

EDITORIAL



Inaugural Editorial: Journal of Nonlinear Dynamics and Applications

Guodong Zhang nad Leimin Wang na

- ¹ School of Mathematics and Statistics, South-Central Minzu University, Wuhan 430074, China
- ²School of Automation, China University of Geosciences, Wuhan 430074, China

It is with great pleasure that we present to you our inaugural issue of Journal of Nonlinear Dynamics and *Applications (JNDA)*. The topics of nonlinear dynamics mainly include stability, bifurcation, chaos and control of nonlinear systems. Before the 1950s, the researches on nonlinear dynamics were in the preliminary stage. In 1963, the formal proposal of chaos theory marked a major breakthrough in nonlinear dynamics. After the 1980s, nonlinear dynamics has been widely applied in physics, chemistry, biology, engineering and other fields. Since the 21st century, complex network dynamics, nonlinear control, intelligent control and other researches have become the hot topics, promoting the cross-disciplinary development of artificial intelligence, neuroscience, control science and other fields. Today, nonlinear dynamics has become an important theoretical framework for understanding the behaviors of complex systems.

Our journal aims to provide a dedicated forum for researchers and scholars to exchange ideas, fostering to the development of Nonlinear Dynamics and their Applications.

JNDA encompasses a broad spectrum of topics, but are



Submitted: 27 June 2025 **Accepted:** 27 June 2025 **Published:** 29 June 2025

Vol. 1, No. 1, 2025.

€ 10.62762/JNDA.2025.992253

*Corresponding author: ⊠ Guodong Zhang zgd2008@mail.scuec.edu.cn

not limited to:

- 1. Dynamical Systems: Time-delay systems and stochastic systems, multi-agent systems, neural networks and complex networks, population systems and circuit systems.
- 2. Chaos & Bifurcations: Periodic solutions, bifurcation theory, chaotic dynamics and transient chaos.
- Control & Synchronization: Nonlinear control strategies, stability and synchronization of nonlinear systems, finite/fixed-time control, adaptive control.
- 4. Advanced intelligent methods: Artificial intelligence, machine learning and big data analytics.
- Applications: Engineering (mechanical, electrical, aerospace), physics, biology, economics and network dynamics.

JNDA thrives on the collective dedication of authors, reviewers, and editors. We welcome researchers to submit their high-quality work to our journal, where a rigorous peer-review process upholds the highest standards of scientific integrity and excellence. Our diverse editorial team brings together experts from multiple disciplines, guaranteeing comprehensive and

Citation

Zhang, G., & Wang, L. (2025). Inaugural Editorial: Journal of Nonlinear Dynamics and Applications. *Journal of Nonlinear Dynamics and Applications*, 1(1), 1–2.



© 2025 by the Authors. Published by Institute of Central Computation and Knowledge. This is an open access article under the CC BY license (https://creativecommons.org/licenses/by/4.0/).

impartial manuscript evaluations.

We encourage researchers, practitioners, and academics to collaborate with us in advancing this mission. Your contributions will play a pivotal role in driving innovation and shaping the future of the *Journal of Nonlinear Dynamics and Applications*.

We sincerely appreciate your participation and support in making *JNDA* a success. Yours Sincerely,

Guodong Zhang, Leimin Wang
Founding Editors-in-Chief
Journal of Nonlinear Dynamics and Applications

Data Availability Statement

Not applicable.

Funding

This work was supported without any funding.

Conflicts of Interest

The authors declare no conflicts of interest.

Ethical Approval and Consent to Participate

Not applicable.



Guodong Zhang received the Ph.D. degree from the School of Automation, Huazhong University of Science and Technology, in 2014. He is currently a Professor and the Supervisor with the School of Mathematics and Statistics, South-Central Minzu University, Wuhan, China.

He has published over 70 journal articles, he received the 2012 Outstanding Master's Degree Thesis Award of Hubei Province, the

2015 Outstanding Ph.D. Dissertation Award of Hubei Province, and the 2016 Chinese Association of Automation Outstanding Ph.D. Dissertation Award. His current research interests include stability analysis of dynamic systems, synchronization, memristive neural networks and event-triggered control. (Email: zgd2008@mail.scuec.edu.cn)



Leimin Wang received the B.S. degree in mathematics and applied mathematics from the South-Central University for Nationalities, Wuhan, China, in 2011 and the Ph.D. degree in control science and engineering from Huazhong University of Science and Technology, Wuhan, China, in 2016.

From December 2018 to December 2019, he was a Visiting Research Fellow with the Department of Electrical, Computer, and

Biomedical Engineering, University of Rhode Island, Kingston, RI, USA. He is currently a Professor with the School of Automation, China University of Geosciences, Wuhan, China. His current research interests include neural networks, memristive systems, and finite-time control. (Email: wangleimin@cug.edu.cn)