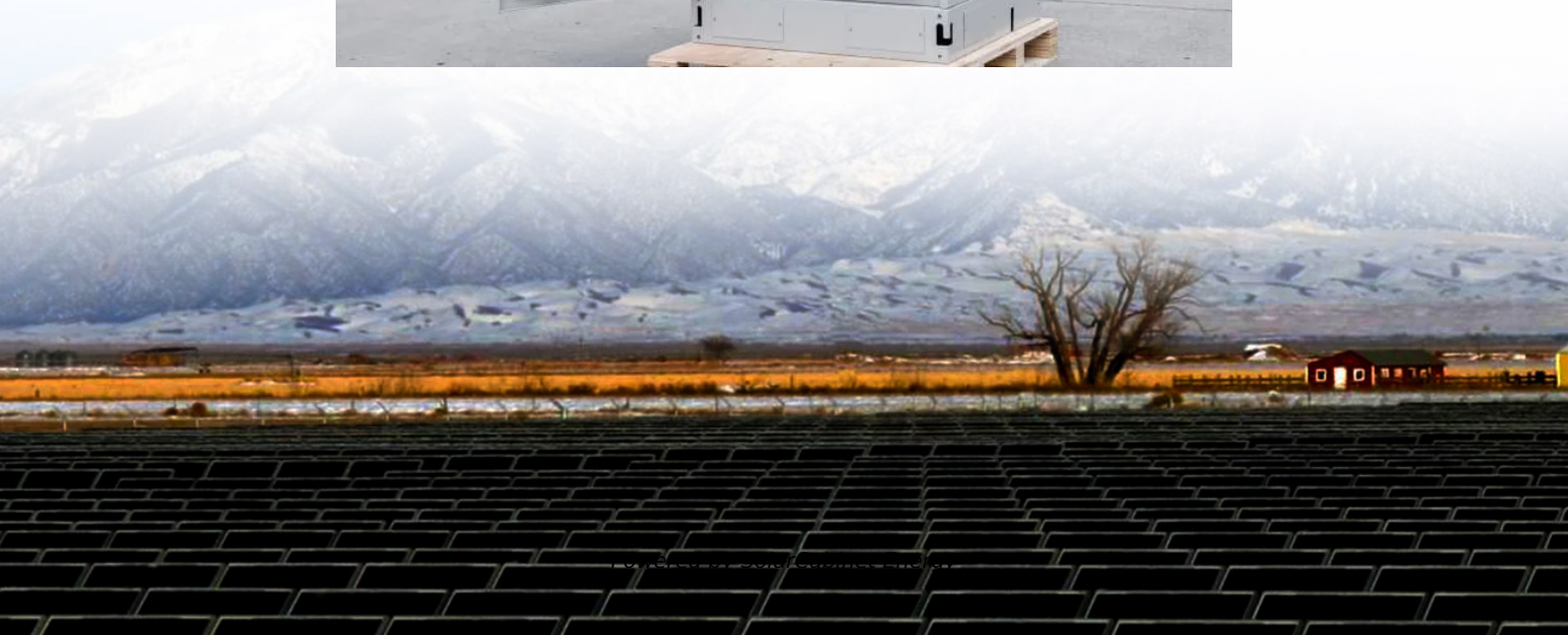


Anisotropic double-glass components





Overview

What is anisotropic glass etching?

The anisotropic glass etching in laser-induced selective etching is a commonly observed yet almost overlooked phenomenon. In the case of through glass via (TGV) processing, the modified region cannot be rapidly removed due to the delayed penetration of etchant into the modification, resulting in tapered holes at the two sides of the glass .

What is laser guided anisotropic etching?

Laser-guided anisotropic etching is developed for precision glass micromachining. Steady guided etching ensures LGAE's robustness and the shape accuracy. High-quality microstructures, <10 nm surface roughness, meet optical requirements.

How does anisotropic etching work?

The localized enhanced etching rate allows more rapid material removal at the bottom of concave structures, thus facilitating the directional etching along the track of the modified line. Therefore, a basic groove structure with a remarkably sharp bottom tip can be obtained under anisotropic etching along any laser scanning path.

Are polarization-sensitive photodetectors anisotropic 2D materials?

In recent years, there has been a surge in research on polarization-sensitive photodetectors that utilize anisotropic two-dimensional (2D) materials. The essence of these 2D polarization-sensitive photodetectors is rooted in the anisotropic characteristics that arise from the asymmetric crystal lattice of the 2D materials in question.

Does laser-guided anisotropic etching affect the final shape?

The initial laser-machined arc profile is fully etched away during the isotropic etching and does not affect the final shape. At the same time, the steady and



continuous laser-guided anisotropic etching can create V-shape tips with stable angles, guaranteeing shape accuracy and thus confirming the robustness of the LGAE method.

How can a 3D glass structure be customized?

Leveraging the flexible scanning capability of laser processing, a 3D internal modification region can be further customized by interconnecting the Bessel beam-modified lines, making various 3D glass structures achievable under the anisotropic etching mechanism.



Anisotropic double-glass components



[Dual Nature of Large and Anisotropic Glass-Forming Molecules in ...](#)

Dielectric spectroscopy and shear viscosity measurements were employed to get insight into the decoupling between reorientation relaxation times and viscosity for anisotropic ...

[Structural and optoelectronic characterization of anisotropic two](#)

This article systematically categorizes anisotropic 2D materials and offers an insightful overview of their crystal structures. It also introduces various optical and electrical ...



[The effect of optical anisotropies on building glass façades ...](#)

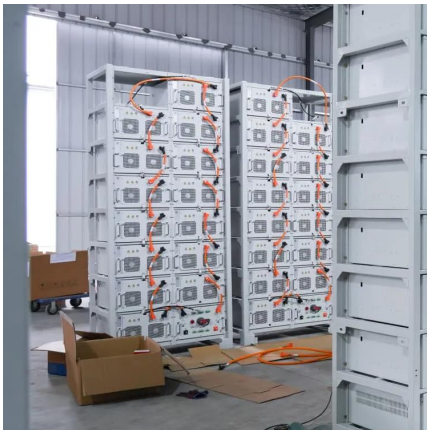
The sources of the anisotropy effect are natural polarized light in the environment and the anisotropic refractive index of stressed (unequal in the principle directions) glass, which leads ...

[\(PDF\) Formation of double glass in binary mixtures of anisotropic](#)

We propose a simple microscopic model of molecular dynamics simulation to study orientational glass in three dimensions. We



present simulation results for mixtures of mildly anisotropic ...



[Double primary relaxation in a highly anisotropic orientational...](#)

Table 1: Values of the glass transition temperature (T_g) and pressure (P_g), fragility (m) and activation volume ($V^\ddagger$) for the measurements at constant pressure and temperature shown in ...

Contact Us

For catalog requests, pricing, or partnerships, please visit:
<https://www.legnano.eu>