



## NTIS Technical Reports Newsletter

**Purpose:** To bring you a sampling of the latest documents added to the NTIS Database and to help you gain a greater understanding of the wealth of scitech information available from the National Technical Information Service.

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## Category 47 Ocean Sciences & Technology

ADA499729

Best Practices: High Levels of Knowledge at Key Points Differentiate Commercial Shipbuilding from Navy Shipbuilding. General Accounting Office. 2009, 76p

Related Categories/Sub-categories:  
74 (Military Sciences)

ADA500324

Ohio River Denial as a Transportation Corridor and Its Economic Impacts on the Energy Industry.

Air Force Institute of Technology. 2009, 121p

AFIT/GLM/ENS/09-5

Related Categories/Sub-categories:  
41G (Quality Control & Reliability)  
96 (Business & Economics)  
97O (Miscellaneous Energy Conversion & Storage)

ADA500698

Development of a Semi-Autonomous Underwater Vehicle for Intervention Missions (SAUVIM Phase III-B).

Hawaii Univ., Honolulu. Dept. of Mechanical Engineering. 2009, 150p

Related Categories/Sub-categories:  
76D (Navigation Systems)

ADA501144

Impact of the Type 094 Ballistic Missile Submarine on China's Nuclear Policy.

Naval Postgraduate School, Monterey, CA. 2009, 124p

Authors: S. Bell.  
Related Categories/Sub-categories:  
74H (Nuclear Warfare)  
75F (Missile Warheads & Fuses)

ADA501275

Cooperative Localization for Autonomous Underwater Vehicles.

Woods Hole Oceanographic Institution, MA. 2009, 143p

MIT/WHOI-2009-05

Related Categories/Sub-categories:  
62 (Computers, Control & Information Theory)  
76D (Navigation Systems)

ADA501276

Parallel Hypothesis Method of Autonomous Underwater Vehicle Navigation.

Woods Hole Oceanographic Institution, MA. 2009, 287p

MIT/WHOI-2009-03

Related Categories/Sub-categories:  
62 (Computers, Control & Information Theory)  
76D (Navigation Systems)

ADA501867

Enterprise Command and Control Requirements and Common Architecture on US Navy Surface Combatants.

Naval Postgraduate School, Monterey, CA. 2009, 197p

Related Categories/Sub-categories:  
45C (Common Carrier & Satellite)  
62B (Computer Software)

DE2009962501

Ocean Energy Technology Overview: Federal Energy Management Program (FEMP).

National Renewable Energy Laboratory. 2009, 32p

DOE/GO-102009-2823

Related Categories/Sub-categories:  
97A (Reserves)  
97G (Policies, Regulations & Studies)  
97O (Miscellaneous Energy Conversion & Storage)

PB2009111557

Mapping Sea Ice Overflood Using Remote Sensing: Smith Bay to Camden Bay.

Alaska University, Fairbanks. Geophysical Institute.

2009, 282p

OCS-S-MMS-2009-017

Related Categories/Sub-categories:  
48C (Natural Resource Surveys)  
48I (Cartography)

PB2009113245

Coast Guard: As Deepwater Systems Integrator, Coast Guard Is Reassessing Costs and Capabilities but Lags in Applying Its Disciplined Acquisition Approach.

Government Accountability Office. 2009, 39p

GAO-09-682

Related Categories/Sub-categories:  
62 (Computers, Control & Information Theory)  
72B (Algebra, Analysis, Geometry, & Mathematical Logic)  
88B (Information Systems)



## Category 47 Ocean Sciences & Technology

PB2009113249

Loop Current Frontal Eddies Based on Satellite Remote-Sensing and Drifter Data.  
Minerals Management Service, New Orleans, LA.  
2009, 88p

Related Categories/Sub-categories:

- 46B (Fluid Mechanics)
- 48G (Hydrology & Limnology)
- 63 (Detection & Countermeasures)

PB2009113280

Coast Guard: Better Logistics Planning Needed to Aid Operational Decisions Related to the Deployment of the National Security Cutter and Its Support Assets.

Government Accountability Office.  
2009, 58p  
GAO-09-497

Related Categories/Sub-categories:

- 74 (Military Sciences)

PB2009113741

Northern Gulf of Mexico Continental Slope Habitats and Benthic Ecology Study.  
Texas Engineering Experiment Station, College Station.  
2009, 417p

Related Categories/Sub-categories:

- 57H (Ecology)

PB2009113742

Post-Hurricane Assessment of Sensitive Habitats of the Flower Garden Banks Vicinity.  
Minerals Management Service, New Orleans, LA.  
2009, 160p

Related Categories/Sub-categories:

- 48F (Geology & Geophysics)
- 55C (Meteorological Data Collection, Analysis, & Weather Forecasting)
- 57H (Ecology)

PB2009113760

Results of the 2008 Eastern Bering Sea Continental Shelf Bottom Trawl Survey of Groundfish and Invertebrate Resources.  
Alaska Fisheries Science Center, Seattle, WA.  
2009, 241p

NOAA-TM-NMFS-AFSC-195

See also PB2008109338.

Related Categories/Sub-categories:

- 98F (Fisheries & Aquaculture)

PB2010102821

West Coast Regional Marine Research and Information Needs.

Oregon State Univ., Corvallis. Oregon Sea Grant.  
2009, 60p

ORESU-Q-09-001

Related Categories/Sub-categories:

- 57H (Ecology)
- 68A (Air Pollution & Control)

PB2010102863

National Estuarine Research Reserve System: Research and Monitoring Plan (2006-2011).

National Oceanic and Atmospheric Administration.

2009, 44p

Related Categories/Sub-categories:

- 48B (Natural Resource Management)
- 57H (Ecology)

PB2010103062

GeoVision Report: Unraveling Earth's Complexities Through the Geosciences.

National Science Foundation.

2009, 44p

Related Categories/Sub-categories:

- 48F (Geology & Geophysics)
- 55A (Aeronomy)
- 77 (Nuclear Science & Technology)
- 97 (Energy)

PB2010103314

Science at Sea: Meeting Future Oceanographic Goals with a Robust Academic Research Fleet.

National Academy of Sciences-National Research Council.

2009, 120p

Related Categories/Sub-categories:

- 55C (Meteorological Data Collection, Analysis, & Weather Forecasting)
- 68 (Environmental Pollution & Control)

PB2010103801

Marine Mammal Commission, Annual Report to Congress, 2008.

Marine Mammal Commission, Bethesda, MD.  
2009, 282p

See also PB2009102394.

Related Categories/Sub-categories:

- 48B (Natural Resource Management)
- 57H (Ecology)
- 57Z (Zoology)

### Major Subject Categories

Category Codes*/Title	New for January Quantity**
41 Manufacturing Technology	53
43 Problem Solving Information for State & Local Governments	239
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45 Communication	78
46 Physics	144
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72 Mathematical Sciences	38
74 Military Sciences	399
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76 Navigation, Guidance, & Control	17
77 Nuclear Science & Technology	67
79 Ordnance	71
81 Combustion, Engines, & Propellants	18
82 Photography & Recording Devices	3
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85 Transportation	102
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91 Urban & Regional Technology & Development	245
92 Behavior & Society	656
94 Industrial & Mechanical Engineering	61
95 Biomedical Technology & Human Factors	40
96 Business & Economics	194
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\* 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.

## Category 99 Chemistry

ADA499532

Characterization of Reaerosolization From Impingers in an Effort to Improve Airborne Virus Sampling.

Florida Univ., Gainesville. Dept. of Environmental Engineering Sciences.

2009, 35p

Related Categories/Sub-categories:

57K (Microbiology)

74D (Chemical, Biological, & Radiological Warfare)

ADA499711

Integrated Semiconductor-based Diagnostics System for Multiplexed Genomic Amplification and Electrochemical Detection of Biothreat Agents.

Combimatrix Corp Mukilteo WA.

2009, 85p

Related Categories/Sub-categories:

57K (Microbiology)

63F (Optical Detection)

74D (Chemical, Biological, & Radiological Warfare)

ADA500388

New Paradigm in Modeling and Simulations of Complex Oxidation Chemistry Using a Statistical Approach.

California Institute of Technology, Pasadena.

2009, 66p

Related Categories/Sub-categories:

72F (Statistical Analysis)

ADA501277

Computational Design Tool for the Synthesis and Optimization of Gel Formulations (SOGeF).

CFD Research Corp., Huntsville, AL.

2009, 102p

Related Categories/Sub-categories:

79A (Ammunition, Explosives, & Pyrotechnics)

ADA502402

Eigendeformation-Based Homogenization of Concrete.

Rensselaer Polytechnic Inst., Troy, NY.

2009, 31p

Related Categories/Sub-categories:

46E (Structural Mechanics)

ADA502557

Thermo-Mechanical Characterization of Silicon Carbide-Silicon Carbide Composites at Elevated Temperatures Using a Unique Combustion Facility.

Air Force Institute of Technology, Wright-Patterson Air Force Base, OH.

2009, 344p

AFIT/DS/ENY/09-S01

Related Categories/Sub-categories:

46E (Structural Mechanics)

81A (Combustion & Ignition)

ADA502599

Evaluation of an Innovative Technology for Treatment of Water Contaminated with Perchlorate and Organic Compounds.

Air Force Institute of Tech., Wright-Patterson Air Force Base, OH.

2009, 153p

AFIT/GEM/ENV/09-M04

Related Categories/Sub-categories:

68D (Water Pollution & Control)

96 (Business & Economics)

ADA504989

Carbon Nanotube Synthesis and Detection: Limiting the Environmental Impact of Novel Technologies.

Massachusetts Institute of Technology, Cambridge.

2009, 227p

MIT/WHOI-2009-10

Related Categories/Sub-categories:

68G (Environmental Health & Safety)

71I (Fibers & Textiles)

ADA505310

Altitude Chamber Testing of the Passenger Oxygen System (POS).

Air Force Research Laboratory, Brooks Air Force Base, TX.

2009, 233p

AFRL-RH-BR-TR-2009-0047

Related Categories/Sub-categories:

94K (Laboratory & Test Facility Design & Operation)

95E (Life Support Systems)

### 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.

ADA508953

Mechanistic Investigations of Branched Macromolecules and Metal Nanocomposites for Nonlinear Optical Applications.

Michigan University, Ann Arbor, MI.

2009, 29p

Related Categories/Sub-categories:

46C (Optics & Lasers)

71N (Nonferrous Metals & Alloys)

DE2009951312

Study of Turbulent Fluctuations Driven by the Electron Temperature Gradient in the National Spherical Torus Experiment.

Department of Energy, Washington, DC.

2009, 40p

PPPL-4395

Related Categories/Sub-categories:

46G (Plasma Physics)

77A (Thermonuclear Fusion Devices)

97Q (Selected Studies In Nuclear Technology)

DE2009952083

Science & Technology Review: Powering the Future with Life.

Department of Energy.

2009, 32p

Related Categories/Sub-categories:

77A (Thermonuclear Fusion Devices)

77G (Radioactive Wastes & Radioactivity)

97B (Energy Use, Supply, & Demand)

97G (Policies, Regulations & Studies)

97R (Environmental Studies)

97Q (Selected Studies In

Nuclear Technology)

### 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)



## Category 99 Chemistry

DE2009952162

Summary Report: Direct Approaches for Recycling Carbon Dioxide into Synthetic Fuel.

Department of Energy.

2009, 41p

SAND2009-0399

Related Categories/Sub-categories:

97F (Fuel Conversion Processes)

97K (Fuels)

DE2009957533

Degradation in Solid Oxide Cells During High Temperature Electrolysis.

Department of Energy.

2009, 62p

INL/EXT-09-15617

Related Categories/Sub-categories:

97F (Fuel Conversion Processes)

97K (Fuels)

97O (Miscellaneous Energy Conversion & Storage)

DE2009958564

Development of the Write Process for Pipeline-Ready Heavy Oil.

Department of Energy.

2009, 97p

Related Categories/Sub-categories:

97F (Fuel Conversion Processes)

97K (Fuels)

DE2009962851

Techno-economic Analysis for the Thermochemical Conversion of Lignocellulosic Biomass to Ethanol via Acetic Acid Synthesis.

Department of Energy.

2009, 79p

PNNL-18483

Related Categories/Sub-categories:

97F (Fuel Conversion Processes)

97K (Fuels)

N20090027845

2009 NASA Goddard Space Flight Center Nanotechnology Safety Training.

NASA Goddard Space Flight Center.

2009, 30p

Related Categories/Sub-categories:

41I (Job Environment)

57U (Public Health & Industrial Medicine)

84 (Space Technology)

PB2009111507

Development of an Improved VOC Analysis Method for Architectural Coatings.

California Environmental Protection Agency.

2009, 112p

Related Categories/Sub-categories:

68A (Air Pollution & Control)

71E (Coatings, Colorants, & Finishes)

PB2009111522

Particle Phase Peroxides: Concentrations, Sources, and Behavior.

California Environmental Protection Agency.

2009, 96p

Related Categories/Sub-categories:

57E (Clinical Medicine)

68A (Air Pollution & Control)

68G (Environmental Health & Safety)

PB2009111524

Harbor Community Monitoring Study (HCMS) Saturation Monitoring.

California Environmental Protection Agency.

2009, 168p

Related Categories/Sub-categories:

57U (Public Health & Industrial Medicine)

57Y (Toxicology)

68A (Air Pollution & Control)

68G (Environmental Health & Safety)

PB2009113615

Collection of Pyrethroids in Water and Sediment Matrices: Development and Validation of a Standard Operation Procedure.

Geological Survey, Reston, VA.

2009, 34p

USGS-SIR-2009-5012

Related Categories/Sub-categories:

57P (Pest Control)

57Y (Toxicology)

68D (Water Pollution & Control)

PB2009113740

Qualitative Risk Characterization and Management of Occupational Hazards: Control Banding (CB). A Literature Review and Critical Analysis.

National Institute for Occupational Safety and Health.

2009, 118p

DHHS/PUB/NIOSH-2009-152

Related Categories/Sub-categories:

44G (Environmental & Occupational Factors)

57U (Public Health & Industrial Medicine)

57Y (Toxicology)

68G (Environmental Health & Safety)

PB2009113935

Manure Use for Fertilizer and for Energy. Report to Congress.

Economic Research Service.

2009, 53p

Related Categories/Sub-categories:

97K (Fuels)

98A (Agricultural Chemistry)

PB2009114000

Detection of Delaminations of FRP Retrofitted Reinforced Concrete Columns.

Department of Transportation.

2009, 54p

TNW-2009-08

Related Categories/Sub-categories:

50C (Construction Equipment, Materials, & Supplies)

71F (Composite Materials)

PB2010100838

Guidelines for Safe Use of Gaseous Halocarbon Extinguishing Agents in Aircraft.

Federal Aviation Administration.

2009, 71p

Related Categories/Sub-categories:

51C (Aircraft)

57Y (Toxicology)

PB2010101607

Assessment of the National Institute of Standards and Technology Center for Nanoscale Science and Technology, Fiscal Year 2009.

National Institute of Standards and Technology.

2009, 30p

ISBN-13-978-0-309-14500-8

Related Categories/Sub-categories:

46 (Physics)

70E (Research Program Administration & Technology Transfer)

94K (Laboratory & Test Facility Design & Operation)

Any of the technical reports listed in this newsletter can be ordered directly from the National Technical Information Service, simply click on the title to go to the product detail page on [NTIS.GOV](http://NTIS.GOV).

If your organization is a subscriber to the National Technical Reports Library, most of the reports listed can be downloaded free there. For information on how to subscribe to NTRL, go to <http://www.ntis.gov/products/ntrl/>



## Category 99 Chemistry

PB2010101610

Assessment of the National Institute of Standards and Technology Chemical Science and Technology Laboratory, Fiscal Year 2009.

National Research Council.

2009, 50p

ISBN-13-978-0-309-14509-1

Related Categories/Sub-categories:

57B (Biochemistry)

PB2010102590

Final Contaminant Candidate List 3 Chemicals: Classification of the PCCL to CCL.

Environmental Protection Agency.

2009, 121p

EPA/815-09/008

Related Categories/Sub-categories:

57U (Public Health & Industrial Medicine)

68D (Water Pollution & Control)

PB2010102643

Contaminant Information Sheets for the Final CCL 3 Chemicals.

Environmental Protection Agency

2009, 216p

EPA/815/R-09/012

Related Categories/Sub-categories:

57U (Public Health & Industrial Medicine)

68D (Water Pollution & Control)

PB2010102644

Contaminant Information Sheets for the PCCL Chemicals Considered for CCL 3.

Environmental Protection Agency.

2009, 1126p

EPA/815/R-09/014

Related Categories/Sub-categories:

57U (Public Health & Industrial Medicine)

68D (Water Pollution & Control)

PB2010102876

Frontiers in Crystalline Matter From Discovery to Technology.

National Research Council, Washington, DC.

2009, 192p

Related Categories/Sub-categories:

46D (Solid State Physics)

**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.**

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