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The short-wavelength limit ; 3.4.6
Approximation for the long-wavelength limit and for high electron energies ; 3.4.7
Cross section in second Born approximation
3.5 Calculation using relativistic partial-wave expansions
3.5.1 Partial wave expansion ; 3.5.2 Calculations with a relativistic self-consistent-field potential
; 3.5.3 Calculation for a pure Coulomb potential
; 3.6 Spin-dependent cross section and bremsstrahlung asymmetry
3.7 Bremsstrahlung polarization

Sommario/riassunto

This book deals with the theory and experiment of the elementary process of bremsstrahlung, where photons are detected in coincidence with decelerated outgoing electrons. Such experiments allow for a more stringent check of the theoretical work. The main emphasis is laid on electron-atom bremsstrahlung and electron-electron bremsstrahlung, but further bremsstrahlung processes are also dealt with. In the theoretical parts, triply differential cross sections are derived in various approximations, including electron spin and photon-polarization. In the experimental sections, electron-photon coin
