

Editorial

X-Ray Focusing: Techniques and Applications

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This Special Issue of *X-Ray Optics and Instrumentation* comprises ten review papers and six research articles, which collectively offer a broad overview of X-ray focusing techniques and applications in laboratory measurements, in synchrotron beamlines, and in X-ray astronomy. Focusing enables not only more intense illumination for reduced exposure time and higher signal-to-noise ratio, but higher spatial resolution through true imaging. Although X-ray focusing is accomplished through the application of some basic physical principles, such as reflection (mirrors), refraction (lenses), and diffraction (crystals or zone plates), stringent performance requirements coupled with physical, mechanical, environmental, and manufacturability imperatives or limitations make the task technically challenging. The diverse X-ray focusing techniques and applications covered in this Volume provide a glimpse into the scope, challenges, and future of this expanding field.

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