## Preparation of nano indium oxide for optoelectronics application

Farah G. Khalid<sup>1</sup>, Alaa Q. Raheema<sup>2</sup>, Zahraa S. Alshakhli<sup>3</sup>, and Makram A. Fakhri<sup>3,a)</sup>

## ABSTRACT

In this Work, the effect of the temperatures of the substrate on the morphological and optical properties of the  $In_2O_3$  nano thin film have been prepared by the Reactive of the Laser Pulsed as a Deposition method (RPLD). The Q-switch Nd-YAG laser, 1064nm, 6 nanosecond with 350mJ/cm<sup>2</sup> energies of laser have been used to ablate the high purity target of Indium and deposited on the quartz substrates. The gives result of the films shows good transparency up to 85 % which is found to sharply decrease with the temperatures of the substrate.