

PROF. ESRA KARATAŞ AKGÜL



Kişisel Bilgiler

Eposta: esrakaratas@siirt.edu.tr

Birimi : UYGULAMALI MATEMATİK

Dahili : -

Makaleler (YOKSIS)

6

AKGÜL ALİ,KARATAŞ AKGÜL ESRA,İNÇ MUSTAFA,Şahin Korhan

,

AKGÜL ALİ,KARATAŞ AKGÜL ESRA,İNÇ MUSTAFA,Bariş Örcan

,

Khan Yasir,AKGÜL ALİ,faraz Naeem,İNÇ MUSTAFA,KARATAŞ AKGÜL ESRA,Baleanu Dumitru
,<http://aip.scitation.org/doi/abs/10.1063/1.5043777>

HASHEMİ MİR SAJJAD,İNÇ MUSTAFA,KARATAŞ AKGÜL ESRA,AKGÜL ALİ

,

AKGÜL ALİ,KARATAŞ AKGÜL ESRA

,

AKGÜL ALİ,KARATAŞ AKGÜL ESRA,Baleanu Dumitru
,<http://aip.scitation.org/doi/abs/10.1063/1.5043775>

7

Invariant investigation on the system of Hirota-Satsuma coupled KdV equation

MS Hashemi, Z Balmeh, AKGÜL ALİ, KARATAŞ AKGÜL ESRA, BALEANU DUMITRU
AIP Conference Proceedings,<https://doi.org/10.1063/1.5043776>

- 8 **Solving a New Type of Fractional Differential Equation by Reproducing Kernel Method**
KARATAŞ AKGÜL ESRA, AKGÜL ALİ
Springer International Publishing,https://doi.org/10.1007/978-3-030-62299-2_3
- 9 **A New Application of the Sumudu Transform for the Falling Body Problem**
KARATAŞ AKGÜL ESRA, AKGÜL ALİ, Alqahtani Rubayyi T.
Journal of Function Spaces,<http://dx.doi.org/10.1155/2021/9702569>
- 10 **A novel method for analysing the fractal fractional integrator circuit**
AKGÜL ALİ, Ahmad Shabir, Ullah Aman, BALEANU DUMITRU, KARATAŞ AKGÜL ESRA
Alexandria Engineering Journal,<http://dx.doi.org/10.1016/j.aej.2021.01.061>
- 11 **A Novel Method for Solutions of Fourth-Order Fractional Boundary Value Problems**
AKGÜL ALİ, KARATAŞ AKGÜL ESRA
Fractal and Fractional,<https://www.mdpi.com/2504-3110/3/2/33>
- 12 **A Novel Method for Solving Nonlinear Jerk Equations**
KARATAŞ AKGÜL ESRA, AKGÜL ALİ
Springer International Publishing,https://doi.org/10.1007/978-3-030-62299-2_2
- 13 **A novel method for the space and time fractional Bloch-Torrey equations**
KARATAŞ AKGÜL ESRA
Thermal Science,<http://www.doiserbia.nb.rs/Article.aspx?ID=0354-98361700293A>
- 14 **Analysis of e-cigarette smoking model by a novel technique**
KARATAŞ AKGÜL ESRA, AKGÜL ALİ
Methods of Mathematical Modeling,<https://doi.org/10.1016/C2021-0-00445-4>
- 15 **Analysis Of Hidden Attractors Of Non-Equilibrium Fractal-Fractional Chaotic System With One Signum Function**
Zhang Lei, Ahmad Shabir, Ullah Aman, AKGÜL ALİ, KARATAŞ AKGÜL ESRA
FRACTALS (fractals),
- 16 **Analysis of respiratory mechanics models with different kernels**
KARATAŞ AKGÜL ESRA, AKGÜL ALİ, Jamshed Wasim, Rehman Zulfiqar, Nisar Kottakkaran Sooppy, Alqahtani Mohammed S., Abbas Mohamed
Walter de Gruyter GmbH,<http://dx.doi.org/10.1515/phys-2022-0027>
- 17 **Analysis of the Fractal-Fractional Modelling of Immune-Tumor Problem**
Partohaghighi Mohammad, Rubasinghe Kalani, AKGÜL ALİ, KARATAŞ AKGÜL ESRA
International Journal of Applied and Computational Mathematics,
- 18 **Analysis of the Fractional Differential Equations Using Two Different Methods**
Partohaghighi Mohammad, AKGÜL ALİ, KARATAŞ AKGÜL ESRA, Attia Nourhane, BAYRAM MUSTAFA
symmetry,
- 19 **Analytic approximate solutions for fluid flow in the presence of heat and mass transfer**

- 19 KILIÇMAN ADEM, Khan Yasir, AKGÜL ALİ, Naeem Faraz, KARATAŞ AKGÜL ESRA, İNÇ MUSTAFA
Thermal Science,<http://dx.doi.org/10.2298/tsci171117029k>
- 20 **Comparison on solving a class of nonlinear systems of partial differential equations and multiple solutions of second order differential equations**
KARATAŞ AKGÜL ESRA, AKGÜL ALİ, Khan Yasir, BALEANU DUMITRU
Mathematical Methods in Engineering: Theoretical Aspects,https://doi.org/10.1007/978-3-319-91065-9_8
- 21 **COMPUTATIONAL SOLUTIONS of FRACTIONAL ELECTRIC SYMMETRIC CIRCUITS by SUMUDU TRANSFORMATION**
KARATAŞ AKGÜL ESRA, Jamshed Wasim, SHERZOD SHUKHRATOVICH ABDULLAEV, FETHI BIN MUHAMMED BELGACEM, SAYED M. EL DIN
FRACTALS-COMPLEX GEOMETRY PATTERNS AND SCALING IN NATURE AND SOCIETY,<https://doi.org/10.1142/S0218348X23401965>
- 22 **Computational Solutions of Fractional Electric Symmetric Circuits by Sumudu Transformation**
KARATAŞ AKGÜL ESRA, Jamshed Wasim, FETHI BIN MUHAMMED BELGACEM, SAYED M. EL DIN, SHERZOD SHUKHRATOVICH ABDULLAEV
Fractals,<https://doi.org/10.1142/S0218348X23401965>
- 23 **Fractional modeling of COVID-19 pandemic model with real data from Pakistan under the ABC operator**
Zarin Rahat, Khan Amir, . Aurangzeb, AKGÜL ALİ, KARATAŞ AKGÜL ESRA, Humphries Usa Wannasingha
AIMS Mathematics,
- 24 **Frequency Analysis for Functionally Graded Material Cylindrical Shells: A Significant Case Study**
Anwar Rabia, Ghamkhar Madiha, Khan Muhammad Imran, Safdar Rabia, Iqbal Muhammad Zafar, Jamshed Dr-Wasim, KARATAŞ AKGÜL ESRA, Prakash M
MATHEMATICAL PROBLEMS IN ENGINEERING,
- 25 **Impact of gold nanoparticles along with Maxwell velocity and Smoluchowski temperature slip boundary conditions on fluid flow: Sutterby model**
Sajid Tanveer, Jamshed Wasim, Shahzad Faisal, KARATAŞ AKGÜL ESRA, Nisar Kottakkaran Sooppy, Eid Mohamed R.
Chinese Journal of Physics,<http://dx.doi.org/10.1016/j.cjph.2021.11.011>
- 26 **Keller box study for inclined magnetically driven Casson nanofluid over a stretching sheet: single phase model**
Jamshed Wasim, KARATAŞ AKGÜL ESRA, Nisar Kottakkaran Sooppy
Physica Scripta,<http://dx.doi.org/10.1088/1402-4896/abecfa>
- 27 **Kernel Functions and New Applications of an Accurate Technique**
Wannan Rania, AKGÜL ALİ, KARATAŞ AKGÜL ESRA, Hasan Hasan Eyad, Asad Jihad
information sciences letter,<http://dx.doi.org/10.18576/isl/120356>
- 28 **Laplace Transform Method for Economic Models with Constant Proportional Caputo Derivative**
KARATAŞ AKGÜL ESRA, AKGÜL ALİ, Baleanu Dumitru
Fractal and Fractional,<https://www.mdpi.com/2504-3110/4/3/30>
- 29 **Mechanical improvement in solar aircraft by using tangent hyperbolic single-phase nanofluid**

- 29 Hussain Syed M., Jamshed Wasim, KARATAŞ AKGÜL ESRA, Mohd Nasir Nor Ain Azeany
Proceedings of the Institution of Mechanical Engineers, Part E: Journal of Process Mechanical Engineering,<http://dx.doi.org/10.1177/09544089211059377>
- 30 **Micropolar fluid past a convectively heated surface embedded with nth order chemical reaction and heat source/sink**
Sajid Tanveer, Jamshed Wasim, Shahzad Faisal, Eid Mohamed R., Alshehri Hashim M, Goodarzi Marjan, KARATAŞ AKGÜL ESRA, Nisar Kottakkaran Sooppy
Physica Scripta,<http://dx.doi.org/10.1088/1402-4896/ac0f3e>
- 31 **New applications of Sumudu transform method with different fractional derivatives**
KARATAŞ AKGÜL ESRA, AKGÜL ALİ
International Journal of Applied and Computational Mathematics,
- 32 **New Illustrative Applications of Integral Transforms to Financial Models with Different Fractional Derivatives**
KARATAŞ AKGÜL ESRA, AKGÜL ALİ, YAVUZ MEHMET
Chaos, Solitons & Fractals,<http://dx.doi.org/10.1016/j.chaos.2021.110877>
- 33 **New Numerical Method for Solving Tenth Order Boundary Value Problems**
AKGÜL ALİ, KARATAŞ AKGÜL ESRA, Baleanu Dumitru, İNÇ MUSTAFA
Mathematics,<http://www.mdpi.com/2227-7390/6/11/245>
- 34 **New numerical simulation of the oscillatory phenomena occurring in the bioethanol production process**
PARTOHAGHIGHI MOHAMMAD, AKGÜL ALİ, KARATAŞ AKGÜL ESRA, Asad Jihad, Safdar Rabia
BIOMASS CONVERSION AND BIOREFINERY,<https://doi.org/10.1007/s13399-021-01949-1>
- 35 **New reproducing kernel function in the reproducing kernel Sobolev spaces**
AKGÜL ALİ, KARATAŞ AKGÜL ESRA, Sahin Korhan
AIMS Mathematics,<http://www.aimspress.com/article/10.3934/math.2020032>
- 36 **New reproducing kernel functions in the reproducing kernel Sobolev space**
AKGÜL ALİ, KARATAŞ AKGÜL ESRA, Sahin Korhan
AIMS Mathematics,<http://www.aimspress.com/article/10.3934/math.2020032>
- 37 **New reproducing kernel functions in the reproducing kernel Sobolev spaces**
AKGÜL ALİ, KARATAŞ AKGÜL ESRA, Korhan Şahin
AIMS MATHEMATICS,<http://www.aimspress.com/article/10.3934/math.2020032>
- 38 **Numerical investigation of generalized perturbed Zakharov–Kuznetsov equation of fractional order in dusty plasma**
Ali Nasir, Nawaz Rashid, Zada Laiq, Nisar Kottakkaran Sooppy, Ali Zahid, Jamshed Wasim, Hussain Syed M, KARATAŞ AKGÜL ESRA
Waves in Random and Complex Media,
- 39 **Numerical solutions of fractional differential equations of Lane-Emden type by an accurate technique**
AKGÜL ALİ, İNÇ MUSTAFA, KARATAŞ ESRA, Dumitru Baleanu
Advances in Difference Equations,<http://www.advancesindifferenceequations.com/content/2015/1/220>

- 40 Numerical treatment on one-dimensional hyperbolic telegraph equation by the method of line-group preserving scheme**
Hashemi Mir Sajjad, İNÇ MUSTAFA, KARATAŞ AKGÜL ESRA, Darvishi Elham
The European Physical Journal Plus, <http://link.springer.com/10.1140/epjp/i2019-12500-y>
- 41 On an improved computational solution for the 3D HCIR PDE in finance**
Soleymani Fazlollah, AKGÜL ALİ, KARATAŞ AKGÜL ESRA
Analele Stiintifice ale Universitatii Ovidius Constanta-Seria
Matematica, <https://content.sciendo.com/view/journals/auom/27/3/article-p207.xml>
- 42 On soliton solutions of the Wu-Zhang system**
İNÇ MUSTAFA, kilic bülent, KARATAŞ ESRA, qurashi maysa, baleanu dimitru, Tchier Firouz
Open Physics, <https://www.degruyter.com/view/j/phys.2016.14.issue-1/phys-2016-0004/phys-2016-0004.xml>
- 43 On solutions of gross domestic product model with different kernels**
KARATAŞ AKGÜL ESRA, Jamshed Wasim, Nisar Kottakkaran Sooppy, Elagan SK, Alshehri Nawal A
Alexandria Engineering Journal,
- 44 Recovering source term of the time-fractional diffusion equation**
PARTOHAGHIGHI MOHAMMAD, KARATAŞ AKGÜL ESRA, WEBER GERHARD WILHELM, YAO GUANGMING, AKGÜL ALİ
Pramana, <http://dx.doi.org/10.1007/s12043-021-02183-0>
- 45 Remarks on Fractal-Fractional Malkus Waterwheel Model with Computational Analysis**
Guran Liliana, KARATAŞ AKGÜL ESRA, AKGÜL ALİ, Bota Monica-Felicia
Symmetry,
- 46 REPRODUCING KERNEL HILBERT SPACE METHOD}{REPRESENTATION FOR THE REPRODUCING KERNEL HILBERT SPACE METHOD FOR A NONLINEAR SYSTEM**
KARATAŞ AKGÜL ESRA, AKGÜL ALİ, Khan Yasir, Baleanu Dumitru
Hacettepe Journal of Mathematics and Statistics, <http://www.hjms.hacettepe.edu.tr/uploads/968d9daf-74bb-4d41-80d8-5415737a98d8.pdf>
- 47 Reproducing Kernel Functions**
AKGÜL ALİ, KARATAŞ AKGÜL ESRA
Differential Equations-Theory and Current Research, <https://doi.org/10.5772/intechopen.75206>
- 48 Reproducing kernel functions for difference equations**
AKGÜL ALİ, İNÇ MUSTAFA, KARATAŞ ESRA
Discrete and Continuous Dynamical Systems - Series
S, <http://www.aims sciences.org/journals/displayArticlesnew.jsp?paperID=12026>
- 49 Reproducing kernel Hilbert space method for nonlinear boundary-value problems**
KARATAŞ AKGÜL ESRA
MATHEMATICAL METHODS IN THE APPLIED SCIENCES, <http://doi.wiley.com/10.1002/mma.5102>
- 50 Reproducing kernel Hilbert space method for solutions of a coefficient inverse problem for the kinetic equation**
KARATAŞ AKGÜL ESRA

- 50 An International Journal of Optimization and Control: Theories Applications (IJOCTA),<http://ijocta.balikesir.edu.tr/index.php/files/article/view/568>
- 51 **Solitary Wave Solutions for the Sawada-Kotera Equation**
İNÇ MUSTAFA, kilic bülent, KARATAŞ AKGÜL ESRA, AKGÜL ALİ
Journal of Advanced Physics, <http://www.ingentaconnect.com/content/10.1166/jap.2017.1318>
- 52 **Solutions of Nonlinear System of Differential Equations by Reproducing Kernel Hilbert Space Method**
KARATAŞ AKGÜL ESRA
Journal of Advanced Physics, <http://www.ingentaconnect.com/content/10.1166/jap.2018.1394>
- 53 **Solutions of nonlinear systems by reproducing kernel method**
AKGÜL ALİ, Khan Yasir, KARATAŞ AKGÜL ESRA, BALEANU DUMITRU, Al Qurashi Maysaa Mohamed
The Journal of Nonlinear Sciences and Applications, <http://dx.doi.org/10.22436/jnsa.010.08.33>
- 54 **Solutions of the linear and nonlinear differential equations within the generalized fractional derivatives**
KARATAŞ AKGÜL ESRA
CHAOS,
- 55 **Solving Higher-Order Fractional Differential Equations by Reproducing Kernel Hilbert Space Method**
KARATAŞ AKGÜL ESRA, Örcan Barış, AKGÜL ALİ
Journal of Advanced Physics, <http://www.ingentaconnect.com/content/10.1166/jap.2018.1392>
- 56 **Solving the nonlinear system of third-order boundary value problems**
KARATAŞ AKGÜL ESRA, AKGÜL ALİ, Khan Yasir, BALEANU DUMITRU
Mathematical Methods in Engineering: Applications in Dynamics of Complex Systems, https://doi.org/10.1007/978-3-319-90972-1_8
- 57 **Sumudu Transform for Some Implementations with a New Kernel**
KARATAŞ AKGÜL ESRA, AKGÜL ALİ, Jamshed Wasim
Progress in Fractional Differentiation and Applications, <http://dx.doi.org/10.18576/pfda/090206>

Bildiriler (YOKSIS)

- 1 **A geometric approach for the one-dimensional hyperbolic telegraph equation with variable coefficient**
KARATAŞ AKGÜL ESRA, İNÇ MUSTAFA, Hashemi Mir Sajjad
International Conference on Mathematics and Mathematics Education ,
- 2 **A Numerical Investigation on Burgers Equation MOL-GPS method**
Hashemi Mir Sajjad, İNÇ MUSTAFA, KARATAŞ AKGÜL ESRA, AKGÜL ALİ
International workshop on Mathematical Methods in Engineering ,
- 3 **A geometric approach for the one dimensional hyperbolic telegraph equation**
KARATAŞ ESRA, İNÇ MUSTAFA, Hashemi M Sajjad
-International Conference on Mathematics and Mathematics Education (ICMME-2016) ,

2

4 A homotopy perturbation solution for solving highly nonlinear fluid flow problem arising in mechanical

Khan Yasir, AKGÜL ALİ, Baleanu Dumitru, KARATAŞ AKGÜL ESRA, Faraz Naeem, İNÇ MUSTAFA
Icnaam 2017 ,

5 A New Method for a Nonlinear System of Differential Equations

AKGÜL ALİ, KARATAŞ AKGÜL ESRA, Barış Örcan
CMES 2018 ,

6 A novel method for coefficient inverse problem for the kinetic equation

KARATAŞ AKGÜL ESRA, AKGÜL ALİ, Şahin Korhan
CMES 2018 ,

7 A novel method for nonlinear systems of higher-order boundary value problems

KARATAŞ AKGÜL ESRA, AKGÜL ALİ
Caucasian Mathematics Conference (CMC-II) ,

8 A Novel Method for the Solution of Blasius Equation in Semi-Infinite Domain

KARATAŞ AKGÜL ESRA, AKGÜL ALİ
International Conference on Mathematical Modelling in Applied Sciences, ICMMAS'17A ,

9 Bernoulli ve Riccati diferansiyel denklemlerinin Adomian ayrışım metodu ile sayısal çözümleri

KARATAŞ ESRA
Fırat Üniversitesi Matematik Bölümü Öğrenci Çalıştayı ,

10 Comparison on Solving a Class of Nonlinear Systems of Partial Differential Equations

AKGÜL ALİ, Khan Yasir, KARATAŞ AKGÜL ESRA
International Conference on Mathematics and Mathematics Education (ICMME-2017), Harran University,
Şanlıurfa, 11-13 May 2017 ,

11 dzgddgd

KARATAŞ AKGÜL ESRA
sdggsd sdgsdg ,

12 Group preserving scheme for the Burgers equation

KARATAŞ ESRA, İNÇ MUSTAFA, Hashemi M Sajjad
-ICNAAM 2016, 19-25 September 2016, Rodos Palace Hotel, Rhodes, Greece ,

13 Invariant investigation on the system of Hirota-Satsuma Coupled KdV equation

Hashemi Mir Sajjad, Baleanu Dumitru, Balmeh Zehra, KARATAŞ AKGÜL ESRA, AKGÜL ALİ
ICNAAM 2017 ,

14 On Soliton Solutions of the Kaup Boussinesq Equation by Hirota Bilinear Method

KARATAŞ ESRA, İNÇ MUSTAFA
- International Conference on Advances in Applied Mathematics and Mathematical Physics. , Yıldız
Technical University, Istanbul. ,

15 On Solutions of Higher-Order Fractional Differential Equations

- 15 AKGÜL ALİ,KARATAŞ AKGÜL ESRA
CMES 2018 ,
- 16 **On Solutions of Nonlinear Boundary-Value Problems**
KARATAŞ AKGÜL ESRA,AKGÜL ALİ,Korhan Şahin
CMES 2018 ,
- 17 **Reproducing kernel method for nonlinear system of high-order boundary value problems**
AKGÜL ALİ,KARATAŞ AKGÜL ESRA,DİNÇ YAVUZ
The 22th Seminar on Mathematical Analysis Its Applications ,
- 18 **Reproducing Kernel Method for Nonlinear Systems of Higher–Order Boundary Value Problems**
AKGÜL ALİ,KARATAŞ AKGÜL ESRA,dinc yavuz
22th seminar on mathematical analysis and its applications ,
- 19 **Reproducing kernel method for strongly non-linear equatio**
AKGÜL ALİ,Baleanu Dumitru,KARATAŞ AKGÜL ESRA
ICNAAM 2017 ,
- 20 **Soliton Solutions of the Sawada Kotera Equation by Hirota Bilinear Method**
KARATAŞ ESRA,İNÇ MUSTAFA
- International Congress in Honour of Professor Ravi P. Agarwal, Uludağ University., 2014, Bursa ,
- 21 **Solutions of Initial Value Problems by Reproducing Kernel Method and Group Preserving Scheme**
AKGÜL ALİ,KARATAŞ AKGÜL ESRA,mustafa idrees sedeeq
International Workshop On Mathematical Methods In Engineering ,
- 22 **Solutions of Nonlinear Differential Equations by Reproducing Kernel Method and Group Preserving Scheme**
AKGÜL ALİ,KARATAŞ AKGÜL ESRA,raheem salar ameen
International Workshop On Mathematical Methods In Engineering ,
- 23 **Some new applications of reproducing kernel method**
AKGÜL ALİ,KARATAŞ AKGÜL ESRA
Caucasian Mathematics Conference (CMC-II) ,
- 24 **zxgsdgsfd fff**
KARATAŞ AKGÜL ESRA
dgddsggd sgdgdg ,