



## Advances in X-ray Optics

Guest Editor:

**Dr. Mikhail Yu. Ryabikin**

Institute of Applied Physics,  
Russian Academy of Sciences, 46  
Ulyanov Str., 603950 Nizhny  
Novgorod, Russia

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### Message from the Guest Editor

In recent years, great advances have been made in the development of X-ray radiation sources of various types, from large-scale XFELs and synchrotron-based sources to table-top laser-plasma X-ray sources and laser-based high-order harmonic XUV sources, which have proven themselves as indispensable tools for studies in chemistry, physics, biology, materials science and other fields. On the other hand, X-ray optics play a key role in delivering the beam from the source to the target, as well as in technology providing X-ray optics metrology, X-ray detection and image processing; new methods of X-ray spectroscopy and microscopy have been developed. Furthermore, important steps have been taken towards ensuring that experiments in X-ray nonlinear and quantum optics can be translated into practical applications.

