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Titolo	III-Nitrides Light Emitting Diodes: Technology and Applications [[electronic resource] /] / by Jinmin Li, Junxi Wang, Xiaoyan Yi, Zhiqiang Liu, Tongbo Wei, Jianchang Yan, Bin Xue
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Nota di contenuto	Introduction -- Basic concept of light-emitting diodes -- Property and testing analysis of III-nitrides based light-emitting diodes -- Epitaxy growth of III-nitrides based light-emitting diodes -- Green and blue light-emitting diodes based on InGaN/GaN MQWs structure -- UV light-emitting diodes based on AlGaN MQWs structure -- Quantum efficiency promotion of III-nitrides based light-emitting diodes -- Chip process of III-nitrides based light-emitting diodes -- Packaging of III-nitrides based light-emitting diodes -- Reliability analysis of III-nitrides based light-emitting diodes -- Application of light-emitting diodes -- Novel technology of III-nitrides based light-emitting diodes. .
Sommario/riassunto	The book provides an overview of III-nitride-material-based light-emitting diode (LED) technology, from the basic material physics to the

latest advances in the field, such as homoepitaxy and heteroepitaxy of the materials on different substrates. It also includes the latest advances in the field, such as approaches to improve quantum efficiency and reliability as well as novel structured LEDs. It explores the concept of material growth, chip structure, packaging, reliability and application of LEDs. With spectra coverage from ultraviolet (UV) to entire visible light wavelength, the III-nitride-material-based LEDs have a broad application potential, and are not just limited to illumination. These novel applications, such as health & medical, visible light communications, fishery and horticulture, are also discussed in the book. .
