

Spin-valve effect in double-barrier systems with noncollinearly polarized magnetic barriers: linear response regime

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Electron tunneling through a double-barrier structure with ferromagnetic barriers and nonmagnetic external and central electrodes has been considered theoretically in the linear response regime. Magnetic moments of the barriers are assumed to be generally non-collinear, but oriented in the plane of the junction. Tunnel conductance and tunnel magnetoresistance are calculated theoretically as a function of the angle between magnetizations. Possible applications of such systems in spintronic spin-valve devices are also discussed.

9.7 cm

13.4 cm

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