

Influence of cylindrical pole sizes to parameters of high-dispersion mass-analyzer with in-homogeneous field

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The static mass-analyzer with in-homogeneous field and the cylindrical poles proposed by authors earlier has been investigated theoretically when the angle pole sizes were varied in big diapasons. The analytical expression of the magnet scalar potential distribution has been obtained. For the regimes with three turns of the trajectories the main parameters in the dispersion plane have been found in quadrature form when the first order focusing takes place. The regimes with the space focusing have been found too. The optimal angle pole sizes have been given from point of view of the maximum specific mass dispersion. The comparison with the mass-analyzers with the homogeneous field has been made.

Литература

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