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Ferropnictides at high magnetic fields: the role of pairing symmetry and impurity scattering¹

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An overview of recent results on the effect of impurity scattering and pairing symmetry on the upper critical field $H_{c2}(T)$ and critical temperature of oxypnictides at very high magnetic fields is given. The role of multiband effects and different scattering impurity channels on the observed anomalous temperature dependencies of anisotropic $H_{c2}(T)$ significantly exceeding the BCS paramagnetic limit is addressed.

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