

Special Issue

Application of Nondestructive Testing in the Structural Health Monitoring of Industrial Materials

Message from the Guest Editors

Nondestructive testing (NDT) and structural health monitoring (SHM) are critical for ensuring the integrity, safety, and longevity of industrial materials across sectors such as aerospace, energy, and manufacturing. As aging infrastructure and complex engineering systems demand proactive maintenance, NDT techniques (e.g., ultrasonic testing, thermography, and eddy currents) enable the early detection of defects without compromising material performance. Meanwhile, SHM integrates sensor networks, data analytics, and AI to continuously assess structural conditions, reducing downtime and operational risks.

This Special Issue aims to foster interdisciplinary dialogue by highlighting novel NDT methodologies, SHM systems, and real-world applications. Contributions should emphasize technical innovation, validation using case studies, and alignment with industry standards.

Guest Editors

Prof. Pietro Burrascano

Department of Engineering, University of Perugia, Polo Scientifico Didattico di Terni, Via di Pentima 4, 05100 Terni, TR, Italy

Dr. Mario Versaci

Dipartimento di Ingegneria Civile Energia Ambiente e Materiali (DICEAM), Mediterranean University, I-89122 Reggio Calabria, Italy

Deadline for manuscript submissions

20 September 2026



Applied Sciences

an Open Access Journal
by MDPI

Impact Factor 2.5
CiteScore 5.5



mdpi.com/si/242378

Applied Sciences
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
applsci@mdpi.com

mdpi.com/journal/

[applsci](https://mdpi.com/journal/applsci)





Applied Sciences

an Open Access Journal
by MDPI

Impact Factor 2.5
CiteScore 5.5



[mdpi.com/journal/
applsci](https://mdpi.com/journal/applsci)



About the Journal

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.

Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo
Dipartimento di Fisica, Politecnico di Milano, Piazza L. da Vinci 32,
20133 Milano, Italy

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), Ei Compendex, Inspec, Embase, CAPIus / SciFinder, and other databases.

Journal Rank:

JCR - Q2 (Engineering, Multidisciplinary) / CiteScore - Q1 (General Engineering)