

# Gallium Arsenide Wafer Market Report: Trends, Forecast and Competitive Analysis

<https://marketpublishers.com/r/G700DE3E677EN.html>

Date: June 2018

Pages: 111

Price: US\$ 4,850.00 (Single User License)

ID: G700DE3E677EN

## Abstracts

The future of the gallium arsenide wafer market looks attractive with opportunities in radio frequency (RF) electronics and optoelectronics. The global gallium arsenide wafer market is expected to reach an estimated \$1.3 billion by 2023 with a CAGR of 11.5% from 2018 to 2023. The major drivers of growth for this market are increasing adoption of smartphones and growing penetration of light emitting diode (LED) in general lighting.

Emerging trends, which have a direct impact on the dynamics of the gallium arsenide wafer industry, include growing demand for larger size GaAs wafers and reusing gallium arsenide wafers for higher performance devices.

A total of 67 figures/charts and 50 tables are provided in this 111 -page report to help in your business decisions. Sample figures with some insights are shown below. To learn the scope of, benefits, companies researched and other details of this gallium arsenide wafer market report, download the report brochure.

wafer market by substrate type

wafer market trends forecast

market share analysis

The study includes the gallium arsenide wafer market size, and forecast for the global gallium arsenide wafer through 2023, segmented by substrate type, manufacturing technology, application, and region as follows:

Gallium Arsenide Wafer Market by Substrate Type [\$M shipment analysis from 2012 to

2023]:

Semi-Insulating Gallium Arsenide (SI GaAs) Semi-Conducting Gallium Arsenide (SC GaAs)

Gallium Arsenide Wafer Market by Manufacturing Technology [\$M shipment analysis from 2012 to 2023]:

Liquid Encapsulated Czochralski (LEC) Vertical Gradient Freeze (VGF) Others  
Gallium Arsenide Wafer Market by Application [\$M shipment analysis from 2012 to 2023]:

RF Electronics Optoelectronics

Gallium Arsenide Wafer Market by Region [\$M shipment analysis for 2012 – 2023]:

North America United States Canada Mexico Europe United Kingdom Germany Asia Pacific China Taiwan Japan The Rest of the World

Some of the gallium arsenide wafer companies profiled in this report include Freiberger Compound Materials GmbH, Sumitomo Electric Industries, Ltd., AXT, Inc., Mitsubishi Chemical Corporation, DOWA Electronics Materials Co., Ltd. and others.

VGF will remain the largest manufacturing technology, and it is expected to witness highest growth during the forecast period as it produces sub-strates with relatively low defect densities and higher mechanical strength.

In the GaAs wafer market, optoelectronics will remain the largest application segment, and this segment is also expected to grow at highest rate during the forecast period supported by the increasing demand for LEDs and lasers.

Asia Pacific is expected to be the largest region by value and will experience the highest growth over the forecast period supported by increasing demand for smartphones and LEDs in China, Japan, Taiwan, and India.

Some of the features of “Global Gallium Arsenide Wafer Market Report: Trends, Forecast and Competitive Analysis” include:

Market size estimates: Global gallium arsenide wafer market size estimation in terms of value (\$M) and volume (Million Pounds) shipment. Trend and forecast analysis: Market trend (2012-2017) and forecast (2018-2023) by application, and end use industry. Segmentation analysis: Global gallium arsenide wafer market size by various applications such as substrate type, manufacturing technology, and application in terms of value and volume shipment. Regional analysis: Global gallium arsenide wafer market breakdown by North America, Europe, Asia Pacific, and the Rest of the World. Growth

opportunities: Analysis on growth opportunities in different applications and regions of gallium arsenide wafer in the gallium arsenide wafer market. Strategic analysis: This includes M&A, new product development, and competitive landscape of gallium arsenide wafer in the gallium arsenide wafer market. Analysis of competitive intensity of the industry based on Porter's Five Forces model.

This report answers following 11 key questions:

- Q.1 What are some of the most promising, high-growth opportunities for the global gallium arsenide wafer market by substrate type (SI GaAs and SC GaAs), by manufacturing technology (VGF, LEC, and Others), by application (RF Electronics and Optoelectronics), and by region (North America, Europe, Asia Pacific, and the Rest of the World)?
- Q.2 Which segments will grow at a faster pace and why?
- Q.3 Which regions will grow at a faster pace and why?
- Q.4 What are the key factors affecting market dynamics? What are the drivers and challenges of the gallium arsenide wafer market?
- Q.5 What are the business risks and threats to the gallium arsenide wafer market?
- Q.6 What are the emerging trends in this gallium arsenide wafer market and reasons behind them?
- Q.7 What are some changing demands of customers in the gallium arsenide wafer market?
- Q.8 What are the new developments in the gallium arsenide wafer market? Which companies are leading these developments?
- Q.9 Who are the major players in this gallium arsenide wafer market? What strategic initiatives are being implemented by key players for business growth?
- Q.10 What are some of the competitive products and processes in this gallium arsenide wafer area and how big of a threat do they pose for loss of market share via product substitution?
- Q.11 What M&A activity has occurred in the last 5 years in this gallium arsenide wafer market?

## Contents

### 1. EXECUTIVE SUMMARY

### 2. MARKET BACKGROUND AND CLASSIFICATIONS

2.1: Introduction, Background, and Classifications

2.2: Supply Chain

2.3: Industry Drivers and Challenges

### 3. MARKET TRENDS AND FORECAST ANALYSIS FROM 2012 TO 2023

3.1: Macroeconomic Trends and Forecast

3.2: Global Gallium Arsenide Wafer Market Trends and Forecast

3.3: Global Gallium Arsenide Wafer Market by Substrate Type

3.3.1: Semi-Insulating Gallium Arsenide (SI GaAs) Wafers

3.3.2: Semi-Conducting Gallium Arsenide (SC GaAs) Wafers

3.4: Global Gallium Arsenide Wafer Market by Manufacturing Technologies

3.4.1: Liquid Encapsulated Czochralski (LEC)

3.4.2: Vertical Gradient Freeze (VGF)

3.4.3: Others

3.5: Global Gallium Arsenide Wafer Market by Application

3.5.1: RF Electronics

3.5.2: Optoelectronics

### 4. MARKET TRENDS AND FORECAST ANALYSIS BY REGION

4.1: Global Gallium Arsenide Wafer Market by Region

4.2: North American Gallium Arsenide Wafer Market

4.2.1: North American Gallium Arsenide Wafer Market by Application

4.2.2: US Gallium Arsenide Wafer Market

4.2.3: Canadian Gallium Arsenide Wafer Market

4.2.4: Mexican Gallium Arsenide Wafer Market

4.3: European Gallium Arsenide Wafer Market

4.3.1: European Gallium Arsenide Wafer Market by Application

4.3.2: German Gallium Arsenide Wafer Market

4.3.3: UK Gallium Arsenide Wafer Market

4.4: APAC Gallium Arsenide Wafer Market

4.4.1: APAC Gallium Arsenide Wafer Market by Application

- 4.4.2: Chinese Gallium Arsenide Wafer Market
- 4.4.3: Japanese Gallium Arsenide Wafer Market
- 4.4.4: Taiwanese Gallium Arsenide Wafer Market
- 4.5: ROW Gallium Arsenide Wafer Market
  - 4.5.1: ROW Gallium Arsenide Wafer Market by Application

## **5. COMPETITOR ANALYSIS**

- 5.1: Product Portfolio Analysis
- 5.2: Geographical Reach
- 5.3: Porter's Five Forces Analysis

## **6. GROWTH OPPORTUNITIES AND STRATEGIC ANALYSIS**

- 6.1: Growth Opportunity Analysis
  - 6.1.1: Growth Opportunities for the Global Gallium Arsenide (GaAs) Wafer Market by Application
  - 6.1.2: Growth Opportunities for the Global Gallium Arsenide (GaAs) Wafer Market by Substrate Type
  - 6.1.3: Growth Opportunities for the Global Gallium Arsenide (GaAs) Wafer Market by Manufacturing Technologies
  - 6.1.4: Growth Opportunities for the Global Gallium Arsenide Wafer Market by Region
- 6.2: Emerging Trends in the Global Gallium Arsenide Wafer Market
- 6.3: Strategic Analysis
  - 6.3.1: Geographical Expansion
  - 6.3.2: Mergers, Acquisitions, Partnership, and Joint Ventures in the Global Gallium Arsenide Wafer Market

## **7. COMPANY PROFILES OF LEADING PLAYERS**

- 7.1: AXT, Inc.
- 7.2: Mitsubishi Chemical Corporation
- 7.3: Sumitomo Electric Industries
- 7.4: Freiberger Compound Materials GmbH
- 7.5: DOWA Electronics Materials Co., Ltd.
- 7.6: Xiamen Powerway Advanced Material Co.
- 7.7: Wafer Technology Ltd.

## List Of Figures

### LIST OF FIGURES

#### CHAPTER 2. MARKET BACKGROUND AND CLASSIFICATIONS

Figure 2.1: Classification of the Global Gallium Arsenide (GaAs) Market

Figure 2.2: Supply Chain for the Global GaAs Wafer Market

Figure 2.3: Major Drivers and Challenges for the Global GaAs Wafer Market

#### CHAPTER 3. MARKET TRENDS AND FORECAST ANALYSIS FROM 2012 TO 2023

Figure 3.1: Trends of the Global GDP Growth Rate

Figure 3.2: Trends of the Global Population Growth Rate

Figure 3.3: Trends of the Global Inflation Rate

Figure 3.4: Trends of the Global Unemployment Rate

Figure 3.5: Trends of the Regional GDP Growth Rate

Figure 3.6: Trends of the Regional Population Growth Rate

Figure 3.7: Trends of the Regional Inflation Rate

Figure 3.8: Trends of the Regional Unemployment Rate

Figure 3.9: Regional Per Capita Income Trends

Figure 3.10: Forecast for the Global GDP Growth Rate

Figure 3.11: Forecast for the Global Population Growth Rate

Figure 3.12: Forecast for the Global Inflation Rate

Figure 3.13: Forecast for the Global Unemployment Rate

Figure 3.14: Forecast for the Regional GDP Growth Rate

Figure 3.15: Forecast for the Regional Population Growth Rate

Figure 3.16: Forecast for the Regional Inflation Rate

Figure 3.17: Forecast for the Regional Unemployment Rate

Figure 3.18: Forecast for Regional Per Capita Income

Figure 3.19: Trends and Forecast for the Global GaAs Wafer Market (2012-2023)

Figure 3.20: Trends of the Global GaAs Wafer Market (\$M) by Substrate Type (2012-2017)

Figure 3.21: Forecast for the Global GaAs Wafer Market (\$M) by Substrate Type (2018-2023)

Figure 3.22: Trends and Forecast for the Global SI GaAs Wafer Market (\$M) (2012-2023)

Figure 3.23: Trends and Forecast for the Global SC GaAs Wafer Market (2012-2023)

Figure 3.24: Trends of the Global GaAs Wafer Market (\$M) by Manufacturing

Technology (2012-2017)

Figure 3.25: Forecast for the Global GaAs Wafer Market (\$M) by Manufacturing Technology (2018-2023)

Figure 3.26: Trends and Forecast for LEC Manufacturing Technology in the Global GaAs Wafer Market (2012-2023)

Figure 3.27: Trends and Forecast for VGF Manufacturing Technology in the Global GaAs Wafer Market (2012-2023)

Figure 3.28: Trends and Forecast for the Other Manufacturing Technology in the Global GaAs Wafer Market (2012-2023)

Figure 3.29: Trends of the Global GaAs Wafer Market (\$M) by Application (2012-2017)

Figure 3.30: Forecast for the Global GaAs Wafer Market (\$M) by Application (2018-2023)

Figure 3.31: Trends of GaAs Wafers in the RF Electronics Market by Region (2012-2017)

Figure 3.32: Forecast for GaAs Wafers in the RF Electronics Market by Region (2018-2023)

Figure 3.33: Trends of GaAs Wafers in the Optoelectronics Market by Region (2012-2017)

Figure 3.34: Forecast for GaAs Wafers in the Optoelectronics Market by Region (2018-2023)

## **CHAPTER 4. MARKET TRENDS AND FORECAST ANALYSIS BY REGION**

Figure 4.1: Trends of the Global GaAs Wafer Market (\$M) by Region (2012-2017)

Figure 4.2: Forecast for the Global GaAs Wafer Market (\$M) by Region (2018-2023)

Figure 4.3: Trends and Forecast for the North American GaAs Wafer Market (2012-2023)

Figure 4.4: Trends of the North American GaAs Wafer Market (\$M) by Application (2012-2017)

Figure 4.5: Forecast for the North American GaAs Wafer Market (\$M) by Application (2018-2023)

Figure 4.6: Trends and Forecast for the United States GaAs Wafer Market (2012-2023)

Figure 4.7: Trends and Forecast for the Canadian GaAs Wafer Market (2012-2023)

Figure 4.8: Trends and Forecast for the Mexican GaAs Wafer Market (2012-2023)

Figure 4.9: Trends and Forecast for the European GaAs Wafer Market (2012-2023)

Figure 4.10: Trends of the European GaAs Wafer Market (\$M) by Application (2012-2017)

Figure 4.11: Forecast for the European GaAs Wafer Market (\$M) by Application (2018-2023)

Figure 4.12: Trends and Forecast for the German GaAs Wafer Market (2012-2023)

Figure 4.13: Trends and Forecast for UK GaAs Wafer Market (2012-2023)

Figure 4.14: Trends and Forecast for the APAC GaAs Wafer Market (2012-2023)

Figure 4.15: Trends of the APAC GaAs Wafer Market (\$M) by Application (2012-2017)

Figure 4.16: Forecast for the APAC GaAs Wafer Market (\$M) by Application (2018-2023)

Figure 4.17: Trends and Forecast for the Chinese GaAs Wafer Market (2012-2023)

Figure 4.18: Trends and Forecast for the Japanese GaAs Wafer Market (2012-2023)

Figure 4.19: Trends and Forecast for the Taiwanese GaAs Wafer Market (2012-2023)

Figure 4.20: Trends and Forecast for the ROW GaAs Wafer Market (2012-2023)

Figure 4.21: Trends of the ROW GaAs Wafer Market (\$M) by Application (2012-2017)

Figure 4.22: Forecast for the ROW GaAs Wafer Market (\$M) by Application (2018-2023)

## **CHAPTER 5. COMPETITOR ANALYSIS**

Figure 5.1: Headquarter Locations of Major GaAs Wafer Manufacturers

Figure 5.2: Porter's Five Forces Analysis of the Global GaAs Wafer Market

## **CHAPTER 6. GROWTH OPPORTUNITIES AND STRATEGIC ANALYSIS**

Figure 6.1: Growth Opportunities for the Global GaAs Wafer Market by Application (2018-2023)

Figure 6.2: Growth Opportunities for the Global GaAs Wafer Market by Substrate Type (2018-2023)

Figure 6.3: Growth Opportunities for the Global GaAs Wafer Market by Manufacturing Technology (2018-2023)

Figure 6.4: Growth Opportunities for the Global GaAs Wafer Market by Region (2018-2023)

Figure 6.5: Emerging Trends in the Global GaAs Wafer Market

Figure 6.6: Major Geography Expansions in the Global GaAs Wafer Market



## List Of Tables

### LIST OF TABLES

#### CHAPTER 1. EXECUTIVE SUMMARY

Table 1.1: Global Gallium Arsenide Wafer Market Parameters and Attributes

#### CHAPTER 3. MARKET TRENDS AND FORECAST ANALYSIS FROM 2012 TO 2023

Table 3.1: Market Trends of the Global GaAs Wafer Market (2012-2017)

Table 3.2: Market Forecast for the Global GaAs Wafer Market (2018-2023)

Table 3.3: Market Size and CAGR of Various Substrate Types of the GaAs Wafer Market by Value (2012-2017)

Table 3.4: Market Size and CAGR of Various Substrate Types of the GaAs Wafer Market by Value (2018-2023)

Table 3.5: Market Trends of the Global SI GaAs Wafer Market (2012-2017)

Table 3.6: Market Forecast for the Global SI GaAs Wafer Market (2018-2023)

Table 3.7: Market Trends of the Global SC GaAs Wafer Market (2012-2017)

Table 3.8: Market Forecast for the Global SC GaAs Wafer Market (2018-2023)

Table 3.9: Market Size and CAGR of Various Manufacturing Technologies in the Global GaAs Wafer Market (2012-2017)

Table 3.10: Market Size and CAGR of Various Manufacturing Technologies in the Global GaAs Wafer Market (2018-2023)

Table 3.11: Market Trends of LEC Manufacturing Technology in the Global GaAs Wafer Market (2012-2017)

Table 3.12: Market Forecast for LEC Manufacturing Technology in the Global GaAs Wafer Market (2018-2023)

Table 3.13: Market Trends of the VGF Manufacturing Technology in the Global GaAs Wafer Market (2012-2017)

Table 3.14: Market Forecast for the Global VGF Manufacturing Technology in the Global GaAs Wafer Market (2018-2023)

Table 3.15: Market Trends of Other Manufacturing Technology in the Global GaAs Wafer Market (2012-2017)

Table 3.16: Market Forecast for Other Manufacturing Technology in the Global GaAs Wafer Market (2018-2023)

Table 3.17: Market Size and CAGR of Various Applications in the Global GaAs Wafer Market (2012-2017)

Table 3.18: Market Size and CAGR of Various Applications in the Global GaAs Wafer

Market (2018-2023)

Table 3.19: Market Size and CAGR of GaAs Wafers in the RF Electronics Market (\$M) by Region (2012-2017)

Table 3.20: Market Size and CAGR of GaAs Wafers in the RF Electronics Market (\$M) by Region (2018-2023)

Table 3.21: Market Size and CAGR of GaAs Wafers in the Optoelectronics Market (\$M) by Region (2012-2017)

Table 3.22: Market Size and CAGR of GaAs Wafers in the Optoelectronics Market (\$M) by Region (2018-2023)

## **CHAPTER 4. MARKET TRENDS AND FORECAST ANALYSIS BY REGION**

Table 4.1: Market Size and CAGR of the GaAs Wafer Market by Region (2012-2017)

Table 4.2: Market Size and CAGR of the GaAs Wafer Market by Region (2018-2023)

Table 4.3: Market Trends of the North American GaAs Wafer Market (2012-2017)

Table 4.4: Market Forecast for the North American GaAs Wafer Market (2018-2023)

Table 4.5: Market Size and CAGR of Various Applications of the North American GaAs Wafer Market (2012-2017)

Table 4.6: Market Size and CAGR of Various Applications of the North American GaAs Wafer Market (2018-2023)

Table 4.7: Trends and Forecast for the United States GaAs Wafer Market (2012-2023)

Table 4.8: Trends and Forecast for the Canadian GaAs Wafer Market (2012-2023)

Table 4.9: Trends and Forecast for the Mexican GaAs Wafer Market (2012-2023)

Table 4.10: Market Trends of the European GaAs Wafer Market (2012-2017)

Table 4.11: Market Forecast for the European GaAs Wafer Market (2018-2023)

Table 4.12: Market Size and CAGR of Various Applications of the European GaAs Wafer Market (2012-2017)

Table 4.13: Market Size and CAGR of Various Applications of the European GaAs Wafer Market (2018-2023)

Table 4.14: Trends and Forecast for the German GaAs Wafer Market (2012-2023)

Table 4.15: Trends and Forecast for the UK GaAs Wafer Market (2012-2023)

Table 4.16: Market Trends of the APAC GaAs Wafer Market (2012-2017)

Table 4.17: Market Forecast for the APAC GaAs Wafer Market (2018-2023)

Table 4.18: Market Size and CAGR of Various Applications of the APAC GaAs Wafer Market (2012-2017)

Table 4.19: Market Size and CAGR of Various Applications of the APAC GaAs Wafer Market (2018-2023)

Table 4.20: Trends and Forecast for the Chinese GaAs Wafer Market (2012-2023)

Table 4.21: Trends and Forecast for the Japanese GaAs Wafer Market (2012-2023)

Table 4.22: Trends and Forecast for the Taiwanese GaAs Wafer Market (2012-2023)

Table 4.23: Market Trends of the ROW GaAs Wafer Market (2012-2017)

Table 4.24: Market Forecast for the ROW GaAs Wafer Market (2018-2023)

Table 4.25: Market Size and CAGR of Various Application of the ROW GaAs Wafer Market (2012-2017)

Table 4.26: Market Size and CAGR of Various Application of the ROW GaAs Wafer Market (2018-2023)

## **CHAPTER 5. COMPETITOR ANALYSIS**

Table 5.1: Product Mapping of a Suppliers Based on Markets Served

## I would like to order

Product name: Gallium Arsenide Wafer Market Report: Trends, Forecast and Competitive Analysis

Product link: <https://marketpublishers.com/r/G700DE3E677EN.html>

Price: US\$ 4,850.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer Service:

[info@marketpublishers.com](mailto:info@marketpublishers.com)

## Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <https://marketpublishers.com/r/G700DE3E677EN.html>

To pay by Wire Transfer, please, fill in your contact details in the form below:

First name:  
Last name:  
Email:  
Company:  
Address:  
City:  
Zip code:  
Country:  
Tel:  
Fax:  
Your message:

**\*\*All fields are required**

Customer signature \_\_\_\_\_

Please, note that by ordering from marketpublishers.com you are agreeing to our Terms & Conditions at <https://marketpublishers.com/docs/terms.html>

To place an order via fax simply print this form, fill in the information below and fax the completed form to +44 20 7900 3970