Recent Advances in Data Analysis and Artificial Intelligence for Degradation and Asymmetric Mechanisms

Guest Editors:

Dr. Chaoqun Duan
School of Mechatronic Engineering and Automation, Shanghai University, Shanghai, China

Dr. Ting Gong
Department of Molecular and Cellular Biology, University of California, Davis, Davis, CA, USA

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Message from the Guest Editors

Dear Colleagues,

This Issue aims to highlight the latest advancements in the data analysis and artificial intelligence (AI) techniques used to understand degradation and asymmetric mechanisms, with applications in engineering, medical, and biology fields. Degradation and asymmetry are prevalent phenomena in various domains, and comprehending their underlying mechanisms is crucial for developing effective solutions…

This Special Issue will provide researchers with a platform with which to present novel findings, methodologies, and applications that leverage data analysis and AI to address the challenges associated with degradation and asymmetry in engineering, medical, and biology fields. Topics of interest include degradation analysis, aging modeling, asymmetric cell division, neural asymmetry, data fusion techniques, reliability estimation, and explainable AI for interpreting degradation and asymmetry, etc.

This Special Issue welcomes original research articles, reviews, and methodological papers that contribute to the understanding and application of data analysis and AI in the study of degradation and asymmetric mechanisms.

Dr. Chaoqun Duan
Dr. Ting Gong
Guest Editors

Special Issue

Editor-in-Chief

Prof. Dr. Sergei D. Odintsov
1. Institució Catalana de Recerca i Estudis Avançats (ICREA), Passeig Luis Companys, 23, 08010 Barcelona, Spain
2. Institute of Space Sciences (ICE-CSIC), C. Can Magrans s/n, 08193 Barcelona, Spain

Message from the Editor-in-Chief

Symmetry is ultimately the most important concept in natural sciences. It is not surprising then that very basic and fundamental research achievements are related to symmetry. For instance, the Nobel Prize in Physics 1979 (Glashow, Salam, Weinberg) was received for a unified symmetry description of electromagnetic and weak interactions, while the Nobel Prize in Physics 2008 (Nambu, Kobayashi, Maskawa) was received for the discovery of the mechanism of spontaneous breaking of symmetry, including CP symmetry. Our journal is named *Symmetry* and it manifests its fundamental role in nature.

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