

Abstract Submitted
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Spin and angular resolved photoemission studies of Bi₂Se₃¹ ZHIHUI PAN, E. VESCOVO, G.D. GU, Brookhaven National Laboratory, D. GARDNER, S. CHU, Y. LEE, Massachusetts Institute of Technology, A.V. FEDOROV, Lawrence Berkeley National Laboratory, T. VALLA, Brookhaven National Laboratory — Topological insulators (TL) have attracted much attention because of their exotic properties. Bi₂Se₃ is a model TL with a relative large bulk gap and a simple surface state structure. By depositing various non-magnetic and magnetic impurities on the surface, we were able to fill the topological surface state and higher lying Rashba splitting surface states. The spin texture of the surface electronic structure was determined in spin resolved photoemission measurement.

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