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Nota di contenuto	Basic Properties of AlN Single Crystal -- Physical Basis for the Growth of AlN Single Crystal -- Defects in AlN Single Crystal -- Growth of AlN Bulk Crystal by Physical Vapor Transport -- Growth of Thick AlN Layers by Hydride Vapor Phase Epitaxy -- Growth of Thin AlN Layers by Metal Organic Chemical Vapor Deposition -- Aluminium Nitride based Semiconductor Devices.
Sommario/riassunto	This book covers the rapidly developing field of AlN research and some of its technical applications. In this book, the development of aluminium nitride from single crystal growth to device applications is comprehensively presented. Single crystal AlN growth includes bulk single crystal growth, single crystal thick film growth and single crystal thin film growth involving physical vapor deposition technology, hydride vapor phase epitaxy and metal-organic chemical vapor deposition technology. In terms of devices, AlN basic UV LED and power electronics devices are discussed. This book can provide researchers, engineers and graduate students with a wealth of new discoveries, results, information and knowledge in the field of AlN single crystal materials.