

Radiative transitions of electrons between Landau levels in a moderately strong magnetic field

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We investigate the processes of radiative transitions of electrons between the Landau levels, $e_{(\ell)} \rightarrow e_{(n)} + \gamma$, in a moderately strong magnetic field. Under such conditions, it is necessary to take into account transitions in which both the initial and final electrons can be in states corresponding to arbitrary Landau levels. The results obtained can be used in calculating the efficiency of the electron-positron plasma generation under the conditions of the Kerr black hole accretion disk.

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