

Muhammad Sajid Iqbal

Associate Professor

Military College of Signals

Email: m_sajid_iqbal@mcs.edu.pk

Contact:



About

Dr. Muhammad Sajid Iqbal is working as Associate Professor in the Military College of Signals. Dr. Muhammad Sajid Iqbal has a PhD in Nonlinear Partial Differential Equations. Dr. Muhammad Sajid Iqbal has published 88 research articles & conference papers having a citation count of 957, carried out 0 projects and filed 0 intellectual property.

Qualifications

PhD in Nonlinear Partial Differential Equations Technische Universität Graz , Austria	2008 - 2011
MSc in Applied Mathematics UET Lahore , Pakistan	2003 - 2005
BSc in Mathematics and Physics BZU, Multan , Pakistan	1997 - 2003

Experience

Associate Professor Military College of Signals	2023- Present
Associate Professor Military College of Signals	2023 - 2023
Associate Professor Military College of Signals	2023 - 2023
Associate Professor Military College of Signals	2022 - 2023
Assistant Professor (Mathematics) The University of Lahore , Defense Road Lahroe	2017 - 2022
HOD Minhaj University Lahore , Green Town Lahore	2017 - 2017
Post Doc Fello TU Graz Austria , Graz, Austria	2017 - 2017
Assistant Professor Preston University Islambad , H-8/1 Islamabad	2012 - 2013
PhD Research Fellow and follow up TU Graz , Graz Austria	2008 - 2012
Assistant Professor/E-Lecturer/Tutor Virtual University of Pakistan , Defense Road Lahore	2006 - 2017

Research Articles

Analysis and exact solutions for reaction-diffusion predator-prey system with prey-taxis by $\phi 6$ method <i>Rishi Naeem Ali Hasan Ali Mustafa Inc Muhammad Sajid Iqbal</i> <i>Nonlinear Analysis: Modelling and Control</i> , Volume 30, No. 4, Pages 732-746 Impact Factor: 2.000 Quartile: 1 DOI: https://doi.org/10.15388/namc.2025.30.42236	2025
Numerical and Analytical Study for the Stochastic Spatial Dependent Prey-Predator Dynamical System <i>Muhammad Zafarullah Baber Muhammad Waqas Yasin Changjin Xu Nauman Ahmed Muhammad Sajid Iqbal</i>	2024

Impact Factor: 1.900 | **Quartile:** 3

DOI: 10.1115/1.4066038

Computer modeling: A gateway to novel advancements in solving real-life problems

2024

Ali Raza Muhammad Rafiq Nauman Ahmed Muhammad Sajid Iqbal Shahram Rezapour Mustafa Inc

Biomedical Signal Processing and Control, Volume 95, Part B, Article Number 106414

Impact Factor: 4.900 | **Quartile:** 1 | **Citations:** 2

DOI: 10.1016/j.bspc.2024.106414

Pattern Formation and analysis of reaction–diffusion ratio-dependent prey–predator model with

2024

harvesting in predator

Nauman Ahmed Muhammad Waqas Yasin Dumitru Baleanu Ovidiu Tintareanu-Mircea Muhammad Sajid Iqbal Ali Akgül

Chaos, Solitons & Fractals, Volume 186, Article Number 115164

Impact Factor: 5.300 | **Quartile:** 1 | **Citations:** 6

DOI: 10.1016/j.chaos.2024.115164

Analysis of multi-wave solitary solutions of (2+1)-dimensional coupled system of Boiti–Leon–

2024

Pempinelli

Sidra Ghazanfar Nauman Ahmed Muhammad Sajid Iqbal Syed Mansoor Ali Ali Akgül Shah Muhammad Mubasher Ali Murad Khan Hassani

Scientific Reports, Volume 14, Article Number: 20234

Impact Factor: 3.800 | **Quartile:** 1

DOI: 10.1038/s41598-024-67698-z

Optimum study of fractional polio model with exponential decay kernel

2024

Muhammad Sajid Iqbal Muhammad Shahzad Nauman Ahmed Ali Akgül Madiha Ghafoor Murad Khan Hassani

Scientific Reports, Volume 14, Issue 1, Article Number: 17237

Impact Factor: 3.800 | **Quartile:** 1 | **Citations:** 1

DOI: 10.1038/s41598-024-64611-6

Modulation instability and optical wave profiles for the conformable Schrödinger–Poisson dynamical

2024

system

Muhammad Waqas Yasin Muhammad Zafarullah Baber Muskan Munir Abaker A. Hassaballa Mustafa Inc Muhammad Sajid Iqbal Shahram Rezapour

Optical and Quantum Electronics, Volume 56, Article Number 1294

Impact Factor: 3.300 | **Quartile:** 2 | **Citations:** 1

DOI: 10.1007/s11082-024-07015-0

Analysis of a diffusive chemical reaction model in three space dimensions

2024

Nauman Ahmed Javaid Ali Ali Akgül Y. S. Hamed Muhammad Sajid Iqbal A. F. Aljohani Muhammad Rafiq Ilyas Khanh

Numerical Heat Transfer, Part B: Fundamentals, Numerical Heat Transfer, Part B: Fundamentals

Impact Factor: 1.700 | **Quartile:** 3

DOI: 10.1080/10407790.2024.2364778

Effects of Brownian motion on solitary wave structures for 1D stochastic Poisson–Nernst–Planck

2024

system in electrobiochemical

Tang Nan Muhammad Zafarullah Baber Nauman Ahmed Muhammad Sajid Iqbal Ulviye Demirebilek Hadi Rezazadeh

International Journal of Geometric Methods in Modern Physics, Pages 1-23

Impact Factor: 2.100 | **Quartile:** 2 | **Citations:** 3

DOI: 10.1142/S0219887824502256

Optical Soliton solutions for stochastic Davey–Stewartson equation under the effect of noise

2024

Muhammad Sajid Iqbal Mustafa Inc

Optical and Quantum Electronics, Volume 56, Article Number 1148

Impact Factor: 3.300 | **Quartile:** 2 | **Citations:** 5

DOI: 10.1007/s11082-024-06453-0

Analyzing multiplicative noise effects on stochastic dynamical ϕ^4 equation using the new extended

2024

direct algebraic method

Zuha Manzoor Muhammad Sajid Iqbal Nader Omer Mohammed Zakarya Mohammad Kanan Ali Akgül Shabbir Hussain Farrah Ashraf

Alexandria Engineering Journal, Volume 97, Pages 185-203

Impact Factor: 6.800 | **Quartile:** 1 | **Citations:** 4

DOI: 10.1016/j.aej.2024.04.011

Optical soliton solutions in a distinctive class of nonlinear Schrödinger’s equation with cubic, quintic,

2024

septic, and nonic nonlinearities

Shabbir Hussain Muhammad Sajid Iqbal Mustafa Bayram Romana Ashraf Mustafa Inc Shahram Rezapour Muhammad Akhtar Tarar
Optical and Quantum Electronics, Volume: 56, Article Number: 1066, Pages: 20

Impact Factor: 3.300 | **Quartile:** 2 | **Citations:** 8
DOI: 10.1007/s11082-024-06972-w

A computational scheme and its comparison with optical soliton solutions for the stochastic Chen–Lee–Liu equation with sensitivity analysis 2024

Muhammad Zafarullah Baber Nauman Ahmed Changjin Xu Muhammad Sajid Iqbal Tukur Abdulkadir Sulaiman
Modern Physics Letters B, Article Number 2450376 (25 Pages)

Impact Factor: 1.800 | **Quartile:** 2 | **Citations:** 27
DOI: 10.1142/S0217984924503767

Exact solitary wave propagations for the stochastic Burgers’ equation under the influence of white noise and its comparison with computational scheme 2024

Muhammad Zafarullah Baber Wael W. Mohammed Nauman Ahmed Muhammad Sajid Iqbal
Scientific Reports, Volume 14, Article Number: 10629

Impact Factor: 3.800 | **Quartile:** 1 | **Citations:** 9
DOI: 10.1038/s41598-024-58553-2

Soliton solutions of nonlinear stochastic Fitz-Hugh Nagumo equation 2024

Muhammad Sajid Iqbal Mustafa Inc Muhammad W. Yasin Nauman Ahmed Ferdous M. Tawfiq Muhammad Bilal Muhammad Zafarullah Baber Shahram Rezapour
Optical and Quantum Electronics, Volume: 56, Article Number: 1047, Pages: 23

Impact Factor: 3.300 | **Quartile:** 2 | **Citations:** 6
DOI: 10.1007/s11082-024-06819-4

Analyzing solitary wave solutions of the nonlinear Murray equation for blood flow in vessels with non-uniform wall properties 2024

Mustafa Inc Shabbir Hussain Ali Hasan Ali Muhammad Sajid Iqbal Romana Ashraf Muhammad Akhtar Tarar Muhammad Adnan
Scientific Reports, Article Number 14, Article Number: 10588

Impact Factor: 3.800 | **Quartile:** 1 | **Citations:** 1
DOI: 10.1038/s41598-024-61276-z

Analytical investigation of space–time shifted nonlocal stochastic Sasa–Satsuma equation using the enhanced modified extended tanh-expansion method for stochastic solitary waves Solutions 2024

Zuha Manzoor Farrah Ashraf Muhammad Sajid Iqbal Ali Akgül Md Yushalify Misro
Results in Physics, Volume 60, Article Number 107596

Impact Factor: 4.400 | **Quartile:** 1
DOI: 10.1016/j.rinp.2024.107596

Comparisons of Numerical and Solitary Wave Solutions for the Stochastic Reaction–Diffusion Biofilm Model including Quorum Sensing 2024

Muhammad Zafarullah Baber Nauman Ahmed Muhammad Waqas Yasin Muhammad Sajid Iqbal Ali Akgül Alicia Cardero Juan R. Torregrosa
Mathematics, Volume 12(9), Article Number 1293

Impact Factor: 2.300 | **Quartile:** 1 | **Citations:** 1
DOI: 10.3390/math12091293

Borel control and efficient numerical techniques to solve the Allen–Cahn equation governed by temporal multiplicative noise 2024

Nauman Ahmed Jorge E. Macías-Díaz Muhammad W. Yasin Muhammad Sajid Iqbal
International Journal of Computer Mathematics, Pages 1-16

Impact Factor: 1.800 | **Quartile:** 2
DOI: 10.1080/00207160.2024.2340694

New exact solutions of the (3+1)-dimensional double sine-Gordon equation by two analytical methods 2024

Zuha Manzoor Muhammad Sajid Iqbal Farrah Ashraf Roobaee Alroobaee Muhammad Akhtar Tarar Mustafa Inc Shabbir Hussain
Optical and Quantum Electronics, Volume 56, Article Number 807

Impact Factor: 3.00 | **Quartile:** 2 | **Citations:** 2
DOI: 10.1007/s11082-024-06712-0

Optimization and exact solutions for biofilm model of bacterial communities 2024

Muhammad Zafarullah Baber Aly R. Seadawy Muhammad Sajid Iqbal Syed T.R. Rizvi
Alexandria Engineering Journal, Volume 90, Pages 89-97

Impact Factor: 6.8 | **Quartile:** 1 | **Citations:** 4
DOI: 10.1016/j.aej.2024.01.037

Investigation of soliton structures for dispersion, dissipation, and reaction time-fractional KdV–burgers–Fisher equation with the noise effect <i>Nauman Ahmed Muhammad Zafarullah Baber Muhammad Sajid Iqbal Ali Akgül Muhammad Rafiq Ali Raza Mohammad Showkat Rahim Chowdhury</i> <i>International Journal of Modelling and Simulation</i> , Pages 1-17 Impact Factor: 3.100 Quartile: 1 Citations: 7 DOI: 10.1080/02286203.2024.2318805	2024
Analysis and more General Solutions of Einstein Field Equation in f(R, T) Gravity <i>Reem K. Alhefthi Muhammad Sajid Iqbal Mustafa Inc Saba Sohail</i> <i>International Journal of Theoretical Physics</i> , Volume 63, Article Number 24, Pages: 21 Impact Factor: 1.4 Quartile: 3 DOI: 10.1007/s10773-024-05555-5	2024
Explicit solitary wave solutions for the nonlinear equations in semiconductor and magnetic field with their stability analysis <i>Tahir Shahzad Muhammad O. Ahmed Muhammad Sajid Iqbal Muhammad Z Baber Muhammad Waqas Yasin A. S. A. Alsubaie K. H. Mahmoud Mustafa Inc</i> <i>Optical and Quantum Electronics</i> , Volume 56, Article Number 73 Impact Factor: 3.0 Quartile: 2 DOI: DOI: 10.1007/s11082-023-05644-5	2024
Exact and solitary wave structure of the tumor cell proliferation with LQ model of three dimensional PDE by newly extended direct algebraic method <i>Sidra Ghazanfar Nauman Ahmed Syed Mansoor Ali Muhammad Sajid Iqbal Ali Akgül Muhammad Ali Shar Abdul Bariq</i> <i>AIP Advances</i> , Volume 13, Article Number 125218 Impact Factor: 1.6 Quartile: 4 Citations: 3 DOI: doi.org/10.1063/5.0153529	2023
Application of Fixed Point Theory and Solitary Wave Solutions for the Time-Fractional Nonlinear Unsteady Convection-Diffusion System <i>Muhammad Shahzad Nauman Ahmed Muhammad Sajid Iqbal Mustafa Inc Muhammad Zafarullah Baber Rukhshanda Anjum Naveed Shahid</i> <i>International Journal of Theoretical Physics</i> , Volume 62, Article Number 263 Impact Factor: 1.4 Quartile: 3 Citations: 4 DOI: 10.1007/s10773-023-05516-4	2023
On the spatiotemporal structures of ratio-dependent prey–predator model of ecological system <i>Muhammad Zafarullah Baber Aly R. Seadawy Muhammad Qasim Muhammad Sajid Iqbal Syed T. R. Rizvi</i> <i>International Journal of Geometric Methods in Modern Physics</i> , Volume 21, No. 4, Article Number 2450079 (37 pages) Impact Factor: 1.800 Quartile: 2 Citations: 5 DOI: 10.1142/S0219887824500798	2023
Analytical study of reaction diffusion Lengyel-Epstein system by generalized Riccati equation mapping method <i>Nauman Ahmed Muhammad Z Baber Muhammad Sajid Iqbal Amina Annum Syed Mansoor Ali Mubasher Ali Ali Akgül Sayed M. El Din</i> <i>Scientific Reports</i> , Vol:13, Article number: 20033 Impact Factor: 4.6 Quartile: 2 Citations: 11 DOI: 10.1038/s41598-023-47207-4	2023
Stability analysis and consistent solitary wave solutions for the reaction–diffusion regularized nonlinear model <i>Mustafa Inc Rubayyi T. Alqahtani Muhammad Sajid Iqbal</i> <i>Results in Physics</i> , Volume 54, Article Number 107053 Impact Factor: 5.3 Quartile: 1 Citations: 3 DOI: doi.org/10.1016/j.rinp.2023.107053	2023
Exploring the solitary wave solutions of Einstein's vacuum field equation in the context of ambitious experiments and space missions <i>Mustafa Inc Muhammad Sajid Iqbal Muhammad Zafarullah Baber Muhammad Qasim Zafar Iqbal Muhammad Akhtar Tarar Ali Hasan Ali</i> <i>Alexandria Engineering Journal</i> , Volume 82, Pages 186-194 Impact Factor: 6.8 Quartile: 1 Citations: 7 DOI: doi.org/10.1016/j.aej.2023.09.071	2023
Traveling-wave solutions for a nonlinear non-Ohmic cardioelectrophysiological tissue conduction cable equation <i>Sidra Ghazanfar Jorge E. Macías-Díaz Muhammad Sajid Iqbal Nauman Ahmed</i> <i>Mathematical Methods in the Applied Sciences</i> , Volume 46, Issue 12, Pages 12690-12710	2023

Impact Factor: 2.9 Quartile: 1 Citations: 2 DOI: DOI: 10.1002/mma.9205	
A dynamical study of diarrhea delayed epidemic model: application of mathematical biology in infectious diseases <i>Muhammad Naveed Ali Raza Atif Hasan Soori Mustafa Inc Muhammad Rafiq Nauman Ahmed Muhammad Sajid Iqbal European Physical Journal Plus</i>, Volume 138, Article Number 664 Impact Factor: 3.4 Quartile: 2 Citations: 6 DOI: doi.org/10.1140/epjp/s13360-023-04287-5	2023
A study of propagation of the ultra-short femtosecond pulses in an optical fiber by using the extended generalized Riccati equation mapping method <i>Zuha Manzoor Muhammad Sajid Iqbal Shabbir Hussain Farrah Ashraf Mustafa Inc Muhammad Akhtar Tarar Shaher Momani Optical and Quantum Electronics</i>, Volume 55, Issue 8, Article Number 717 Impact Factor: 3.0 Quartile: 2 Citations: 3 DOI: doi.org/10.1007/s11082-023-04934-2	2023
Acoustic wave structures for the confirmable time-fractional Westervelt equation in ultrasound imaging <i>Tahira Sumbal Shaikh Muhammad Zafarullah Baber Nauman Ahmed Muhammad Sajid Iqbal Ali Akgül Sayed M. El Din Results in Physics</i>, Volume 49, Article Number 106494 Impact Factor: 5.3 Quartile: 1 Citations: 23 DOI: 10.1016/j.rinp.2023.106494	2023
Exploring nonlinear dispersive waves in a disordered medium: an analysis using ϕ_6 model expansion method <i>Shabbir Hussain Muhammad Sajid Iqbal Romana Ashraf Mustafa Inc Muhammad Akhtar Tarar Optical and Quantum Electronics</i>, Volume 55, Issue 7, Article Number 651 Impact Factor: 3.000 Quartile: 2 Citations: 4 DOI: 10.1007/s11082-023-04851-4	2023
Quantum analysis of nonlinear optics in Kerr affected saturable nonlinear media and multiplicative noise: a path to new discoveries <i>Shabbir Hussain Muhammad Sajid Iqbal Romana Ashraf Mustafa Inc Muhammad Akhtar Tarar Bandar Almohsen Lanre Akinyemi Optical and Quantum Electronics</i>, Volume 55, Issue 7, Article Number 578 Impact Factor: 3.0 Quartile: 2 Citations: 3 DOI: doi.org/10.1007/s11082-023-04842-5	2023
Investigation of solitary wave structures for the stochastic Nizhnik–Novikov–Veselov (SNNV) system <i>Tahira Sumbal Shaikh Muhammad Zafarullah Baber Nauman Ahmed Muhammad Sajid Iqbal Ali Akgül Sayed M. El Din Results in Physics</i>, Volume 48, Article Number 106389 Impact Factor: 4.565 Quartile: 2 Citations: 22 DOI: doi.org/10.1016/j.rinp.2023.106389	2023
A dynamical study on stochastic reaction diffusion epidemic model with nonlinear incidence rate <i>Nauman Ahmed Muhammad Waqas Yasin Muhammad Sajid Iqbal Ali Raza Muhammad Rafiq Mustafa Inc European Physical Journal Plus</i>, Volume 138, Article Number: 350 Impact Factor: 3.758 Quartile: 2 Citations: 6 DOI: doi.org/10.1140/epjp/s13360-023-03936-z	2023
Analysis and soliton solutions of biofilm model by new extended direct algebraic method <i>Muhammad Sajid Iqbal Mustafa Inc Saba Sohail Hina Khurshid Kalsoom Chishti Nonlinear Analysis: Modelling and Control</i>, Volume 28, No. 3, Pages 538-553 Impact Factor: 2.217 Quartile: 1 Citations: 3 DOI: doi.org/10.15388/namc.2023.28.31866	2023
On multiple solitons of glycolysis reaction-diffusion system for the chemical concentration <i>Muhammad Sajid Iqbal Muhammad Zafarullah Baber Mustafa Inc Muhammad Younis Nauman Ahmed Muhammad Qasim International Journal of Modern Physics B</i>, Pages 1-30 Impact Factor: 1.404 Quartile: 3 Citations: 11 DOI: https://doi.org/10.1142/S0217979224500553	2023
Volume of Fluid Simulations of Heat Transfer in Liquid-Liquid Segmented Flows in Microfluidic channel <i>Shazia Bashir Saad Shaukat Mustafa Inc Muhammad Bashir Ayesha Maqbool Muhammad Sajid Iqbal Farkhanda Afzal Microgravity Science and Technology</i>, Volume 35, Article Number: 16 Impact Factor: 1.642 Quartile: 3	2023

DOI: doi.org/10.1007/s12217-023-10041-4

Abundant solitary wave solutions of the higher dimensional generalized Camassa–Holm–KP model in shallow water waves	2023
<i>Shao-Wen Yao Tahir Shahzad Muhammad Ozair Ahmad Mustafa Inc Muhammad Sajid Iqbal Muhammad Zafarullah Baber Results in Physics</i> , Volume 46, Article Number 106331	
Impact Factor: 4.565 Quartile: 2 Citations: 3	
DOI: doi.org/10.1016/j.rinp.2023.106331	
Construction of solitary wave solutions of bi-harmonic coupled Schrödinger system through ϕ_6 - methodology	2023
<i>Muhammad Sajid Iqbal M. S. Hashemi Rishi Naeem Muhammad Akhtar Tarar Misbah Farheen Mustafa Inc Optical and Quantum Electronics</i> , Volume 55, Issue 5, Article Number 404	
Impact Factor: 2.794 Quartile: 2 Citations: 1	
DOI: doi.org/10.1007/s11082-023-04683-2	
Dynamical behavior of cancer cell densities in two dimensional domain by the representation theory of solitons	2023
<i>Muhammad Sajid Iqbal Nauman Ahmed Rishi Naeem Ali Akgül Abdul Razzaque Mustafa Inc Hina Khurshid Modern Physics Letters A</i> , Volume 463, Article Number 128670	
Impact Factor: 1.594 Quartile: 2 Citations: 1	
DOI: doi.org/10.1016/j.physleta.2023.128670	
Investigation of nonlinear problems governed by stochastic ϕ-4 type equations in nuclear and particle physics	2023
<i>Shao-Wen Yao Muhammad Zafarullah Baber Mustafa Inc Muhammad Sajid Iqbal Muhammad Jawaz Muhammad Zubair Akhtar Results in Physics</i> , Volume 46, Article Number 106295	
Impact Factor: 4.565 Quartile: 2 Citations: 11	
DOI: doi.org/10.1016/j.rinp.2023.106295	
Numerical investigations of stochastic Newell-Whitehead-Segel equation in (2 + 1) dimensions	2023
<i>Nauman Ahmed Muhammad Waqas Yasin Muhammad Sajid Iqbal Ali Akgül Muhammad Rafiq Ali Raza Muhammad Zafarullah Baber International Journal of Modern Physics B</i> , Pages 1-25	
Impact Factor: 1.404 Quartile: 3 Citations: 8	
DOI: doi.org/10.1142/S0217979223502612	
Extraction of soliton solutions for the time–space fractional order nonclassical Sobolev-type equation with unique physical problems	2023
<i>Shao-Wen Yao Tahir Shahzad Muhammad Ozair Ahmad Muhammad Zafarullah Baber Muhammad Sajid Iqbal Mustafa Inc Results in physics</i> , Volume 45, Article Number 106256	
Impact Factor: 4.565 Quartile: 2 Citations: 11	
DOI: 10.1016/j.rinp.2023.106256	
Spatio-temporal numerical modeling of stochastic predator-prey model	2023
<i>Muhammad Waqas Yasin Nauman Ahmed Muhammad Sajid Iqbal Ali Raza Muhammad Rafiq Elsayed Mohamed Tag eldin Ilyas Khan Scientific Reports</i> , Volume 13, Issue 1, Article Number 1990	
Impact Factor: 4.996 Quartile: 2 Citations: 23	
DOI: 10.1038/s41598-023-28324-6	
Numerical investigation of treated brain glioma model using a two-stage successive over-relaxation method	2023
<i>Abida Hussain Mohana Sundaram Muthuvalu Ibrahima Faye Mudassar Zafar Mustafa Inc Farkhanda Afzal Muhammad Sajid Iqbal Computers in Biology and Medicine</i> , Volume 153, Article Number 106429	
Impact Factor: 6.698 Quartile: 1 Citations: 6	
DOI: 10.1016/j.combiomed.2022.106429	
Analysis of the fractional polio model with the Mittag-Leffler kernels	2023
<i>Muhammad Sajid Iqbal Nauman Ahmed Ali Akgül Ammad Mehmood Satti Zafar Iqbal Ali Raza Muhammad Rafiq Rukhshanda Anjum Mohammed Zakarya Choongkil Park Alexandria Engineering Journal</i> , Article in Press	
Impact Factor: 6.8 Quartile: 1 Citations: 8	
DOI: 10.1016/j.aej.2022.08.025	
Numerical simulations of nonlinear stochastic Newell-Whitehead-Segel equation and its measurable properties	2023
<i>Muhammad Sajid Iqbal Muhammad Waqas Yasin Nauman Ahmed Ali Akgül Muhammad Rafiq Ali Raza</i>	

Analysis of a Modified System of Infectious Disease in a Closed and Convex Subset of a Function

2023

Space with Numerical Study

Tahira Sumbal Shaikh Ali Akgül Muhammad Aziz ur Rehman Nauman Ahmed Muhammad Sajid Iqbal Naveed Shahid Muhammad Rafiq Manuel De la Sen

Axioms , Volume 12(1), Article Number 79

Impact Factor: 1.824 | **Quartile:** 2 | **Citations:** 1

DOI: doi.org/10.3390/axioms12010079

Existence theories and exact solutions of nonlinear PDEs dominated by singularities and time noise

2023

Muhammad Ozair Ahmad Rishi Naeem Muhammad Akhtar Tarar Muhammad Sajid Iqbal Mustafa Inc Farkhanda Afzal

Nonlinear Analysis: Modelling and Control, Vol 28, No 2, Pages:194-208

Impact Factor: 2.217 | **Quartile:** 1 | **Citations:** 3

DOI: doi.org/10.15388/namc.2023.28.30563

Numerical Analysis for the Effect of Irresponsible Immigrants on HIV/AIDS Dynamics

2023

Muhammad Tariq Ali Dumitru Baleanu Muhammad Rafiq Jan Awrejcewicz Nauman Ahmed Ali Raza Muhammad Sajid Iqbal Muhammad Ozair Ahmad

Intelligent Automation and Soft Computing, Volume 36, Issue 2, Pages 1479-1496

Impact Factor: 3.401 | **Quartile:** 2

DOI: 10.32604/iasc.2023.033157

Reliable numerical analysis for stochastic reaction-diffusion system

2023

Muhammad Waqas Yasin Nauman Ahmed Muhammad Sajid Iqbal Muhammad Rafiq Ali Raza Ali Akgül

Physica Scripta , Volume 98, Issue 1, Article Number 015209

Impact Factor: 3.081 | **Quartile:** 2 | **Citations:** 16

DOI: 10.1088/1402-4896/aca847

A Nonlinear Structure of a Chemical Reaction Model and Numerical Modeling with the New Aspect of

2023

Existence and Uniqueness

Tahira Sumbal Shaikh Ali Akgül Muhammad Aziz-ur Rehman Nauman Ahmed Muhammad Sajid Iqbal Naveed Shahid Muhammad Rafiq Manuel De la Sen

Mathematics , Volume 11, Issue 1, Article Number 37

Impact Factor: 2.592 | **Quartile:** 1 | **Citations:** 4

DOI: 10.3390/math11010037

Comparative analysis of numerical with optical soliton solutions of stochastic Gross–Pitaevskii

2023

equation in dispersive media

Muhammad Zafarullah Baber Nauman Ahmed Muhammad Waqas Yasin Muhammad Sajid Iqbal Ali Akgül Muhammad Bilal Riaz Muhammad Rafiq Ali Raza

Results in Physics, Volume 44, Article Number 106175

Impact Factor: 4.565 | **Quartile:** 2 | **Citations:** 33

DOI: doi.org/10.1016/j.rinp.2022.106175

On traveling wave solutions of an autocatalytic reaction–diffusion Selkov–Schnakenberg system

2023

Yun-Hui Zhao Muhammad Sajid Iqbal Muhammad Zafarullah Baber Mustaf Inc Muhammad Ozair Ahmad Hina Khurshid

Results in Physics, Volume 44, Article Number 106129

Impact Factor: 4.565 | **Quartile:** 2 | **Citations:** 18

DOI: doi.org/10.1016/j.rinp.2022.106129

A dynamically consistent approximation for an epidemic model with fuzzy parameters

2022

Fazal Dayan Nauman Ahmed Muhammad Rafiq Muhammad Sajid Iqbal Ilyas Khan Ali Raza Muhammad Ozair Ahmad

Expert Systems with Applications , Volume 210, Article Number 118066

Impact Factor: 8.665 | **Quartile:** 1 | **Citations:** 7

DOI: doi.org/10.1016/j.eswa.2022.118066

Selection of solitons coinciding the numerical solutions for uniquely solvable physical problems: A

2022

comparative study for the nonlinear stochastic Gross-Pitaevskii equation in dispersive media

Muhammad Zafarullah Baber Aly R.Seadawy Nauman Ahmed Muhammad Sajid Iqbal Muhammad Waqas Yasin

International Journal of Modern Physics B, Pages 1-30

Impact Factor: 1.404 | **Quartile:** 3 | **Citations:** 7

DOI: 10.1142/S0217979223501916

Comparative analysis of numerical and newly constructed soliton solutions of stochastic Fisher-type

2022

equations in a sufficiently long habitat

Muhammad Zafarullah Baber Aly R.Seadawy Muhammad Sajid Iqbal Nauman Ahmed Muhammad Waqas Yasin Muhammad Ozair Ahmad

Imaging Ultrasound Propagation Using the Westervelt Equation by the Generalized Kudryashov and Modified Kudryashov Methods

2022

Sidra Ghazanfar Nauman Ahmed Muhammad Sajid Iqbal Ali Akgül Mustafa Bayram Manuel De la Sen

Applied Sciences , Volume 12(22), Article Number 11813

Impact Factor: 2.9 | Quartile: 2 | Citations: 22

DOI: doi.org/10.3390/app122211813

Extraction of solitons for time incapable illimitable paraxial wave equation in Kerr-media

2022

Muhammad Sajid Iqbal Aly R.Seadawy Muhammad Zafarullah Baber Nauman Ahmed Muhammad Waqas Yasin

International Journal of Modern Physics B, Article Number 2350122

Impact Factor: 1.404 | Quartile: 3 | Citations: 15

DOI: doi.org/10.1142/S0217979223501229

Application of modified exponential rational function method to Jaulent–Miodek system leading to exact classical solutions

2022

Muhammad Sajid Iqbal Aly R.Seadawy Muhammad Zafarullah Baber Muhammad Qasim

Chaos, Solitons and Fractals , Volume 164, Article Number 112600

Impact Factor: 9.922 | Quartile: 1 | Citations: 53

DOI: doi.org/10.1016/j.chaos.2022.112600

Solution of stochastic Allen-Cahn equation in the framework of soliton theoretical approach

2022

Muhammad Sajid Iqbal Aly R. Seadawy Muhammad Zafarullah Baber Muhammad Waqas Yasin Nauman Ahmed

International Journal of Modern Physics B, Pages 1-23

Impact Factor: 1.404 | Quartile: 3 | Citations: 14

DOI: DOI: 10.1142/S0217979223500510

Demonstration of unique problems from Soliton solutions to nonlinear Selkov–Schnakenberg system

2022

Muhammad Sajid Iqbal Aly R.Seadawy Muhammad Zafarullah Baber

Chaos, Solitons and Fractals , Volume 162, Article Number 112485

Impact Factor: 9.922 | Quartile: 1 | Citations: 37

DOI: doi.org/10.1016/j.chaos.2022.112485

Mathematical and Numerical Analysis of SIQR Epidemic Model of Measles Disease Dynamics

2022

Muhammad Aziz-ur Rehman Anum Farooq Rana Nauman Ahmed Ali Raza Amnah S. Al-Johani Abdullah Mohamed Muhammad Sajid Iqbal Muhammad Rafiq Ilyas Khan

Fractals , Volume 30, No. 05, Article Number 2240154

Impact Factor: 4.555 | Quartile: 1 | Citations: 3

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Travelling wave solutions and regularity results for nonlinear Newton-Schrödinger systems especially in one dimensions

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