Special Issue

Innovative Materials and Technologies in Orthodontics

Message from the Guest Editor

The scope of this Special Issue includes the integration of interdisciplinary approaches, the use of smart technologies, and the promising future of biodegradable materials and personalized medicine in orthodontics. 3D printing enables the creation of highly customized orthodontic appliances, including aligners, brackets, and retainers. Machine learning algorithms can analyze vast amounts of data to predict treatment outcomes with high accuracy. AI-powered software can monitor a patient's progress in real time, ensuring that the treatment is on course. Clear aligners are becoming more integrated with digital platforms, allowing for the enhanced monitoring of treatment progress. Smart braces equipped with sensors can monitor the forces applied to teeth and relay this information to the orthodontist. These data ensure that the treatment is progressing as planned. In this Special Issue, original research articles and reviews are welcome. Research areas may include, but are not limited to, the following:

technology in orthodontics
3D printing in orthodontics
clear aligners
customized orthodontics
Artificial Intelligence in orthodontics

Guest Editor

Dr. Nunzio Cirulli

Department of Interdisciplinary Medicine, University of Bari "Aldo Moro", 70124 Bari, Italy

Deadline for manuscript submissions

20 February 2026

Applied Sciences

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, CAPlus / SciFinder, and other databases.

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