Mathematical Studies and Applications, 4 - 06 October 2018
- XI. **APPROXIMATE SOLUTIONS OF FRACTIONAL BENJAMIN-BONA-MAHONY-BURGERS' EQUATION**  
ŞENOL M., ATA A., TAŞBOZAN O., KURT A.  
II. International Scientific and Vocational Studies Congress, 5 - 08 July 2018
- XII. **NUMERICAL SOLUTIONS OF (3 1) DIMENSIONAL TIME-FRACTIONAL MKDV-ZK EQUATION**  
ŞENOL M., ATA A., TAŞBOZAN O., KURT A.  
II. International Scientific and Vocational Studies Congress, 5 - 08 July 2018
- XIII. **Küçük Genlikli Lineer Olmayan Uzun Dalgaların Gelişiminde Türeyen Zaman Kesirli Kadomtsev-**

### **Petviashvili Denkleminin Yeni Dalga Çözümleri**

DURUR H., TAŞBOZAN O., KURT A., ŞENOL M.

31.Ulusal Matematik Sempozyumu, Turkey, 12 - 15 September 2018

- XIV. **Zaman-Kesirli Kadomtsev- Petviashvili Denkleminin Conformable Türev ile Yaklaşık Çözümleri**  
DURUR H., ŞENOL M., KURT A., TAŞBOZAN O.  
31.Ulusal Matematik Sempozyumu, Turkey, 12 - 15 September 2018
- XV. **Comparison of Two Reliable Methods to Solve Fractional Rosenau-Hyman Equation**  
ŞENOL M., TAŞBOZAN O., KURT A.  
The International Conference on Fractional Differentiation and its Applications 2018, 16 - 18 July 2018
- XVI. **A New Concept for Fractional Quantum Calculus: ( $\beta q$ )-Calculus and Its Properties**  
KURT A., TAŞBOZAN O.  
3rd International Researchers, Statisticians and Young Statisticians Congress, 24 - 26 May 2017
- XVII. **Approximate analytical solution of Sharma Tasso Olver and Burgers Kdv equations with homotopy analysis method and conformable fractional derivative**  
ÇENESİZ Y., KURT A., TAŞBOZAN O.  
Computational Methods in Applied Mathematics (CMAM-7), Finland, 31 July - 06 August 2016
- XVIII. **New solutions of the space time fractional Sharma Tasso Olver equation with conformable derivative**  
ÇENESİZ Y., TAŞBOZAN O., KURT A., İYİOLA O. S.  
2nd International Conference on Analysis and Its Applications (ICAA-2016), Kırşehir, Turkey, 12 - 15 July 2016
- XIX. **New exact solutions for some nonlinear conformable PDEs Using Exp Function method**  
KURT A., TAŞBOZAN O., ÇENESİZ Y., BALEANU D.  
International Conference on Applied Mathematics and Analysis (ICAMA 2016), 11 - 13 July 2016
- XX. **Numerical Solution of Time Fractional Schrödinger Equation**  
TAŞBOZAN O., ESEN A.  
2nd International Conference on Pure and Applied Sciences (ICPAS 2016), 1 - 05 June 2016
- XXI. **New Exact Solution for The Conformable Time Fractional Burgers Equation by Hopf Cole Transform**  
KURT A., ÇENESİZ Y., TAŞBOZAN O.  
2nd International Conference on Pure and Applied Sciences (ICPAS 2016), 1 - 05 June 2016
- XXII. **New Solutions of Some Nonlinear Conformable Fractional Wave Equations Using Jacobi Elliptic Function Expansion Method**  
TAŞBOZAN O., ÇENESİZ Y., KURT A.  
2nd International Conference on Pure and Applied Sciences (ICPAS 2016), 1 - 05 June 2016
- XXIII. **New Analytical Solution of Conformable Time Fractional Burgers Equation**  
KURT A., ÇENESİZ Y., TAŞBOZAN O.  
International Conference on Applied Analysis and Mathematical Modeling, İstanbul, Turkey, 8 - 12 June 2015
- XXIV. **Numerical Solution of Time Conformable Fractional Burger s Equation by Homotopy Analysis Method**  
KURT A., ÇENESİZ Y., TAŞBOZAN O.  
International Conference on Applied Analysis and Mathematical Modeling, İstanbul, Turkey, 8 - 12 June 2015
- XXV. **A finite element method to solve the system of two dimensional Burgers equations**  
KUTLUAY S., YAĞMURLU N. M., UÇAR Y., TAŞBOZAN O.  
International Conference on Nonlinear Differential and Difference Equations: Recent Developments and Applications, 27 - 30 May 2014
- XXVI. **Numerical Solutions of the Combined KdV MKdV Equation by a Quintic B spline Collocation Method**  
YAĞMURLU N. M., TAŞBOZAN O., UÇAR Y., ESEN A.  
International Conference on Nonlinear Differential and Difference Equations: Recent Developments and Applications, 27 - 30 May 2014
- XXVII. **Numerical Solutions of the Sine Gordon Equation by Collocation Method**  
TAŞBOZAN O., YAĞMURLU N. M., UÇAR Y., ESEN A.  
International Workshop on Boundary Value Problems, 12 - 14 March 2014

## Supported Projects

TAŞBOZAN O., UÇAR Y., ÖZDEMİR M. K., ESEN A., YAĞMURLU N. M., Project Supported by Higher Education Institutions, Matematik Bölümü Bilgisayar Laboratuvarı, 2013 - 2015

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