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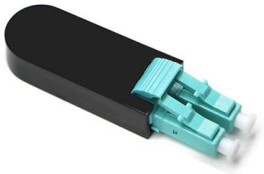
Buried Structure Diode Laser

Buried Structure Diode Laser



(PDF) ESD breakdown characteristics of buried

We report here the characteristics of the ESD breakdown of buried heterostructure (BH) semiconductor lasers. We show that the BH lasers exhibit

High-efficiency and high-brightness broad area laser diodes with buried

Buried-regrown-implant-structure (BRIS) technology combines two-step epitaxial regrowth with an intermediate ion implantation step in order to realise a buried current aperture close to the active

Buried-regrown-implant-structure diode lasers with ultra-thick epitaxy

The resulting buried-regrown-implant-structure (BRIS) lasers with 100 um stripes and lasing wavelength of 915 nm show high efficiency (peak of 67%, 55% at 20 W) and high lateral brightness (3.3

High-efficiency and high-brightness broad area laser diodes with

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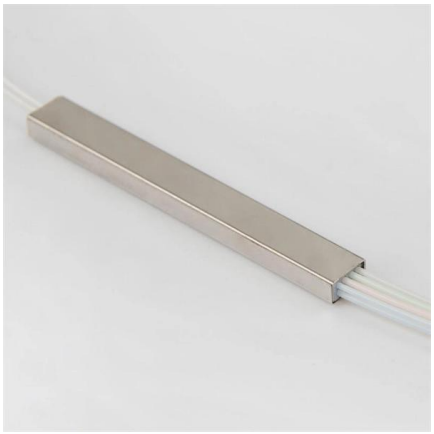
Buried Heterostructure Photonic Crystal Lasers

The buried heterostructure photonic crystal lasers on Si platform promise exciting opportunities in the future for novel device design demonstrations as well as for photonic integrated circuits applications.

Buried tunnel junction for p-down nitride laser diodes

Introduction Most commercially available nitride devices are obtained along direction. That is why the internal polarization-induced electric fields in violet to green nitride light emitting diode (LED) and



InGaAsP/InP Buried-Ridge Waveguide Laser with Improved Lateral

ABSTRACT?A novel InGaAsP/InP buried-ridge waveguide laser diode structure is proposed and demonstrated for use as a single-mode laser. The lateral mode of the proposed device can be

Properties of GaN-based laser diodes with a buried-ridge structure

The buried-ridge structure was introduced to GaN-based laser diodes for the purpose of realizing an index-guided structure in order to control the difference of effective refractive indexes

InGaAs/AlGaAs Quantum Wire DFB Buried HeteroStructure Laser

In this study, we demonstrate a quasi-BH QWR-DFB laser on a ridge substrate with a submicron grating. Here, we used one-time selective MOCVD to form a ridge waveguide with a BH

Buried heterostructure laser diodes using directly bonded InP thin film

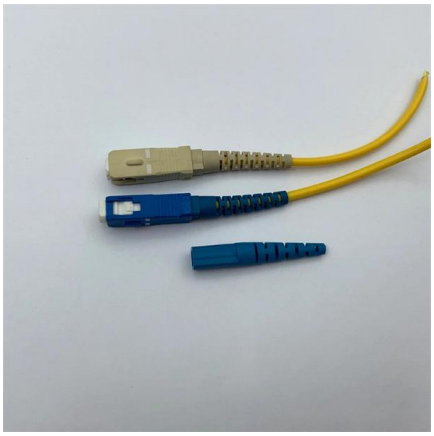
Successful lasing of buried heterostructure GaInAsP SCH MQW laser diode on silicon substrate has been achieved. BH laser structure was obtained by wet etching a.

Lecture 21

By convention, when the distributed reflectors are within the active laser cavity the laser is called a DFB laser and when they are outside the active region on either end of the device the laser is called a

Planar-buried-heterostructure laser diodes with oxidized AlAs

We have proposed and demonstrated a novel planar-buried-heterostructure laser diode that includes oxidized AlAs current blocking layers exhibiting the overall lasing performance improvement.



Analysis of Light Power Dependence on the Leakage

An effective device structure for reducing leakage current in BH laser diodes with semiin-sulation doped Fe in InP blocking layers has been analyzed . In this

(PDF) Fabrication, characterization, and applications of

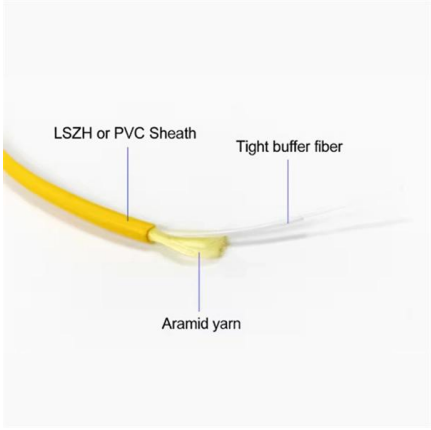
Data are presented on buried-heterostructure (BH) AlGaAs/GaAs and InGaAs/AlGaAs quantum-well diode lasers (DLs) fabricated by low-temperature

Creation of Buried Heterostructures for Microwave Laser Diodes

A technique for creating laser diodes with a channel in the substrate, including etching of mesas-tripe structure and burying with a layer of zinc selenide, is developed for the first time.

Ultra low RIN, low threshold AlGaInAs/InP BH-DFB laser

This study presents a comparative analysis of AlGaInAs buried heterostructure laser diodes by using dual-channel ridge-waveguides. Different shaped channels, including bowl shaped groove and



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Method to form semiconductor laser diode with mesa structure buried by current blocking layer Download PDF

US4731791A

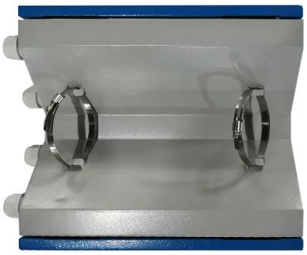
A buried hetero-structure laser diode is disclosed. The buried hetero-structure is formed by growing a double hetero-structure on a substrate. The double hetero-structure comprises two cladding layers

High-efficiency and high-brightness broad area laserdiodes with buried

Buried-regrown-implant-structure (BRIS) technology combines two-step epitaxial regrowth with an intermediate ion implantation step in order to realise a buried current aperture close

A Buried Heterostructure Laser Diode Based on High Thermal

A buried-heterostructure laser diode based on a silicon carbide substrate has been proposed and demonstrated. Using quantum well intermixing and wafer bonding technique, an InGaAsP buried



Buried Heterostructure and Shallow Ridge laser s: a theoretical

Conclusions and future work l model to compare SR and BH lasers in terms of threshold current density. This is able to predict the performance advances anticipated for buried

(PDF) Scanning Voltage Microscopy on Buried

We report scanning voltage microscopy (SVM) results on actively driven buried heterostructure (BH) multiquantum-well (MQW) lasers that exhibit

1.3-um InGaAsP planar buried heterostructure laser diodes with AlInAs

This study reports on the realization of 1.3-um InGaAsP buried-heterostructure (BH) laser diodes (LDs) via an Fe-doped semi-insulating InP layer and a

InGaAs/AlGaAs Quantum Wire DFB Buried HeteroStructure Laser Diode

A quasi-buried heterostructure (BH) quantum wire (QWR)-distributed feedback (DFB) laser was realized by one-time selective metalorganic chemical vapor deposition (MOCVD) on a

Creation of Buried Heterostructures for Microwave Laser Diodes

As a continuation of our studies aimed at creating semiconductor lasers based on buried InP/GaInAsP heterostructures, we consider the design and fabrication aspects of 1310-nm laser

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