



Intelligent Damage Assessment for Engineering Materials and Structures

Guest Editors:

Dr. Xiangyun Long

College of Mechanical and
Vehicle Engineering, Hunan
University, Changsha 410082,
China

Prof. Dr. Shun-Peng Zhu

Center for System Reliability and
Safety, University of Electronic
Science and Technology of
China, Chengdu 611731, China

Dr. José António Correia

INEGI, Faculty of Engineering,
University of Porto, Rua Dr.
Roberto Frias, 4200-465 Porto,
Portugal

Deadline for manuscript
submissions:

closed (29 February 2024)

Message from the Guest Editors

Dear Colleagues,

New damage detection techniques and schemes are of interest, while methods that make full use of the available information from different sensors are worth exploring. Introducing mechanics and semi-empirical theory into existing data-driven models to address issues such as insufficient data and data imbalance is a scientific and effective approach. In addition, the real-time assessment of damage state and determining how to make quick decisions based on these assessment results are also particularly important. Recently, with the development of artificial intelligence technology, deep learning methods have been successfully applied in speech recognition, computer vision and other fields. Due to their advantages of automatically extracting features and their highly integrated convenience in mobile devices, deep learning methods have become a powerful tool for intelligent damage assessment technology. This Special Issue is dedicated to opening a scientific discussion on recent developments in this new research area with the aim of providing the updated state of the art and discussing advantages, drawbacks, and challenges in detail.





an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo

Dipartimento di Fisica,
Politecnico di Milano, Piazza L.
da Vinci 32, 20133 Milano, Italy

Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility: indexed within Scopus, SCIE (Web of Science), Inspec, CAPlus / SciFinder, and other databases.

Journal Rank: JCR - Q2 (*Engineering, Multidisciplinary*) / CiteScore - Q1 (*General Engineering*)

Contact Us

Applied Sciences Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/applsci
applsci@mdpi.com
X@Applsci