



## Computed Tomography: Technological Developments, Methods and Applications

Guest Editors:

**Dr. Viktor Nikitin**

Advanced Photon Source,  
Argonne National Laboratory,  
Lemont, IL 60439, USA

**Dr. Francesco De Carlo**

Advanced Photon Source,  
Argonne National Laboratory,  
Lemont, IL 60439, USA

**Dr. Rajmund Mokso**

Department of Physics, The  
Technical University of Denmark,  
2800 Kongens Lyngby, Denmark

Deadline for manuscript  
submissions:

**20 June 2024**

### Message from the Guest Editors

Dear Colleagues,

The Special Issue provides a comprehensive overview of the evolving landscape of computed tomography (CT), highlighting recent advancements in technology, methodological innovations and varied applications. As such, works pushing the boundaries of CT technology, emphasizing improvements in image resolution, acquisition speed and diagnostic precision will be particularly welcome. The Special Issue extends a specific invitation for contributions focusing on innovative methodologies, including advancements in image reconstruction, segmentation and informative 3D visualization strategies. Moreover, the Special Issue aims to reveal the broader range of applications for CT, encompassing traditional fields such as biomedical imaging, as well as emerging domains such as industrial inspection, material science and geology.

- computed tomography
- imaging methods
- reconstruction techniques
- image segmentation
- 3D visualization
- diagnostic techniques
- biomedical imaging
- geological tomography
- non-destructive analysis





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](http://www.mdpi.com)

[mdpi.com/journal/applsci](http://mdpi.com/journal/applsci)  
[applsci@mdpi.com](mailto:applsci@mdpi.com)  
[X@Applsci](https://twitter.com/Applsci)