Назва	On The Features of Open Magnetoactive Waveguides
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Короткий огляд (реферат):	It is shown that in the volume of an open waveguide, each electron – oscillator rotating in a constant magnetic field is capable of generating a TE wave, for which this waveguide is transparent. The generation efficiency is determined by the rate of electron injection and their longitudinal velocity along the waveguide axis. The field generation mode near the cutoff frequency with a low group velocity comparable with the longitudinal velocity of the injected electrons is selected. In this case, the transverse velocity of the electrons significantly exceeds their longitudinal velocity and the group velocity of the wave. In the absence of field reflection from the waveguide ends, each electron makes its contribution to the total radiation field, i.e. it can be considered that the field generation occurs in the superradiance mode. It is shown that the total field of the electron flow is capable of forming a resonator field consisting of two waves propagating towards each other due to even partial reflections from the waveguide ends. With a small reflection of the fields from the ends and a small drift velocity of the rotating electrons, the superradiance mode dominates, similar to the case of excitation of a completely open waveguide. In the case of a noticeable reflection of the fields from the ends of the system at a relatively high velocity of their longitudinal injection, the reflected fields significantly exceed the total field of the emitters and the traditional mode of waveguide resonator field generation is formed. The zones where either resonator field generation or generation under superradiance conditions dominate are presented on the plane "longitudinal motion velocity – reflection coefficient". Two cases are considered: when reflected waves are formed only due to reflection from the ends, and also when the effect of rotating electrons on reflected waves in the waveguide volume is taken into account. It is essential that the average amplitude of the total particle radiation field changes slightly for all considered generation modes. Resonance effects during reflection from the ends lead to a significant increase in the amplitude of the waveguide – resonator field.