

Special Issue

Nonlinear Dynamics of Frictional Systems

Message from the Guest Editors

Through an in-depth exploration and understanding of the friction system's nonlinear dynamics, friction-coupled vibration, hybrid lubrication and dynamics coupling, and other complex physical phenomena, in order to enhance the performance of the system, prolong the life of the equipment, improve efficiency, and reduce energy consumption, provide strong scientific support and technical support. We would like to give priority to manuscripts related to, but not limited to, the following topics:

- **Nonlinear dynamic model:** Nonlinear dynamic problems such as gear transmission systems and vehicle friction braking systems that consider friction factors.
- **Nonlinear dynamic analysis:** The impact of friction on the transmission system, such as vibration, energy consumption, etc.
- **Vibrational friction mechanism:** Nonlinear coupling behavior between vibration and friction.
- **Analysis of the dry friction vibration system:** Nonlinear dynamic behavior of the vibration system with dry friction, including stick-slip vibration and system stability.

Guest Editors

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About the Journal

Message from the Editor-in-Chief

Friction, wear, and lubrication are tribological phenomena that govern the behavior of interacting surfaces in a wide range of machine components. Understanding the physical and chemical nature of these phenomena is critical to achieving long component lifetime and economical operation. Research in the field of tribology is highly interdisciplinary, and encompasses the fields of physics, chemistry, engineering, and mathematical modeling. *Lubricants* invites contributions on new advances in all areas of tribology for publication as peer-reviewed research articles, reviews of current research, letters, and communications. We are committed to providing timely reviews of all articles submitted. Please consider sharing your work with the scientific community through publication in *Lubricants*.

Editor-in-Chief

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