

# Global Bio-inspired And Nano-engineered Surfaces Market Size study & Forecast, by Application (Aviation, Biomedical, Electronics, Energy, Textiles, Automotive) and Regional Analysis, 2022-2029

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## Abstracts

Global Bio-inspired And Nano-engineered Surfaces Market is valued at approximately USD XX billion in 2021 and is anticipated to grow with a healthy growth rate of more than XX% over the forecast period 2022-2029. Bioinspired materials can be defined as synthetic materials whose structure and properties are the replica of natural materials. Extreme scientific research has been conducted on bio-inspired structures. The physics and chemistry of these structures have been attempted to be replicated by scientists. This has resulted in the development of artificial nano-engineered surfaces (NES), which have a wide range of commercial applications. Many industrial processes and consumer products benefit from nano-engineered surfaces. The rising expansion of the automotive industry and growing demand for metallic structures in the construction and automotive sectors are key factors driving the market growth.

The rising automotive industry worldwide is contributing towards the growth of the Global Bio-inspired And Nano-engineered Surfaces Market as these surfaces have applications in different automotive auxiliaries such as thermoelectric materials for temperature control, polymer nanocomposites structural parts, high-efficiency-low-cost sensors, high-power rechargeable battery systems, lower rolling-resistance tires, and electronics. For instance – as per Statista – in 2020, the global automotive manufacturing industry was valued at USD 2.71 trillion, and furthermore, the automotive manufacturing industry reached USD 2.95 trillion in 2022. Also, the growing oil & gas industry as well as rising demand for metal across end-use industries would create a lucrative growth prospectus for the market over the projected period. However, the high cost of Bio-inspired And Nano-engineered Surfaces and limited penetration hinder the

market growth throughout the forecast period of 2022-2029.

The key regions considered for the Global Bio-inspired And Nano-engineered Surfaces Market study includes Asia Pacific, North America, Europe, Latin America, and Rest of the World. North America dominated the market in terms of revenue, owing to the dominance of branded products and the increasing demand for bio-inspired materials across the end-use industries in the region. Whereas Asia Pacific is expected to grow with the highest CAGR during the forecast period, owing to factors such as the rising expansion of the automotive manufacturing industry as well as the growing penetration of leading market players in the region.

Major market player included in this report are:

BASF AG

Lotus Leaf Coatings

Entergris Inc.

Nanopool GmbH

PolymerPlys LLC

Rolith Inc.

Furukawa Kikou Corp. Ltd.

Magnolia Solar Inc.

Fusion Bionic GmbH

GreenPod Labs

Recent Developments in the Market:

In August 2020, Forge Nano Inc. announced the launch of a new tool to enable Particle Atomic Layer Deposition (PALD) development. This new solution PANDORA would enable researchers to develop revolutionary coatings across disciplines.

Global Bio-inspired And Nano-engineered Surfaces 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 Application, 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 Application

- Aviation
- Biomedical
- Electronic
- Energy
- Textiles
- Automotive

#### 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

RoLA

Rest of the World

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