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# Reduction of multiple scattering of positively charged ultrarelativistic particles channeling in planar fields of single crystals

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Recently the effect of reduction of multiple scattering of positively charged particles was observed at channeling in bent (111) and (110) planes of silicon. The effect is observed in the plane orthogonal to the bending plane. The degree of reduction of rms scattering angle channeling particles (in comparing with equivalent amorphous media) reached up to 8 times. The analytical theory of observed phenomenon was proposed in the article. In this report we present the improved variant of the theory and give the results of calculation of reduction of multiple scattering angles for particles channeling in (111) and (110) planar electric fields of silicon and germanium single crystals. The increase in the angle of multiple scattering (in comparison with an equivalent amorphous medium) during planar channeling of negatively charged particles is also discussed.

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