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Sommario/riassunto	The unique materials properties of GaN-based semiconductors havestimulated a great deal of interest in research and developmentregarding nitride materials growth and optoelectronic

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andnitride-based electronic devices. High electron mobility andsaturation velocity, high sheet carrier concentration atheterojunction interfaces, high breakdown field, and low thermalimpedance of GaN-based films grown over SiC or bulk AIN substratesmake nitride-based electronic devices very promising.