



BUHLE POWER

Solar glass hafnium target





Overview

How are thin films of hafnium deposited on Si (100) substrates?

Samples preparation Thin films of hafnium and hafnium carbide were deposited on Si (100) substrates by a balanced reactive magnetron sputtering system using a hafnium (Hf) target with 99.9% purity, dia. of 75 mm and thickness of 6 mm.

What is hafnium carbide?

Thanks to the knowledge of the hafnium carbide film properties, this material can be included in the design and fabrication of optical structures for applications that require high operating temperatures, such as in thermophotovoltaic and solar thermal devices, as well as in thermal energy grid storage.

How are hafnium carbide thin films prepared?

In the present work, five hafnium carbide thin films were prepared using a Hf cathode in a direct-current (DC) magnetron sputtering apparatus. The depositions were performed in reactive sputtering mode, i.e., by introducing C₂H₂ gas into the process.



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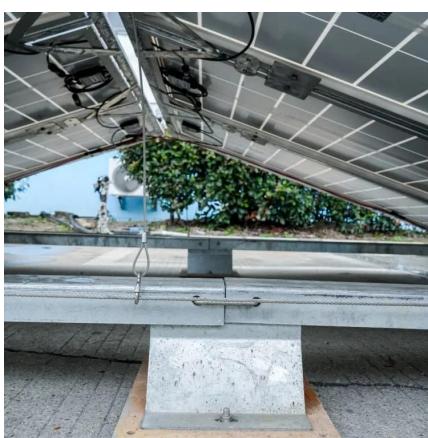


[Manufacturing High-Purity Hafnium Sputtering Targets](#)

Apr 27, 2025 · All these techniques work together to ensure the purity of hafnium sputtering targets reaches levels of 99.99% or higher, making them suitable for sensitive industrial ...

[Hafnium Targets Market 2025 Forecast to 2032](#)

May 30, 2025 · Global hafnium target market size was valued at USD 145 million in 2024 and is projected to reach USD 210 million by 2032, growing at a CAGR of 4.8% during the forecast ...



[HAFNIUM TARGET-Thin Films-SUNRISE](#)

Hafnium is traditionally used in high temperature super alloys and nuclear control rods. Sputtering target for thin film depositions is a newer application. Hafnium-based thin films are used as an ...

[Detailed studies on sputter-deposited Hf and HfC thin films for solar](#)

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[Global Hafnium Targets Market Report 2025 Edition, Market ...](#)

Global Hafnium Targets Market Report 2025 Market Size Split by Type (Plane Target, Rotating Target), by Application (Display Industry, Solar Energy Industry, Automobile & Transportation ...



[Hafnium Targets Market Size, Research, Consumer Behavior ...](#)

Hafnium Target Demand Drivers: Technological advancements in thin-film deposition and sputtering, particularly in the display and solar energy sectors, are key factors driving demand.



[Hafnium Targets Market Report: Trends, Forecast and ...](#)

The future of the global hafnium targets market looks promising with opportunities in the display, solar energy, and automobile markets. The publisherl forecasts that, within the type category, ...



[Hafnium Targets Market Research Report 2032](#)

The global hafnium targets market size was valued at approximately USD 250 million in 2023 and is expected to reach around USD 400 million by 2032, exhibiting a compound annual growth

...

[Global Hafnium Targets Market 2024 by Manufacturers, ...](#)

The Global Info Research report includes an overview of the development of the Hafnium Targets industry chain, the market status of Display Industry (Plane Target, Rotating Target), Solar ...



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