



MIMOS Graphene Wafer (Mi-GraphWafer)

A pristine graphene material on 8-inch (200mm) wafer for enabling the manufacturing and development of next generation high performance electronics.

Overview

MIMOS Mi-GraphWafer is a state-of-the-art process technology for the development of pristine Graphene on 8-inch (200mm) wafer to enable the manufacturing and production of next generation advanced electronics. The graphene layer developed are available at the highest purity as well as uniformly-synthesised through industry-grade chemical vapour deposition (CVD) process technology.

Features

Mi-GraphWafer comprises the following features:

- **High Purity**
Pristine single layer graphene synthesised through chemical vapour deposition (CVD) method on wafer. Can be tuned for bi- and multi-layer graphene.
- **Uniform**
Single layer graphene coverage >90%. Top and bottom heater for uniformly-controlled growth and coverage.
- **Large Area**
Can be synthesised on substrate of up to 8" (200mm). Also accept small sample size.
- **Customisable**
Can be tuned and structured based on requirements and applications.

Technology Benefits

The main impacts of Mi-GraphWafer are:

- **Pristine Graphene Material**
High purity single layer graphene that can be transferred and utilised as a nanomaterial by itself for R&D and device development purposes. Quality of graphene controlled at a consistent and uniform manner across the substrate.
- **Scalability**
Process capability-ready. Structuring and patterning of graphene material can be executed on full wafer-scale level for device development.
- **Enabling New Nanomaterials Development**
Functionalisation of base graphene material can be achieved through multiple process add-ons for value-added purposes. Matured industry-grade chemical vapour deposition process technology utilised.

Technology Summary

Mi-GraphWafer

State-of-the-art process technology for the development of pristine Graphene on 8-inch (200mm) wafer to enable the manufacturing and production of next generation advanced electronics.

Industries: E&E industries, SMEs, Government

Features

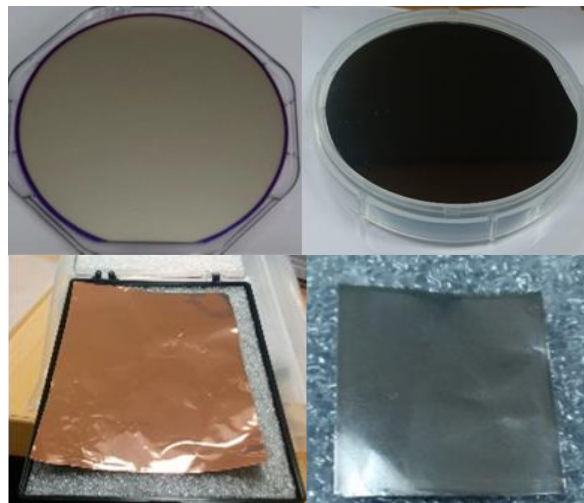
- High purity
- Uniform
- Large area
- Customisable

Technology Benefits

- Pristine graphene material
- Scalability
- Enabling new nanomaterials development



MIMOS graphene CVD equipment



Mi-GraphWafer on multiple substrates

Specifications

Mi-GraphWafer	
Description	Specification
Catalyst layer	Copper, Nickel
Substrate	Silicon, foil
Size	Up to 8" (200mm)
Layers	Single layer Graphene, Multi-layer Graphene
Grain size	Up to 10µm
Coverage	>90%

Disclaimer: Trademarks, logos and images of third parties used are the property of the respective owners. They are used for illustration purposes only.

