

128. 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.