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Nota di contenuto	Preface; CONTENTS; Materials Properties of Nitrides. Summary; Kinetics, Microstructure and Strain in GaN Thin Films Grown Via Pendeo-Epitaxy; Strain of GaN Layers Grown Using 6H-SiC(0001) Substrates with Different Buffer Layers; Growth of Thick GaN Films and Seeds for Bulk Crystal Growth; Cracking of GaN Films; Direct Bonding of GaN and SiC; A Novel Technique for Electronic Device Fabrication; Electronic Properties of GaN (0001) - Dielectronic Interfaces; Transport and Noise Properties; Quasi-Ballistic and Overshoot Transport in Group III-Nitrides; High Field Transport in AlN Generation-Recombination Noise in GaN-Based DevicesInsulated Gate III-N Heterostructure Field-Effect Transistors; High Voltage AlGaIn/GaN Heterojunction Transistors; Etched Aperture GaN CAVET Through Photoelectrochemical Wet Etching; n-AlGaAs/p-GaAs/n-GaN Heterojunction Bipolar Transistor: The First Transistor Formed Via Wafer Fusion
Sommario/riassunto	The unique materials properties of GaN-based semiconductors

have stimulated a great deal of interest in research and development regarding nitride materials growth and optoelectronic and nitride-based electronic devices. High electron mobility and saturation velocity, high sheet carrier concentration at heterojunction interfaces, high breakdown field, and low thermal impedance of GaN-based films grown over SiC or bulk AlN substrates make nitride-based electronic devices very promising.
