

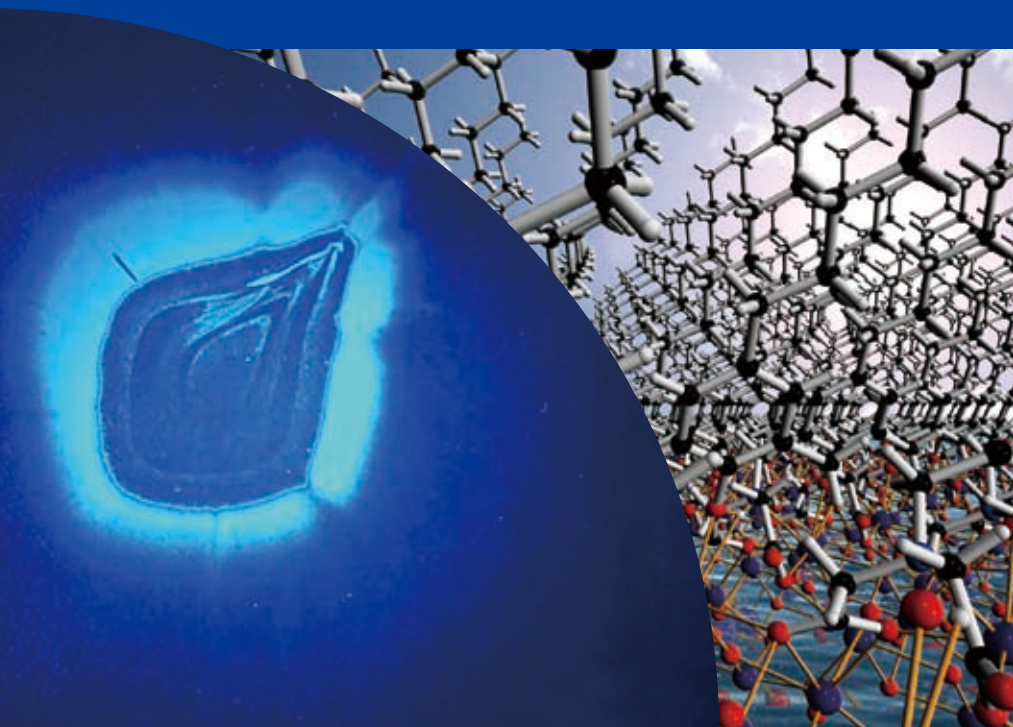
Our world is made of a diverse range of substances.

The substances that support our everyday lives are called “materials.” Among the virtually infinite number of substances, those which are selected for their value in practical application, and have been arranged for good usability, and processed into parts or products are materials.

The progress of the human race has always gone hand in hand with materials.

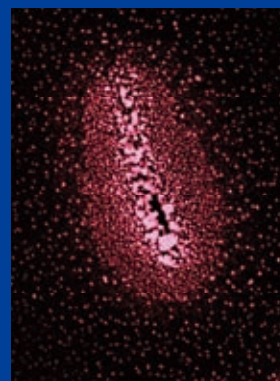
The Industrial Revolution was supported by iron and steel materials, and the dramatic development of information and communication technologies was possible thanks precisely to high purity crystals of silicon.

- 02 研究領域
Research Fields
- 02 ナノテクノロジー基盤領域
Key Nanotechnologies Field
- 09 ナノスケール物質領域
Nanoscale Materials Field
- 13 情報通信材料研究領域
Nanotech-driven Materials Research
for Information Technology Field
- 18 生体材料研究領域
Nanotech-driven Materials Research
for Biotechnology Field
- 21 環境・エネルギー材料領域
Materials Research for Environment and Energy Field
- 29 材料信頼性領域
Materials Research for Reliability and Safety Field
- 34 国際ナノアーキテクトニクス研究拠点
International Center for Materials
Nanoarchitectonics (MANA)
- 36 ナノ材料科学環境拠点
Innovative Center of Nanomaterials Science
for Environment and Energy
- 37 元素戦略センター
Center for Strategic Natural Resources
- 38 共用基盤部門
Department of Materials Infrastructure
- 39 クラスター / 分野融合クラスター
Interdisciplinary Cluster
- 40 若手国際研究センター /
連係大学院・連携大学院
International Center for Young Scientists (ICYS)
Joint Graduate Program / Cooperative Graduate Program
- v 連携
Collaboration
- vi 国際ナノテクノロジーネットワーク拠点
International Center for Nanotechnology Network
- vii NIMS の成果
Numerical Data: Results at NIMS



Many of the successes of Japan's basic industries, including automobiles, electrical machinery, and electronics, were the fruit of the 20th century's excellent materials development capabilities. However in order to solve today's global environmental problems, new innovation in materials is strongly desired.

The technology that supports this materials development is nanotechnology, which is based on manipulation of substances at the atomic/molecular level.



Science

Room temperature superconductivity,
Unfettered control of atoms and molecules,
Perfection of the ultimate energy
technologies,
Abundant water and food for every inhabitant
of the planet . . .
This utopia is the dream
of NIMS.

