

Abstract Submitted
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Magnetic Tunnel Junctions with W Layers.¹ BRIAN ZAMARRRIPA ROMAN, University of Central Florida, HAMID ALMASI, WEIGANG WANG, University of Arizona — Magnetic Tunnel Junctions with Perpendicular Magnetic Anisotropy are promising candidates for next generation of magnetic random access memories. Room-temperature tunneling magnetoresistance behavior has been analyzed in CoFeB/MgO/CoFeB perpendicular magnetic tunnel junctions with different buffer layers for annealing at 340C and 380C. Transport properties have been studied in these junctions. The TMR rapidly increased to a maximum within the first few minutes, up to 135%, followed by a steady decline afterwards. These results highlight the importance of proper buffer/capping layer in perpendicular tunneling junction.

¹Magnetic Tunnel Junctions with W Layers

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