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# 激光与光电子学进展

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# 超精密测量技术

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科学家门捷列夫说：“科学是从测量开始的。”“现代热力学之父”开尔文有一条著名结论：“只有测量出来，才能制造出来。”超精密测量是指测量精度达到纳米量级的先进测量技术、系统与仪器，是现代科技发展与高端装备制造的基石，是工业生产的倍增器。近年来，随着现代光学与光电子学的快速发展（如微纳光学、极短波长光学、量子光学），出现了若干新的光学测量原理与方法，推动了超精密测量向更高分辨、更高精度、更高效率和更高性能等方向不断发展。

建设高端超精密测量强国在我国具有十分突出的必要性和紧迫性，它是科学探索的“眼睛”、高端制造的“尺子”。为集中展示国内外超精密测量在原理方法、技术、仪器及其应用等方面的最新研究进展，促进学术交流，推动相关领域纵深发展，《激光与光电子学进展》推出“超精密测量技术”专题，其中包括1篇特邀导言、16篇特邀综述和8篇特邀研究论文。



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### 推荐文章



#### 封面文章 先进节点图案化晶圆缺陷检测技术

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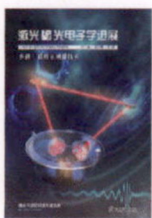
#### 封底文章 大型飞机装配中的高精度测量技术研究进展

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#### 内封面文章 用于表面形貌测量的扫描白光干涉技术进展

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#### 内封面文章 空间引力波探测中的激光干涉多自由度测量技术

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#### 特邀导言

#### 超精密测量与仪器技术是高端制造发展的前提与基础

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#### 亮点文章

#### 机械测试理论与技术研究：现状、趋势及展望

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