

Warisa Pancharoen 2010: Properties of Thin Film ZnO Prepared by DC Magnetron Sputtering. Master of Science (Physics), Major Field: Physics, Department of Physics. Thesis Advisor: Associate Professor Noppadon Suttisiri, M.S. 90 pages.

The effect of oxygen partial pressure on the structure of ZnO thin films was studied. The films which were prepared by direct current (DC) reactive magnetron sputtering with variation of oxygen concentration at room temperature showed that the structure of ZnO thin films phase exhibited to (002) orientation at the diffraction angle 34.2° . When the oxygen partial pressure increased, grain size and roughness decreased.

Student's signature

Thesis Advisor's signature