

Detailed analysis of the physics of passively phase-locked lasers still needed. Careful design & optimization of the CBC architecture in regard with the devices. New results in BRIDLE expected !

Multimode high-power laser diodes suffer from inefficient beam focusing, leading to a focal spot 10-100 times greater than the diffraction limit. ...

A double wavelength combination and long focal length optical system was designed to combine and focus two direct high power laser diodes stacks with different wavelengths for laser...

The focusing of multimode laser diode beams is probably the most significant problem that hinders the expansion of the high-power semiconductor lasers in many spatially-demanding...

In this study, we prepared a theoretical model of a pump fiber laser and acquired the coupling efficiency of various optical configurations by regulating its system parameters. The effect of ...

These laser diodes offer distinct advantages and pose specific challenges compared to their single-mode counterparts. In this article, we will ...

The paper presents descriptions of multi-focus optics as well as examples of intensity profile measurements of beam caustics and application results. Keywords: multi-focus, beam shaping, high ...

This paper presents an efficiency optimization method for laser wireless power transmission (LWPT) system, focusing on the coordination and ...

In the LD Guide tab, we will walkthrough an overview of the major considerations and warnings involved with handling and operating laser diodes. Damage mechanisms are introduced and common ...

Unlike conventional light sources, laser diodes convert electrical energy directly into focused, monochromatic light through precise control of electron-hole recombination processes ...

Here, we review the development of low-coherence semiconductor light sources, including superluminescent diodes, highly multimode lasers, and random lasers, and the wide range of...

These laser diodes offer distinct advantages and pose specific challenges compared to their single-mode counterparts. In this article, we will explore what multimode laser diodes are, their ...

Principles of single-element holographic diffractive optics for collimation of diode laser beams with a large divergence, an elliptic cross-section, and astigmatism ...

Figure 1.4 Laser diodes with different lateral optical guiding mechanisms: (a) gain guided laser, (b) ridge waveguide laser with weak index guiding, and (c) buried heterostructure laser with strong index guiding.

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