

عنوان مقاله:

Design and simulation of semiconductor laser with GaN & GaAS

محل انتشار:

دومین کنفرانس بین المللی یافته های نوین پژوهشی در مهندسی برق و علوم کامپیوتر (سال: 1395)

تعداد صفحات اصل مقاله: 6

نویسندگان:

Mosayeb nouri - Department of Electrical Engineering, Behbahan Branch, Islamic Azad University, Behbahan, Iran

Gholamhosein moloudian - Department of Electrical Engineering , Behbahan Branch, Islamic Azad University, Behbahan, Iran

خلاصه مقاله:

In this paper, we focus on designing and simulation of a Gallium nitride (GaN) semiconductor laser with Indium gallium nitride (InGaN) and Aluminium gallium nitride (AlGaN). We've used Indium gallium nitride material and Aluminium gallium nitride in the sides with the mole fraction of x (AlxGa1-xN, InxGa1-xN). For simulation we have used the SILVACO software of ATLAS simulator environment. First, we review a structure similar to the laser and then to describe the materials used in the laser described above. The results show good performance laser. Went on .to design another laser material will gallium arsenide

کلمات کلیدی:

semiconductor laser, Gallium nitride, active region, power emitted

لینک ثابت مقاله در پایگاه سیویلیکا:

https://civilica.com/doc/545979

