POLARIZATION EFFECTS IN SYNCHROTRON RADIATION IN ULTRA-QUANTUM APPROXIMATION

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Summary

The effect of electronic self-polarization in synchrotron radiation in the approximation of weakly excited state of an electron and a strong magnetic field is investigated. An essential difference of the process probabilities with spin reorientation of an electron along and opposite the field is denoted, which indicates a more expressed effect of self-polarization of electrons in comparison with the quasi-classical approximation.