

ELECTRIC EXPLOSION OF MICROWIRES BY HIGH FREQUENCY CURRENT.*

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In various accelerating structures operating at a high frequency, an important role is played by the mechanism of explosive emission [1]. Such a situation can be realized, for example, at the Compact Linear Collider (CLIC) [2], the development of which is being carried out within the framework of international cooperation. In the process of explosive emission, an electric explosion of metal microprotrusions occurs on the cathode surface, and the one formed during the explosion emits electrons. In this work, using magnetohydrodynamic calculations, the influence of the frequency of an electromagnetic pulse on the characteristics of an electric explosion is determined.

REFERENCES

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