

ELECTRON RADIATION IN A STRONG ELECTROMAGNETIC WAVE AND A STRONG MAGNETIC FIELD

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Thomson scattering is a very important phenomenon in the interaction of a laser with matter, potentially capable of generating attosecond X-ray pulses. The X-rays generated by Thomson scattering have many advantages. Thus, Thomson scattering generated by relativistic electrons in a laser field has been widely developed.

In this paper, we consider the motion of a single electron in a strong electromagnetic field generated by laser radiation and an external strong magnetic field. The trajectories and radiation spectra calculated by numerical methods are compared with the theoretical data obtained in [1].

References

1. **Zhao, L.** Angular Distributions of Thomson Scattering in Combined Laser and Magnetic fields [Text] / L. Zhao et al. // arXiv:1810.08333 [physics.plasm-ph] 2018.
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