

# 2023 Advanced Materials Research Review

<https://marketpublishers.com/r/2A1B4EACA46FEN.html>

Date: December 2024

Pages: 170

Price: US\$ 4,650.00 (Single User License)

ID: 2A1B4EACA46FEN

## Abstracts

### Research Review Scope

The advanced materials market covers a wide range of high-performance materials designed to offer exceptional properties such as increased strength, lightweight design, thermal stability, resistance to corrosion, and electrical conductivity. This category includes materials like nanomaterials, high-performance polymers, composites, ceramics, biomaterials, and smart materials, all of which are essential in industries such as aerospace, automotive, electronics, healthcare, energy, and construction. These sectors rely heavily on advanced materials to improve performance, sustainability, and efficiency.

The demand for lightweight, durable materials is growing across various industries, driving the expansion of the advanced materials market. Innovations in nanotechnology, additive manufacturing (3D printing), and biomaterials have accelerated development within the sector. Additionally, sustainability concerns and the push for recyclability are encouraging the creation of more eco-friendly materials, such as bio-based options.

In the construction industry, advanced materials are becoming essential for creating energy-efficient, sustainable, and high-performance buildings. Technologies like advanced composites, high-strength concrete, self-healing materials, and aerogels are reshaping modern construction practices. For example, self-healing concrete, which incorporates bacteria or chemical agents to repair cracks autonomously, is helping reduce maintenance costs over time. The advent of 3D-printed construction materials is also speeding up construction processes, making them more sustainable. Moreover, the use of green cement and sustainable building materials is gaining momentum, contributing to reducing the environmental impact of construction projects.

Research Reviews from BCC Research provide market professionals with concise

market coverage within a specific research category. This 2023 Research Review of advanced materials provides a sampling of the type of quantitative market information, analysis, and guidance that BCC Research has been developing since its inception in 1971 to help its customers make informed business decisions. This Research Review includes highlights and excerpts from the following reports published by BCC Research in 2023:

AVM239A Green Building Materials: Global Markets

AVM243A 3D Printable Concrete Market: Global

AVM238A 3D Printing for Construction: Global Markets

AVM245A Global Green Cement Market

After you survey the excerpts in this Research Review, we encourage you to follow up on these topics by checking out the full market research reports associated with each topic. BCC Research looks forward to serving your market intelligence needs in the future.

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