多模态第三代晶圆检测系统
Multi-mode 3rd generation wafer inspection system

ASTRI
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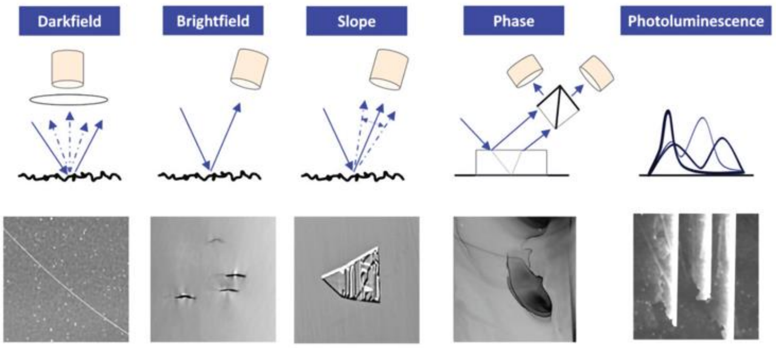
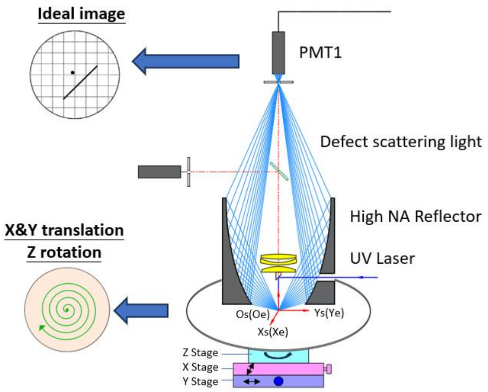
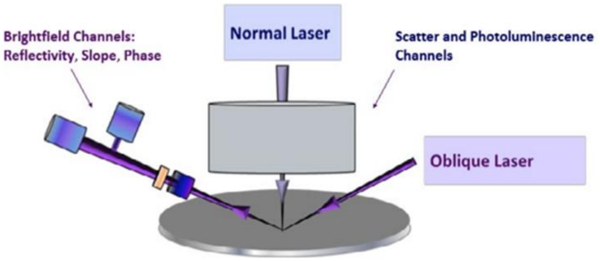
该系统专为第三代半导体而设计，用于在线检测碳化硅（SiC）或氮化镓（GaN）衬底或外延晶圆的表面缺陷和亚表面缺陷，并实现检测设备的国产化替代。

This system is designed for third-generation semiconductor, to in-line inspect surface defects and sub-surface defects for SiC or GaN substrates or epitaxial wafers, and to realize domestic substitution for inspection equipment.





光学系统 Optical system



关键技术 key technologies

- ➢ 雷射光束暗场和亮场缺陷
  Dark field and bright field defects of the laser beam
- ➢ 缺陷斜坡/高低轮廓测量
  Defect slope/high-low profile measurement
- ➢ GaN/SiC 晶体缺陷的相位成像系统
  Phase imaging system for GaN/SiC crystal defects

解决方案 solutions

- ➢ 均匀的圆心UV线性雷射光束整形
  Uniform circular center UV linear laser beam shaping
- ➢ 用于晶体缺陷的紧凑型差分干涉显微镜系统
  Compact differential interference microscope system for crystal defects
- ➢ 晶体材料缺陷高解析度照片亮度检测系统
  High-resolution photo brightness detection system for defects in crystal materials
- ➢ 用于快速自动聚焦和距离感测的同轴点共焦
  Coaxial point confocal for fast autofocus and distance sensing

应用实例 application

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