

Title: Magnetic properties of Co-doped TiO(2) anatase nanopowders

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Abstract: This letter reports on the magnetic properties of Ti(1-x)Co(x)O(2) anatase phase nanopowders with different Co contents. It is shown that oxygen vacancies play an important role in promoting long-range ferromagnetic order in the material studied in addition to the transition-metal doping. Furthermore, the results allow ruling out the premise of a strict connection between Co clustering and the ferromagnetism observed in the Co:TiO(2) anatase system.

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