

# Advanced Ceramics Market Size & Share Analysis - Growth Trends and Forecast (2026 - 2031)

> **\*\*Industry:\*\*** Advanced Materials & Composites (Chemicals & Materials)  
> **\*\*Source:\*\*** [https://www.mordorintelligence.com/industry-reports/advanced-ceramics-market](https://www.mordorintelligence.com/industry-reports/advanced-ceramics-market) [https://www.mordorintelligence.com/industry-reports/advanced-ceramics-market]  
> **\*\*Scraped Date:\*\*** 2026-09-17

## Executive Market Summary

| Market Metric             | Details            |
|---------------------------|--------------------|
| Base Market Size          | USD 105.12 billion |
| Projected Forecast (2031) | USD 105.12 billion |
| Growth Rate (CAGR)        | 6.81 %             |
| Largest Market Region     | N/A                |
| Fastest-Growing Region    | N/A                |

## Market Visualizations & Infographics

! [Major players in Advanced Ceramics industry] (images/chart\_2.png)

! [Advanced Ceramics Market Size] (images/chart\_3.png)

! [Advanced Ceramics Market Share by Class Type, 2025] (images/chart\_4.png)

! [Advanced Ceramics Market Share by End-user Industry, 2025] (images/chart\_5.png)

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## Comprehensive Research Analysis

### Overview Points List Flex 49 Share Feature End

Market OverviewStudy Period | 2026 - 2031 |  
Market Size (2026) | USD 105.12 Billion |  
Market Size (2031) | USD 146.13 Billion |  
Growth Rate (2026 - 2031) | 6.81 % |  
Fastest Growing Market | Asia-Pacific |  
Largest Market | Asia-Pacific |  
Market Concentration | Medium |  
Major Players\*Disclaimer: Major Players sorted in no particular order

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### ### Market Overview

**Advanced Ceramics Market Analysis by Mordor Intelligence**  
The Advanced Ceramics Market size is projected to expand from USD 99.17 billion in 2025 and USD 105.12 billion in 2026 to USD 146.13 billion by 2031, at a CAGR of 6.81% between 2026 and 2031. This steady ascent stems from the electrification of vehicles, demand for high-frequency power electronics, and sovereign-manufacturing directives that localize substrate output in the United States, the European Union, and China. Supply-chain realignment favors materials able to handle temperatures above 1,200 °C, extend component life, and enable miniaturization in AI servers and 5G infrastructure. Manufacturers are widening portfolios to include piezoelectric titanates, aluminum nitride substrates, and zirconia-based bioceramics that win faster regulatory approvals. At the same time, capital-intensive sintering processes and limited recycling options temper near-term profitability, prompting incumbents to pursue efficiency gains and strategic partnerships.

**Key Report Takeaways\*** By material type, alumina captured 41.26% of the 2025 share; titanate ceramics hold the highest 7.82% CAGR outlook.

\* By class type, monolithic products commanded 78.24% of 2025 revenue; ceramic matrix composites are pacing at an 8.84% CAGR.

\* By application, electroceramics led with 45.31% of 2025 revenue, while bioceramics is advancing at an 8.79% CAGR through 2031.

\* By end-user industry, electronics accounted for 44.56% of sales in 2025, whereas the medical segment is anticipated to post the fastest 11.87% CAGR to 2031.

\* By geography, Asia-Pacific controlled 54.22% of 2025 turnover and is expanding at a 7.11% CAGR to 2031.

### ### Key Market Trends

**Market Trends and Insights**  
**Drivers Impact Analysis of Advanced Ceramics Market\***  
Drivers | (~) % Impact on CAGR Forecast | Geographic Relevance | Impact Timeline |

Shift from metals and high-performance plastics | +1.2% | Asia-Pacific, North America | Medium term (2-4 years) |

Expanding use in medical implants and devices | +1.8% | North America, Europe, emerging Asia-Pacific | Long term (≥ 4 years) |

Demand in high-frequency power electronics | +1.5% | Asia-Pacific core, spill-over to North America | Short term (≤ 2 years) |

Rising aerospace and defense thermal needs | +1.1% | North America, Europe | Long term (≥ 4 years) |

Solid-state batteries and SOFC adoption | +1.0% | Global, early traction in Japan, Germany, California | Medium term (2-4 years) |

Source: Mordor Intelligence |

### ### Competitive Landscape

#### Competitive Landscape

The advanced ceramics market is moderately fragmented. Japanese incumbents maintain powder-to-module vertical integration, giving them tight control of dielectric formulations and multilayer stacking accuracy. Murata's 2025 roll-out of 0402-size capacitors with 100 V ratings for AI accelerator boards illustrates the edge gained from in-house material science. Kyocera expanded Kagoshima AlN capacity by 30% in 2025 to protect its share in EV inverter substrates.

**Advanced Ceramics Industry Leaders\*** KYOCERA Corporation

\* CoorsTek Inc.

\* CeramTec GmbH

- \* Morgan Advanced Materials

- \* Saint-Gobain

- \* \*Disclaimer: Major Players sorted in no particular order

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### ### Scope Methodology P Space

For this study, the market covers engineered ceramic materials and parts that are designed for high-performance use. Adoption is driven by performance characteristics such as heat resistance, wear resistance, electrical behavior, and chemical stability.

Scope exclusions: Traditional clay-based structural ceramics and glass-ceramics are excluded from the market totals.

### ### Segmentation Container

- \* By Material Type\* Alumina

- \* Zirconia

- \* Titanate

- \* Silicon Carbide

- \* Silicon Nitride

- \* Aluminum Nitride

- \* Magnesium Silicate

- \* Pyrolytic Boron Nitride

- \* Others

- \* By Class Type\* Monolithic Ceramics

- \* Ceramic Matrix Composites

- \* Ceramic Coatings

- \* By Application\* Structural Ceramics

- \* Bioceramics

- \* Electroceramics

- \* Wear and Corrosion Components

- \* Thermal Barrier and UHTC Components

- \* Catalyst Supports and Filters

- \* Others (Environmental and Energy Systems)

- \* By End-user Industry\* Electrical and Electronics

- \* Transportation

- \* Medical

- \* Industrial

- \* Defense and Security

- \* Chemical

- \* Other End-user Industries (Energy and Environmental)

- \* By Geography\* Asia-Pacific\* China

- \* India

- \* Japan

- \* South Korea

- \* Rest of Asia-Pacific

- \* North America\* United States

- \* Canada

- \* Mexico

- \* Europe\* Germany

- \* United Kingdom

- \* France

- \* Italy
- \* Rest of Europe
- \* South America\* Brazil
- \* Argentina
- \* Rest of South America
- \* Middle East and Africa\* Saudi Arabia
- \* South Africa
- \* Rest of Middle East and Africa

## ## Frequently Asked Questions

#### What is the current value of the advanced ceramics market?

The Advanced Ceramics Market size is projected to expand from USD 99.17 billion in 2025 and USD 105.12 billion in 2026 to USD 146.13 billion by 2031, at a CAGR of 6.81% between 2026 and 2031.

#### Which application accounts for the largest revenue?

Electroceramics, led by multilayer ceramic capacitors, generated 45.31% of 2025 revenue.

#### Which end-user industry is growing fastest?

The medical industry segment is projected to post an 11.87% CAGR through 2031 due to wider adoption of zirconia-based orthopedic implants.

#### Why is Asia-Pacific so dominant in advanced ceramics?

The region hosts vertically integrated giants like Kyocera and Murata and benefits from concentrated MLCC and EV-inverter supply chains.

#### What hinders wider adoption of advanced ceramics?

High production costs above 1,600 °C sintering, complex capital-intensive processes, and limited recycling infrastructure restrain growth.

#### Are ceramic matrix composites gaining share?

Yes, CMCs are forecast to expand at an 8.84% CAGR through 2031 as aerospace and defense programs qualify hotter-running turbine components.