Optimization of Output Properties for Bias Signal-Modulated in a Single-Mode Laser

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Abstract: Defining the quantity K as the signal-to-noise ratio (SNR) and the normalized intensity fluctuation C(0) of a single-mode laser for bias signal modulation driven by color noises with colored correlation, the whole output properties of the laser system is described by K. It is found that there is a maximum in the curves of K versus D, Q, and i_0. The optimization parameters are gained.

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