



Institute for Photonics & Advanced Sensing (IPAS)

Glass Sputtering Targets for Mid-IR Applications

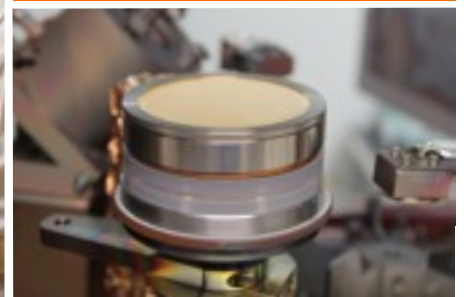
www.ipas.edu.au

IPAS can provide customised high purity glass sputtering targets from a broad range of glass compositions. The targets are directly cast from high purity raw materials (>99.99%) into the required dimensions and the back surface is polished flat for optimal thermal contact. We offer mid IR transmitting glasses in the Tellurite, Germanate and Fluoride (ZBLAN) families with the option for rare earth doping. Precise compositions can be created through a consultation process.

These targets are for use in chemical vapor deposition (CVD) and physical vapor deposition (PVD) systems. Applications include manufacture of planar waveguides, thin film devices, planar lasers and amplifiers.

IPAS can provide consistent sputtering targets that meet our customers requirements. Other target materials are available on request.

For pricing and availability, please contact [Luis Lima-Marques](#).



The Institute for Photonics & Advanced Sensing (IPAS)

IPAS brings together physicists, chemists and biologists to pursue a new transdisciplinary approach to science.

We are developing novel photonic, sensing and measurement technologies that are changing the way science is done within traditional discipline areas, stimulating the creation of new industries, and inspiring a new generation of scientists to be engaged in solving real-world problems.

IPAS research targets applications in four key market areas: defence and national security, environmental monitoring, preventative health, food and wine. We have world leading facilities for the production of novel soft and silica fibres, surface functionalisation and sensor development.

Glass Family	Glass Code	Composition	Refractive Index at 633nm	Transmission Range
Fluoride	ZBLAN	$53\text{ZrF}_4\text{-}20\text{BaF}_2\text{-}4\text{LaF}_3\text{-}3\text{AlF}_3\text{-}20\text{NaF}$	1.50	0.3-5 μm
Tellurite	TZNL	$73\text{TeO}_2\text{-}20\text{ZnO}\text{-}5\text{Na}_2\text{O}\text{-}2\text{La}_2\text{O}_3$	2.04	0.4-4 μm
Germanate	GPL	$60\text{GeO}_2\text{-}35\text{PbO}\text{-}5\text{La}_2\text{O}_3$	2.25	0.4-4 μm

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