Special Issue

X-ray Ptychography Technology: Recent Developments and Applications

Message from the Guest Editor

Ptychography for nanoscale imaging has attracted significant research effort over the last decade, hence it has come to the fore-front of high-resolution microscopy. Real-time imaging of structural, chemical, electronic and magnetic changes in materials that are useful for strained semiconductors, catalysts, memories and batteries, and so on, in industrial application, could enormously benefit from more developments, for example, (hyper-)spectral-ptychography to study the location and the speciation of the chemical elements. Additionally, mixed-states ptychography in conjunction with machine-learning (ML) computational algorithms can be incorporated into the existing ptychographic methodology to accelerate its fast development and realize the full power of the technique. The aim of our Special Issue is to attract high-quality original paper on advances in ptychography in the x-ray and optical regime (new algorithms, operando applications, dichroism).

Guest Editor

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Optics (ISSN 2673-3269) aims at establishing *Optics* as a leading journal for publishing high impact fundamental research and applications in optics field with a fast processing time and high quality service. The journal particularly welcomes both theoretical (simulation) and experimental research within our journal's scope. We encourage scientists to publish their experimental and theoretical results in as much detail as possible. So, there is no restriction on the length or pages of the papers. The full experimental details must be provided so that the results can be reproduced. Electronic files and software regarding the full details of the calculation or experimental procedure, if unable to be published in a normal way, can be deposited as supplementary electronic material.

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