

技术及应用

## 基于双共焦传感器的薄膜厚度测量技术

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**摘要** 研究了基于双共焦传感器的薄膜厚度测量技术, 搭建实际系统对自支撑Au、Mo膜进行测量。结果表明, 该系统有效消除了薄膜翘曲、不完全展平的影响, 测量精度达到干涉仪水平。

关键词 [共焦](#) [薄膜](#) [厚度](#) [测量](#)

分类号

## Measurement of Thickness of Foils Based on Conjugated Confocal Micro-Displacement Sensors

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**Abstract** The measurement of the thickness of foils is crucial to the studies on the equation of state (EOS) based on laser driven shock waves. The new method by means of conjugated confocal micro-displacement sensors was studied. An instrument was set up, and some warped foils were measured with it. The results indicate that the curve of specimen surface is avoided, and the precision is identical to the interferometer.

**Key words** [confocal](#) [foil](#) [thickness](#) [measurement](#)

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