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Education

- ✓ MS, Applied Mathematics - Numerical Analysis, University of Mazandaran - 2010
- ✓ PhD, Applied Mathematics - Numerical Analysis, University of Mazandaran - 2014

Courses

- | | |
|--------------------------------------|---|
| 1. Fundamental of numerical analysis | 2. Mathematics1 |
| 3. Numerical calculations | 4. Differential equations with fraction derivatives |
| 5. Mathematics 2 | 6. Mathematics 1 |

Master Thesis

1. Solving fractional differential equations based on artificial neural network by using Legendre polynomials

حسن كاظمي, [Haleh Tajadodi, Maryam Mojarab, Ali Hatami, Omid Zabeti]

نیمسال دوم سال تحصیلی 1401

2. Some existence and uniqueness results of Bagley-Trovik differential equation in partially ordered spaces and their improvement

محمد نکھت, [Hamid Baghani, Haleh Tajadodi]

نیمسال دوم سال تحصیلی 00-01

3. Using Chebyshev polynomial to solve a variety of fractional integral equations

[Haleh Tajadodi] مرضیه اربابی

نیمسال دوم سال تحصیلی 99-00

4. Varitional iteration method for solving linear and nonlinear differential equations of fractional order

[Haleh Tajadodi] مهدی سارانی

نیمسال اول سال تحصیلی 99-00

5. The use of triangular functions for solving various of differential equations with fractional derivatives

[Haleh Tajadodi, Hamid Baghani] ابراهیم نصرتی

نیمسال دوم سال تحصیلی 98-99

6. Some of numarical methods for solving differential

[Haleh Tajadodi] اسمه جدگال

نیمسال دوم سال تحصیلی 97-98

7. Genocchi polynomials for solving a class of fractional differential equations

[Haleh Tajadodi, G J] فریبا ریگی

نیمسال دوم سال تحصیلی 97-98

8. analytical solutions of partial differential equations of fractional order

[Haleh Tajadodi, G J] سهیمه فرخ زاد

نیمسال اول سال تحصیلی 97-98

9. Solving fractional differential equations based on operational matrices

[Haleh Tajadodi] محمود شیبک

نیمسال اول سال تحصیلی 96-97

Journals Papers

2024

1. An optimization method for solving fractional oscillation equation

Haleh Tajadodi, Hasib Khan, Jihad Alzabut, J.F. Gomez-Aguilar

Results in Physics Volume: (57) 107403-1 - 107403-8

2023

2. FRACTIONAL VARIATIONAL PROBLEM INVOLVING INDEFINITE INTEGRALS AND NONSINGULAR KERNELS

HOSSEIN JAFARI, Haleh Tajadodi, SEYED RABI MOUSAVIAN KHATIR, VAN THINH NGUYEN

FRACTALS-COMPLEX GEOMETRY PATTERNS AND SCALING IN NATURE AND SOCIETY Volume: (31) 2340048 - 2340048

2022

3. Genocchi polynomials as a tool for solving a class of fractional optimal control problems

Haleh Tajadodi, Hossein Jafari, Mahluli Naisbitt Ncube

International Journal of Optimization and Control: Theories and Applications Volume: (12) 160 - 168

4. Variable-order Mittag-Leffler fractional operator and application to mobile-immobile advection-dispersion model

Haleh Tajadodi

AEJ - Alexandria Engineering Journal Volume: (61) 3719 - 3728

5. Spectral method for third-kind Volterra integral equation

Haleh Tajadodi

Journal of Mathematical Extension Volume: (15) 1 - 17

2021

6. Exact solutions of conformable fractional differential equations

Haleh Tajadodi, Zareen A. Khan, Ateeq ur Rehman Irshad, J.F. Gomez-Aguilar, Aziz Khan, Hasib Khan

Results in Physics Volume: (22) 1 - 6

7. Fractional Order Volterra Integro-Differential Equation With Mittag-Leffler Kernel

Hasib Khan, Thabet Abdeljawad, JF Gomez-Aguilar, Haleh Tajadodi, Aziz Khan

FRACTALS-COMPLEX GEOMETRY PATTERNS AND SCALING IN NATURE AND SOCIETY Volume: (29) 2150154-1 - 2150154-11

8. Optimal control problems with Atangana-Baleanu fractional derivative

Haleh Tajadodi, Aziz Khan, Jose Francisco Gomez-Aguilar, Hasib Khan

OPTIMAL CONTROL APPLICATIONS and METHODS Volume: (42) 96 - 109

2020

9. Various types of shadowing and specification properties of semigroup actions

Zahra Shabani Siahkalde, Haleh Tajadodi

University Politehnica of Bucharest Scientific Bulletin-Series A-Applied Mathematics and Physics Volume: (82) 107 - 120

10. Existence and data-dependence theorems for fractional impulsive integro-differential system

Hasib Khan, Zareen A khan, Haleh Tajadodi, Aziz Khan

Advances in Difference Equations Volume: (2020) 1 - 11

11. Approximate technique for solving fractional variational problems

Haleh Tajadodi, Hossein Jafari, Nematollah Kadkhoda, Mustafa Inc

PRAMANA-JOURNAL OF PHYSICS Volume: (94) 1 - 8

12. Efficient technique for solving variable order fractional optimal control problems

Haleh Tajadodi

AEJ - Alexandria Engineering Journal Volume: (59) 5179 - 5185

13. A numerical approach of fractional advection-diffusion equation with Atangana-Baleanu derivative

Haleh Tajadodi

CHAOS SOLITONS and FRACTALS Volume: (130) 1 - 8

2019

14. A numerical scheme for constrained optimal control problems

Zahra Shabani Siahkalde, Haleh Tajadodi

international journal of industrial electronics, control and optimization Volume: (2) 233 - 238

15. Numerical solutions of fractional chemical kinetics system

, Haleh Tajadodi

Nonlinear Dynamics and Systems Theory Volume: (19) 200 - 208

16. Numerical Approach of Fractional Abel Differential Equation by Genocchi Polynomials

Fariba Rigi, Haleh Tajadodi

International Journal of Applied and Computational Mathematics Volume: (5) 1 - 11

2018

17. New method for solving a class of fractional partial differential equations with applications

Hossein Jafari, Haleh Tajadodi

Thermal Science Volume: (22) 277 - 286

2017

18. Analysis of Riccati Differential Equations within a New Fractional Derivative without Singular Kernel

Hossein Jafari, Atena Lia, Haleh Tajadodi, Dumitru Baleanu

FUNDAMENTA INFORMATICA Volume: (151) 161 - 171

2016

19. Electro-spunorganic nanofibers elaboration process investigations using BPs Operational Matrices

- -, Haleh Tajadodi

Iranian Journal of Mathematical Chemistry Volume: (7) 19 - 27

2015

20. A decomposition method for solving diffusion equations via local fractional time derivative

- -, Haleh Tajadodi, Sarah Jane JOHNSTON

Thermal Science Volume: (19) 123 - 129

21. A numerical approach for fractional order Riccati differential equation using B-spline operational matrix

Hossein Jafari, Haleh Tajadodi, - -

Fractional Calculus and Applied Analysis Volume: (18) 387 - 399

2014

22. Application of a homogeneous balance method to exact solutions of nonlinear fractional evolution equations

Hosain Jafari, Haleh Tajadodi,

Journal of Computational and Nonlinear Dynamics Volume: (9) 021019-1 - 021019-4

23. FRACTIONAL ORDER OPTIMAL CONTROL PROBLEMS VIA THE OPERATIONAL MATRICES OF BERNSTEIN POLYNOMIALS

- -, Haleh Tajadodi

University Politehnica of Bucharest Scientific Bulletin-Series A-Applied Mathematics and Physics Volume: (76) 115 - 128

2013

24. EXACT SOLUTIONS OF BOUSSINESQ AND KdV-mKdV EQUATIONS BY FRACTIONAL SUB-EQUATION METHOD

- -, Haleh Tajadodi, - -, , , ,

Romanian Reports in Physics Volume: (65) 1119 - 1124

25. Fractional Subequation Method for Cahn-Hilliard and Klein-Gordon Equations

- -, Haleh Tajadodi, , - -

ABSTRACT AND APPLIED ANALYSIS Volume: (2013) 1 - 5

26. A modified variational iteration method for solving fractional Riccati differential equation by Adomian polynomials

- --, Haleh Tajadodi, - -

Fractional Calculus and Applied Analysis Volume: (16) 109 - 122

27. Homotopy analysis method for solving Abel differential equation of fractional order

- -, , Haleh Tajadodi,

CENTRAL EUROPEAN JOURNAL OF PHYSICS Volume: (10) 1523 - 1527

28. Fractional sub-equation method for the fractional generalized reaction Duffing model and nonlinear fractional Sharma-Tasso-Olver equation

- -, Haleh Tajadodi, , , ,

CENTRAL EUROPEAN JOURNAL OF PHYSICS Volume: (11) 1482 - 1486

29. Numerical solution of fractional differential equations by using fractional B-spline

- -, , , Haleh Tajadodi

CENTRAL EUROPEAN JOURNAL OF PHYSICS Volume: (11) 1372 - 1376

2011

30. Homotopy analysis method for solving a couple of evolution equations and comparison with Adomians decomposition method

- -, Haleh Tajadodi,

Waves in Random and Complex Media Volume: (21) 657 - 667

31. Solving a multi-order fractional differential equation using homotopy analysis method

- -, , Haleh Tajadodi

JOURNAL OF KING SAUD UNIVERSITY SCIENCE Volume: (23) 151 - 155

2010

32. Convergence of Homotopy Perturbation Method for Solving Integral Equations

- -, - -, Haleh Tajadodi

Thai Journal of Mathematics Volume: (8) 511 - 520

Conferences Papers

2023

1. Numerical method for Solving stochastic fractional integral-differential equations

1st Conference on Mathematical Modeling in Dynamical Systems and its Applications

Haleh Tajadodi, Mahsa Zaboli

2. Numerical solution of fractional differtial equation using artificial nerual network method

1st Conference on Mathematical Modeling in Dynamical Systems and its Applications

Hassan Kazemi, Haleh Tajadodi

2021

3. Numerical scheme for solving fractional integro-differential equations with Mittag-Leffler Kernel

9th (Online) International Conference on Applied Analysis and Mathematical Modeling

Haleh Tajadodi, Zohreh Bagheri

4. VARIABLE ORDER FRACTIONAL OPTIMAL CONTROL PROBLEMS

2nd Online Conference on Nonlinear Dynamics and Complexity

Haleh Tajadodi

2019

5. Numerical solutions of mathematical model on fractional Lotka-Volterra equations

First Annual National Conference on Biomathematics

Haleh Tajadodi

6. Numerical solution for a class of nonlinear variable order fractional differential equations

International Conference on Computational Methods In Applied Sciences

Haleh Tajadodi

2018

7. Numerical solution of fractional pantograph equations by using Bernstein polynomials

The 7th Seminar on Numerical Analysis and its Applications

, Haleh Tajadodi

8. Solving fractional differential equations using operational matrix of Genocchi polynomials

2nd Conference on Dynamical Systems and Geometric Theories

Fariba Rigi, Haleh Tajadodi

2017

9. A numerical technique for solving fractional differential equation with the new fractional derivative

The 9th International Conference on Mathematics

Haleh Tajadodi

2016

10. Exact solutions of (2 1)-dimensional breaking soliton and reaction-diffusion equation of fractional order

First International Conference on Combinatorics, Cryptography and Computation

Haleh Tajadodi