Prof. Vedat Suat Ertürk

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Education Information

Doctorate, Ondokuz Mayis University, Fen Bilimleri Enstitüsü, Matematik (Dr), Turkey 1997 - 2000
Postgraduate, Ondokuz Mayis University, Fen Bilimleri Enstitüsü, Matematik (Yl) (Tezli), Turkey 1990 - 1994
Undergraduate, Ondokuz Mayis University, Fen-Edebiyat Fakültesi, Matematik Bölümü, Turkey 1985 - 1989

Foreign Languages

English, B2 Upper Intermediate

Dissertations

Doctorate, İki boyutlu düzlemde newtoniyen olmayan akışkanların zamandan bağımsız hareketlerinin özellikleri,
Ondokuz Mayis University, Fen Bilimleri Enstitüsü, Matematik (Dr), 2000
Postgraduate, Potansiyel denklemi ve uygulamaları, Ondokuz Mayis University, Fen Bilimleri Enstitüsü, Matematik (Yl)
(Tezli), 1994

Research Areas

Mathematics, Dynamic Systems and Ergodic Theory, Numerical Analysis, Natural Sciences

Academic Titles / Tasks

Professor, Ondokuz Mayis University, Fen-Edebiyat Fakültesi, Matematik Bölümü, 2015 - Continues

Courses

MAT 325 Mesleki Yabancı Dil I, Undergraduate, 2012 - 2013
FMA 632 Matematik Fiziğin Denklemleri, Postgraduate, 2012 - 2013
MTÖ 404 Uygulamalı Matematik(Eğt.Fak.), Undergraduate, 2012 - 2013

MAT 208 Mat.Bil.Tek.Kul.II, Undergraduate, 2012 - 2013

FMA 818 Uzmanlık Alan Dersi, Postgraduate, 2012 - 2013, 2011 - 2012, 2010 - 2011

FMA 817 Uzmanlık Alan Dersi , Postgraduate, 2012 - 2013, 2010 - 2011

MAT 501 Bilgisayar Programlama (Eğt.Fak.), Undergraduate, 2012 - 2013, 2010 - 2011

MAT 402 Bilgisayar Programlama II, Undergraduate, 2012 - 2013, 2011 - 2012

MAT 401 Bilgisayar Programlama I, Undergraduate, 2012 - 2013, 2011 - 2012

MAT 207 Mat.Bil.Tek.Kul.I, Undergraduate, 2012 - 2013

BİL 241 Diferansiyel Denklemler , Undergraduate, 2012 - 2013

MAT 206 Diferansiyel Denklemler II, Undergraduate, 2011 - 2012

MTÖ 456 Uygulamalı Matematik, Undergraduate, 2011 - 2012

MAT 205 Diferansiyel Denklemler (Eğt.Fak.), Undergraduate, 2011 - 2012

MAT 501 Bilgisayar Programlama I(Eğt.Fak.), Undergraduate, 2011 - 2012

BİL 241 Diferansiyel Denklemler (Müh.Fak.), Undergraduate, 2011 - 2012

MAT 404 Uygulamalı Matematik (Eğt.Fak.), Undergraduate, 2011 - 2012

MAT 205 Diferansiyel Denklemler I, Undergraduate, 2011 - 2012

MAT 205 Diferansiyel Denklemler I(B), Undergraduate, 2010 - 2011

FMA 660 Kesirli Analiz I, Postgraduate, 2010 - 2011

FMA 661 Kesirli Analiz II, Postgraduate, 2010 - 2011

MAT 421 Mesleki Yabancı Dil I, Undergraduate, 2010 - 2011

MAT 208 Diferansiyel Denklemler II(Eğt.Fak.), Undergraduate, 2010 - 2011

MAT 422 Mesleki Yabancı Dil II, Undergraduate, 2010 - 2011

MAT 408 Bilgisayar Programlama II, Undergraduate, 2010 - 2011

MAT 206 Diferansiyel Denklemler II(B), Undergraduate, 2010 - 2011

MAT 205 Diferansiyel Denklemler I(Eğt.Fak.), Undergraduate, 2010 - 2011

MAT 401 Bilgisayar Programlama I (Eğt.Fak.), Undergraduate, 2010 - 2011

MAT 208 Diferansiyel Denklemler II(Eğt.Fak.), Undergraduate, 2009 - 2010

FMA 818 Uzmanlık Alan Dersi , Postgraduate, 2009 - 2010

MAT 422 Mesleki Yabancı Dil II, Undergraduate, 2009 - 2010

MAT 401 Bilgisayar Programlama I, Undergraduate, 2009 - 2010, 2008 - 2009

FMA 621 Diferansiyel Denklemler I, Postgraduate, 2009 - 2010

MAT 206 Diferansiyel Denklemler II(B), Undergraduate, 2009 - 2010

MAT 408 Bilgisayar Programlama II, Undergraduate, 2009 - 2010, 2008 - 2009

FMA 622 Diferansiyel Denklemler II, Postgraduate, 2009 - 2010

MAT 421 Mesleki Yabancı Dil I, Undergraduate, 2009 - 2010

MAT 205 Diferansiyel Denklemler I, Undergraduate, 2009 - 2010

MAT 302 Bilgisayar Bilimlerine Giriş II, Undergraduate, 2008 - 2009

MAT 282 Diferansiyel Denklemler, Undergraduate, 2008 - 2009

MAT 208 Diferansiyel Denklemler II, Undergraduate, 2008 - 2009

MAT 308 Matematiğe Bilimsel Yaklaşım, Undergraduate, 2008 - 2009

MAT 205 Diferansiyel Denklemler, Undergraduate, 2008 - 2009

Published journal articles indexed by SCI, SSCI, and AHCI

I. **Generalized forms of fractional Euler and Runge-Kutta methods using non-uniform grid**
Kumar P., Erturk V. S., Murillo-Arcila M., Harley C.
International Journal of Nonlinear Sciences and Numerical Simulation, vol.24, no.6, pp.2089-2111, 2023 (SCI-Expanded)

II. **Fractional mathematical modeling of the Stuxnet virus along with an optimal control problem**
Kumar P., Govindaraj V., Ertürk V. S., Nisar K. S., İNÇ M.
AIN SHAMS ENGINEERING JOURNAL, vol.14, no.7, 2023 (SCI-Expanded)

III. **A case study of Covid-19 epidemic in India via new generalised Caputo type fractional derivatives**
Kumar P., Ertürk V. S.
MATHEMATICAL METHODS IN THE APPLIED SCIENCES, vol.46, no.7, pp.7930-7943, 2023 (SCI-Expanded)

IV. **A NEW FORM OF L1-PREDICTOR-CORRECTOR SCHEME TO SOLVE MULTIPLE DELAY-TYPE FRACTIONAL ORDER SYSTEMS WITH THE EXAMPLE OF A NEURAL NETWORK MODEL**
Kumar P., Ertürk V. S., Murillo-Arcila M., Govindaraj V.
FRACTALS-COMPLEX GEOMETRY PATTERNS AND SCALING IN NATURE AND SOCIETY, vol.31, no.4, 2023 (SCI-Expanded)

V. **A revisit on the characteristics of Yao-Cheng non-linear oscillator**
Rath B., Nayak B., Mallick P., Sahoo R. R., Ertürk V. S., Wannan R., Jarrar R., Shanak H., Asad J.
JOURNAL OF LOW FREQUENCY NOISE VIBRATION AND ACTIVE CONTROL, vol.42, no.1, pp.470-474, 2023 (SCI-Expanded)

VI. **A Study on the Nonlinear Caputo-Type Snakebite Envenoming Model with Memory**
Kumar P., Ertürk V. S., Govindaraj V., BALEANU D.
CMES-COMPUTER MODELING IN ENGINEERING & SCIENCES, vol.136, no.3, pp.2487-2506, 2023 (SCI-Expanded)

VII. **A novel mathematical model to describe the transmission dynamics of tooth cavity in the human population**
Kumar P., Govindaraj V., Ertürk V. S.
CHAOS SOLITONS & FRACTALS, vol.161, 2022 (SCI-Expanded)

VIII. **Stability and bifurcation analysis of a fractional-order model of cell-to-cell spread of HIV-1 with a discrete time delay**
Abbas S., Tyagi S., Kumar P., Ertürk V. S., Momani S.
MATHEMATICAL METHODS IN THE APPLIED SCIENCES, vol.45, no.11, pp.7081-7095, 2022 (SCI-Expanded)

IX. **Some novel mathematical analysis on a corneal shape model by using Caputo fractional derivative**
Ertürk V. S., Ahmadkhanlu A., Kumar P., Govindaraj V.
OPTIK, vol.261, 2022 (SCI-Expanded)

X. **A Study on the 3D Hopfield Neural Network Model via Nonlocal Atangana-Baleanu Operators**
Rezapour S., Kumar P., Ertürk V. S., Etemad S.
COMPLEXITY, vol.2022, 2022 (SCI-Expanded)

XI. **A new study on two different vaccinated fractional-order COVID-19 models via numerical algorithms**
Zeb A., Kumar P., Ertürk V. S., Sitthiwirattham T.
JOURNAL OF KING SAUD UNIVERSITY SCIENCE, vol.34, no.4, 2022 (SCI-Expanded)

XII. **A study on the dynamics of alkali-silica chemical reaction by using Caputo fractional derivative**
Kumar P., Govindaraj V., Ertürk V. S., Abdellattif M. H.
PRAMANA-JOURNAL OF PHYSICS, vol.96, no.3, 2022 (SCI-Expanded)

XIII. **Analytic Solution for the Strongly Nonlinear Multi-Order Fractional Version of a BVP Occurring in Chemical Reactor Theory**
Ertürk V. S., Alomari A. K., Kumar P., Murillo-Arcila M.
DISCRETE DYNAMICS IN NATURE AND SOCIETY, vol.2022, 2022 (SCI-Expanded)

XIV. **A study on the maize streak virus epidemic model by using optimized linearization-based predictor-corrector method in Caputo sense**
Kumar P., Ertürk V. S., Vellappandi M., Trinh H., Govindaraj V.
CHAOS SOLITONS & FRACTALS, vol.158, 2022 (SCI-Expanded)

XV. **An Implementation of the Generalized Differential Transform Scheme for Simulating Impulsive Fractional Differential Equations**
Odibat Z., Ertürk V. S., Kumar P., Ben Makhlouf A., Govindaraj V.
MATHEMATICAL PROBLEMS IN ENGINEERING, vol.2022, 2022 (SCI-Expanded)

XVI. **Effects of greenhouse gases and hypoxia on the population of aquatic species: a fractional mathematical model**
Kumar P., Govindaraj V., Ertürk V. S., Mohamed M. S.
ADVANCES IN CONTINUOUS AND DISCRETE MODELS, vol.2022, no.1, 2022 (SCI-Expanded)

XVII. **Existence and stability results for nonlocal boundary value problems of fractional order**
Ertürk V. S., Ali A., Shah K., Kumar P., Abdeljawad T.
BOUNDARY VALUE PROBLEMS, vol.2022, no.1, 2022 (SCI-Expanded)

XVIII. **Fractional dynamics of 2019-nCOV in Spain at different transmission rate with an idea of optimal control problem formulation**
Kumar P., Ertürk V. S., Nisar K. S., Jamshed W., Mohamed M. S.
ALEXANDRIA ENGINEERING JOURNAL, vol.61, no.3, pp.2204-2219, 2022 (SCI-Expanded)

XIX. **A delayed plant disease model with Caputo fractional derivatives**
Kumar P., BALEANU D., Ertürk V. S., Inc M., Govindaraj V.
ADVANCES IN CONTINUOUS AND DISCRETE MODELS, vol.2022, no.1, 2022 (SCI-Expanded)

XX. **Dynamics of generalized Caputo type delay fractional differential equations using a modified Predictor-Corrector scheme**
Odibat Z., Ertürk V. S., Kumar P., Govindaraj V.
PHYSICA SCRIPTA, vol.96, no.12, 2021 (SCI-Expanded)

XXI. **A complex fractional mathematical modeling for the love story of Layla and Majnun**
Kumar P., Ertürk V. S., Murillo-Arcila M.
CHAOS SOLITONS & FRACTALS, vol.150, 2021 (SCI-Expanded)

XXII. **Fractional time-delay mathematical modeling of Oncolytic Virotherapy**
Kumar P., Ertürk V. S., Yusuf A., Kumar S.
CHAOS SOLITONS & FRACTALS, vol.150, 2021 (SCI-Expanded)

XXIII. **Fractional dynamics of huanglongbing transmission within a citrus tree**
Kumar P., Ertürk V. S., Nisar K. S.
MATHEMATICAL METHODS IN THE APPLIED SCIENCES, vol.44, no.14, pp.11404-11424, 2021 (SCI-Expanded)

XXIV. **A case study of 2019-nCOV cases in Argentina with the real data based on daily cases from March 03, 2020 to March 29, 2021 using classical and fractional derivatives**
Kumar P., Ertürk V. S., Murillo-Arcila M., Banerjee R., Manickam A.
ADVANCES IN DIFFERENCE EQUATIONS, vol.2021, no.1, 2021 (SCI-Expanded)

XXV. **A study on canine distemper virus (CDV) and rabies epidemics in the red fox population via fractional derivatives**
Kumar P., Ertürk V. S., Yusuf A., Nisar K. S., Abdelwahab S. F.
RESULTS IN PHYSICS, vol.25, 2021 (SCI-Expanded)

XXVI. **Prediction studies of the epidemic peak of coronavirus disease in Brazil via new generalised Caputo type fractional derivatives**
Kumar P., Ertürk V. S., Abboubakar H., Nisar K. S.
ALEXANDRIA ENGINEERING JOURNAL, vol.60, no.3, pp.3189-3204, 2021 (SCI-Expanded)

XXVII. **A new fractional mathematical modelling of COVID-19 with the availability of vaccine**
Kumar P., Ertürk V. S., Murillo-Arcila M.
RESULTS IN PHYSICS, vol.24, 2021 (SCI-Expanded)

XXVIII. **Mathematical structure of mosaic disease using microbial biostimulants via Caputo and Atangana-Baleanu derivatives**
Kumar P., Ertürk V. S., Almusawa H.
RESULTS IN PHYSICS, vol.24, 2021 (SCI-Expanded)

XXIX. **Projections and fractional dynamics of COVID-19 with optimal control strategies**
Nabi K. N., Kumar P., Ertürk V. S.
CHAOS SOLITONS & FRACTALS, vol.145, 2021 (SCI-Expanded)

XXX. **Environmental persistence influences infection dynamics for a butterfly pathogen via new generalised Caputo type fractional derivative**
Kumar P., Ertürk V. S.
CHAOS SOLITONS & FRACTALS, vol.144, 2021 (SCI-Expanded)

XXXI. **Dynamics of a fractional order mathematical model for COVID-19 epidemic**
Zhang Z., Zeb A., Egbelowo O. F., Erturk V. S.

Advances in Difference Equations, vol.2020, no.1, 2020 (SCI-Expanded)

XXXII. **A fixed point iteration approach for analyzing the pull-in dynamics of beam-type electromechanical actuators**
ALKafri H. Q., Ertürk V. S.
INTERNATIONAL JOURNAL OF COMPUTER MATHEMATICS, vol.97, no.12, pp.2531-2545, 2020 (SCI-Expanded)

XXXIII. **Solution of a COVID-19 model via new generalized Caputo-type fractional derivatives**
Ertürk V. S., Kumar P.
CHAOS SOLITONS & FRACTALS, vol.139, 2020 (SCI-Expanded)

XXXIV. **Mathematical Model for Coronavirus Disease 2019 (COVID-19) Containing Isolation Class**
Zeb A., Alzahrani E., Ertürk V. S., Zaman G.
BIOMED RESEARCH INTERNATIONAL, vol.2020, 2020 (SCI-Expanded)

XXXV. **A unique solution to a fourth-order three-point boundary value problem**
Ertürk V. S.
TURKISH JOURNAL OF MATHEMATICS, vol.44, no.5, pp.1941-1949, 2020 (SCI-Expanded)

XXXVI. **An approximate solution method for the fractional version of a singular BVP occurring in the electrohydrodynamic flow in a circular cylindrical conduit**
Alomari A. K., Ertürk V. S., Momani S., Alsaedi A.
EUROPEAN PHYSICAL JOURNAL PLUS, vol.134, no.4, 2019 (SCI-Expanded)

XXXVII. **Dynamical Analysis of Approximate Solutions of HIV-1 Model with an Arbitrary Order**
Asma A., Ali N., Zaman G., Zeb A., Ertürk V. S., Jung I. H.
COMPLEXITY, vol.2019, 2019 (SCI-Expanded)

XXXVIII. **An approach for approximate solution of fractional-order smoking model with relapse class**
Zeb A., Ertürk V. S., Khan U., Zaman G., Momani S.
INTERNATIONAL JOURNAL OF BIOMATHEMATICS, vol.11, no.6, 2018 (SCI-Expanded)

XXXIX. **Fuzzy Calculus Theory and Its Applications**
Abu Arqub O., Pinto C., Rodriguez Lopez R., Ertürk V. S.
COMPLEXITY, vol.2018, 2018 (SCI-Expanded)

XL. **MHD Flow of a Viscous Fluid Between Dilating and Squeezing Porous Walls**
Ahmed N., Ertürk V. S., Khan U., Mohyud-Din S., Bin-Mohsin B.
IRANIAN JOURNAL OF SCIENCE AND TECHNOLOGY TRANSACTION A-SCIENCE, vol.41, no.A4, pp.951-956, 2017 (SCI-Expanded)

XLI. **Comparing Two Numerical Methods for Approximating a New Giving Up Smoking Model Involving Fractional Order Derivatives**
Ertürk V. S., Zaman G., Alzalg B., Zeb A., Momani S.
IRANIAN JOURNAL OF SCIENCE AND TECHNOLOGY TRANSACTION A-SCIENCE, vol.41, no.A3, pp.569-575, 2017 (SCI-Expanded)

XLII. **Influence of thermal and concentration gradients on unsteady flow over a stretchable surface**
Ahmed N., Adnan A., Khan U., Mohyud-Din S. T., Ertürk V. S.
RESULTS IN PHYSICS, vol.7, pp.3153-3162, 2017 (SCI-Expanded)

XLIII. **Approximating a Giving Up Smoking Dynamic on Adolescent Nicotine Dependence in Fractional Order**
Zeb A., Zaman G., Ertürk V. S., Alzalg B., Yousafzai F., Khan M.
PLOS ONE, vol.11, no.4, 2016 (SCI-Expanded)

XLIV. **Dynamical analysis of the Irving-Mullineux oscillator equation of fractional order**
Abbas S., Ertürk V. S., Momani S.
SIGNAL PROCESSING, vol.102, pp.171-176, 2014 (SCI-Expanded)

XLV. **A FINITE DIFFERENCE TECHNIQUE FOR SOLVING VARIABLE-ORDER FRACTIONAL INTEGRO-DIFFERENTIAL EQUATIONS**
Xu Y., Ertürk V. S.
BULLETIN OF THE IRANIAN MATHEMATICAL SOCIETY, vol.40, no.3, pp.699-712, 2014 (SCI-Expanded)

XLVI. **Comparison of Numerical Methods of the SEIR Epidemic Model of Fractional Order**

Zeb A., Khan M., Zaman G., Momani S., Ertürk V. S.

ZEITSCHRIFT FUR NATURFORSCHUNG SECTION A-A JOURNAL OF PHYSICAL SCIENCES, vol.69, no.1-2, pp.81-89, 2014 (SCI-Expanded)

XLVII. **A Multistage Variational Iteration Method for Solution of Delay Differential Equations**

GÖKDOĞAN A., MERDAN M., Ertürk V. S.

INTERNATIONAL JOURNAL OF NONLINEAR SCIENCES AND NUMERICAL SIMULATION, vol.14, no.3-4, pp.159-166, 2013 (SCI-Expanded)

XLVIII. **A multistage variational iteration method for approximate-analytic solution of avian-human influenza epidemic model**

GÖKDOĞAN A., MERDAN M., Ertürk V. S.

KUWAIT JOURNAL OF SCIENCE & ENGINEERING, vol.39, no.2A, pp.57-67, 2012 (SCI-Expanded)

XLIX. **A numeric-analytic method for approximating a giving up smoking model containing fractional derivatives**

Ertürk V. S., Zaman G., Momani S.

COMPUTERS & MATHEMATICS WITH APPLICATIONS, vol.64, no.10, pp.3065-3074, 2012 (SCI-Expanded)

L. **The Multi-Step Differential Transform Method and Its Application to Determine the Solutions of Non-Linear Oscillators**

Ertürk V. S., Odibat Z. M., Momani S.

ADVANCES IN APPLIED MATHEMATICS AND MECHANICS, vol.4, no.4, pp.422-438, 2012 (SCI-Expanded)

LI. **Numerical Treatment of Singularly Perturbed Two-Point Boundary Value Problems by Using Differential Transformation Method**

DOĞAN N., Ertürk V. S., AKIN Ö.

DISCRETE DYNAMICS IN NATURE AND SOCIETY, vol.2012, 2012 (SCI-Expanded)

LII. **APPLICATION OF MULTI-STEP DIFFERENTIAL TRANSFORM METHOD FOR THE ANALYTICAL AND NUMERICAL SOLUTIONS OF THE DENSITY DEPENDENT NAGUMO TELEGRAPH EQUATION**

Ertürk V. S., Odibat Z. M., Momani S.

ROMANIAN JOURNAL OF PHYSICS, vol.57, no.7-8, pp.1065-1078, 2012 (SCI-Expanded)

LIII. **The differential transform method and Pade approximants for a fractional population growth model**

Ertürk V. S., YILDIRIM A., Momanic S., Khan Y.

INTERNATIONAL JOURNAL OF NUMERICAL METHODS FOR HEAT & FLUID FLOW, vol.22, no.6-7, pp.791-802, 2012 (SCI-Expanded)

LIV. **An approximate solution of a fractional order differential equation model of human T-cell lymphotropic virus I (HTLV-I) infection of CD4(+) T-cells**

Ertürk V. S., Odibat Z. M., Momani S.

COMPUTERS & MATHEMATICS WITH APPLICATIONS, vol.62, no.3, pp.996-1002, 2011 (SCI-Expanded)

LV. **Application of the modified differential transform method to fractional oscillators**

Abu-Gurra S., Ertürk V. S., Momani S.

KYBERNETES, vol.40, no.5-6, pp.751-761, 2011 (SCI-Expanded)

LVI. **Solutions of a fractional oscillator by using differential transform method**

Al-rabtah A., Ertürk V. S., Momani S.

COMPUTERS & MATHEMATICS WITH APPLICATIONS, vol.59, no.3, pp.1356-1362, 2010 (SCI-Expanded)

LVII. **Application of generalized differential transform method to multi-order fractional differential equations**

Ertürk V. S., Momani S., Odibat Z.

COMMUNICATIONS IN NONLINEAR SCIENCE AND NUMERICAL SIMULATION, vol.13, no.8, pp.1642-1654, 2008 (SCI-Expanded)

LVIII. **Solving systems of fractional differential equations using differential transform method**

Ertürk V. S., Momani S.

JOURNAL OF COMPUTATIONAL AND APPLIED MATHEMATICS, vol.215, no.1, pp.142-151, 2008 (SCI-Expanded)

LIX. **Generalized differential transform method: Application to differential equations of fractional order**

Odibat Z., Momani S., Ertürk V. S.

APPLIED MATHEMATICS AND COMPUTATION, vol.197, no.2, pp.467-477, 2008 (SCI-Expanded)

LX. **A numerical scheme for the solution of viscous Cahn-Hilliard equation**
Momani S., Ertürk V. S.
NUMERICAL METHODS FOR PARTIAL DIFFERENTIAL EQUATIONS, vol.24, no.2, pp.663-669, 2008 (SCI-Expanded)

LXI. **Solutions to the problem of prey and predator and the epidemic model via differential transform method**
Ertürk V. S., Momani S.
KYBERNETES, vol.37, no.8, pp.1180-1188, 2008 (SCI-Expanded)

LXII. **Solving a system of fourth-order obstacle boundary value problems by differential transform method**
Momani S., Ertürk V. S.
KYBERNETES, vol.37, no.1-2, pp.315-325, 2008 (SCI-Expanded)

LXIII. **Generalized differential transform method for solving a space-and time-fractional diffusion-wave equation**
Momani S., Odibat Z., Erturk V. S.
PHYSICS LETTERS A, vol.370, no.5-6, pp.379-387, 2007 (SCI-Expanded)

LXIV. **A reliable algorithm for solving tenth-order boundary value problems**
Erturk V. S., Momani S.
NUMERICAL ALGORITHMS, vol.44, no.2, pp.147-158, 2007 (SCI-Expanded)

LXV. **A numerical study of wall-driven flow of a viscoelastic fluid in rectangular cavities**
Demir H., Ertürk V. S.
Indian Journal of Pure and Applied Mathematics, vol.32, no.10, pp.1581-1590, 2001 (SCI-Expanded)

Articles Published in Other Journals

I. **Solution of a dengue fever model via fractional natural decomposition and modified predictor-corrector methods**
Kumar P., Gao W., Veeresha P., Ertürk V. S., Prakasha D. G., Baskonus H. M.
INTERNATIONAL JOURNAL OF MODELING SIMULATION AND SCIENTIFIC COMPUTING, vol.15, no.1, 2024 (ESCI)

II. **A generalized Caputo-type fractional-order neuron model under the electromagnetic field**
Kumar P., Erturk V. S., Tyagi S., Banas J., Manickam A.
International Journal of Dynamics and Control, vol.11, no.5, pp.2179-2192, 2023 (Scopus)

III. **Dynamics of COVID-19 epidemic via two different fractional derivatives**
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INTERNATIONAL JOURNAL OF MODELING SIMULATION AND SCIENTIFIC COMPUTING, vol.14, no.3, 2023 (ESCI)

IV. **A novel study on a fractional-order heat conduction model for the human head by using the least-squares method**
Kumar P., Ertürk V. S., Harley C.
International Journal of Dynamics and Control, vol.11, no.3, pp.1040-1049, 2023 (Scopus)

V. **Some novel analyses of two different Caputo-type fractional-order boundary value problems**
Bekri Z., Ertürk V. S., Kumar P., Govindaraj V.
Results in Nonlinear Analysis, vol.5, no.3, pp.299-311, 2022 (Scopus)

VI. **A fractional mathematical modeling of protectant and curative fungicide application**
Kumar P., Ertürk V. S., Govindaraj V., Kumar S.
Chaos, Solitons and Fractals: X, vol.8, 2022 (Scopus)

VII. **On the existence and uniqueness of a nonlinear q-difference boundary value problem of fractional order**
Bekri Z., Ertürk V. S., Kumar P.
INTERNATIONAL JOURNAL OF MODELING SIMULATION AND SCIENTIFIC COMPUTING, vol.13, no.01, 2022 (ESCI)

VIII. **Lassa hemorrhagic fever model using new generalized Caputo-type fractional derivative operator**

Kumar P., Ertürk V. S., Yusuf A., Sulaiman T. A.

INTERNATIONAL JOURNAL OF MODELING SIMULATION AND SCIENTIFIC COMPUTING, vol.12, no.06, 2021 (ESCI)

IX. **Dynamics of cholera disease by using two recent fractional numerical methods**

Kumar P., ERTÜRK V. S.

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X. **A mathematical study of a tuberculosis model with fractional derivatives**

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INTERNATIONAL JOURNAL OF MODELING SIMULATION AND SCIENTIFIC COMPUTING, vol.12, no.04, 2021 (ESCI)

XI. **A New Technique to Solve Generalized Caputo-type Fractional Differential Equations with the Example of Computer Virus Model**

Kumar P., ERTÜRK V. S., Kumar A., İNÇ M.

JOURNAL OF MATHEMATICAL EXTENSION, vol.15, no.12, pp.1-23, 2021 (ESCI)

XII. **Comparison of the method of variation of parameters to semi-analytical methods for solving nonlinear boundary value problems in engineering**

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NONLINEAR ENGINEERING - MODELING AND APPLICATION, vol.9, no.1, pp.1-13, 2020 (ESCI)

XIII. **Differential Transform Method for Solving a Boundary Value Problem Arising in Chemical Reactor Theory**

ERTÜRK V. S., Chirko M. A.

MathLAB Journal, 2019 (Peer-Reviewed Journal)

XIV. **A practical Jointed Approach to Functionally Graded Structures by Differential Transform Method**

KELEŞ İ., ERTÜRK V. S.

European Mechanical Science, vol.3, no.3, pp.118-124, 2019 (Peer-Reviewed Journal)

XV. **Asymptotic Behavior of Different Controls of Hepatitis B virus**

Zeb A., Sultan H., ERTÜRK V. S., Zaman G.

Neural, Parallel, and Scientific Computations, 2016 (Peer-Reviewed Journal)

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