

<<扫描电子显微学及在纳米技术中的应用>>

图书基本信息

书名：<<扫描电子显微学及在纳米技术中的应用>>

13位ISBN编号：9787040190083

10位ISBN编号：7040190087

出版时间：2007-1

出版范围：高等教育

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内容概要

在过去的10年中，纳米技术的飞速发展使得扫描电子显微镜成为了一种分析和构建新纳米材料、结构和器件不可缺少的有力的工具。

新纳米材料的发现需要通过先进的分析技术和技能来获取高质量的照片，从而帮助我们理解纳米结构，以达到改进合成方法和提高性能的目的。

例如场发射枪、背散射电子的探测、X射线元素的图像化等，已经很大程度地提高了扫描电子显微镜在纳米材料分析中的应用。

除了分析功能之外，扫描电子显微镜可以与最新发展起来的测控技术相结合，实行原位纳米器件的加工、制造和性能表征。

这些技术包括纳米材料的操控、电子刻蚀、聚焦离子束微加工等。

虽然这些技术仍在发展之中，但它们已开始广泛应用于纳米研究的各个领域。

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