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Effects of Neutron Irradiation on Superconducting Properties of MgB_2

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We studied the influence of neutron irradiation up to fluences of $3.4X10^{18}$ cm^{-2} on superconducting properties of polycrystalline MgB_2. Irradiation leads to an improvement in both critical current density at high magnetic fields and irreversibility field. With increasing fluencies the critical temperature is slightly diminished. An analysis of the critical field and critical current density behavior has been carried out.