

Global Thin Film Material Market Size Study & Forecast, by Type (Copper Indium Gallium Selenide (CIGS), Cadmium Telluride (CdTe), Amorphous Silicon (a-Si)), by Application (Photovoltaic Solar Cells, Electrical & Electronics, Optical Coating, Others), and Regional Analysis, 2023-2030

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Abstracts

Global Thin Film Material Market is valued at approximately USD 13.0 billion in 2022 and is anticipated to grow with a healthy growth rate of more than 4.4% over the forecast period 2023-2030. Thin film materials refer to a category of materials that are deposited as thin layers onto substrates, typically with a thickness ranging from a few nanometers to several micrometers. These materials are known for their unique properties and are utilized in various applications across industries such as electronics, solar energy, optics, coatings, and more. The Thin Film Material Market is expanding because of factors such as the high demand from current & emerging applications, increasing demand for efficiency and miniaturization, rising government policies, mandates, and subsidies, coupled with advancements in technology.

In addition, the growth of the semiconductor industry is acting as a catalyzing factor for market growth across the globe. Thin films are used in semiconductor devices, integrated circuits, photovoltaic cells, and displays, contributing to the growth of the market. The Semiconductor Industry Association stated that in 2021the semiconductor industry sales recorded nearly USD 555.9 billion around the world. Also, the industry generates the highest annual revenue and with an increase of 26.2% compared to the 2020 that accounts for USD 440.4 billion. Thus, these aforementioned factors are propelling the growth of the Thin Film Material Market during the estimated period. Moreover, the growing demand for Photovoltaic (PV) cells, as well as rising application



in electronic components present various lucrative opportunities over the forecast years. However, the low conversion efficiency and the availability of other substitutes are challenging the market growth throughout the forecast period of 2023-2030.

The key regions considered for the Global Thin Film Material Market study include Asia Pacific, North America, Europe, Latin America, and Middle East & Africa. North America dominated the market in 2022 owing to the growing presence of photovoltaic solar cell manufacturers, advancements in thin film deposition techniques, along with growing demand for thin film materials in nanotechnologies. Whereas, Asia Pacific is expected to grow at the highest CAGR over the forecast years. The rising popularity of the renewable energy industry, the development of display technologies, and surging demand for consumer goods, electronics appliances, and others are significantly propelling the market demand across the region.

Major market players included in this report are:

Vital Materials Co., Limited (China)

Umicore (Belgium)

Indium Corporation (U.S.)

JX Nippon Mining & Metals (Japan)

Kyoto Thin-Film Materials Institute (Japan)

GEOMATEC CO., LTD (Japan)

Ferroperm Optics A/S (Denmark)

Ascent Solar Technologies, Inc. (U.S.)

Cicor Group (Switzerland)

Hanergy Thin Film Power Group (China)

Recent Developments in the Market:



In April 2022, JX Nippon Mining & Metals stated that the company had acquired land in Mesa, Arizona, for USD 29 million to build a significant footprint in the United States.

In January 2022, Umicore declared that the metal deposition process is used for electroplating and thin film products, thus, this initiative serves to draw in new end-use industries.

Global Thin Film Material Market Report Scope:

Historical Data – 2020 - 2021

Base Year for Estimation – 2022

Forecast period - 2023-2030

Report Coverage - Revenue forecast, Company Ranking, Competitive Landscape, Growth factors, and Trends

Segments Covered - Type, Application, Region

Regional Scope - North America; Europe; Asia Pacific; Latin America; Middle East & Africa

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 Type:

Copper Indium Gallium Selenide (CIGS)

Cadmium Telluride (CdTe)

Amorphous Silicon (a-Si)

By Application:

Photovoltaic Solar Cells

Electrical & Electronics

Optical Coating

Others

By Region:

North America

U.S.

Canada

Europe

UK

Germany

France

Spain

Italy



ROE
Asia Pacific
China
India
Japan
Australia
South Korea
RoAPAC
Latin America
Brazil
Mexico

Middle East & Africa

Saudi Arabia

South Africa

Rest of Middle East & Africa



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