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# Quasiclassical approach and high energy QED processes in the field of a heavy atom

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Method of quasiclassical Green's functions developed recently for the Dirac equation in the external fields of various configurations has allowed one to essentially advance the theoretical description of the fundamental quantum electrodynamical processes taking place at the interaction of high-energy particles with atoms. Novel results of the calculation, exact in the parameters of the atomic field, of the high-energy photoproduction, bremsstrahlung, double bremsstrahlung for electrons and muons, and others are surveyed. In many cases, the results are obtained in the quasiclassical approximation with the first quasiclassical correction taken into account. These results are important for data analysis.

**Primary author:** KRACHKOV, Peter (BINP)

**Presenter:** KRACHKOV, Peter (BINP)

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