

Synthesis of nano titanium oxide for photonic application

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ABSTRACT

Nano structures TiO₂ films on the substrates of quartz were successfully deposited at a temperature of (350 CO) and and under vacuum of 10-3 mbar, using the (PLD) pulsed laser deposition assisted by the Nd:YAG laser tattoo removal with wavelength of 1064 nm. The different energies of the laser effects from 1400-2000 mj on the TiO₂ physical properties of were studied. The optical and structural properties of TiO₂ thin films were studied