Sol–gel synthesis of Sr-doped SnO2 thin films and their photocatalytic properties

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Description
The effect of Sr doping on the structural, optical, morphological and photocatalytic properties of SnO 2 thin films prepared by sol–gel dip-coating method was investigated. Thin films of undoped and Sr-doped (8%) SnO 2 were deposited on glass substrates and characterized by x-ray diffraction (XRD), Raman spectroscopy, UV–vis absorption and atomic force microscopy (AFM). Sr-doped (8%) SnO 2 thin films have exhibited a higher photocatalytic activity with UV irradiation compared to the undoped SnO 2 regarding methylene blue dye degradation.