



Contribution ID: 296

Type: **Presentation**

## CL stability and surface chemical changes of ZnAl<sub>2</sub>O<sub>4</sub>:Mn nanocrystalline phosphor

Luminescence characteristics and surface chemical changes of nanocrystalline Mn doped ZnAl<sub>2</sub>O<sub>4</sub> powder phosphors are presented. X-ray photoelectron spectroscopy (XPS) was used to determine the chemical composition of the possible compounds formed on the surface as a result of the prolonged electron beam exposure. A stable Al<sub>2</sub>O<sub>3</sub> layer was formed on the surface and is possibly contributing to the CL stability of the ZnAl<sub>2</sub>O<sub>4</sub>:Mn phosphor.

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**Track Classification:** Track A - Condensed Matter Physics and Material Science