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Semiconductor materials for IR optoelectronics

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Abstract

Based on studies at the State Institute of Applied Optics Scientific Manufacturing Organization, this review discusses the main properties of III-V, IV-VI, and II-VI narrow-band compounds and solid solutions, as well as the properties of doped germanium and silicon. The use of these materials in IR sources and detectors is considered, along with their use as optical media for optoelectronic devices (filters, modulators, elements for integrated optics and gradient optics, etc.). © 1996 The Optical Society of America.
