



Luminescent properties of $Y_3(Al, Ga)_5O_{12}:Tb$ thin films.

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The main aim of my project is to use the technique of pulsed laser deposition (PLD) to fabricate thin films from Yttrium Aluminum Gallium Oxide ($Y_3(Al, Ga)_5O_{12}$) doped with Tb^{3+} ions and then to investigate the structure, the morphology and the optical properties of the fabricated films. The as deposited $Y_3(Al, Ga)_5O_{12}:Tb^{3+}$ films were amorphous in most cases and crystallized upon heat treatment. Heat treatments were applied to the films for different annealing times and temperatures. Interesting phenomena occurred during the heat treatment which so far under investigation, some results of the investigations presented below:

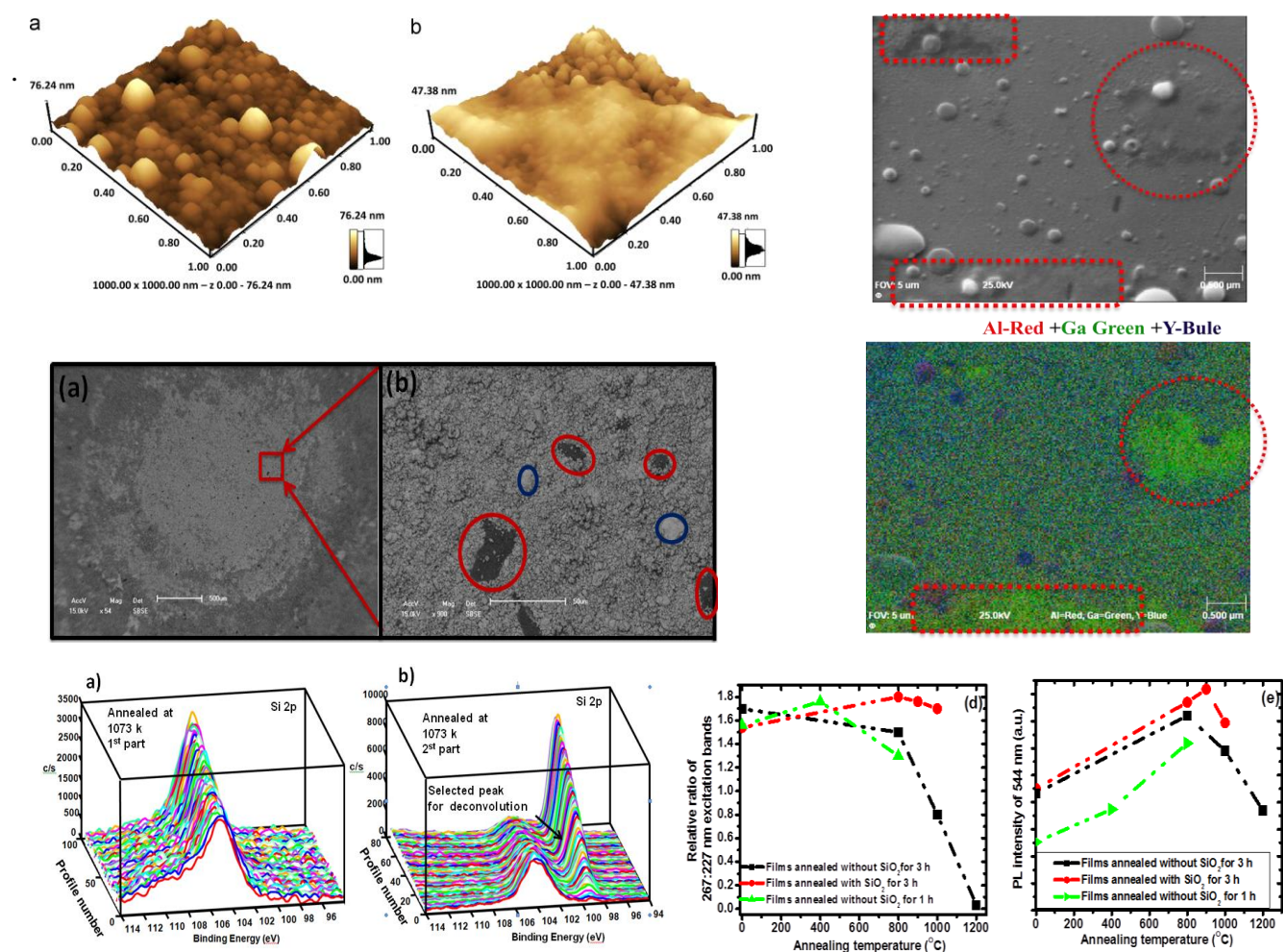


Figure: presentation of some results for the $Y_3(Al, Ga)_5O_{12}:Tb^{3+}$ films.