

Abstract Submitted
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MegaOhm extraordinary Hall effect in oxidized CoFeB¹ GREGORY KOPNOV, ALEXANDER GERBER, Tel Aviv University — We report on the development of controllably oxidized CoFeB ferromagnetic films demonstrating the extraordinary Hall effect (EHE) resistivity exceeding $1 \Omega \text{ cm}$ and magnetic field sensitivity up to $10^6 \Omega/\text{T}$. Such EHE resistivity is four orders of magnitude higher than that previously observed in ferromagnetic materials, while sensitivity is two orders larger than the best of semiconductors.

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