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摘要: A laser diode (LD) has been used in many areas, such as optical communication systems. However, its oscillation frequency changes, with variations in ambient temperature and injection current, so its frequency stabilization is of vital importance. In these situations, Rb saturated absorption spectroscopy is the method of choice. We use the beat signal, both for the purpose of evaluating frequency stability between two independently stabilized LDs, and for generating THz waves. This work shows a basic experiment using our beat signal observation, by high-speed photodetector. In addition, we have also used a frequency-stabilized etalon, to improve frequency selectivity.
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