

**Название публикации:**

Transition Radiation in a Waveguide Filled with Periodically Modulated Medium

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**Наименование журнала:**

International Conference on Mathematical Methods in Electromagnetic Theory, ММЕТ

Volume 2018-July, 10 September 2018, Номер статьи 8460303, Pages 271-273

17th IEEE International Conference on Mathematical Methods in Electromagnetic Theory,  
ММЕТ 2018; Kyiv; Ukraine; 2 July 2018 до 5 July 2018; Номер категории CFP18761-ART;  
Код 139770

**Аннотация:**

The article is devoted to the study of the transition radiation of the source (charged particle), which moves perpendicular to the axis of the waveguide with modulated anisotropic filling. The special attention is given to characteristics of this radiation in the region of 'strong' interaction. The transition radiation energy for the TE field in the waveguide is calculated in the above-mentioned region in view of small modulation depths. It is shown that under certain conditions Cerenkov radiation can arise in the region of strong interaction. © 2018 IEEE.

**Ключевые слова:**

periodically modulated anisotropic magnetodielectric medium, transition radiation, Waveguide