

The Graphene and 2D Materials Investment Report 2018

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Abstracts

Graphene is the most widely studied and developed 2D nanomaterial and its discovery can be considered as a defining point in the research and development of stable, truly 2D material systems.

The global market for graphene continues to grow with weekly product, technology and production developments, public and private investments and new start-ups. There are now over 200 companies either producing graphene or developing applications, and numerous multi-nationals conducting R&D.

However, relatively few graphene products have reached the market yet, and until recently those that have mainly incorporate graphene additives to enhance toughness, conductivity and flexibility. This report seeks to identify investment opportunities for graphene and looks at current commercial and planned activity, most promising applications by market and pricing for graphene materials. This paints a complete picture of the current graphene landscape, from producer capacities & pricing to end products, now and in the future.

Researchers have also looked beyond graphene in recent years to other layered 2D materials, such as molybdenum disulfide (MoS₂), hexagonal boron nitride (h-BN) and phosphorene. These materials possess the intrinsic properties of graphene, such as high electrical conductivity, insulating and semi-conducting properties, high thermal conductivity, high mechanical strength, gas diffusion barriers, high chemical stability and radiation shielding, but crucially also possess a semiconductor band gap. Theoretical and experimental works on these materials have rapidly increased in the past couple of years and they are now commercially available from several advanced materials producers.

This 267 page report examines:

Advantages and shortcomings of graphene as a technology component.

Pricing landscape for graphene, by types and producers.

Production volumes by graphene producer.

Production capacities globally 2010-2018.

Provides a map of the current competitive landscape by market.

Investments in graphene over the past 12 months.

Market impediments for graphene by target market.

Profiles all the major players in graphene production.

Profiles all the major application developers including current and intended products.

Market analysis of 2D Materials beyond graphene.

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- 1.2 Market impediment analysis

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