

Spectroscopic properties of Y_3TaO_7 powders activated with Eu, Er and co-activated with Yb.

Autorzy

Adam Walasek

Eugeniusz Zych

A. Liqiong

Jie Zhang

Shiwei Wang

Rok wydania

2007

Czasopismo

Journal of Physics-
Conference Series

Numer woluminu

79

Strony

012043/1-012043/6

DOI

10.1088/1742-
6596/79/1/012043

Kolekcja

Naukowa

Język

Angielski

Typ publikacji

Artykuł

Streszczenie

A new synthesis method of Y_3TaO_7 is reported. Pure phase powders were prepared by modified Pechini technique. Precursors obtained through that route were heated at the temperature about 1000°C with or without use of Li_2SO_4 flux. That implicates in different morphology of specimens and also their spectroscopic properties. Eu ions were used as a spectroscopic probe to prove inhomogeneous broadening of excitation and emission spectra. Samples with Er and Yb doping are also presented. Photoluminescence and up-conversion emissions, under 378 nm and 980 nm excitation respectively, strongly depend on the method of powders synthesis.

Adres publiczny

<https://doi.org/10.1088/1742-6596/79/1/012043>

Strona internetowa wydawcy

<https://iopublishing.org/>