

# Special Issue

## Applications of X-ray Phase Contrast Imaging

### Message from the Guest Editor

X-ray Phase Contrast Imaging appeared few decades ago as an alternative to standard absorption-based Imaging. With X-rays, the refractive index of materials can be a thousand times greater than its counterpart absorption factor for light elements. This translates into a much greater contrast for soft tissues with X-ray imaging methods based on the sensing of the phase. This property becomes highly interesting when one wants to image with high-resolution biological tissue or light material that are generally admitted to be transparent to X-rays. With the emergence of partially coherent X-ray sources twenty years ago, expectations regarding PCI turned into a reality with the development at synchrotrons of several advanced PCI methods, some of them even later being adapted to laboratory sources. In this Special Issue, we invite submissions exploring cutting-edge research and recent advances in the fields of X-ray Phase Contrast Imaging. Both theoretical and experimental studies are welcome, as well as comprehensive review and survey papers.

---

### Guest Editor

Dr. Emmanuel Brun

1. Inserm UA7 Strobe, French Institute of Health and Medical Research, 75654 Paris, France
2. Department of Synchrotron Radiation and Medical Research, Université Grenoble Alpes, 38400 Saint Martin d'Heres, France

---

### Deadline for manuscript submissions

closed (31 March 2022)



# Applied Sciences

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.5  
CiteScore 5.5



[mdpi.com/si/92294](http://mdpi.com/si/92294)

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

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





# Applied Sciences

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.5  
CiteScore 5.5



[mdpi.com/journal/  
applsci](http://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, CAPlus / SciFinder, and other databases.

#### Journal Rank:

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

