

عنوان مقاله:

Influence of interface roughness on spin-polarized transmission in PbS/EuS double barrier structures

محل انتشار:

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خلاصه مقاله:

In this work, the effect of interface roughness/ islands has investigated on transmission probability for a type of magnetic tunnel junction (MTJ) which involves of two ferromagnetic semiconductor barriers (FMS) by periodic corrugation interfaces. Based on transfer matrix method and nearly free-electron approximation, the transmission probability is studied for several different temperatures. Also the variation of tunnelling magnetoresistance (TMR) and spin polarization (SP) as a function of temperature is studied. The results show that interface roughness effect decreases the transmission probability, but the interface islands do not shift the resonant energy

کلمات کلیدی:

Interface roughness; Transfer matrix method; Magnetic Tunnel Junctions; Spin-dependent tunnelling

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