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Autore	ROXIN, Claus
Titolo	Antigiuridicità e cause di giustificazione : problemi di teoria dell'illecito penale / Claus Roxin ; a cura di Sergio Moccia
Pubbl/distr/stampa	Napoli : Edizioni scientifiche italiane, 1996
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Descrizione fisica	346 p ; 24 cm
Collana	Studi di scienze penalistiche integrate ; 3
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Collocazione	COLL. PLD 3
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Autore	Kinch Michael A
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Descrizione fisica	1 online resource (186 p.)
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Nota di contenuto	1. Introduction. 2. IR detector performance criteria. 2.1. Photon detectors -- 2.2. Thermal detectors. 3. IR detector materials: a technology comparison. 3.1. Intrinsic direct bandgap semiconductor -- 3.2. Extrinsic semiconductor -- 3.3. Quantum well IR photodetectors (QWIPs) -- 3.4. Silicon schottky barrier detectors -- 3.5. High-temperature superconductor -- 3.6. Conclusions. 4. Intrinsic direct bandgap semiconductors. 4.1. Minority carrier lifetime -- 4.2. Diode dark current models -- 4.3. Binary compounds -- 4.4. Ternary alloys -- 4.5. Pb1-x SnxTe -- 4.6. Type III superlattices -- 4.7. Type II superlattices -- 4.8. Direct bandgap materials: conclusions. 5. HgCdTe: material of choice for tactical systems. 5.1. HgCdTe material properties -- 5.2. HgCdTe device architectures -- 5.3. ROIC requirements -- 5.4. Detector performance -- 5.5. HgCdTe: conclusions. 6. Uncooled detection. 6.1. Thermal detection -- 6.2. Photon detection -- 6.3. Uncooled photon vs. thermal detection limits -- 6.4. Uncooled detection: conclusions. 7. HgCdTe electron avalanche photodiodes (EAPDs). 7.1. McIntyre's avalanche photodiode model -- 7.2. Physics of HgCdTe EAPDs -- 7.3. Empirical model for electron avalanche gain in HgCdTe -- 7.4. Room-temperature HgCdTe APD performance -- 7.5. Monte Carlo modeling -- 7.6. Conclusions.

8. Future HgCdTe developments. 8.1. Dark current model -- 8.2. The separate absorption and detection diode structure -- 8.3. Multicolor and multispectral FPAs -- 8.4. High-density FPAs -- 8.5. Low background operation -- 8.6. Higher operating temperatures -- 8.7. Conclusion -- Epilogue -- Appendix A. Mathcad program for HgCdTe diode dark -- Current modeling -- References -- About the author -- Index.

Sommario/riassunto

The choice of available infrared (IR) detectors for insertion into modern IR systems is both large and confusing. The purpose of this volume is to provide a technical database from which rational IR detector selection criteria evolve, and thus clarify the options open to the modern IR system designer. Emphasis concentrates mainly on high-performance IR systems operating in a tactical environment, although there also is discussion of both strategic environments and low- to medium-performance system requirements.