Special Issue

Quantum Beam Diffraction on Glasses and Liquids: Advanced Instrumentation, Data Analysis, and Applications

Message from the Guest Editors

The International Commission on Glass (ICG), along with the Community of Glass Associations (CGA) and ICOM-Glass, applied to have this year recognised as the United Nations International Year of Glass of 2022, and the UN General Council meeting approved this on 18 May 2021. This provides us with an excellent opportunity to publish a Special Issue that focuses on the topic of "Quantum Beam Diffraction on Glasses and Liquids: Advanced Instrumentation, Data Analysis, and Applications". In this issue, we would like to focus on Xray, neutron, and electron diffraction with pair distribution function (PDF) analysis. Moreover, datadriven structure modelling such as reverse Monte Carlo modelling and advanced data analysis techniques, e.g., persistent homology and machine learning molecular dynamics simulation, will be included.

Guest Editors

Prof. Dr. Shinji Kohara National Institute for Materials Science, Tsukuba, Japan

Dr. Anita Zeidler

Department of Physics, University of Bath, Bath, UK

Deadline for manuscript submissions

closed (18 October 2023)



Quantum Beam Science

an Open Access Journal by MDPI

Impact Factor 1.7 CiteScore 2.8



mdpi.com/si/112838

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

mdpi.com/journal/ qubs





Quantum Beam Science

an Open Access Journal by MDPI

Impact Factor 1.7 CiteScore 2.8





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), CAPlus / 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).

