

Global Graphene Electronics Market Size study & Forecast, by Product (Display, Memories, Batteries, Solar Cell, Integrated Circuits and Chips, Others) by Industry Vertical (Consumer Electronics, Automotive, Healthcare, Industrial Robotics, Aerospace and D?fense, Others) and Regional Analysis, 2022-2029

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# **Abstracts**

Global Graphene Electronics Market is valued at approximately USD 270.8 million in 2021 and is anticipated to grow with a healthy growth rate of more than 34.2% over the forecast period 2022-2029. Graphene is composed of a single sheet of ordered graphite atoms. It is used for the development of the next-generation semiconductor, which conducts electricity better than conventional electrode materials. Graphene offers various characteristics such as strong mechanical strength, extremely high electron mobility, and improved thermal conductivity. The surging demand for memory devices of electronics, increasing sales of electric vehicles, coupled with the rising awareness regarding superior performance and functionalities are attributing towards the market growth across the globe.

The rising demand for portable electronics plays a prominent role in the demand of graphene electronics. The graphene is gaining high traction in electronics due to its characteristics such as thinness and conductivity, which lead its adoption in a variety of electronic device components, including batteries, touch screens, sensors, solar cells, and many others. For instance, according to Statista, in 2022, it was estimated that the consumer electronics and appliances segment was accounted with USD 455.15 billion, which is a rise from USD 204.23 billion in 2015. Furthermore, Paragraf- a UK-based startup raised USD 16 million in 2019 in order to create graphene-based sensors and replace the rare metal indium with graphene in electronics devices. Thus, these



aforementioned factors are fostering market demand at a considerable rate. Moreover, increasing emphasis on technological advancements, as well as the growing applications non-ultra high-end are presenting various lucrative opportunities over the forecasting years. However, the high-cost factor and lack of required infrastructure are challenging the market growth throughout the forecast period of 2022-2029.

The key regions considered for the Global Graphene Electronics Market study include Asia Pacific, North America, Europe, Latin America, and the Rest of the World. North America dominated the market in terms of revenue, owing to the increasing focus on the development of next-generation graphene-based electronics solutions, along with the rising development in the Internet of Things and consumer electronics solutions. Whereas, the Asia Pacific is expected to grow with the highest CAGR during the forecast period, owing to factors such as the increasing investment in energy-efficient graphene battery and ICs solutions, as well as surging demand for electronics devices in the market space.

Major market players included in this report are:

AMG Advanced Metallurgical Group N.V.

Graphene Frontiers LLC

Graphenea

Talga Group

NanoXplore Inc.

Versarien Plc

**Graphene Platform Corporation** 

Graphene Square, Inc.

First Graphene

Grafen Chemical Industries Co. Ltd

### Recent Developments in the Market:

In December 2022, AMG Advanced Metallurgical Group N.V. established a strategic cooperation between AMG Brasil SA, JX Nippon Mining & Metals Corporation, and TANIOBIS GmbH in order to produce and supply tantalum concentrate from AMG's Mibra Mine in the Brazilian state of Minas Gerais.

Global Graphene Electronics Market Report Scope:

Historical Data 2019-2020-2021

Base Year for Estimation 2021

Forecast period 2022-2029

Report Coverage Revenue forecast, Company Ranking, Competitive Landscape,



Growth factors, and Trends

Segments Covered Product, Industry Vertical, Region

Regional Scope North America; Europe; Asia Pacific; Latin America; Rest of the World Customization Scope Free report customization (equivalent up to 8 analyst's working hours) with purchase. Addition or alteration to country, regional & segment scope\*

The objective of the study is to define market sizes of different segments & countries in recent years and to forecast the values to the coming years. The report is designed to incorporate both qualitative and quantitative aspects of the industry within countries involved in the study.

The report also caters detailed information about the crucial aspects such as driving factors & challenges which will define the future growth of the market. Additionally, it also incorporates potential opportunities in micro markets for stakeholders to invest along with the detailed analysis of competitive landscape and product offerings of key players. The detailed segments and sub-segment of the market are explained below:

By Product:

Display

Memories

**Batteries** 

Solar Cell

Integrated Circuits and Chips

Others

By Industry Vertical:

Consumer Electronics

Automotive

Healthcare

**Industrial Robotics** 

Aerospace and D?fense

Others

By Region:

North America

U.S.

Canada

Europe

UK

Germany



F	ra	n	С	e
	ıu		v	v

Spain

Italy

**ROE** 

Asia Pacific

China

India

Japan

Australia

South Korea

**RoAPAC** 

Latin America

Brazil

Mexico

RoLA

Rest of the World



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