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The Effect of the Thermal Temperature and Injected Current on Laser Diode 808 nm Output Power

Authors : Hassan H. Abuelhassan, M. Ali Badawi, Abdelrahman A. Elbadawi, Adam A. Elbashir

Abstract : In this paper, the effect of the injected current and temperature into the output power of the laser diode module operating at 808nm were applied, studied and discussed. Low power diode laser was employed as a source. The experimental results were demonstrated and then the output power of laser diode module operating at 808nm was clearly changed by the thermal temperature and injected current. The output power increases by the increasing the injected current and temperature. We also showed that the increasing of the injected current results rising in heat, which also, results into decreasing of the laser diode output power during the highest temperature as well. The best ranges of characteristics made by diode module operating at 808nm were carefully handled and determined.

Keywords : laser diode, light amplification, injected current, output power
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