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# Calculation of reflection electron diffraction on a single crystal

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*The paper presents the results of mathematical modeling for one of the main methods of investigating physical and chemical properties of the surface of solids – electron diffraction. A summary of the basic theory of the micro particles diffraction process with formulae are given. The algorithm for calculating (in MathCAD) is described and a graphical representation of the results is presented. This work allows predicting the course of reflected electrons diffraction on the surface of a single crystal with specified parameters of the test process. The obtained results of modeling diffraction process can be used as an illustrative exemplification material when studying electronography.*

**Keywords:** crystallography, diffraction, single crystal, scattering spectrum, glancing angle.

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