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Field Characterization of Axially and Radially Magnetized Neodymium Rings

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Permanent magnets are attractive options for nano focusing and q -magnification in MeV ultrafast electron diffraction (MeV-UED) due to their high field strengths and compact footprints. In this work, we present field characterization of axially and radially magnetized neodymium rings. Such rings can produce strong axisymmetric focusing and naturally fulfill the requirement of stigmatic imaging for post-sample optical systems. Field qualities of the rings and their application in MeV-UED are studied and presented.

Footnotes

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North America

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