# Europe Sapphire Substrate Market Forecast to 2028 - COVID-19 Impact and Regional Analysis - by Wafer Diameter (2 Inches, 4 Inches, 6 Inches, and Others) and Application [LED, RFIC Application, Laser Diode, Silicon on Sapphire (SoS) IC, and Others]

Market Report | 2022-09-22 | 89 pages | The Insight Partners

**AVAILABLE LICENSES:**

- Single User Price $3000.00
- Site Price $4000.00
- Enterprise Price $5000.00

**Report description:**

The sapphire substrate market in Europe is expected to grow from US$ 141.28 million in 2021 to US$ 199.41 million by 2028; it is estimated to grow at a CAGR of 5.3% from 2021 to 2028.

The growing demand for silicon-on-sapphire microelectronic circuits has been propelling the sapphire substrate market significantly. It is the way of developing a monocrystal Si film on sapphire wafers crystal face (1-102), known as the heterogeneous extension method. It then develops semiconductor devices on monocrystal Si film. It has the same thermal expansion coefficient as the monocrystalline Si. These Silicon Sapphire Substrate has incased the usage of microelectronics and optoelectronics technologies. Sapphire usage for wafers has also helped in reducing the overall cost of larger wafers at relatively low rate. Currently, high quality GaN crystals can overgrow on sapphire wafer with the significant rise of growth technology. The (0001) sapphire surface has become the most ideal application of the substrate.

The increasing demand for silicon-on-sapphire circuits can be credited to several benefits, such as high speed, low power consumption, and resistance to radiation. Additionally, silicon-on-sapphire microelectronics circuits are broadly utilized in developing high frequency and high-speed radio communication, smartphones, desktop computers, small satellite, laptops, and aerospace industry applications. These factors and rising usage among various industries has positive impact on the sapphire substrate market.

These silicon sapphire substrate has incased the usage of microelectronics and optoelectronics technologies. The use of sapphire

in wafers has also helped in reducing the overall cost of larger wafers. Currently, high-quality GaN crystals can overgrow on sapphire wafer with the significant rise of growth technology. The (0001) sapphire surface has become the most ideal application of the substrate.

With new features and technologies, vendors can attract new customers and expand their footprints in emerging markets. This factor is likely to drive the Europe sapphire substrate market at a substantial CAGR during the forecast period.

Europe Sapphire Substrate Market Revenue and Forecast to 2028 (US$ Million)

Europe Sapphire Substrate Market Segmentation

The Europe sapphire substrate market is segmented on the basis of wafer diameter, application, and country. Based on wafer diameter, the market is segmented into 2 inches, 4 inches, 6 inches, and others. In 2021, the 4 inches segment held a larger share of the market. And 6 inches is expected to register a higher CAGR during the forecast period. Based on application, the Europe sapphire substrate market is segmented into LED, RFIC application, laser diode, silicon on sapphire (SOS) IC, and others. The LED segment held the largest market share in 2021 and it is also expected to register the highest CAGR in the market during the forecast period. Based on country, the Europe sapphire substrate market is segmented into France, Germany, Italy, the UK, Russia, and Rest of Europe. In 2021, Germany held a larger market share. On the other side, and it is also expected to register a higher CAGR during the forecast period.Semiconductor Wafer Inc; ILJIN DISPLAY CO., LTD; CRYSCORE OPTOELECTRONIC LIMITED; CRYSTALWISE TECHNOLOGY INC.; SAINT GOBAIN S.A.; KYOCERA Corporation; and Monocrystal are among the leading companies in the Europe sapphire substrate market.

**Table of Contents:**

TABLE OF CONTENTS

1. Introduction
1.1 Study Scope
1.2 The Insight Partners Research Report Guidance
1.3 Market Segmentation
2. Key Takeaways
3. Research Methodology
3.1 Coverage
3.2 Secondary Research
3.3 Primary Research
4. Europe Sapphire Substrate Market Landscape
4.1 Market Overview
4.2 PEST Analysis
4.3 Ecosystem Analysis
4.4 Expert Opinion
5. Europe Sapphire Substrate Market - Key Market Dynamics
5.1 Market Drivers
5.1.1 Widening Uptake of Silicon-on-Sapphire Microelectronic Circuits
5.1.2 Raising Demand for Sapphire Substrate in LED Applications
5.2 Market Restraints
5.2.1 Fabrication of High Resolution in Sapphire Nanostructures
5.3 Market Opportunities
5.3.1 Growing Adoption of Sapphire Technology in Various Devices and Applications Across Electronics Industry

5.4 Future Trends
5.4.1 Higher Trend of Using Large LEDs
5.5 Impact Analysis of Drivers and Restraints
6. Europe Sapphire Substrate Market Analysis
6.1 Europe Sapphire Substrate Market Overview
6.2 Europe Sapphire Substrate Market Revenue and Forecast to 2028 (US$ Million)
7. Europe Sapphire Substrate Market Analysis - By Wafer Diameter
7.1 Overview
7.2 Europe Sapphire Substrate Market, by Wafer Diameter
7.3 2 Inches
7.3.1 Overview
7.3.2 2 Inches: Sapphire Substrate Market - Revenue, and Forecast to 2028 (US$ Million)
7.4 4 Inches
7.4.1 Overview
7.4.2 4 Inches: Sapphire Substrate Market - Revenue, and Forecast to 2028 (US$ Million)
7.5 6 Inches
7.5.1 Overview
7.5.2 6 Inches: Sapphire Substrate Market - Revenue, and Forecast to 2028 (US$ Million)
7.6 Others
7.6.1 Overview
7.6.2 Others: Sapphire Substrate Market - Revenue, and Forecast to 2028 (US$ Million)
8. Europe Sapphire Substrate Market Analysis - By Application
8.1 Overview
8.2 Europe Sapphire Substrate Market, by Application
8.3 LED
8.3.1 Overview
8.3.2 LED: Sapphire Substrate Market - Revenue, and Forecast to 2028 (US$ Million)
8.4 RFIC Application
8.4.1 Overview
8.4.2 RFIC Application: Sapphire Substrate Market - Revenue, and Forecast to 2028 (US$ Million)
8.5 Laser Diode
8.5.1 Overview
8.5.2 Laser Diode: Sapphire Substrate Market - Revenue, and Forecast to 2028 (US$ Million)
8.6 Silicon On Sapphire (SOS) IC
8.6.1 Overview
8.6.2 Silicon On Sapphire (SOS) IC: Sapphire Substrate Market - Revenue, and Forecast to 2028 (US$ Million)
8.7 Others
8.7.1 Overview
8.7.2 Others: Sapphire Substrate Market - Revenue, and Forecast to 2028 (US$ Million)
9. Europe Sapphire Substrate Market - Country Analysis
9.1 Overview
9.1.1 Europe: Sapphire Substrate Market, by Key Country
9.1.1.1 Germany: Sapphire Substrate Market - Revenue and Forecast to 2028 (US$ Million)
9.1.1.1.1 Germany: Sapphire Substrate Market, by Wafer Diameter
9.1.1.1.2 Germany: Sapphire Substrate Market, by Application
9.1.1.2 France: Sapphire Substrate Market - Revenue and Forecast to 2028 (US$ Million)
9.1.1.2.1 France: Sapphire Substrate Market, by Wafer Diameter

9.1.1.2.2 France: Sapphire Substrate Market, by Application
9.1.1.3 Italy: Sapphire Substrate Market - Revenue and Forecast to 2028 (US$ Million)
9.1.1.3.1 Italy: Sapphire Substrate Market, by Wafer Diameter
9.1.1.3.2 Italy: Sapphire Substrate Market, by Application
9.1.1.4 UK: Sapphire Substrate Market - Revenue and Forecast to 2028 (US$ Million)
9.1.1.4.1 UK: Sapphire Substrate Market, by Wafer Diameter
9.1.1.4.2 UK: Sapphire Substrate Market, by Application
9.1.1.5 Russia: Sapphire Substrate Market - Revenue and Forecast to 2028 (US$ Million)
9.1.1.5.1 Russia: Sapphire Substrate Market, by Wafer Diameter
9.1.1.5.2 Russia: Sapphire Substrate Market, by Application
9.1.1.6 Rest of Europe: Sapphire Substrate Market - Revenue and Forecast to 2028 (US$ Million)
9.1.1.6.1 Rest of Europe: Sapphire Substrate Market, by Wafer Diameter
9.1.1.6.2 Rest of Europe: Sapphire Substrate Market, by Application
10. Industry Landscape
10.1 Overview
10.2 Market Initiative
11. Company Profiles
11.1 KYOCERA Corporation
11.1.1 Key Facts
11.1.2 Business Description
11.1.3 Products and Services
11.1.4 Financial Overview
11.1.5 SWOT Analysis
11.1.6 Key Developments
11.2 Monocrystal
11.2.1 Key Facts
11.2.2 Business Description
11.2.3 Products and Services
11.2.4 Financial Overview
11.2.5 SWOT Analysis
11.2.6 Key Developments
11.3 SAINT GOBAIN S.A.
11.3.1 Key Facts
11.3.2 Business Description
11.3.3 Products and Services
11.3.4 Financial Overview
11.3.5 SWOT Analysis
11.3.6 Key Developments
11.4 CRYSTALWISE TECHNOLOGY INC.
11.4.1 Key Facts
11.4.2 Business Description
11.4.3 Products and Services
11.4.4 Financial Overview
11.4.5 SWOT Analysis
11.4.6 Key Developments
12. Appendix
12.1 About The Insight Partners

SCOTTS INTERNATIONAL

# Europe Sapphire Substrate Market Forecast to 2028 - COVID-19 Impact and Regional Analysis - by Wafer Diameter (2 Inches, 4 Inches, 6 Inches, and Others) and Application [LED, RFIC Application, Laser Diode, Silicon on Sapphire (SoS) IC, and Others]

Market Report | 2022-09-22 | 89 pages | The Insight Partners

To place an Order with Scotts International:

- - Print this form
- - Complete the relevant blank fields and sign
- - Send as a scanned email to support@scotts-international.com

**ORDER FORM:**

| Select license | License | Price |
|---|---|---|
| | Single User Price | $3000.00 |
| | Site Price | $4000.00 |
| | Enterprise Price | $5000.00 |
| | VAT | |
| | Total | |

*Please circle the relevant license option. For any questions please contact support@scotts-international.com or 0048 603 394 346.

** VAT will be added at 23% for Polish based companies, individuals and EU based companies who are unable to provide a valid EU Vat Numbers.

| | | | |
|---|---|---|---|
| Email* | | Phone* | |
| First Name* | | Last Name* | |
| Job title* | | | |
| Company Name* | | EU Vat / Tax ID / NIP number* | |
| Address* | | City* | |
| Zip Code* | | Country* | |

| | |
|---|---|
| Date | 2026-03-11 |
| Signature | |