

专论与综述

## 快速高效液相色谱分离技术在中药分析中的应用

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**摘要** 中药化学成分分析是中药药效物质阐明及质量控制的关键问题之一。由于中药化学成分的复杂性, 中药成分分析一直存在着分离难度大、分析时间长等问题。为此, 针对这些问题发展起来的快速、高效液相色谱技术(主要包括超高压液相色谱、基于整体柱的高效液相色谱和高温液相色谱)备受关注。本文结合本实验室近年的研究, 对该技术在中药复杂体系化学成分分析中的应用做简要综述, 内容主要包括这些技术的原理、分离性能及其在中药复杂体系中的应用。

**关键词** [快速高效液相色谱](#) [超高压液相色谱](#) [整体柱高效液相色谱](#) [高温液相色谱](#) [中药分析](#)

## Applications of fast and ultra performance liquid chromatography in the analysis of Chinese herbal medicines

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### Abstract

The analysis of chemical components of Chinese herbal medicines (CHMs) is one of the most critical issues not only for screening and analyzing the bioactive components but also for controlling their quality. However, due to the complexity of the chemical constituents of CHMs, it is difficult to separate them on column within a short time. In the recent, the fast and ultra performance liquid chromatography, including ultra high pressure liquid chromatography, high performance liquid chromatography based on the monolithic columns and high temperature liquid chromatography, are of particular interest because of the high resolution and fast analytical speed provided by these techniques. This overview covers the principle and separation characteristics of these techniques, as well as their applications in Chinese herbal medicines.

**Key words** [fast and ultra performance liquid chromatography](#) [ultra-high pressure liquid chromatography](#) [high performance liquid chromatography based on the monolithic columns](#) [high temperature liquid chromatography](#) [analysis of Chinese herbal medicines](#)

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