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Author

Korneeva MD. Ponomarenko VP. Filachev AM.

Author Unabbreviated

Korneeva M. D.; Ponomarenko V. P.; Filachev A. M.

Author/Editor Affiliation

Korneeva MD. Ponomarenko VP. Filachev AM. : Orion R&P Association, Moscow, Russia

Title

Current state and new prospects of semiconductor infrared photoelectronics. Part 2

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Abstract

Present condition and results of development are discussed in a number of basic technologies of infrared photoelectronics: semiconductor photosensitive materials, solid-state photo converters for IR and UV regions of electromagnetic radiation, multispectral and fast response devices, THz radiation recording devices, metamaterials and nanotechnology for creation of new types of optoelectronic devices. The the results of development of "staring" and TDA focal plane arrays based on Cd₀₂Hg₀₈Te and InSb for spectral regions 8-12, 3-5, and 1-2 m with 2x96, 2x256, 4x288, 2x(2x288), 6x576, 256x256, 384x288 formats, digital imaging systems, and also imaging modules on their basis are discussed. (66 References).