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Title:Features of the manufacture of deep X-ray lithography masks in the siberian synchrotron and terahertz radiation center
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Abstract:The development of a low-cost technology to manufacture high-contrast X-ray LIGA masks is topical because this technology is important for various applied research on microstructured products with minimum element sizes of 10-50 μm, such as microfluid analytical systems, selective waveguide mesh-based elements to control terahertz (THz) radiation, microshaped optical elements for the visible range, etc. Technological particularities of mask manufacture are considered. A method to check the quality of masks is presented. Test microproducts manufactured using the produced deep X-ray lithography masks are demonstrated.
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