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Maximum gradients on a charged line moving above a corrugated surface of arbitrary geometry

L. Schächter*, D. Schieber

Department of Electrical Engineering, Technion – Israel Institute of Technology, Haifa 32000, Israel

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Abstract

We present the maximum longitudinal and transverse gradients on a charged line that moves above a grating of arbitrary geometry. These upper limits are evaluated subject to the assumption that the absolute value of each diagonal term of the reflection matrix, that describes the scattering from the surface, is smaller than unity.

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