



## 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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National Technical Information Service  
 U.S. Department of Commerce  
 5301 Shawnee Road  
 Alexandria, VA 22312

## Category 92D Education

**PB2010101491**  
**Achievement Effects of Four Early Elementary School Math Curricula: Findings from First Graders in 39 Schools.**

Department of Education, Washington, DC.  
 Inst. of Education Sciences.  
 2009, 148p  
 NCEE 2009-4052

Related Categories/Sub-Categories:  
 72 (Mathematical Sciences)  
 92D (Education, Law, & Humanities)  
 Keywords: Curriculum, Mathematics, Student achievement.

**PB2010109186**  
**Chemistry in the Gulf of Mexico: A Teacher's Companion.**  
 Minerals Management Service, New Orleans, LA. Gulf of Mexico OCS Region.

2009, 23p  
 MMS 2001-065  
 Related Categories/Sub-Categories:  
 48A (Mineral Industries)  
 57H (Ecology)  
 92D (Education, Law, & Humanities)  
 99 (Chemistry)

Keywords: Gulf of Mexico, Chemical processes, Instructional guides.

**PB2009111868**  
**Education Strategic Plan 2009-2029. Focusing on Science, Service & Stewardship.**

National Oceanic and Atmospheric Administration.  
 2009, 40p

Related Categories/Sub-Categories:  
 47 (Ocean Sciences & Technology)  
 55 (Atmospheric Sciences)  
 57H (Ecology)  
 68 (Environmental Pollution & Control)  
 92D (Education, Law, & Humanities)  
 Keywords: Strategic plans, Science education.

**PB2009114342**  
**Students Who Study Science, Technology, Engineering, and Mathematics (STEM) in Postsecondary Education.**

National Center for Education Statistics, Washington, DC. Institute of Education Sciences.  
 2009, 25p  
 NCES-2009-161

Related Categories/Sub-Categories:  
 70E (Research Program Administration & Technology Transfer)  
 92D (Education, Law, & Humanities)  
 Keywords: Postsecondary education, Student demographics, Student academics.

**PB2010106901**  
**Exploring the Intersection of Science Education and 21st Century Skills: A Workshop Summary.**  
 National Research Council, Washington, DC.

Commission on Behavioral and Social Sciences and Education.  
 2009, 144p  
 ISBN-0-309-14518-X

Related Categories/Sub-Categories:  
 43C (Human Resources)  
 70D (Personnel Management, Labor Relations & Manpower Studies)  
 92A (Job Training & Career Development)  
 92D (Education, Law, & Humanities)

Keywords: Science education, Job skills, Adolescents.

## 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 46 Physics

### 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)**

**Keywords**

ADA524318

Hybrid Modeling of Plasma Discharges.

Air Force Research Lab., Edwards AFB, CA.  
Propulsion Directorate West.

2010, 349p

AFRL-RZ-ED-TR-2010-0026

Related Categories/Sub-Categories:

46B (Fluid Mechanics)

46G (Plasma Physics)

Keywords: Plasmas (Physics), Computational fluid dynamics, Particle in cell.

ADA524490

Environmental Acoustic Considerations for Passive Detection of Maritime Targets by Hydrophones in a Deep Ocean Trench.

Naval Postgraduate School, Monterey, CA.

2010, 81p

Related Categories/Sub-Categories:

46A (Acoustics)

76D (Navigation Systems)

Keywords: Acoustic detectors, Hydrophones, Ocean surveillance.

ADA524523

High Terahertz Absorbing Nanoscale Metal Films for Fabrication of Micromechanical Bi-material THz Sensors.

Naval Postgraduate School, Monterey, CA.

2010, 71p

Related Categories/Sub-Categories:

46H (Radiofrequency Waves)

Keywords: Electromagnetic spectra, Bragg angle, Terahertz imaging.

ADA524620

Air-Sea Enthalpy and Momentum Exchange at Major Hurricane Wind Speeds.

Naval Postgraduate School, Monterey, CA.

2010, 155p

Related Categories/Sub-Categories:

46 (Physics)

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

Keywords: Hurricanes, Tropical cyclones, Wind velocity.

DE2010974775

CFD Analysis of Core Bypass Phenomena.

Department of Energy.

2010, 60p

INL/EXT-09-16882

Related Categories/Sub-Categories:

46B (Fluid Mechanics)

77H (Reactor Engineering & Nuclear Power Plants)

Keywords: Core bypass phenomena, Computational fluid dynamics, High Temperature gas-cooled reactors.

DE2010977624

Nevada Test Site Directed Research and Development. FY 2009 Report.

Department of Energy.

2010, 234p

DOE/NV/25946-895

Related Categories/Sub-Categories:

46 (Physics)

57U (Public Health & Industrial Medicine)

77E (Nuclear Instrumentation)

97Q (Selected Studies in Nuclear Technology)

99 (Chemistry)

Keywords: Particle accelerators, National security, Nevada Test Site.

### Major Subject Categories

Category Codes*/Title	New for October Quantity**
41 Manufacturing Technology .....	66
43 Problem Solving Information for State & Local Governments .....	291
44 Health Care .....	357
45 Communication .....	64
46 Physics.....	351
47 Ocean Sciences & Technology .....	383
48 Natural Resources & Earth Sciences.....	373
49 Electrotechnology .....	55
50 Civil Engineering .....	119
51 Aeronautics & Aerodynamics .....	317
54 Astronomy & Astrophysics .....	50
55 Atmospheric Sciences .....	149
57 Medicine & Biology .....	563
62 Computers, Control & Information Theory .....	202
63 Detection & Countermeasures.....	157
68 Environmental Pollution & Control .....	339
70 Administration & Management.....	272
71 Materials Sciences.....	121
72 Mathematical Sciences.....	90
74 Military Sciences .....	423
75 Missile Technology.....	3
76 Navigation, Guidance, & Control.....	12
77 Nuclear Science & Technology .....	60
79 Ordnance .....	91
81 Combustion, Engines, & Propellants .....	99
82 Photography & Recording Devices.....	20
84 Space Technology.....	137
85 Transportation .....	206
88 Library & Information Sciences.....	71
89 Building Industry Technology .....	43
90 Government Inventions for Licensing .....	6
91 Urban & Regional Technology & Development.....	305
92 Behavior & Society.....	512
94 Industrial & Mechanical Engineering .....	100
95 Biomedical Technology & Human Factors .....	42
96 Business & Economics .....	331
97 Energy.....	158
98 Agriculture & Food .....	175
99 Chemistry.....	164

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

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

## Category 46 Physics

DE2010979708

Operation of the Run IIB D0 Luminosity System and Determination of the Run IIB Luminosity Constant.

Department of Energy.  
2010, 73p

FERMILAB-MASTERS-2010-02

Related Categories/Sub-Categories:  
46 (Physics)

Keywords: Luminosity, Cross sections, Detectors.

N20100025561

Fully-Implicit Navier-Stokes (FIN-S).

National Aeronautics and Space Administration, Houston, TX. Lyndon B. Johnson Space Center.  
2010, 34p

JSC-CN-20996

Related Categories/Sub-Categories:  
46 (Physics)

Keywords: Supersonics, Thermochemistry, Laminar flow.

N20100025865

Preprocessor that Enables the Use of GridPro™ Grids for Unsteady Reynolds-Averaged Navier-Stokes Code TURBO.

National Aeronautics and Space Administration, Cleveland, OH. NASA John H. Glenn Research Center at Lewis Field.

2010, 91p

NASA/TM-2010-216739, E-17316

Related Categories/Sub-Categories:  
46B (Fluid Mechanics)

Keywords: Computational fluid dynamics, Reynolds averaging, Unsteady flow.

PB2010115053

Derivations of Relationships among Field Strength, Power in Transmitter-Receiver Circuits and Radiation Hazard Limits.

National Telecommunications and Information Administration.

2010, 27p

NTIA-TM-10-469

Related Categories/Sub-Categories:  
45C (Common Carrier & Satellite)  
46H (Radiofrequency Waves)

Keywords: Receivers, Transmitters, Electromagnetic radiation.

**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.

## Category 72 Mathematics

ADA520887

Usability of Wearable and Desktop Game-Based Simulations: A Heuristic Evaluation.

Army Research Inst. for the Behavioral and Social Sciences, Alexandria, VA.  
2010, 56p

Related Categories/Sub-Categories:

62B (Computer Software)  
72E (Operations Research)  
94K (Laboratory & Test Facility Design & Operation)

Keywords: Game theory, Heuristic methods, Simulators.

ADA521202

Coastal Dynamics of Heterogeneous Sedimentary Environments: Numerical Modeling of Nearshore Hydrodynamics and Sediment Transport.

Naval Research Lab. Detachment, Stennis Space Center, MS.

2010, 145p

NRL/MR-7320-10-9242

Related Categories/Sub-Categories:

46B (Fluid Mechanics)  
47C (Physical & Chemical Oceanography)  
72E (Operations Research)

Keywords: Ocean models, Hydrodynamics, Sediment transport.

ADA522073

Finite-Time Performance of Local Search Algorithms: Theory and Application.

Illinois Univ. at Urbana-Champaign. Dept. of Computer Science.

2010, 52p

AFRL-SR-AR-TR-10-0206

Related Categories/Sub-Categories:

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

Keywords: Algorithms, Homeland security, Resource management.

ADA522423

Dynamic Network Analysis for Robust Uncertainty Management.

United Aircraft Corp., East Hartford, CT.  
2010, 352p

AFRL-SR-AR-TR-10-0195

Related Categories/Sub-Categories:

45C (Common Carrier & Satellite)  
62B (Computer Software)  
70B (Management Practice)  
72B (Algebra, Analysis, Geometry, & Mathematical Logic)

Keywords: Network analysis, Software tools, Uncertainty.

ADA523531

Dynamically Configurable Log-based Distributed Security Event Detection Methodology using Simple Event Correlator.

Air Force Inst. of Tech., Wright-Patterson AFB, OH. Graduate School of Engineering and Management.

2010, 212p

AFIT/GCO/ENV/10-J02

Related Categories/Sub-Categories:

72F (Statistical Analysis)  
74 (Military Sciences)

Keywords: Security, Configurations, Correlation.

ADA524078

Theory of Cramer-Rao Bounds for Constrained Parametric Models.

Maryland Univ, College Park, MD.  
2010, 179p

Related Categories/Sub-Categories:

45C (Common Carrier & Satellite)  
72F (Statistical Analysis)

Keywords: Signal processing, Statistics, Communications models.

### 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.

## Category 72 Mathematics

N20100024135

Error Representation in Time For Compressible Flow Calculations.

National Aeronautics and Space Administration, Moffett Field, CA. Ames Research Center.

2010, 42p

ARC-E-DAA-TN516

Related Categories/Sub-Categories:

72F (Statistical Analysis)

Keywords: Aerodynamic drag, Time dependence, Fluid mechanics.

PB2010112706

Ant Colony Optimization Algorithm for Signal Coordination of Oversaturated Traffic Networks.

Southwest Region Univ. Transportation Center, College Station, TX.

2010, 57p

SWUTC/10/169113-1

Related Categories/Sub-Categories:

43G (Transportation)

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

85H (Road Transportation)

91B (Transportation & Traffic Planning)

Keywords: Traffic networks, Signal coordination, Genetic algorithms.

PB2010114491

Non-Deterministic Kleene Coalgebras.

Netherlands Organization for Scientific Research (NWO), Amsterdam (Netherlands).

2010, 46p

Related Categories/Sub-Categories:

62B (Computer Software)

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

Keywords: Colagebras, Theorems, Mathematical models.

PB2010114495

Symbolic Synthesis of Mealy Machines from Arithmetic Bitstream Functions.

Netherlands Organization for Scientific Research (NWO), Amsterdam (Netherlands).

2010, 30p

SEN-1006

Related Categories/Sub-Categories:

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

Keywords: Arithmetic, Algebra, Algorithms.

**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.

## Category 99 Chemistry

ADA521803

Electronic Structure of Lithium Tetraborate.

Air Force Inst. of Tech., Wright-Patterson AFB, OH. School of Engineering and Management.

2010, 195p

AFIT/DS/ENP/10-J01

Related Categories/Sub-Categories:

46D (Solid State Physics)

49E (Optoelectronic Devices & Systems),

99D (Basic & Synthetic Chemistry)

Keywords: Band gaps, Lithium compounds, Neutrons.

ADA522526

Detection and Characterization of Chemical Vapor Fugitive Emissions from Hyperspectral Infrared Imagery by Nonlinear Optimal Estimation.

Physical Sciences, Inc., Andover, MA.

2010, 36p

Related Categories/Sub-Categories:

63C (Infrared & Ultraviolet Detection)

63F (Optical Detection)

99D (Basic & Synthetic Chemistry)

99F (Physical & Theoretical Chemistry)

Keywords: Hyperspectral imagery, Infrared images, Chemical vapors.

ADA522664

Spitzer Spectroscopy of the Transition Object TW Hya.

National Optical Astronomy Observatories, Tucson, AZ.

2010, 40p

Related Categories/Sub-Categories:

54B (Astronomy & Celestial Mechanics)

99F (Physical & Theoretical Chemistry)

Keywords: Spectroscopy, Transitions, Spectral energy distribution.

ADA522802

Dipole Moments From Atomic-Number-Dependent Potentials in Analytic Density-Functional Theory.

Naval Research Lab., Washington, DC.

2010, 33p

Related Categories/Sub-Categories:

46 (Physics)

99F (Physical & Theoretical Chemistry)

Keywords: Density functional theory, Dipole moments, Quantum chemistry.

ADA523019

Young Investigator Program: Quasi-Liquid Grain Boundary Films in Refractory Metals.

Clemson Univ., SC. School of Materials Science and Engineering.

2010, 80p

Related Categories/Sub-Categories:

71N (Nonferrous Metals & Alloys)

99F (Physical & Theoretical Chemistry)

Keywords: Refractory metal alloys, Microstructure, Thermodynamics.

ADA523300

Detection of Biological Warfare Agents in Municipal Tap Water via Standardized Culture Methods.

Edgewood Chemical Biological Center, Aberdeen Proving Ground, MD. Research and Technology Directorate.

2010, 21p

ECBC-TR-772

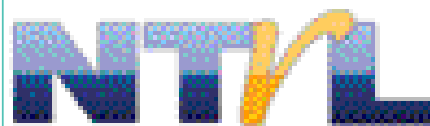
Related Categories/Sub-Categories:

68D (Water Pollution & Control)

74D (Chemical, Biological, & Radiological Warfare)

99A (Analytical Chemistry)

Keywords: Biological warfare agents, Chemical agent simulants, Concentration protocols.



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

## Category 99 Chemistry

ADA523527

Power Spectrum Analysis of BNL Decay-Rate Data.

Stanford Univ., CA. Center for Space Science and Astrophysics.  
2010, 32p

Related Categories/Sub-Categories:

46 (Physics)

54C (Astrophysics)

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

99F (Physical & Theoretical Chemistry)

Keywords: Nuclear energy, Spectrum analysis, Power spectra.

ADA524322

Joints of Articles made of Polymer Composite Materials.

European Office of Aerospace Research and Development, FPO New York 09510.

2010, 72p

STCU-P-296

EOARD-STCU-06-8003

Related Categories/Sub-Categories:

71F (Composite Materials)

99C (Polymer Chemistry)

Keywords: Polymers, Composite materials, Laminates.

ADA524399

Ultra-Sensitive Mass Sensors Based on Suspended Carbon Nanotubes.

Technion - Israel Inst. of Tech., Haifa.

2010, 39p

Related Categories/Sub-Categories:

46 (Physics)

71I (Fibers & Textiles)

99A (Analytical Chemistry)

Keywords: Molecular electronics, Carbon nanotubes, Sensors.

ADA524866

Lithium Gadolinium Borate in Plastic Scintillator as an Antineutrino Detection Material.

Naval Postgraduate School, Monterey, CA.

2010, 91p

Related Categories/Sub-Categories:

46 (Physics)

99D (Basic & Synthetic Chemistry)

Keywords: Neutrinos, Nuclear reactors, Borates.

ADA525378

China's Rare Earth Elements Industry: What Can the West Learn.

Foreign Military Studies Office (Army), Fort Leavenworth, KS.

2010, 43p

Related Categories/Sub-Categories:

92 (Behavior & Society)

99B (Industrial Chemistry & Chemical Process Engineering)

Keywords: Rare earth elements, China, Military critical technologies.

ADA526156

Development of an Advanced Flameless Combustion Heat Source Utilizing Methanol.

Army Natick Soldier Research Development and Engineering Center, MA.

2010, 77p

Related Categories/Sub-Categories:

81A (Combustion & Ignition)

99F (Physical & Theoretical Chemistry)

Keywords: Heating, Methanol, Combustion.

ADA526230

Synthesis of Core-Shell Nanoparticle Composites.

Flinders Univ. of South Australia, Adelaide.

2010, 29p

AOARD-094043

Related Categories/Sub-Categories:

71F (Composite Materials)

99D (Basic & Synthetic Chemistry)

Keywords: Gold, Palladium, Nanoparticles.

DE2010972760

Direct Causticizing for Black Liquor Gasification in a Circulating Fluidized Bed.

Department of Energy.

2010, 48p

DOE/GO16042-1

Related Categories/Sub-Categories:

97F (Fuel Conversion Processes)

99B (Industrial Chemistry & Chemical Process Engineering)

Keywords: Gasification, Energy conservation, Causticizing.

DE2010972856

Report of the First Confidence Building Exercise For Biomedical Sample Analysis.

Department of Energy.

2010, 52p

LLNL-TR-424635

Related Categories/Sub-Categories:

57B (Biochemistry)

57K (Microbiology)

99A (Analytical Chemistry)

Keywords: Analytical chemistry, Metabolites, Biomedicine.

DE2010973190

Performance Properties of Saltstone Produced using SWPF Simulants.

Department of Energy.

2010, 52p

SRNL-STI-2009-00810

Related Categories/Sub-Categories:

68F (Radiation Pollution & Control)

71Q (Solvents, Cleaners, & Abrasives)

77G (Radioactive Wastes & Radioactivity)

99B (Industrial Chemistry & Chemical Process Engineering)

Keywords: Radioactive waste management, Fly ash, Hydraulic conductivity.

DE2010973408

Biomass Energy for Transport and Electricity: Large Scale Utilization Under Low CO2 Concentration Scenarios.

Department of Energy.

2010, 28p

PNNL-19124

Related Categories/Sub-Categories:

97F (Fuel Conversion Processes)

97K (Fuels)

97R (Environmental Studies)

98 (Agriculture & Food)

99B (Industrial Chemistry & Chemical Process Engineering)

Keywords: Biomass fuels, Ethanol, Biofuels.

DE2010977048

Hydrogen Production by Water Dissociation Using Ceramic Membranes: Annual Report for FY 2009.

Department of Energy.

2010, 38p

ANL-10/13

See also DE2009-950210.

Related Categories/Sub-Categories:

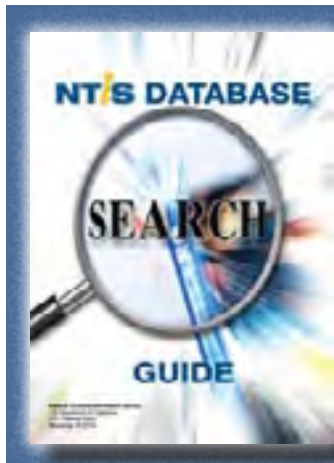
71D (Ceramics, Refractories, & Glass)

97F (Fuel Conversion Processes)

97K (Fuels)

99B (Industrial Chemistry & Chemical Process Engineering)

Keywords: Hydrogen production, Ceramics, Membranes.



### Just Revised – the NTIS Database Search Guide

Gain an in-depth understanding of the NTIS database structure with this new guide:

- Comprehensive list of NTIS Categories
- Helpful information and search hints
- Reference Guide to online commercial services and the NTRL
- Great Reference Manual & Teaching Tool

Free Download – <http://www.ntis.gov/assets/pdf/dbguid.pdf>

## Category 99 Chemistry

DE2010978368

High Temperature Electrolysis for Hydrogen Production from Nuclear Energy Technology Summary.

Department of Energy.

2010, 74p

INL/EXT-09-16140

Related Categories/Sub-Categories:

99B (Industrial Chemistry & Chemical Process Engineering)

97K (Fuels)

97O (Miscellaneous Energy Conversion & Storage)

Keywords: Electrolysis, Nuclear reactors, Hydrogen production.

PB2010112404

Nanotechnology: Nanomaterials Are Widely Used in Commerce, but EPA Faces Challenges in Regulating Risk.

Government Accountability Office.

2010, 64p

GAO-10-549

Related Categories/Sub-Categories:

46D (Solid State Physics)

57U (Public Health & Industrial Medicine)

71F (Composite Materials)

71M (Miscellaneous Materials)

99F (Physical & Theoretical Chemistry)

Keywords: Nanomaterials, Risk regulations, Environmental risks.

PB2010113250

Arsenic Removal from Drinking Water by Iron Removal, U.S. EPA Demonstration Project at Sabin, MN, Final Performance Evaluation Report.

Environmental Protection Agency.

2010, 91p

EPA/600/R-10/033

See also PB2008-108869, Six-Month Evaluation Report.

Related Categories/Sub-Categories:

50B (Civil Engineering)

68D (Water Pollution & Control)

99B (Industrial Chemistry & Chemical Process Engineering)

Keywords: Arsenic, Drinking water, Water treatment processes.

PB2010113851

Next-Generation Biofuels. Near-Term Challenges and Implications for Agriculture.

Economic Research Service.

2010, 26p

ERS-BIO-01-01

Related Categories/Sub-Categories:

97K (Fuels)

98 (Agriculture & Food)

99B (Industrial Chemistry & Chemical Process Engineering)

Keywords: Biofuels, Ethanol, Feedstocks.

PB2010114463

Toxicity-Pathway-Based Risk Assessment: Preparing for Paradigm Change. A Symposium Summary.

National Research Council, Washington, DC.

Board on Environmental Studies and Toxicology.

2010, 134p

Related Categories/Sub-Categories:

57H (Ecology)

57Y (Toxicology)

99F (Physical & Theoretical Chemistry)

Keywords: Toxicity, Scientific pathways, Risk assessments.

PB2010115377

Treating Contaminants of Emerging Concern: A Literature Review Database.

Environmental Protection Agency, Washington, DC. Office of Water.

2010, 100p

EPA/820/R-10/002

Related Categories/Sub-Categories:

43F (Environment)

68C (Solid Wastes Pollution & Control)

68D (Water Pollution & Control)

91B (Transportation & Traffic Planning)

99 (Chemistry)

Keywords: Sewage treatment plants, Waste water treatment, Contaminants.

## Title Index – For NTRL Users

The following is a list of the titles included in this month's issue, without links to the NTIS Website. The list is in alphabetical order by title.

<i>NTIS number</i>	<i>Category</i>	<i>Title</i>
PB2010101491	92D	Achievement Effects of Four Early Elementary School Math Curricula: Findings from First Graders in 39 Schools.
ADA524620	46	Air-Sea Enthalpy and Momentum Exchange at Major Hurricane Wind Speeds.
PB2010112706	72	Ant Colony Optimization Algorithm for Signal Coordination of Oversaturated Traffic Networks.
PB2010113250	99	Arsenic Removal from Drinking Water by Iron Removal, U.S. EPA Demonstration Project at Sabin, MN, Final Performance Evaluation Report.
DE2010973408	99	Biomass Energy for Transport and Electricity: Large Scale Utilization Under Low CO2 Concentration Scenarios.
DE2010974775	46	CFD Analysis of Core Bypass Phenomena.
PB2010109186	92D	Chemistry in the Gulf of Mexico: A Teacher's Companion.
ADA525378	99	China's Rare Earth Elements Industry: What Can the West Learn.
ADA521202	72	Coastal Dynamics of Heterogeneous Sedimentary Environments: Numerical Modeling of Nearshore Hydrodynamics and Sediment Transport.
PB2010115053	46	Derivations of Relationships among Field Strength, Power in Transmitter-Receiver Circuits and Radiation Hazard Limits.
ADA522526	99	Detection and Characterization of Chemical Vapor Fugitive Emissions from Hyperspectral Infrared Imagery by Nonlinear Optimal Estimation.
ADA523300	99	Detection of Biological Warfare Agents in Municipal Tap Water via Standardized Culture Methods.
ADA526156	99	Development of an Advanced Flameless Combustion Heat Source Utilizing Methanol.
ADA522802	99	Dipole Moments From Atomic-Number-Dependent Potentials in Analytic Density-Functional Theory.
DE2010972760	99	Direct Causticizing for Black Liquor Gasification in a Circulating Fluidized Bed.
ADA522423	72	Dynamic Network Analysis for Robust Uncertainty Management.
ADA523531	72	Dynamically Configurable Log-based Distributed Security Event Detection Methodology using Simple Event Correlator.

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<i>NTIS number</i>	<i>Category</i>	<i>Title</i>
PB2009111868	92D	Education Strategic Plan 2009-2029. Focusing on Science, Service & Stewardship.
ADA521803	99	Electronic Structure of Lithium Tetraborate.
ADA524490	46	Environmental Acoustic Considerations for Passive Detection of Maritime Targets by Hydrophones in a Deep Ocean Trench.
N20100024135	72	Error Representation in Time For Compressible Flow Calculations.
PB2010106901	92D	Exploring the Intersection of Science Education and 21st Century Skills: A Workshop Summary.
ADA522073	72	Finite-Time Performance of Local Search Algorithms: Theory and Application.
N20100025561	46	Fully-Implicit Navier-Stokes (FIN-S).
DE2010978368	99	High Temperature Electrolysis for Hydrogen Production from Nuclear Energy Technology Summary.
ADA524523	46	High Terahertz Absorbing Nanoscale Metal Films for Fabrication of Micromechanical Bi-material THz Sensors.
ADA524318	46	Hybrid Modeling of Plasma Discharges.
DE2010977048	99	Hydrogen Production by Water Dissociation Using Ceramic Membranes: Annual Report for FY 2009.
ADA524322	99	Joints of Articles made of Polymer Composite Materials.
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