

THE ROLE OF THE LANDÉ g-FACTOR
OF ELECTRONS IN EFFECTS OF INTEGER
QUANTUM HALL'S PLATEAUX DISAPPEARING

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We indicate that a number of new effects can be observed in quantum electron structures under conditions of the integer quantum Hall effect. These are an effect of Hall's plateaux disappearing with even values of the Landau's levels filling factor and new effects of simultaneous disappearing of two and three Hall's plateaux. The phenomenon of intersection at the Fermi level of two or more spin-split Landau's levels is used as the basis of the analysis. The main results are demonstrated by the example of a single quantum well which is formed with two GaAs/Al_{0.3}Ga_{0.7}As heterojunctions.