

# **Silicon Carbide Market Size, Share & Trends Analysis Report By Product (Black, Green), By Application (Steel, Automotive, Aerospace), By Region (North America, APAC), And Segment Forecasts, 2022 - 2030**

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## **Abstracts**

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### **Silicon Carbide Market Growth & Trends**

The global silicon carbide market size is projected to reach USD 7.98 billion by 2030, according to a new report by Grand View Research, Inc., expanding at a CAGR of 11.7% over the forecast period. The rising prominence of silicon carbide in the production of Single-crystal SiC wafers is projected to aid the market growth over the forecast period. In the last few years, the consumption of single-crystal SiC wafers increased significantly, especially to manufacture electronic chips in the semiconductor industry. The increasing need to produce compact and right design electronic devices is projected to further push the product demand in the semiconductors industry. These single-crystal wafers offer limited power loss in the form of heat owing to the reduced leakage currents and wide-bandgap. Moreover, the SiC-based wafers are equipped to handle 10 times more voltage than their counterpart materials.

The rising usage of SiC-based chips in the electronic section of Electric Vehicles (EVs) is anticipated to positively influence the dynamics of the industry over the forecast period. The prominent EV manufacturers, including Tesla, use SiC-based chips in their vehicles. As per the recent news, Tesla is establishing its new EV manufacturing in India. Such new investments are likely to provide opportunities for the growth of the market of SiC and its associated products over the predicted timeline. The organic and inorganic growth strategies adopted by key players in the semiconductor industry are

also likely to support the growth of the market. For instance, in January 2019, Cree, Inc., signed a long-term agreement to supply SiC wafers to STMicroelectronics. The adoption of SiC power devices in electronics, renewable energy systems, and automotive has increased tremendously over the last few years and is anticipated to gain additional thrust over the coming years.

### Silicon Carbide Market Report Highlights

The black SiC product segment is projected to dominate the overall market, in terms of volume as well as revenue, by 2030

The healthcare segment is anticipated to register the fastest CAGR over the forecast period. The segment is projected to observe a significant CAGR, in terms of revenue, from 2022 to 2030

Post-pandemic era is likely to observe higher spending on healthcare infrastructure across the globe, thereby supporting the segment growth

Steel is projected to remain a key consuming application segment in the industry. The development, in terms of overall crude steel production, in 2022 is likely to aid the segment growth in the near future

Asia Pacific is expected to remain a dominant regional market over the forecast period owing to the presence of major steel-manufacturing countries in the region

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