Channeling 2012



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Multiple Volume Reflection as an Origin of Significant Scattering Intensity and Radiation Power Increase

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The effect of Multiple Volume Reflection from bent planes of one crystal combines the advantages of the space order of the planar and the strength of the axial fields. The experiments confirme that this effect gives rise to a five-time increase of one-plane Volume Reflection effect and manifests itself in much wider angular region than axial channeling. The advantages of the Multiple Volume Reflection applications for both the LHC beam collimation and gamma-radiation production are discussed.

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