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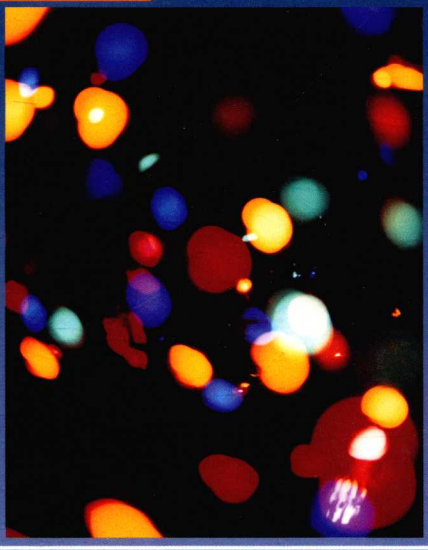

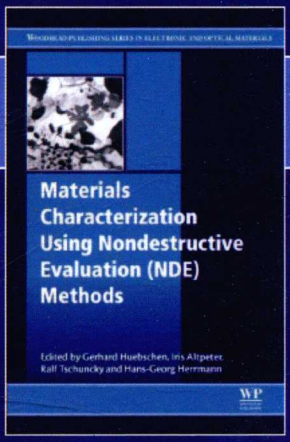


Gerhard Hübschen,
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Hans-Georg Herrmann

# 材料表征的无损检测方法

## Materials Characterization Using Nondestructive Evaluation (NDE) Methods

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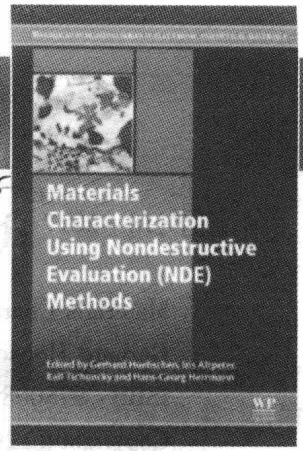




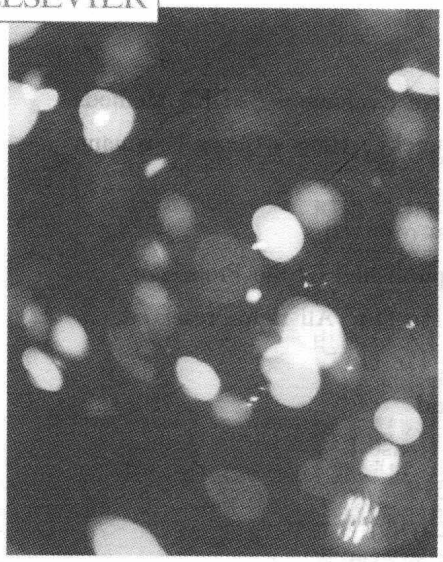

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# 内容简介

本书概述了能对材料进行长期、短期监测、评估和表征的无损检测方法(NDE),主要包括材料表征的原子力显微术,扫描电子显微术,透射电子显微术,X 射线显微术,X 射线衍射技术,微波、毫米波和太赫兹波(MMT)技术,声学显微术,超声波技术,电磁技术以及混合技术。

本书内容切合实际,每一章重点介绍了不同的 NDE 技术,强调了材料的微观结构性质(如相含量和晶粒尺寸),以及机械性能(如硬度、韧性、屈服强度、织构和残余应力)的测定方法。

本书可供土木、结构和机械工程师,材料学家,开发表征技术的物理学家以及汽车、航空航天和发电行业的研发人员使用。同时,本书也可作为高等院校材料、冶金、航空航天等相关专业学生的参考书。

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