

## Oxygen pressure effects on optical properties of ZnO prepared by reactive pulsed laser deposition

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### ABSTRACT

The deposition processes of the ZnO films have been conducted in this paper. The Q-switched Nd:YAG laser of 10 ns duration and 900 mJ of energy was utilized to perform the deposition process of ZnO/glass heterojunction. At different oxygen pressure, the optical properties, and constant of the deposited samples have been tested. Under 300 °C heating treatment, and different oxygen pressure the results recorded an a higher transparency of more than 80% was also listed with a reduction in its value alongside with the reduction of the substrate temperature. Further, the energy bandgap has found to be 3.26 electron-volts.