

# Synthesis of a micro-relief using chalcogenide vitreous semiconductors

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## Abstract

Chalcogenide vitreous semiconductors were first synthesized in 1954 by N.A. Goryunova and B.T. Kolomiets, the scientists of the Ioffe Physical-Technical Institute of the Russian Academy of Sciences. The group of chalcogenide vitreous semiconductors includes binary or multicomponent chalcogenides, i.e. sulfides, selenides and tellurides of the elements of the groups V, IV, and III of the periodic table. This work presents the devices patented by the authors for generating stoichiometric chalcogenide vitreous semiconductor films, applicable for writing high-resolution optical elements.

**Keywords:** chalcogenide vitreous semiconductor, binary chalcogenide, multicomponent chalcogenide, periodic table, high-resolution optical element.

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[Access full text \(in Russian\)](#)

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