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専攻名： 基盤情報学専攻

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論文題目： 半導体レーザの注入同期を用いた光信号処理
(Optical signal processing using injection-locking of semiconductor lasers)

キーワード：

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The main purpose of this research is focused on reshaping characteristic for multi channels non-return-to-zero (NRZ) optical signal of an injection locked semiconductor laser, in the sense that we will investigate the mechanism and verify its validity in real system application through the measurement of bit error rate (BER). Besides, we also investigate the possibility of signal wavelength conversion and multicasting function using a single injection locked semiconductor laser.