

New Electronic Materials and Device Technologies: Global Markets

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Abstracts

REPORT SCOPE

The report addresses the global market for new electronic materials during the period from 2017 through 2023. The report details new electronic materials produced for use in the production of electronic materials (transistors, semiconductors, displays, etc.). Estimated values used are based on manufacturers' total revenue and research grants awarded towards R&D. Projected and forecast revenue values are in US dollars, not adjusted for inflation. Electronic materials are those that are used to affect the electrons or their associated fields in a desired manner consistent with the intended function of the electronic system. Other materials used in electronic devices, such as thermal management or packaging materials, are not covered in this report.

New electronic materials are those that are not yet in widespread commercial use or are still under development, such as:

Graphene.

Quantum dots.

Photonic crystals.

Carbon nanotubes.

Superconductors.

Nanowires.

Conducting and semiconducting polymers.

Phase change materials.

Molybdenite.

The report format includes the following major elements:

Executive summary.

Definitions and key concepts.

New materials.

Major applications.

Market drivers.

Global trends in the market for new electronic materials by type of material and application (2017-2023).

Patent analysis.

Company profiles.

REPORT INCLUDES:

40 data tables and 14 additional tables

A survey of emerging electronic material technologies and applications, and identification of those that are most likely to achieve significant commercial sales

General description, applications, end uses and markets of types of new electronic materials such as graphene, quantum dots, photonic crystals, and carbon nanotubes

Discussion about the main industry drivers and opportunities with detailed focus on the current and future trends

A look into the involvement of governments and multinational companies in the revolutionization of the electronics industry

Company profiles of major players in the market, including BASF SE, Graphene Industries Ltd., Samsung Electronics Co. Ltd., Sigma-Aldrich Corp., Thomas Swan & Co. Ltd., and Micron Technology Inc.

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ADVANCED MICRO DEVICES
ANGEWANDTE MIKRO-UND OPTOELEKTRONIK GMBH
ANGSTRON MATERIALS INC.
APPLIED GRAPHENE MATERIALS PLC.
BASF SE
BGT MATERIALS LTD. (BGT)
CAMBRIDGE NANOSYSTEMS
CVD EQUIPMENT CORP.
DIRECTA PLUS S.P.A.
GLOBALFOUNDRIES INC.
GRAPHENE FRONTIERS LLC
GRAPHENE INDUSTRIES LIMITED
GRAPHENEA S.A.
GRAPHENE NANO CHEM PLC

HAYDALE GRAPHENE INDUSTRIES PLC
HRL LABORATORIES LLC
INTERNATIONAL BUSINESS MACHINES CORP. (IBM)
MONOLITHIC 3-D INC.
NANO CARBON SP. Z O.O (NANO CARBON LLC)
SAMSUNG ELECTRONICS CO. LTD.
TEXAS INSTRUMENTS INC.
VORBECK MATERIALS CORP.
WESTERN DIGITAL TECHNOLOGIES INC.
XG SCIENCES INC.
Quantum Dots
CYRIUM TECHNOLOGIES INC.
EVIDENT THERMOELECTRICS
INNOLUME GMBH
INVISAGE TECHNOLOGIES INC.
M K IMPEX CORP.
NANOCO TECHNOLOGIES LTD.
NANOCRYSTALS TECHNOLOGY LTD.
NANOSYS INC.
QUANTUM MATERIALS CORP.
SIGMA-ALDRICH CORP.
THERMO FISHER SCIENTIFIC INC.
Photonic Crystals
3SAE TECHNOLOGIES INC.
ADVANCED PHOTONIC CRYSTALS LLC
ELUXI LTD.
FIANIUM LTD.
GLOPHOTONICS SAS
ICX PHOTONICS INC.
LUXTERA INC.
NANOSCRIBE GMBH
NEOPHOTONICS CORP.
NKT PHOTONICS
OMNIGUIDE INC.
OPALUX INC.
PHOTONIC LATTICE INC.
Carbon Nanotubes
CARBON NANOTECHNOLOGIES INC.
CARBON SOLUTIONS INC.

CHASM TECHNOLOGIES INC.
CNANO TECHNOLOGY LTD.
FUTURECARBON GMBH
NANO-C INC.
NANOCOMP TECHNOLOGIES INC.
NANOCYL SA
NANOSTRUCTURED & AMORPHOUS MATERIALS INC.
NANTERO INC.
SURREY NANOSYSTEMS
THOMAS SWAN & CO. LTD.
Superconductors
BRUKER ENERGY & SUPERCON TECHNOLOGIES INC.
CRYOELECTRA GMBH
CRYOTON LTD.
D-WAVE SYSTEMS INC.
EVICO GMBH
HYPRES INC.
ISCO INTERNATIONAL LLC
NEOCERA INC.
QUANTUM DESIGN INC.
SUPERCONDUCTOR TECHNOLOGIES INC.
SUPERPOWER INC.
Nanowire
CAMBRIOS TECHNOLOGIES CORP.
CARESTREAM ADVANCED MATERIALS
CIMA NANOTECH
Polymers
E.I. DU PONT DE NEMOURS AND CO.
MERCK KGAA
OSRAM OPTO SEMICONDUCTORS GMBH
POLYIC GMBH & CO.
RITDISPLAY CORP.
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UNIVERSAL DISPLAY CORP.
Phase Change Memory
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OUTLAST TECHNOLOGIES LLC
PHASE CHANGE ENERGY SOLUTIONS INC.

RUBITHERM TECHNOLOGIES GMBH

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