PREPARATION OF LOW TEMPERATURE TITANIUM DIOXIDE THIN FILMS BY USING DOCTOR-BLADE METHOD

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ABSTRACT

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The TiO₂ films have been deposited onto a glass slide using the doctor-blade technique as-deposited and annealed in different low annealing temperature at 120 °C, 140 °C, 160 °C and 400 °C. The structural and optical properties of prepared TiO₂ thin films was proved by using XRD and UV-vis spectrometer that effected by annealed process. The XRD analysis as-deposited TiO₂ thin film and TiO₂ thin film and TiO₂ thin film annealed at 140 °C. Optical properties of TiO₂ thin film measured by UV-vis at the annealing temperature from 120 °C - 400 °C. Besides, the band gap value measured by Tauc plot.

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