



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.

Director: Ellen Herbst
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Manager, Cataloging/Indexing Division: Sue Feindt
Manager, Product & Program Management: Wayne Strickland
Contributing Program Manager: Christie Langone
Technical Information Specialist: Anne Harrison
Editor and Design Direction: Linda Davis

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

VOLUME 1
NUMBER 11
MAY 15, 2009

Category 41: Manufacturing Technology

DE2009947235
Characterization of Defocused Electron Beams and Welds in Stainless Steel and Refractory Metals using the Enhanced Modified Faraday Cup Diagnostic.

Department of Energy.

2009, 30p

LLNL-TR-410110

Related Categories/Sub-categories:

71J (Iron & Iron Alloys)

94G (Manufacturing Processes & Materials Handling)

DE2009947256
Technical Advisory. Team (TAT) Report On the Rocket Sled Test Accident of October 9, 2008.

Department of Energy.

2009, 61p

SAND2009-0180

Related Categories/Sub-categories:

51A (Aerodynamics)

51B (Aeronautics)

94 (Industrial & Mechanical Engineering)

DE2009947347
Development of a High-Temperature Diagnostics-While Drilling Tool.

Department of Energy.

2009, 62p

SAND2009-0248

Related Categories/Sub-categories:

94F (Tooling, Machinery, & Tools)

97 (Energy)

N20090006701

NASA SSA for Robotic Missions.

National Aeronautics and Space Administration.

2009, 44p

Related Categories/Sub-categories:

62 (Computers, Control & Information Theory)

84A (Astronautics)

PB2009105000

Specifications, Tolerances, and Other Technical Requirements for Weighting and Measuring Devices as Adopted by the 92nd National Conference on Weights and Measures 2008. 2009 Edition.

National Institute of Standards and Technology.

2009, 365p

NIST/HB-44/2009

Related Categories/Sub-categories:

43 (Problem Solving Information for State & Local Governments)

94K (Laboratory & Test Facility Design & Operation)

98 (Agriculture & Food)

PB2009105845

Evaluation of Composite Joints in General Aviation Structures.

Federal Aviation Administration.

2009, 137p

DOT/FAA/AR-07/24

Related Categories/Sub-categories:

51C (Aircraft)

70E (Research Program Administration & Technology Transfer)

71F (Composite Materials)

PB2009105872

Health Hazard Evaluation Report: HETA-2007-0199-3075, Dehler Manufacturing, Inc., Chicago, Illinois, January 2009. Evaluation of Employees' Exposures to Welding Fumes and Powder Paint Dust During Metal Furniture Manufacturing.

National Institute for Occupational Safety and Health.

2009, 56p

HETA-2007-0199-3075

Related Categories/Sub-categories:

44G (Environmental & Occupational Factors)

57U (Public Health & Industrial Medicine)

94D (Job Environment)

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

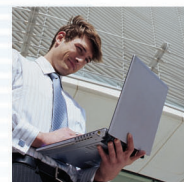
Source

Report Year, Page Count

Report Number/ISBN13 (if available)

Related Categories/Sub-categories

(where the document is also indexed)



Category 41: Manufacturing Technology

PB2009106710

Medicare and Medicaid Participating Facilities: CMS Needs to Reexamine Its Approach for Funding State Oversight of Health Care Facilities.

Government Accountability Office.

2009, 90p

GAO-09-64

Related Categories/Sub-categories:

44E (Health Care Measurement Methodology)

44Q (Health Related Costs)

PB2009106791

Geothermal Heat Pump Manufacturing Activities, 2007.

Energy Information Administration.

2009, 30p

Related Categories/Sub-categories:

94F (Tooling, Machinery, & Tools)

97G (Policies, Regulations & Studies)

97J (Heating & Cooling Systems)

ADA494552

Opportunities in the Defense and Security Robotics Sector.

Space and Naval Warfare Systems Center, San Diego, CA. Unmanned Systems Branch.

Nov 2008, 40p

Related Categories/Sub-categories:

41C (Robotics/Robots)

62 (Computers, Control & Information Theory)

74E (Military Facilities, & Supplies)

ADA494809

Theoretical and Numerical Investigation of Polymer-Particle Nanocomposites and their Effective Materials Properties.

Florida State Univ., Tallahassee. Dept. of Mathematics

Nov 2008, 8p

Related Categories/Sub-categories:

74 (Military Sciences)

99C (Polymer Chemistry)

PB2009108932

Workplace Solutions: Control of Hazardous Dust When Grinding Concrete.

National Institute for Occupational Safety and Health

Apr 2009, 4p

Related Categories/Sub-categories:

57U (Public Health & Industrial Medicine)

68A (Pollution & Control)

68G (Environmental Health & Safety)

94D (Job Environment)

PB2009108934

Workplace Solutions: Reducing Hazardous Dust Exposure When Rock Drilling During Construction.

National Institute for Occupational Safety and Health

Apr 2009, 4p

Related Categories/Sub-categories:

48F (Geology & Geophysics)

57U (Public Health & Industrial Medicine)

68A (Pollution & Control)

68G (Environmental Health & Safety)

94D (Job Environment)

Major Subject Categories

Category Codes*/Title	New for April Quantity**
41 Manufacturing Technology.....	72
43 Problem Solving Information for State & Local Governments	390
44 Health Care.....	169
45 Communication.....	85
46 Physics.....	160
47 Ocean Sciences & Technology	109
48 Natural Resources & Earth Sciences.....	216
49 Electrotechnology	38
50 Civil Engineering.....	62
51 Aeronautics & Aerodynamics.....	93
54 Astronomy & Astrophysics	38
55 Atmospheric Sciences	62
57 Medicine & Biology	529
62 Computers, Control & Information Theory	158
63 Detection & Countermeasures.....	56
68 Environmental Pollution & Control	304
70 Administration & Management.....	408
71 Materials Sciences.....	70
72 Mathematical Sciences.....	65
74 Military Sciences.....	464
75 Missile Technology.....	10
76 Navigation, Guidance, & Control.....	22
77 Nuclear Science & Technology	90
79 Ordnance	36
81 Combustion, Engines, & Propellants	37
82 Photography & Recording Devices.....	2
84 Space Technology.....	109
85 Transportation.....	216
88 Library & Information Sciences.....	71
89 Building Industry Technology	32
90 Government Inventions for Licensing	1
91 Urban & Regional Technology & Development.....	403
92 Behavior & Society.....	731
94 Industrial & Mechanical Engineering	125
95 Biomedical Technology & Human Factors	33
96 Business & Economics	551
97 Energy.....	207
98 Agriculture & Food	233
99 Chemistry.....	153

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

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

Category 81: Combustion, Engines and Propellants

DE2009945214

Heavy Truck Engine Program, (Final).

Department of Energy.

2009, 18p

Related Categories/Sub-categories:

68A (Air Pollution & Control)

85H (Road Transportation)

99B (Industrial Chemistry & Chemical Process Engineering)

DE2009947237

Chemical Kinetic Modeling of Advanced Transportation Fuels.

Department of Energy.

2009, 12p

LLNL-TR-410103

Related Categories/Sub-categories:

85H (Road Transportation)

97K (Fuels)

N20090006702

Hydrogen Hazards Assessment. Hydrogen Hazards Assessment Protocol (HHAP). Approach and Methodology.

National Aeronautics and Space Administration.

2009, 43p

Related Categories/Sub-categories:

84F (Space Safety)

97K (Fuels)

N20090007950

CFD Simulation on the J-2X Engine Exhaust in The Center-Body Diffuser and Spray Chamber at the B-2 Facility.

National Aeronautics and Space Administration.

2009, 13p

NASA/TM-2009-215464, TFAWS08-1013

Related Categories/Sub-categories:

46B (Fluid Mechanics)

N20090008506

Supporting Technology at GRC to Mitigate Risk as Stirling Power Conversion Transitions to Flight.

National Aeronautics and Space Administration.

2009, 11p

AIAA-2009-2407

Related Categories/Sub-categories:

84 (Space Technology)

97I (Electric Power Production)

PB2009105978

Fuel Economy Guide, Model Year 2008.

Department of Energy.

2009, 33p

DOE/EE-0321

Related Categories/Sub-categories:

85H (Road Transportation)

97B (Energy Use, Supply, & Demand)

97L (Engine Studies, Energy Related)

85H (Road Transportation)

PB2009105979

Fuel Economy Guide, Model Year 2009.

Department of Energy.

2009, 31p

DOE/EE-0325

Related Categories/Sub-categories:

85H (Road Transportation)

97B (Energy Use, Supply, & Demand)

97L (Engine Studies, Energy Related)

DE2009947240

Complete Burning of Weapons Grade Plutonium and Highly Enriched Uranium with (Laser Inertial Fusion-Fission Energy) LIFE Engine.

Lawrence Berkeley National Laboratory,

Department of Energy, Washington, DC.

Dec 2008, 194p

Related Categories/Sub-categories:

77H (Reactor Engineering & Nuclear Power Plants)

77I (Reactor Fuels & Fuel Processing)

97Q (Selected Studies In Nuclear Technology)

PB2009107712

Safety Risks Hydrogen Fuel Applications in Transportation Vehicles.

Federal Highway Administration

Apr 2009, 12p

Related Categories/Sub-categories:

68G (Environmental Health & Safety)

85H (Road Transportation)

97K (Fuels)

DE2009947240

Complete Burning of Weapons Grade Plutonium and Highly Enriched Uranium with (Laser Inertial Fusion-Fission Energy) LIFE Engine.

Lawrence Berkeley National Laboratory,

Department of Energy, Washington, DC.

Dec 2008, 194p

LLNLTR410152

Related Categories/Sub-categories:

77H (Reactor Engineering & Nuclear Power Plants)

77I (Reactor Fuels & Fuel Processing)

97Q (Selected Studies In Nuclear Technology)

PB2009105847

Engine Damage-Related Propulsion System Malfunctions.

Federal Aviation Administration

Dec 2008, 219p

DOTFAAAR0824

Related Categories/Sub-categories:

51G (Aircraft)

85A (Air Transportation)



U.S. Department of Commerce

On April 2, 2009, NTIS launched the National Technical Reports Library (NTRL) to further enhance accessibility to the NTIS technical reports collection.

The NTRL provides access to:

- Bibliographic records of more than 2,000,000 technical reports
- Downloadable full text of 550,000 of these reports in PDF format

Subscription rates are based on institutional FTE levels.

The NTRL operates on a system interface that allows users to do queries on the large NTIS bibliographic database. The intent is to broadly expand and improve access to over 2.5 million bibliographic records (pre-1960 to present) and 500k full-text documents in PDF Format that are directly linked to that bibliographic database.

For more information, go to <http://www.ntis.gov/products/ntrl.aspx>.

PB2009101716

Experimental Study of a Combined-Cycle Engine Combustor in Ejector-Jet Mode.

Japan Aerospace Exploration Agency

Feb 2008, 14p

JAXARR07011

Related Categories/Sub-categories:

51 (Aeronautics & Aerodynamics)

84 (Space Technology)



Category 90: Government Inventions for Licensing

ADD020318

Method for Coupling a Direct Current Power Source Across a Dielectric Membrane or Other Non-Conducting Membrane.

Department of the Navy.

2008, 42p

PAT-APPL-8-122 506

Related Categories/Sub-categories:

49F (Power & Signal Transmission Devices)

97E (Electric Power Transmission)

ADD020319

Method for Coupling a Direct Current Power Source Across a Nearly Frictionless High-Speed Rotation Boundary.

Department of the Navy.

2008, 42p

PAT-APPL-8-12 537

Related Categories/Sub-categories:

49F (Power & Signal Transmission Devices)

97E (Electric Power Transmission)

ADD020322

Olivo-Cerebellar Controller.

Department of the Navy.

2008, 83p

PAT-APPL-8-12/021 555

Related Categories/Sub-categories:

62 (Computers, Control & Information Theory)

72E (Operations Research)

95F (Bionics & Artificial Intelligence)

ADD020362

Explosive Water Jet With Precursor Bubble.

Department of the Navy.

2008, 21p

PAT-APPL-8-110 703

Related Categories/Sub-categories:

46B (Fluid Mechanics)

79A (Ammunition, Explosives, & Pyrotechnics)

92 (Behavior & Society)

ADD020365

High-Speed Underwater Data Transmission System and Method.

Department of the Navy.

2008, 36p

PAT-APPL-8-114 193

Related Categories/Sub-categories:

45C (Common Carrier & Satellite)

ADD020369

Remote Blood Pressure Waveform Sensing Method and Apparatus.

Department of the Navy.

2008, 26p

PAT-APPL-8-131 472

Related Categories/Sub-categories:

57A (Anatomy)

57S (Physiology)

94K (Laboratory & Test Facility Design & Operation)

The Nation's Source for Scientific Information

The National Technical Information Service (NTIS), is the nation's largest and most comprehensive source of government-funded scientific, technical, engineering and business-related information.

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 straightforward: 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.

ADD020373

Method to Estimate Local Towed Array Angles Using Flush Mounted Hot Film Wall Shear Sensors.

Department of the Navy.

2008, 22p

PAT-APPL-8-133 896

Related Categories/Sub-categories:

63 (Detection & Countermeasures)

74G (Military Operations, Strategy, & Tactics)

ADD020381

SGML/XML to HTML Conversion System and Method for Frame-Based Viewer.

Department of the Navy.

2008, 32p

PAT-APPL-8-284 478

Related Categories/Sub-categories:

45C (Common Carrier & Satellite)

62B (Computer Software)

ADD020394

Method for Solving Combinatorial Optimization Problems.

Department of the Navy.

2008, 33p

PAT-APPL-8-287 157

Related Categories/Sub-categories:

72E (Operations Research)

ADD020395

Multi-Function Modulator for Low-Powered, Wired and Wireless Command, Control, and Communications Applications.

Department of the Navy.

2008, 62p

PAT-APPL-8-313 789

Related Categories/Sub-categories:

49 (Electrotechnology)

97I (Electric Power Production)

ADD020396

System for Beaming Acoustic Buoy Fields.

Department of the Navy.

2008, 15p

PAT-APPL-8-12287163

Related Categories/Sub-categories:

47 (Ocean Sciences & Technology)

63A (Acoustic Detection)

N20080009751

Hybrid Power Management System and Method. National Aeronautics and Space Administration.

2008, 8p

PATENT-7 259 692, PAT-APPL-10-931 205

Related Categories/Sub-categories:

49 (Electrotechnology)

97N (Solar Energy)

97O (Miscellaneous Energy Conversion & Storage)

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.