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### **All-Manganite Tunnel Junctions with Interface-Induced Barrier Magnetism<sup>1</sup>**

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The recent discovery of several unexpected phases at complex oxide interfaces is providing new insights into the physics of strongly correlated electron systems. The possibility of tailoring the electronic structure of such interfaces has triggered a great technological drive to functionalize them into devices. In this communication, we describe an alternative strategy to produce spin filtering by inducing a ferromagnetic insulating state in an ultrathin antiferromagnetic layer in contact with a ferromagnetic layer. This artificially induced spin filtering persists up to relatively high temperatures and operates at high applied bias voltages. The results suggest that after playing a key role in exchange-bias for spin-valves, uncompensated moments at engineered antiferromagnetic interfaces represent a novel route for generating highly spin-polarized currents with antiferromagnets.

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