

Implosion Manufacturing: Novel Nanotech Methods for Next Generation Materials

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Abstracts

REPORT SCOPE:

The report will evaluate the various technologies that are being developed or adapted from existing nanofabrication technologies, including -

New technologies.

Implosion fabrication.

Surfactant?assisted multiphoton?induced reduction.

Spun-wrapped aligned nanofiber (SWAN) lithography.

Ion beam etching redeposition.

Laser scanning holographic lithography.

Proton beam nano-machining.

Others, as appropriate.

Modifications of existing technologies.

Nanoimprint lithography.

Others, as appropriate.



The time frame for the analysis is the period from 2018 to 2029 to allow for the fact that many of the devices analyzed by the report are still in the research and development phase, but could reach the commercial market by 2029. The market values estimated or imputed for various segments represent the direct cost to the user or investor. These values are expressed in 2018 dollars, and no attempt has been made to adjust them for inflation.

REPORT INCLUDES:

46 data tables and 15 additional tables

An overview of implosion manufacturing, a 3D enabled nanolithography technology for next generation materials

Analyses of the global market trends with data from 2018, estimates for 2019, and projections of compound annual growth rates (CAGRs) for a 10-year timeframe through 2029

Description of key enabling technologies such as hydrogels and two-photon microscopy; and their applications with the greatest commercial potential

Information on the industry's structure, market size and market dynamics that will impact the furture growth

A relevant patent analysis and number of U.S. patents issued for implosion fabrication-related developments

Company profiles of the leading market participants within the nanotech industry, including Nano3D Biosciences, Nanonex, NanoOpto Corp., NIL Technology ApS and SwissLitho AG



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Ceramics

Metals

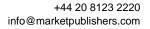
Polymers

Silicon

- Potential Applications
- Nanolenses
- Nanoelectronics
- Nanorobots
- **Metamaterials**
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- Nanosensors
- Labs-on-a-Chip and Labs-on-Fiber
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Light Emitting Diodes Miscellaneous Application

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