

Im Rahmen des Seminars

Recent Progress in Applied Physics

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spricht

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über

Quantum Dots and Nanostructures in Optoelectronics

Abstract:

Quantum dots (QDs) are nanoscale semiconductor systems that confine electron motion, leading to unique optical and electronic properties due to quantum confinement.

Their ability to emit precise wavelengths of light depending on their size makes them suitable for various technologies. In this presentation, the fundamental characteristics of quantum dots will be covered, exploring how their properties are exploited in LEDs and photodetector devices.

An examination of recent advances and ongoing challenges in their applications will be presented.