

Special Issue

X Rays: Physics and Applications

Message from the Guest Editor

We seek to publish a definitive issue on “X Rays: Physics and Applications.” Humankind has been investigating X rays since their discovery in 1895 by Wilhelm Röntgen. Much is known about X-ray production and detection, and the applications of X rays in medicine and industry are ubiquitous. The literature is so broad, in fact, that it can sometimes become overwhelming. Thus, we invite succinct review articles and papers on the fundamental physics of X-ray production and interaction as well as on current trends in X-ray applications. We live in a world of specialization, and we hope that this single issue can unite researchers from medicine, industry, and education. Articles are encouraged on fundamental processes down to the quantum scale, on computed tomography (CT) and radiography (both medical and industrial), on nondestructive evaluation of artwork and other items of cultural heritage, on X-ray scanning to detect hidden defects in materials, on synchrotron design and application, on X-ray lasers, on X-ray dosimetry, and on other current topics.

Guest Editor

Prof. Dr. William L. Dunn

Alan Levin Department of Mechanical and Nuclear Engineering, Kansas State University, 3002 Rathbone Hall, Manhattan, KS 66506-5205, USA

Deadline for manuscript submissions

closed (31 October 2021)



Quantum Beam Science

an Open Access Journal
by MDPI

Impact Factor 1.7
CiteScore 2.8



mdpi.com/si/66416

Quantum Beam Science
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
qubs@mdpi.com

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





Quantum Beam Science

an Open Access Journal
by MDPI

Impact Factor 1.7
CiteScore 2.8



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



About the Journal

Message from the Editor-in-Chief

Quantum Beam Science focuses on application of quantum beams for the study and characterization of materials in their widest sense, and developments of quantum beam sources, instrumentation and facilities. Quantum beams include synchrotron radiation, neutron beams, electrons, lasers, muons, positrons, ions. The journal covers disciplines including, solid state physics, chemistry, crystallography, materials science, biology, geology, earth- and planetary materials, and engineering. Articles presenting multiple quantum beams for complementary studies are welcome.

Editor-in-Chief

Prof. Dr. Klaus-Dieter Liss

School of Mechanical, Materials, Mechatronic and Biomedical
Engineering, University of Wollongong, Wollongong 2522, Australia

Author Benefits

High Visibility:

indexed within Scopus, ESCI (Web of Science), CAPus / SciFinder, Inspec, Astrophysics Data System, and other databases.

Journal Rank:

CiteScore - Q2 (Nuclear and High Energy Physics)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 26.8 days after submission; acceptance to publication is undertaken in 9.8 days (median values for papers published in this journal in the first half of 2025).