

## List of Publications

### Dr. Najeeb Alam Khan

- 1- O.A. Razzaq, F. Alzahrani, M. Fahad, **N. A. Khan**, A. Alshomrani, M. ZakaUlah, Prioritization of Awareness Campaigns for a Diseases through Fusion of Pentagonal Intuitionistic Fuzzy Number and PROMETHEE, Applied and Computational Mathematics, V22, N1, 2023.
- 2- M. Zafarullah, I. Khan, Aneesa, **N. A. Khan**, Spiral flows of ABC fractionalized rate type fluids in cylindrical region: An increasingly amplitude of oscillation study through complex analysis applications, *Waves in Random and Complex Media (TWRM)* (2023)
- 3- **N. A. Khan**, M. A. Qureshi, S. Akbar, A. Ara, Probing 3D Chaotic Thomas' Cyclically Attractor with Multimedia Encryption and Electronic Circuitry, Archives of Control Sciences, vol 33, no 1, 2023.
- 4- **N. A. Khan**, O.A. Razzaq, A. A. Bajwa, M. Ayaz, Global dynamics and Impact of Gaussian noise intensity on the stochastic epidemic model with local fractional derivative, Phys. Scr. 98 (2023) Art. ID 064002
- 5- F. Alzahrani, O.A. Razzaq, M. Fahad, **N. A. Khan**, A. Alshomrani, Zaka Ulah, Repercussions of unreported populace on disease dynamics and its optimal control through system of fractional order delay differential equations, Chaos Soliton & Fractals, (2022) Art. ID 111997.
- 6- **N. A. Khan**, M. Ali Qureshi, T. Hameed, S. Akbar, Nadeem A Khan Qualitative Study of the fractional order nonlinear chaotic model: Electronic realization and secure data enhancement, *Journal of the Korean Physical Society Society* 78 (2021) 93-108.
- 7- O.A. Razzaq, D. U. Rehman, **N. A. Khan**, M. Ali Qureshi, T. Hameed, S. Akbar, Optimal surveillance mitigation of COVID'19 disease outbreak: Fractional order optimal control of compartment model, Results in Physics, 20 (2021) Art. ID. 103715.
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- 10- **N. A. Khan**, S. Akbar, T. Hameed, M. Ali Qureshi, Stumped nature hyperjerk system with fractional order and exponential nonlinearity: Analog simulation, bifurcation analysis and cryptographic applications, Integration 79(7)(2021) 73-93.

- 11- **N. A. Khan**, S. Ahmed, Finite difference method with Metaheuristic Orientation for exploration of time fractional partial differential equations, *International Journal of Applied and Computational Mathematics* (2021)
- 12- K. Alzahrani, O.A. Razzaq, **N. A. Khan**, A. S. Alshomrani, M. Z. Ullah, Transmissibility of Epidemic diseases caused by Delay with proportional fractional derivative, *Advances in Difference Equations* (2021) Art. ID. 292.
- 13- **N. A. Khan**, S. Ahmed, O.A. Razzaq, Ahmad Kamil Mahmood, Exploring fractional order 2-D Helmholtz equation using finite difference scheme through the bat optimization algorithm, *Mathematical Methods in the Applied Sciences* (2021).
- 14- O.A. Razzaq, **N. A. Khan**, M. Faizan, A. Ara, Saif Ullah, Behavioral response of population on transmissibility and saturation incidence of deadly pandemic through fractional order dynamical system, *Results in Physics*, (2021) 26(1) 104438.
- 15- O.A. Razzaq, M. Fahad, **N. A. Khan**, Different Variants of Pandemic and Prevention Strategies: A Prioritizing Framework in Fuzzy Environment, *Results in Physics*, (2021) 104564.
- 16- **N. A. Khan**, S. Ahmed, M. Ayaz, O.A. Razzaq, Rational Approximation with Cuckoo Search Algorithm for Multifarious Painlevé Type Differential Equations, *Ain Shams Engineering Journal* 11(1) (2020) 179-190.
- 17- **N. A. Khan**, T. Hameed, O.A. Razzaq, Modelling and simulation of Coal Gases in a Nano porous Medium: A Biologically Inspired Stochastic Simulation, *Soft Computing* 24, 5133–5150 (2020).
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- 20- **N. A. Khan**, F. Sultan, A. S. Alshomrani, Binary chemical reaction with activation energy in radiative rotating disk flow of Bingham plastic fluid, *Heat Transfer-Asian Research* 49 (3)(2020) 1314-1337.
- 21- **N. A. Khan**, T. Hameed, M. A. Qureshi, S. Akbar, A. K. Alzahrani, Emulate the chaotic flows of fractional jerk system to scramble the sound and image memo with circuit execution, *Physica Scripta* 95(6) (2020) 065217.
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- 23- M. Jamil, A. Ahmed, **N. A. Khan**, Some exact traveling wave solutions of MHD Maxwell fluid in porous medium, *International Journal of Applied and Computational Mathematics* 6(3) (2020) Art. ID 69.
- 24- **N. A. Khan**, M. Ali Qureshi, T. Hameed, S. Akbar, Saif Ullah, Behavioral effects of a four-wing attractor with circuit realization: a cryptographic perspective on immersion, *Commun. Theor. Phys.* 72 (12) (2020) Art. ID 125004.
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- 28- CSK Raju, MM Hoque, **N.A. Khan**, M Islam, S. Santosh, Multiple slip effects on magnetic-Carreau fluid in a suspension of gyrotactic microorganisms over a slendering sheet, *J Process Mechanical Engineering* 233(2) (2019) 254-266 \_Doi: 10.1177/0954408918776723
- 29- **N. A. Khan**, T. Hameed, O.A. Razzaq, M. Ayaz, Tracking of Chaotic behaviour of fractional order Chua's system by Mexican Hat Wavelet based artificial neural network, *Journal of Low Frequency Noise, Vibration & Active Control* 38 (3-4) (2019) 1279-1296.
- 30- **N. A. Khan**, T. Hameed, O.A. Razzaq, M. Ayaz, Intelligent computing for Duffing-Harmonic oscillator equation via bio evolutionary optimization algorithm, *Journal of Low Frequency Noise, Vibration & Active Control* 38 (3-4) (2019) 1327-1337. (ISI; 1.491)\_10.1177/1461348418819408
- 31- **N. A. Khan**, F. Sultan, M. Qasim, M.I. Afridi, Numerical Simulation of the Flow of Nano-Eyring-Powell Fluid through a Curved Artery with Time-Variant Stenosis and Aneurysm, *Nihon Reorji Gaikashi* 47 (2)(2019) 75-85 (ISI; 0.377)
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**BOOK (Chapters) 06**

1. Najeeb A Khan, Oyoon A Razzaq, Asmat Ara, Fatima Riaz, Numerical solution of system of fractional differential equations in imprecise environment” Numerical Simulation –From Brain Imaging to Turbulent Flows”, Chapter 8, 167-186 (ISBN 978-953-51-4720-6.)
2. Najeeb A Khan, Amber Shaikh, Asmat Ara and Faqiha Sultan, Numerical Simulation using Artificial Neural Network on Fractional Differential Equations” “Numerical Simulation – From Brain Imaging to Turbulent Flows “, Chapter 5, 97-112, (ISBN 978-953-51-4720-6).
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## **Dr. Syeda Sadia Zia**

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6. Mehwish Shafi Khan, Samreen Fatima, Syeeda Sadia Zia, Ehtesham Hussain, Tayyab Raza Faraz, Farah Khalid, (2019), Modeling and Forecasting Infant Mortality Rates of Asian Countries in The Perspective of GDP(PPP) International Journal of Scientific & Engineering Research, 10(3), pp. 18-23

## **Dr. Muhammad Imtiaz**

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## Dr. Asif Raza Khan

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31. Ali Hassan, Asif Raza Khan, Faraz Mehmood and Maria Khan, BF-Ostrowski Type Inequalities Via  $\varphi$ - $\lambda$ -Convex Functions, *International Journal of Computer Science and Network Security*, 21 (10) (2021), 177-183.
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