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标题: Studies on Signal-to-Noise Ratio Standard for THz Time-Domain Spectroscope
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摘要: Terahertz time-domain spectroscopy (THz-TDS) is an important part of THz technology, but its low scan speed always becomes the bottleneck. In this article signals of TDS system under different scan speed were compared. The signal quality was getting worse while scan speed was increasing, and the time constant of lock-in amplifier plays an important role in the process. The main noise was found introduced from the circuit according to the experiment results.
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