

Tunnelling magnetoresistance in nanometer granular perovskite systems

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Abstract: In this contribution the phenomenological theory for the tunnelling magnetoresistance phenomenon observed in granular perovskite manganese systems is developed using Landauer ballistic transport concept. It was shown that the field dependence, magnitude and derivative of magnetoresistance ratio observed experimentally are well reproduced by the presented theory. © 2009 IOP Publishing Ltd.

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