

# Covalent Organic Frameworks Market, Global Outlook and Forecast 2022-2028

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## Abstracts

Covalent organic frameworks (COFs) are an emerging class of functional nanostructures with intriguing properties, due to their unprecedented combination of high crystallinity, tunable pore size, large surface area, and unique molecular architecture. Covalent organic frameworks are two or three dimensional organic solids. We can abbreviate them as COFs. These material have extended structures with building blocks which are bonded to each other via covalent chemical bonds. These linkages are strong covalent bonds. Usually, COFs are porous and crystalline structures. Moreover, these materials are made of light elements; mainly hydrogen (H), boron (B), carbon (C), nitrogen (N), and oxygen (O). These light chemical elements usually form strong covalent bonds. Some common examples of covalent organic framework include diamond, graphite, and boron nitride.

This report contains market size and forecasts of Covalent Organic Frameworks in Global, including the following market information:

Global Covalent Organic Frameworks Market Revenue, 2017-2022, 2023-2028, (\$ millions)

Global top five companies in 2021 (%)

The global Covalent Organic Frameworks market was valued at 86 million in 2021 and is projected to reach US\$ 531 million by 2028, at a CAGR of 29.8% during the forecast period 2022-2028.

The U.S. Market is Estimated at \$ Million in 2021, While China is Forecast to Reach \$ Million by 2028.

Two-dimensional (2D) Segment to Reach \$ Million by 2028, with a % CAGR in next six years.

The global key manufacturers of Covalent Organic Frameworks include ACS Material, Lumtec, April Scientific, Shanghai Kaishu, Shanghai Tensus and Nanjing Sanhao, etc. In 2021, the global top five players have a share approximately % in terms of revenue.

MARKET MONITOR GLOBAL, INC (MMG) has surveyed the Covalent Organic Frameworks companies, and industry experts on this industry, involving the revenue, demand, product type, recent developments and plans, industry trends, drivers, challenges, obstacles, and potential risks.

Total Market by Segment:

Global Covalent Organic Frameworks Market, by Type, 2017-2022, 2023-2028 (\$ millions)

Global Covalent Organic Frameworks Market Segment Percentages, by Type, 2021 (%)

Two-dimensional (2D)

Three-dimensional (3D)

Global Covalent Organic Frameworks Market, by Application, 2017-2022, 2023-2028 (\$ millions)

Global Covalent Organic Frameworks Market Segment Percentages, by Application, 2021 (%)

Gas Storage and Separation

Catalysis

Sensing

Energy Storage

## Optoelectronics

Global Covalent Organic Frameworks Market, By Region and Country, 2017-2022,  
2023-2028 (\$ Millions)

Global Covalent Organic Frameworks Market Segment Percentages, By Region and  
Country, 2021 (%)

### North America

US

Canada

Mexico

### Europe

Germany

France

U.K.

Italy

Russia

Nordic Countries

Benelux

Rest of Europe

### Asia

China

Japan

South Korea

Southeast Asia

India

Rest of Asia

South America

Brazil

Argentina

Rest of South America

Middle East & Africa

Turkey

Israel

Saudi Arabia

UAE

Rest of Middle East & Africa

## Competitor Analysis

The report also provides analysis of leading market participants including:

Key companies Covalent Organic Frameworks revenues in global market, 2017-2022 (estimated), (\$ millions)

Key companies Covalent Organic Frameworks revenues share in global market, 2021

(%)

Further, the report presents profiles of competitors in the market, key players include:

ACS Material

Lumtec

April Scientific

Shanghai Kaishu

Shanghai Tensus

Nanjing Sanhao

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