气相色谱热导检测器的信号测量与电源电路研究

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摘　要：在气相色谱仪中，采用热导检测器检测物质成分的浓度变化，具有构造简单、测定范围广、稳定性好、线性范围宽等优点。针对气相色谱热导检测器的弱信号失真和电源不稳定问题，研究与设计热导检测器的弱信号测量电路、信号放大电路以及电源电路。实践表明，该方法有效提高气相色谱热导检测系统的可靠性。

关键词：

Study of signal measurement and power circuit for modern-gas

Abstract：As the thermal conductivity detector is used in the modern-gas chromatography analytical instrument，it hassome abvantages of the simple structure，wide linear determining range ang good stability.The analysis of the weak signal circuit，amplifying circuit of the signal and power circuit in the thermal conductivity detector has been done，and the characteristic of the circuits with the rhenium tungsten filament is designed.Finally，the sensitivity and effect condition of gas-chromatography thermal conductivity detection system can be greatly increased.

Key words：