



## Welcome from the Director

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- Improving the precision of search results by reengineering the advanced search function on the Web site
- Increasing electronic output options with a print-on-demand option

The NTIS Technical Reports Newsletter informs you of technical reports recently added to the NTIS collection. While the premier issue of the NTIS Technical Reports Newsletter is a print document, it will transition to electronic delivery via e-mail. In addition, new RSS feeds by major NTIS Subject Categories will also be offered.

I invite you to sign up for this free newsletter or the upcoming RSS feeds, by e-mailing us at [ntrnews@ntis.gov](mailto:ntrnews@ntis.gov). Your comments or suggestions are also welcome.

Ellen Herbst  
Director, NTIS

## The Nation's Source for Scientific Information

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For more than 60 years, we have served as an innovative resource to Federal agencies, businesses and universities looking for high-caliber information. Our mission is straight-forward: to support the nation's economic growth by providing access to information that stimulates innovation and discovery.

While you can find information on virtually any subject on the web, there's no guarantee that the information is accurate — or that it has been published by a legitimate source. NTIS undergoes a rigorous process to ensure that all the information we offer is authentic and credible. This integrity, along with the breadth and depth of our collection, is why NTIS is regarded as the nation's preeminent source of government information.

## Highlighted Categories — Going Green

This month, we highlight the NTIS categories that include technical documents related to our growing awareness of environmental issues and climate conditions. Some of these include:

- Natural Resources & Earth Sciences (NTIS category 48)
- Environmental Pollution & Control (NTIS category 68)
- Urban & Regional Technology & Development (NTIS category 91)
- Energy (NTIS category 97)

See inside for a short list in each of these categories.

Also, in celebration of the recent Mars landing, we have included a sampling of recent releases about Mars in the NTIS Category 84, Space Technology.

PB2008109312

[20% Wind Energy by 2030: Increasing Wind Energy's Contribution to the U.S. Electricity Supply](#)  
Department of Energy, Energy Information Administration, Office of Integrated Analysis and Forecasting

May 2008, 248 pages

Report Number: DOE/GO-102008-2567

Related Categories/Sub-categories:

- 68 (Environmental Pollution & Control)
- 41 (Manufacturing Technology)
- 97E (Electric Power Transmission)
- 97I (Electric Power Production)
- 97O (Miscellaneous Energy Conversion and Storage)
- 97R (Environmental Studies)
- 91A (Environmental Management & Planning)
- 43F (Environment)

National Technical Information Service  
U.S. Department of Commerce  
5285 Port Royal Rd  
Springfield VA 22161

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## 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 Agency**

**Report Year, Page Count:**

**Report Number/ISBN13 (if available)**

**Related Categories/Sub-categories**

(where the document is also indexed)

## Find More on NTIS.GOV

The documents listed here are just some of the newest in the collection. Find information on other new items, legacy documents, ordering and format options on the search area of <http://www.ntis.gov>.



## Category 48

### Natural Resources and Earth Sciences

ADA474361

Understanding Recent Variability in the Arctic Sea Ice Cover – synthesis of Model Results and Observations

Department of Defense, Naval Postgraduate School

September 2007, 83 pages

Related Categories/Sub-categories:

48C (Natural Resource Surveys)

47C (Physical & Chemical Oceanography)

55A (Aeronomy)

ADA474394

Relationships between Global Warming and Tropical Cyclone Activity in the Western North Pacific

Department of Defense, Naval Postgraduate School

September 2007, 163 pages

Related Categories/Sub-categories:

55C (Meteorological Data Collection, Analysis, & Weather Forecasting)

N20080002201

Emergency Response Fire-Imaging UAS Missions over the Southern California Wildfire Disaster

National Aeronautics and Space Administration, Dryden Flight Research Center

December 2007, 25 pages

Related Categories/Sub-categories:

85A (Air Transportation)

PB2008101072

Global-Change Scenarios. Their Development and Use. U.S. Climate Change Science Program Synthesis and Assessment Product 2.1b

US Environmental Protection Agency, Global Change Research Program

July 2007, 116 pages

Related Categories/Sub-categories:

55 (Atmospheric Sciences)

70E (Research Program Administration & Technology Transfer)

PB2008105721

Development of a Global Slope Dataset for Estimation of Landslide Occurrence Resulting from Earthquakes

Department of the Interior, US Geological Survey 2007, 29 pages

Report Number: USGS/OFR-2007-1188

Related Categories/Sub-categories:

48F (Forestry)

63I (Seismic Detection)

PB2008108683

Preliminary Analytical Results for Ash and Burned Soils from the October 2007 Southern California Wildfires

Department of the Interior, US Geological Survey 2007, 15 pages

Report Number: USGS/OFR-2007-1407

Related Categories/Sub-categories:

48D (Forestry)

43B (Economic & Community Development)

57H (Ecology)

57U (Public Health & Industrial Medicine)

43F (Environment)

81A (Combustion & Ignition)

## Major Subject Categories

Category Codes*/Title	New for June Quantity**
41 Manufacturing Technology .....	53
43 Problem Solving Information for State & Local Governments .....	161
44 Health Care .....	71
45 Communication .....	63
46 Physics .....	281
47 Ocean Sciences & Technology .....	240
50 Civil Engineering .....	109
51 Aeronautics & Aerodynamics .....	169
54 Astronomy & Astrophysics .....	40
55 Atmospheric Sciences .....	144
57 Medicine & Biology .....	424
62 Computers, Control & Information Theory .....	154
63 Detection & Countermeasures .....	75
68 Environmental Pollution & Control .....	197
70 Administration & Management .....	318
71 Materials Sciences .....	110
72 Mathematical Sciences .....	106
74 Military Sciences .....	376
75 Missile Technology .....	6
76 Navigation, Guidance, & Control .....	10
77 Nuclear Science & Technology .....	88
79 Ordnance .....	61
81 Combustion, Engines, & Propellants .....	110
82 Photography & Recording Devices .....	8
84 Space Technology .....	137
85 Transportation .....	160
88 Library & Information Sciences .....	73
89 Building Industry Technology .....	28
90 Government Inventions for Licensing .....	7
91 Urban & Regional Technology & Development .....	215
92 Behavior & Society .....	523
94 Industrial & Mechanical Engineering .....	111
95 Biomedical Technology & Human Factors Engineering .....	104
96 Business & Economics .....	91
97 Energy .....	164
98 Agriculture & Food .....	53
99 Chemistry .....	94

\* 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 68

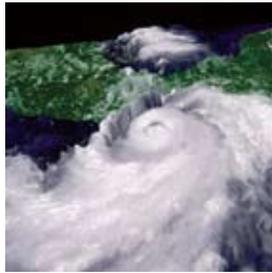
### Environmental Pollution and Control

PB2008106984  
**Policy Options for Reducing CO (2) Emissions.**  
 Congressional Budget Office  
 February 2008, 42 pages  
 Related Categories/Sub-categories:  
 68A (Air Pollution & Control)  
 70F (Public Administration & Government)  
 97R (Environmental Studies)  
 91A (Environmental Management & Planning)  
 43F (Environment)

PB2008108986  
**Greening Government Research and Implementation Project – Phase 1.**  
 Department of Transportation, Federal Highway Administration  
 December 2007, 216 pages  
 Report Number: CDOT-2007-8  
 Related Categories/Sub-categories:  
 70F (Public Administration and Government)  
 91A (Environmental Management & Planning)  
 43F (Environment)

PB2008108034  
**Managing Wet Weather with Green Infrastructure, Action Strategy, 2008**  
 US Environmental Protection Agency  
 March 2007, 38 pages  
 Related Categories/Sub-categories:  
 91A (Environmental Management & Planning)  
 43F (Environment)

PB2008106955  
**Facing Tomorrow's Challenges: U.S. Geological Survey Science in the Decade 2007-2017**  
 Department of the Interior, US Geological Survey  
 2007, 81 pages  
 Report Number: CIRC-1309  
 Related Categories/Sub-categories:  
 48 (Natural Resources & Earth Science)  
 55 (Atmospheric Sciences)  
 70E (Administration & Management)



## Category 91

### Urban & Regional Technology & Development

PB2008106933  
**Against the Wind: Protecting Your Home from Hurricane Wind Damage**  
 Federal Emergency Management Agency  
 2008, 8 pages  
 Related Categories/Sub-categories:  
 91A (Environmental Management & Planning)  
 89B (Architectural Design & Environmental Engineering)

PB2008108967  
**Hurricane Evacuation Traffic Operations**  
 Department of Transportation, Federal Highway Administration  
 March 2008, 221 pages  
 Report Number: REPT-0-4962-1  
 Related Categories/Sub-categories:  
 91I (Emergency Services & Planning)  
 85D (Structural Analyses)  
 70F (Public Administration & Government)  
 43G (Transportation)

PB2008109367  
**Real-Time Data for Hurricane Evacuation in Texas**  
 Department of Transportation, Federal Highway Administration  
 February 2008, 46 pages  
 Related Categories/Sub-categories:  
 91B (Transportation & Traffic Planning)  
 85H (Road Transportation)  
 70F (Public Administration & Government)  
 62 (Computers, Control & Information Theory)  
 43G (Transportation)

PB2008105512  
**California Wildfires: An Employment and Wage Profile of the Affected Counties**  
 Department of Labor, Bureau of Labor Statistics  
 December 2007, 7 pages  
 Related Categories/Sub-categories:  
 91I (Emergency Services & Planning)  
 43D (Police, Fire, & Emergency Services)  
 96A (Domestic Commerce, Marketing, & Economics),  
 70D (Personnel Management, Labor Relations & Manpower Studies)



## Category 97

### Energy

PB2008107491  
**Transportation Vision for 2030**  
 Department of Transportation, Research and Innovative Technology Administration  
 February 2008, 33 pages  
 Related Categories/Sub-categories:  
 97B (Energy Use, Supply & Demand)  
 91B (Transportation & Traffic Planning)  
 85 (Transportation)  
 43G (Transportation, Problem Solving Information for State & Local Governments)

PB2008106835  
**Hydrogen Fuel Initiative: DOE Has Made Important Progress and Involved Stakeholders but Needs to Update What It Expects to Achieve by Its 2015 Target**  
 Government Accountability Office  
 January 2008, 48 pages  
 Report Number: GAO-08-305  
 Related Categories/Sub-categories:  
 97B (Energy, Use, Supply & Demand)  
 97K (Fuels)

PB2008105777  
**Yield Characteristics of Biodiesel Produced from Chicken Fat-Tall Oil Blended Feedstocks. Final Report**  
 Department of Transportation, Research and Special Programs Administration  
 January 2008, 76 pages  
 Report Number: MBTC-2092  
 Related Categories/Sub-categories:  
 97K (Fuels)  
 97B (Energy, Use, Supply & Demand)

PB2008106962  
**Energy in 2020: Assessing the Economic Effects of Commercialization of Cellulosic Ethanol**  
 International Trade Administration  
 November 2007, 20 pages  
 Related Categories/Sub-categories:  
 97K (Fuels)  
 97G (Policies, Regulations & Studies)  
 96C (International Commerce, Marketing & Economics)

ADA477664  
**21st Century Barrels of Alternative Fuels**  
 Department of Defense, Tacom Research, Development and Engineering Center  
 August 2007, 13 pages  
 Report Number: TARDEC-17532-RC  
 Related Categories/Sub-categories:  
 97K (Fuels)  
 97B (Energy, Use, Supply & Demand)



### 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.



## Category 84

### Space Technology

N20080012525

#### [Mars Sample Return from Meridiani Planum](#)

National Aeronautics and Space Administration,  
Johnson Space Center  
2008, 2 pages

Related Categories/Sub-categories:

- 84B (Extraterrestrial Exploration)
- 54 (Astronomy & Astrophysics)

N20080012587

#### [Challenges of Developing a Food System for a Mars Mission](#)

National Aeronautics and Space Administration,  
Johnson Space Center  
2008, 30 pages

Related Categories/Sub-categories:

- 95E (Life Support Systems)
- 98H (Food Technology)
- 57L (Nutrition)

N20080013365

#### [Mars Exploration Rovers Entry, Descent, and Landing Trajectory Analysis](#)

National Aeronautics and Space Administration,  
Johnson Space Center  
March 2008, 2 pages

Related Categories/Sub-categories:

- 84B (Extraterrestrial Exploration)
- 54 (Astronomy & Astrophysics)

N20080013453

#### [Robotic Exploration of Moon and Mars: Thematic Education Approach](#)

National Aeronautics and Space Administration,  
Johnson Space Center March 2008, 2 pages

Related Categories/Sub-categories:

- 54 (Astronomy & Astrophysics)
- 62 (Computers, Control & Information Theory)

N20080008384

#### [Imaginable Technologies for Human Missions to Mars](#)

National Aeronautics and Space Administration,  
Langley Research Center  
2007, 11 pages

Related Categories/Sub-categories:

- 84B (Extraterrestrial Exploration)
- 54 (Astronomy & Astrophysics)
- 84C (Manned Spacecraft)

N20080008605

#### [Decadal Planning Team Mars Mission Analysis Summary](#)

National Aeronautics and Space Administration,  
Johnson Space Center  
July 2007, 106 pages

Report Numbers: NASA/TM-2007-214761,  
JSC63725, S-1012

Related Categories/Sub-categories:

- 84A (Astronautics)

N20080008607

#### [DPT Mars Long-Stay Mission Architecture Status](#)

National Aeronautics and Space Administration,  
Johnson Space Center  
July 2007, 52 pages

Related Categories/Sub-categories:

- 84B (Extraterrestrial Exploration)
- 54 (Astronomy & Astrophysics)
- 81B (Electric & Ion Propulsion)

N20080013471

#### [2007 Mars Phoenix Entry, Descent, and Landing Simulation and Modeling Analysis](#)

National Aeronautics and Space Administration,  
Langley Research Center  
June 2007, 23 pages

Related Categories/Sub-categories:

- 84B (Extraterrestrial Exploration)
- 54 (Astronomy & Astrophysics)

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### Coming Soon – RSS Feeds

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