7. Title: Antenna-coupled microbolometers
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   Abstract: This paper analyzes the development trends of devices and processes for fabricating antenna-coupled microbolometers for the IR, submillimeter, and millimeter ranges. Depending on the problem to be solved, these thermal detectors can be self-contained or can be built into linear or two-dimensional arrays and can operate at temperatures of 300, 78, and 4 K. The temperature determines the choice of material of the thin-film heat-sensitive element-metal, semiconductor, high-temperature or classical superconductor. The planar antennas used in these detectors provide efficient reception of radiation in the specified spectral range. The achievable parameters and examples of the use of antenna-coupled microbolometers are discussed.