

THE TRANSPORT AND QUANTUM LIFETIMES
OF RELAXATION OF TWO-DIMENSIONAL
ELECTRONS IN SILICON MOS-STRUCTURES

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S u m m a r y

The electron scattering mechanisms in the dimensionally quantized channels of silicon MOS-structures are investigated. The conclusion of the Coulomb scattering mechanism prevailing is made from the ratio of transport and quantum lifetimes. The experimental transport mobility values are compared with the Born approximation calculations. It is shown that the agreement of the experimental and calculated mobility's values can be obtained by taking into account the interference effect of remote ion potentials.