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VOLUME 2
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Nanobiotechnology

ADA481176
DNA Computing.
Department of Defense.
2008, 6p
AFRL-SR-AR-TR-08-0241
Related Categories/Sub-categories:
57B (Biochemistry)
72E (Operations Research)
95C (Biomedical Instrumentation & Bioengineering)

ADA484353
Acquisition of Equipment for Research in Nanobiomedical Technologies.
Department of Defense.
2008, 16p
AFRL-SR-AR-TR-08-0332
Related Categories/Sub-categories:
44H (Health Care Technology)
57E (Clinical Medicine)
95C (Biomedical Instrumentation & Bioengineering)

ADA486891
Development of Convergence Nanoparticles for Multi-Modal Bio-Medical Imaging.
Yonsei Univ., Seoul (Korea South)
2008, 18p
AOARD-074016
Related Categories/Sub-categories:
44H (Health Care Technology)
57B (Biochemistry)
63D (Magnetic Detection)
95C (Biomedical Instrumentation & Bioengineering)
99F (Physical & Theoretical Chemistry)

ADA494417
Prostate Cancer in African-American Men: Serum Biomarkers for Early Detection Using Nanoparticles.
Department of Defense.
2008, 18p
Related Categories/Sub-categories:
49 (Electrotechnology)
57B (Biochemistry)
57E (Clinical Medicine)

ADA480692
Biomimetic Approach to Solar Cells Based on TiO₂ Nanotubes.
Department of Defense.
2008, 16p
ARL-TN-312
Related Categories/Sub-categories:
95F (Bionics & Artificial Intelligence)
97I (Electric Power Production)
99D (Basic & Synthetic Chemistry)

DE2009945919
Toxicological Studies of Semiconductor Quantum Dots on Immune Cells.
Department of Energy.
2008, 39p
SAND2008-7710
Related Categories/Sub-categories:
49 (Electrotechnology)
57B (Biochemistry)
57E (Clinical Medicine)
57F (Cytology, Genetics, & Molecular Biology)
57Y (Toxicology)

RSS Feeds are available in your choice of NTIS Subject Category. For information use the [RSS link on the NTIS Homepage](#) and look for the Category RSS Feeds button.

Key to Database Fields Used

The following NTIS database fields are used in this short listing of recently acquired technical reports.

NTIS Order Number
Title
Source
Report Year, Page Count
Report Number/ISBN13 (if available)
Related Categories/Sub-categories
(where the document is also indexed)



Nanoelectronics

ADA483318

Nanotechnology and U.S. Competitiveness: Issues and Options.

Congressional Research Service.

2008, 31p

CRS-RL34493

Related Categories/Sub-categories:

49 (Electrotechnology)

94K (Laboratory & Test Facility Design & Operation)

96 (Business & Economics)

ADA483912

Nanotechnology: A Policy Primer.

Congressional Research Service.

2008, 16p

CRS-RL34511

Related Categories/Sub-categories:

49 (Electrotechnology)

92 (Behavior & Society)

ADA485115

Strategic Partnership for Research in Nanotechnology.

Department of Defense.

2008, 11p

AFRL-SR-AR-TR-08-0506

Related Categories/Sub-categories:

49 (Electrotechnology)

ADA496844

Stochastic Magnetization Dynamics Excited by Spin-Polarized Current in Magnetic Nano-Structures.

Department of Defense.

2008, 13p

TARDEC-19505

Related Categories/Sub-categories:

46 (Physics)

49 (Electrotechnology)

DE2008925584

Oregon Nanoscience and Microtechnologies Institute. Final Report Solar DOE.

Department of Energy.

2008, 16p

DOE/GO-86073-1

Related Categories/Sub-categories:

49 (Electrotechnology)

92D (Education, Law, & Humanities)

94K (Laboratory & Test Facility Design & Operation)

97 (Energy)

ADA498191

Research and Infrastructure Development Center for Nanomaterials Research.

Department of Defense.

2009, 63p

ARL-CR-739

Related Categories/Sub-categories:

46 (Physics)

49 (Electrotechnology)

63F (Optical Detection)

DE2007898981

Nanoscale Science and Technology for the Development of Environmental Sensors.

Department of Energy.

2007, 15p

Related Categories/Sub-categories:

49H (Semiconductor Devices)

99F (Physical & Theoretical Chemistry)

N20090014772

Electroconductive PET/SWNT Films by Solution Casting.

NASA Marshall Space Flight Center.

2008, 16p

MSFC-2091

Related Categories/Sub-categories:

71F (Composite Materials)

ADA476859

Energy and Power Aware Computing Through Management of Computational Entropy.

Department of Defense.

2008, 60p

AFRL-RI-RS-TR-2007-278

Related Categories/Sub-categories:

49H (Semiconductor Devices)

62A (Computer Hardware)

72B (Algebra, Analysis, Geometry, & Mathematical Logic)

72F (Statistical Analysis)

97B (Energy Use, Supply, & Demand)

Major Subject Categories

| Category Codes*/Title | New for July Quantity** |
|--|----------------------------|
| 41 Manufacturing Technology..... | 56 |
| 43 Problem Solving Information for State & Local Governments | 260 |
| 44 Health Care..... | 132 |
| 45 Communication..... | 96 |
| 46 Physics..... | 270 |
| 47 Ocean Sciences & Technology | 137 |
| 48 Natural Resources & Earth Sciences..... | 301 |
| 49 Electrotechnology | 56 |
| 50 Civil Engineering..... | 97 |
| 51 Aeronautics & Aerodynamics | 166 |
| 54 Astronomy & Astrophysics | 9 |
| 55 Atmospheric Sciences | 103 |
| 57 Medicine & Biology | 486 |
| 62 Computers, Control & Information Theory | 213 |
| 63 Detection & Countermeasures..... | 110 |
| 68 Environmental Pollution & Control | 309 |
| 70 Administration & Management..... | 429 |
| 71 Materials Sciences..... | 64 |
| 72 Mathematical Sciences..... | 84 |
| 74 Military Sciences..... | 617 |
| 75 Missile Technology..... | 11 |
| 76 Navigation, Guidance, & Control..... | 27 |
| 77 Nuclear Science & Technology | 75 |
| 79 Ordnance | 158 |
| 81 Combustion, Engines, & Propellants | 34 |
| 82 Photography & Recording Devices..... | 6 |
| 84 Space Technology..... | 28 |
| 85 Transportation..... | 133 |
| 88 Library & Information Sciences..... | 105 |
| 89 Building Industry Technology | 34 |
| 90 Government Inventions for Licensing | 3 |
| 91 Urban & Regional Technology & Development..... | 341 |
| 92 Behavior & Society..... | 672 |
| 94 Industrial & Mechanical Engineering | 71 |
| 95 Biomedical Technology & Human Factors | 32 |
| 96 Business & Economics | 367 |
| 97 Energy..... | 153 |
| 98 Agriculture & Food | 132 |
| 99 Chemistry..... | 154 |

* For a listing of Scope Notes that defines the specific topical content for each category, go to <http://www.ntis.gov/assets/pdf/scopenotes.pdf>

** Quantities represent each new report assigned on average to 3-5 categories.

Nanoelectronics

ADA495648

Promises of Graphene Nanoelectronics.
Department of Defense.
2008, 2p

Related Categories/Sub-categories:
49 (Electrotechnology)

ADA482328

Wide Bandgap III-Nitride Micro- and Nano-
Photonics.

Department of Defense.
2008, 10p

Related Categories/Sub-categories:
46C (Optics & Lasers)
49E (Optoelectronic Devices & Systems)

ADA485332

Real-Time Intelligent Chemical and Biological
Nanosensors on Flexible Platform.

Department of Defense.
2008, 20p

ARL-TN-325

Related Categories/Sub-categories:
49 (Electrotechnology)
74D (Chemical, Biological, & Radiological
Warfare)

ADA486769

Electroluminescence Efficiency Enhancement
using Metal Nanoparticles.

Department of Defense.
2008, 4p

AFRL-RY-HS-TP-2008-0022

Related Categories/Sub-categories:
46 (Physics)
49 (Electrotechnology)

ADA486827

Bio-Nanotechnology Infrastructure and
Technology Oriented Research.

Department of Defense.
2008, 14p

AFRL-SR-AR-TR-08-0481

Related Categories/Sub-categories:
49E (Optoelectronic Devices & Systems)
82C (Recording Devices)
99F (Physical & Theoretical Chemistry)

ADA487993

Polypeptides Based Molecular Electronics.
Nanyang Technological Inst., Singapore.

2008, 26p

AOARD-074062

Related Categories/Sub-categories:
46 (Physics)
49 (Electrotechnology)
57B (Biochemistry)
99F (Physical & Theoretical Chemistry)

ADA490342

Development of Nanomechanical Sensors for
Breast Cancer Biomarkers.
Department of Defense.

2008, 22p

Related Categories/Sub-categories:
49 (Electrotechnology)
57E (Clinical Medicine)
57I (Electrophysiology)

ADA492513

Aligner/Bonder for Fabrication of Nanoscale
Spectral and Polarimetric Sensors.

Department of Defense.
2008, 5p

FR-1

Related Categories/Sub-categories:
41G (Quality Control & Reliability)
49E (Optoelectronic Devices & Systems)
63F (Optical Detection)

PB2009100646

Applicability of Microelectronic and Mechanical
Systems (MEMS) for Transportation
Infrastructure Management.

Department of Transportation.
2008, 22p

MBTC-2056

Related Categories/Sub-categories:
43G (Transportation)
49 (Electrotechnology)
50A (Highway Engineering)
85H (Road Transportation)
91B (Transportation & Traffic Planning)

N20080023404

Intelligent Engine Systems.

National Aeronautics and Space Administration.
2008, 38p

NASA/CR-2008-215233

E-16523

Related Categories/Sub-categories:
51C (Aircraft)
51F (Test Facilities & Equipment)

PB2008101896

Semiconductor Microelectronics and
Nanoelectronics Programs, July 2007.

National Institute of Standards and Technology.
2007, 254p

NISTIR-7426

See also report dated Jul 06, PB2006-114750.

Related Categories/Sub-categories:
46 (Physics)
49H (Semiconductor Devices)
70E (Research Program Administration &
Technology Transfer)
71 (Materials Sciences)



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database.

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Nanostructured Materials

PB2009113239

Sampling and Analysis of Nanomaterials in the Environment: A State-of-Science Review.

Environmental Protection Agency.

2008, 178p

EPA/600/R-08/098

Related Categories/Sub-categories:

41K (Engineering Materials)

46 (Physics)

68 (Environmental Pollution & Control)

71 (Materials Sciences)

ADA476114

Engineered Nanoscale Materials and Derivative Products: Regulatory Challenges.

Congressional Research Service.

2008, 27p

CRS-RL34332

Related Categories/Sub-categories:

70 (Administration & Management)

71M (Miscellaneous Materials)

92 (Behavior & Society)

N20080040160

Strain and Temperature Sensing Properties of Multiwalled Carbon Nanotube Yarn Composites.

National Aeronautics and Space Administration.

2008, 10p

Related Categories/Sub-categories:

71F (Composite Materials)

N20080047425

Polymeric Materials for Aerospace Power and Propulsion-NASA Glenn Overview.

National Aeronautics and Space Administration.

2008, 26p

Related Categories/Sub-categories:

71O (Plastics)

81G (Rocket Engines & Motors)

84 (Space Technology)

99C (Polymer Chemistry)

PB2008108955

Nanotechnology: Better Guidance Is Needed to Ensure Accurate Reporting of Federal Research Focused on Environmental, Health, and Safety Risks.

Government Accountability Office.

2008, 43p

GAO-08-402

Related Categories/Sub-categories:

49 (Electrotechnology)

57U (Public Health & Industrial Medicine)

70E (Research Program Administration & Technology Transfer)

70F (Public Administration & Government)

70G (Productivity)

PB2009105919

Interim Guidance for Medical Screening and Hazard Surveillance for Workers Potentially Exposed to Engineered Nanoparticles. Current Intelligence Bulletin 60.

National Institute for Occupational Safety and Health.

2009, 40p

DHHS-NIOSH-2009-116

Related Categories/Sub-categories:

57E (Clinical Medicine)

57U (Public Health & Industrial Medicine)

68G (Environmental Health & Safety)

PB2009106468

Review of the Federal Strategy for Nanotechnology-Related Environmental, Health, and Safety Research.

National Science Foundation.

2009, 130p

ISBN-0-309-11699-6

Related Categories/Sub-categories:

49 (Electrotechnology)

57U (Public Health & Industrial Medicine)

70E (Research Program Administration & Technology Transfer)

70F (Public Administration & Government)

PB2009108943

Approaches to Safe Nanotechnology: Managing the Health and Safety Concerns Associated with Engineered Nanomaterials.

National Institute for Occupational Safety and Health.

2009, 104p

DHHS/PUB/NIOSH-2009-125

Related Categories/Sub-categories:

43 (Problem Solving Information for State & Local Governments)

44 (Health Care)

46 (Physics)

70E (Research Program Administration & Technology Transfer)

71 (Materials Sciences)

PB2009111828

National Nanotechnology Initiative: Strategy for Nanotechnology-Related Environmental, Health, and Safety Research, February.

National Science and Technology Council.

2008, 102p

See also PB2009-106468.

Related Categories/Sub-categories:

49 (Electrotechnology)

57U (Public Health & Industrial Medicine)

70E (Research Program Administration & Technology Transfer)

70F (Public Administration & Government)

PB2009105274

Nanoscale Science Research Centers. Approach to Nanomaterial ES&H, Revision 2, June 2007.

Department of Energy.

2007, 25p

NSRC-REV2

Related Categories/Sub-categories:

57U (Public Health & Industrial Medicine)

68G (Environmental Health & Safety)

70E (Research Program Administration & Technology Transfer)

N20070013794

Composite Nanomechanics: A Mechanistic Properties Prediction.

National Aeronautics and Space Administration.

2007, 30p

NASA/TM-2007-214673

E-15643

Related Categories/Sub-categories:

71F (Composite Materials)

Subject Category Codes/ Classification

NTIS classifies citations into 39 subject categories. Each of these subject categories is divided into subcategories. This method provides sorting categories for both hard and soft sciences. All subject categories consist of three character codes: two numerics and one alpha character. The numeric codes represent entire categories, the alpha codes are used to designate subcategories within these broad categories. The number of NTIS subcategories posted to an information product average from one to five, although there are some reports with more.



Nanotechnology — General

ADA490992

National Nanotechnology Initiative: Driving Innovation & Competitiveness.

Executive Office of the President.

2007, 23p

Related Categories/Sub-categories:

94K (Laboratory & Test Facility Design & Operation)

96 (Business & Economics)

ADA479341

Initial Investigation on the Aerodynamic Performance of Flapping Wings for Nano Air Vehicles.

Defence Research and Development Canada.

2008, 166p

DRDC-V-TM-2007-550

Related Categories/Sub-categories:

51A (Aerodynamics)

51C (Aircraft)

ADA485710

Nanotechnology and Environmental, Health, and Safety: Issues for Consideration. Updated August 6, 2008.

Congressional Research Service.

2008, 46p

CRS-RL34614

Related Categories/Sub-categories:

68G (Environmental Health & Safety)

99F (Physical & Theoretical Chemistry)

ADA477700

Competitive Technologies for National Security: Review and Recommendations.

Department of Defense.

2008, 42p

SR-21

Related Categories/Sub-categories:

70B (Management Practice)

70E (Research Program Administration & Technology Transfer)

74F (Military Intelligence)

91I (Emergency Services & Planning)

ADA481269

National Nanotechnology Initiative: Second Assessment and Recommendations of the National Nanotechnology Advisory Panel.

Executive Office of the President.

2008, 57p

Related Categories/Sub-categories:

71M (Miscellaneous Materials)

94K (Laboratory & Test Facility Design & Operation)

PB2008113698

Nanotechnology: A Policy Primer. CRS Report for Congress.

Congressional Research Service.

2008, 15p

Related Categories/Sub-categories:

44G (Environmental & Occupational Factors)

57U (Public Health & Industrial Medicine)

68G (Environmental Health & Safety)

70E (Research Program Administration & Technology Transfer)

96A (Domestic Commerce, Marketing, & Economics)

PB2007108746

Nanotechnology Synthesis Study: Research Report.

Federal Highway Administration.

2007, 122p

REPT-0-5239-1

Related Categories/Sub-categories:

43G (Transportation)

50A (Highway Engineering)

85 (Transportation)

91B (Transportation & Traffic Planning)

PB2009105958

National Nanotechnology Initiative. Strategic Plan.

National Science and Technology Council.

2007, 46p

Related Categories/Sub-categories:

70E (Research Program Administration & Technology Transfer)

Nanotechnology — Environment, Health and Safety

ADA485710

Nanotechnology and Environmental, Health, and Safety: Issues for Consideration. Updated August 6, 2008.

Congressional Research Service.

2008, 46p

CRS-RL34614

Related Categories/Sub-categories:

68G (Environmental Health & Safety)

99F (Physical & Theoretical Chemistry)

PB2007106824

Progress Towards Safe Nanotechnology in the Workplace: A Report from the NIOSH Nanotechnology Research Center.

National Institute for Occupational Safety and Health.

2007, 198p

DHHS/PUB/NIOSH-2007-123

Related Categories/Sub-categories:

41I (Job Environment)

57U (Public Health & Industrial Medicine)

94D (Job Environment)

PB2008108823

Nanotechnology: A Report of the U.S. Food and Drug Administration Nanotechnology Task Force, July 25, 2007.

Food and Drug Administration.

2007, 38p

Related Categories/Sub-categories:

44H (Health Care Technology)

46 (Physics)

57E (Clinical Medicine),

62 (Computers, Control & Information Theory)

70E (Research Program Administration & Technology Transfer)

70F (Public Administration & Government)

99 (Chemistry)

PB2007108925

U.S. Environmental Protection Agency Nanotechnology White Paper.

Environmental Protection Agency.

2007, 132p

EPA/100/B-07/001

Related Categories/Sub-categories:

43F (Environment)

46 (Physics)

88E (Reference Materials),

91A (Environmental Management & Planning)

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