

Scientific Search Tools from the Department of Energy

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Conference

October 17, 2012

Tim Byrne, Senior Outreach Librarian
Office of Scientific and Technical Information




The screenshot displays the OSTI.gov website interface. At the top, it features the U.S. Department of Energy logo and the OSTI.gov branding. A search bar is prominently displayed with the text "Search OSTI website". Below the search bar, there are navigation tabs for HOME, ABOUT OSTI, SCIENCE INFORMATION, COMMUNICATIONS, UNIVERSITIES & LIBRARIES, and DOE COMMUNITY ONLY. The main content area is divided into several sections: "Science Accelerator" with a search input field, "Now playing: ScienceCinema" featuring a video player and a "Read More" button, "Find Key DOE Resources and More" with a list of resource categories, "DOE SCIENCE SHOWCASE" with a "Particle Physics" featured item, and "MOST VISITED" with a list of popular resources. The interface is clean and professional, with a focus on providing access to scientific information.

OSTI

- Scientific and Technical Information is more than just textual matter.
 - Data
 - Videos and Images
 - Software

Data

- *DOE Data Explorer*
- *Energy Citations Database*



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Use the DOE Data Explorer (DOE) to find scientific research data - such as computer simulations, numeric data files, figures and plots, interactive maps, multimedia, and scientific images - generated in the course of DOE-sponsored research in various science disciplines. The DOE Data Explorer includes a database of citations prepared by the [Office of Scientific and Technical Information \(OSTI\)](#) based on the information found at data-hosting websites. It is intended to be particularly useful to students, the public, and to researchers who are new to a field or looking for experimental or observational data outside their normal field of expertise.

You may browse or search the database, then link to a data collection where it resides. You will often find specialized search interfaces and software toolkits developed by the data owners. These allow you to search deeper into the data files and help you understand, analyze, and use the data within the context of your own research interests.


The publicly available data collections support DOE research results that are well documented in journal articles, conference literature, and technical reports. Key DOE databases of R&D information are searchable through the [Science Accelerator](#). The DOE Data Explorer will include enhanced search capabilities across specialized websites as it continues to grow.

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FEATURED DATA COLLECTION




PVWatts Viewer
Personalized energy modeling



OpenEI OPENENERGYINFO

View the OpenEI citation (DOE00494) or directly to the PVWatts page on OpenEI

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PVWatts Viewer
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OpenEI OPENENERGYINFO

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- Interactive data maps
- Multimedia
- Numeric Files/Datasets

- A+M Collisional Databases in ALADDIN Format;** DOE00181
[Bibliographic Record](#) [Data Collection](#)
- AERONET: The Aerosol Robotic Network;** DOE00383
[Bibliographic Record](#) [Data Collection](#)
- ARMET Data from Los Alamos National Laboratory: Air Concentration Data by Site and Isotope/Element;** DOE00196
[Bibliographic Record](#) [Data Collection](#)
- ARM's Aerosol Observing System (AOS) Data;** DOE00590
[Bibliographic Record](#) [Data Collection](#)
- ARM's Atmospheric Emitted Radiance Interferometer (AERI) Data;** DOE00592
[Bibliographic Record](#) [Data Collection](#)
- ARM's Broadband Radiometer Station (BRS) Data;** DOE00593
[Bibliographic Record](#) [Data Collection](#)
- Advanced Reactor Innovation Evaluation Study (ARIES) Properties Archive;** DOE00216
[Bibliographic Record](#) [Data Collection](#)
- Aerosol Characterization Data from the Asian Pacific Regional Aerosol Characterization Project (ACE-Asia);** DOE00284
[Bibliographic Record](#) [Data Collection](#)
- Air Quality Data from HABSTO (North American Research Strategy for Tropospheric Ozone);** DOE00187
[Bibliographic Record](#) [Data Collection](#)
- AmeriFlux Network Data from ORNL's AmeriFlux Website;** DOE00176
[Bibliographic Record](#) [Data Collection](#)
- Atmospheric Data, Images, and Animations from Lidar Instruments used by the University of Wisconsin Lidar Group;** DOE00310
[Bibliographic Record](#) [Data Collection](#)
- Atmospheric Radiation Measurement (ARM) Data Plots and Figures;** DOE00211
[Bibliographic Record](#) [Data Collection](#)
- Atmospheric Radiation Measurement (ARM) Data Products from Principal Investigators;** DOE00248
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Collection Citation

Collection Title	A+M Collisional Databases in ALADDIN Format
Collection Sponsor	USDOE - Office of Science (SC)
Other Sponsors	International Atomic Energy Agency (IAEA)
DOE Data Center	Controlled Fusion Atomic Data Center (CFADC)
Host Website	Controlled Fusion Atomic Data Center (CFADC)
Other Related Organizations	Oak Ridge National Laboratory (ORNL)
Main Content Type	Numeric Files/Datasets
Subject Categories	70 - PLASMA PHYSICS AND FUSION TECHNOLOGY; 74 - ATOMIC AND MOLECULAR PHYSICS
Keywords	ALADDIN; Electron collisions; Cross sections; Ions; Atoms; Atomic and molecular collisions; Particle surface interaction
Description	ALADDIN(A Labelled Atomic Data Interface)is a database system developed in order to provide a standard and flexible format and interface for the exchange and management of atomic, molecular and plasma-material interaction data of interest to fusion research. As part of the Atomic and Molecular Data Information System (AMDIS), introduced by the IAEA Atomic and Molecular Data Unit, the ALADDIN interface is available on-line. Twelve databases from DOE and IAEA sources are available from the CFADC website under the heading A+M Collisional Databases.
DDE Number	DDE00181
Special Interface	No
Registration Required	No


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ALADDIN data files

The list of recommended databases is given below. Those marked by an asterisk (*) are in ALADDIN format and can be accessed on-line at the IAEA. [Connect to the IAEA via telnet to:](#)
telnet: vip0001.iaea.or.at
account name: aladdin

You can also download them directly through your browser from this site. For example, if you are using NCSA Mosaic, single click on the file number below and your browser will view the appropriate .txt file. You can then pull down on the *File* widget of the browser and use *Save as* to download the file to your local host.

A+M Collisional Databases

- 1.* "Atomic and Molecular Data for Fusion, Part I - Recommended Cross Sections and Rates for Electron Ionization of Light Atoms and Ions" K. L. Bell, H. B. Gibbody, J. G. Hughes, A. E. Kingston, F. J. Smith. *J. Phys. Chem. Ref. Data* 12, 891 (1983). *[This file contains databases 1 and 5]*
- 2.* "Recommended Data on Excitation of Carbon and Oxygen Ions by Electron Collisions" Y. Itikawa, S. Hara, T. Kato, S. Nakazaki, M. S. Pindrola, D. H. Crandall. *At. Data Nucl. Data Tables (ADNDT)* 33, 149 (1985).
- 3.* "Recommended Data on Atomic Collision Processes Involving Iron and Its Ions" C. Botcher, D. C. Griffin, H. T. Hunter, R. K. Janev, A. E. Kingston, M. A. Lennon, R. A. Phaneuf, M. S. Pindrola, S. M. Younger. *Nucl. Fusion, Special Supplement* (1987).
- 4.* "Collisions of Carbon and Oxygen Ions with Electrons, H, H₂ and He" Atomic Data for Controlled Fusion Research, Vol. V. R. A. Phaneuf, R. K. Janev, M. S. Pindrola (Editors). Report ORNL-6090-V5, Oak Ridge National Laboratory, Oak Ridge, Tennessee 37831 USA (1987).
- 5.* "Atomic and Molecular Data for Fusion, Part II - Recommended Cross Sections and Rates for Electron Ionization of Light Atoms and Ions: Fluorine to Nickel." M. A. Lennon, K. L. Bell, H. B. Gibbody, J. G. Hughes, A. E. Kingston, M. J. Murray, F. J. Smith. *J. Phys. Chem. Ref. Data* 17, 1285 (1988). *[This file contains databases 1 and 5]*
- 6.* "Recommended Data for Excitation Rate Coefficients of Helium Atoms and Helium-like Ions by Electron Impact." T. Kato and S. Nakazaki. *At. Data Nucl. Data Tables (ADNDT)* 42, 313 (1989).
- 7.* "Elementary Processes in Hydrogen-Helium Plasmas" R. K. Janev, W. D. Langer, K. Evans, Jr., D. E. Post, Jr., Springer-Verlag (1987).
- 8.* "Collisions of H, H₂, He and Li Atoms and Ions with Atoms and Molecules." Vol. 1. C. F. Barnett (Editor). Report ORNL-6086/VI, Oak Ridge National Laboratory, Oak Ridge, Tennessee 37831, USA (1990).
- 9.* "Atomic and Molecular Data for Fusion, Part III. Recommended Cross Sections and Rates for Electron Ionization of Atoms and Ions: Copper to Uranium." M. J. Higgins, M. A. Lennon, J. G. Hughes, K. L. Bell, H. B. Gibbody, A. E. Kingston, F. J. Smith. *Culham Report, CLM-R294*, Abingdon, Oxfordshire, U.K. (1989).
- 10. "Collisional Processes of Hydrocarbons in Hydrogen Plasmas." A. B. Ehrhardt, W. D. Langer. Report PPL-2477, Plasma Physics Laboratory, Princeton University, Princeton, New Jersey, USA (1988).
- 11.* "Recommended Cross Sections for Collision Processes of Hydrogen Ground-State and Excited Atoms with Electrons, Protons and Multiply Charged Atoms." R. K. Janev, J. J. Smith. *Atomic and Plasma-Material Data for Fusion*, a supplement to the journal *Nuclear Fusion*, Vol.4 (1993).
- 12. Volume 3 of the *Atomic and Plasma-Material Interaction Data for Fusion*, a supplement of the journal *Nuclear Fusion* (1992), contains several articles with recommended data for different atomic collision processes of helium atoms and of beryllium and boron atoms and ions.

Particle-Surface Interaction Databases

- 1. "Energy Dependence of Ion-Induced Sputtering Yields of Monatomic Solids in the Low Energy Region." N. Matsunami, Y. Yamamura, N. Itoh, H. Tawara, T. Kawamura. Report IPPJ-AM-52, Institute of Plasma Physics (National Institute for Fusion Science), Nagoya, Japan (1987).

Energy Citations Database

Home • Basic Search • Fielded Search • Alerts • Document Availability

A SCIENCE Accelerator Resource

The Energy Citations Database (ECD) provides free access to over 2,440,000 science research citations with continued growth through regular updates. There are over 200,000 electronic documents, primarily from 1943 forward, available via the database. Citations and documents are made publicly available by the U.S. Department of Energy (DOE).

ECD includes scientific and technical research results in disciplines of interest to DOE such as chemistry, physics, materials, environmental science, geology, engineering, mathematics, climatology, oceanography and computer science. It includes bibliographic citations to report literature, conference papers, journal articles, books, dissertations, and patents.

Agency Information

ECD was created and developed by DOE's Office of Scientific and Technical Information with the science-attentive citizen in mind. It contains energy and energy-related scientific and technical information collected by the Department of Energy (DOE) and its predecessor agencies: the Energy Research & Development Administration (ERDA) and the Atomic Energy Commission (AEC).

SEARCH

Search the Database: [input] Search

FEATURE

Congratulations!

Photo Courtesy of JPL

LLNL Astrophysicist Dr. Saul Perlmutter wins the 2011 Nobel Prize in Physics

"For the discovery of the accelerating expansion of the universe through observations of distant supernovae."

Dr. Perlmutter's research is ECD

Archived Features

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Sort By: Relevance Ascending Descending

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Limit To

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Matches with electronic documents or DOIs

Publication Date (May enter year only or year and month only)

YYYY MM DD

From [] [] []

To [] [] []

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YYYY MM DD

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Select Type [] or []

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1943 - present

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Enter search criteria into as few or as many fields as desired. Sort By: Relevance Ascending Descending

Search In (For Terms) (Place phrase in "double quotes")

All Fields

Bibliographic Data

Full Text

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Publication Date
(By enter year only or year and month only)
 YYYY MM DD

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- Data Set
- Journal Article
- Manuscript
- Patent Application
- Program Document
- Software Manual
- Technical Report
- Thesis/Dissertation


 Office of Science







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1943 - present

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Search: Type Must Contain (DataSet)

Sorted By: Relevance, Descending

Results: 1-21 of exactly 20 matches (0.034 seconds)

Sort Results By: Relevance Ascending Descending

[Return to Original Search Page](#)
 Page 1 of 15 [100%](#)
 Go to Page: of 15

Show only (1) items	Download All Items as Excel (limit 2,000)	(1) all items on This Page	Clear all (1) items	Create Alert	Refine Search	Printer Friendly
Size	Identifier	Title	Creator/Author (s)	Pub Date		
<input type="checkbox"/>	1021460	Balloon-borne sounding system (DBSS), Vaisala processed winds, press., temp., and RH	Coulter, Richard ; Ritsche, Michael	1994 Apr 12		
<input type="checkbox"/>	1022895	ARM Energy Balance Bowen Ratio (EBBR) station, surf. heat flux and related data, 30-min	Cook, David	1993 Jul 04		
<input type="checkbox"/>	1022898	ARM Multi-Filter Rotating Shadowband Radiometer (MFRSR), irradiances	Hobbes, Gary	1993 Jul 04		
<input type="checkbox"/>	1024897	ARM 1290-MHz Radar Wind Profiler/RASS (RWP1290): wind spectra	Richard Coulter ; Timoth Martin	1990 Jan 01		
<input type="checkbox"/>	1024909	ARM Surface Met Observation Station (SMOS): daily minimum/maximum data, with times	Michael Ritsche ; Jenni Prell	1994 Mar 06		
<input type="checkbox"/>	1025024	ARM Siph Meter Tower: daily minimum/maximum meteorological data, with times	David Cook ; Jenni Prell ; Michael Ritsche	1994 Mar 24		
<input type="checkbox"/>	1025025	ARM Siph Meter Tower: daily minimum/maximum met data, with times, at 25-m height	David Cook ; Jenni Prell ; Michael Ritsche	1996 Feb 07		
<input type="checkbox"/>	1025026	ARM WSL calibrated red or clear images and house keeping data, 2-min intervals	Douglas Slaterson	2000 Feb 17		
<input type="checkbox"/>	1025027	ARM WSL stationary calibrated red or clear quicklook images (JPEG), 2-min intervals	Douglas Slaterson	1999 Feb 01		
<input type="checkbox"/>	1025028	ARM WSL calibrated red or clear quicklook movies (MPEG), 2-min intervals	Douglas Slaterson	1999 Feb 01		
<input type="checkbox"/>	1025029	ARM WSL stationary calibrated red or clear quicklook images (JPEG), 10-min intervals	Douglas Slaterson	1995 Sep 20		
<input type="checkbox"/>	1025030	ARM WSL calibrated red or clear quicklook movies (MPEG), 10-min intervals	Douglas Slaterson	1995 Sep 20		
<input type="checkbox"/>	1025031	ARM 1290-MHz Radar Wind Profiler/RASS (RWP1290): wind consensus data	Richard Coulter ; Timoth Martin	1990 Jan 01		
<input type="checkbox"/>	1025032	ARM 1290-MHz Radar Wind Profiler/RASS (RWP1290): wind moments	Richard Coulter ; Timoth Martin	1990 Jan 01		
<input type="checkbox"/>	1025033	ARM Siph Meter Tower: daily minimum/maximum met data, with times, at 60-m height	David Cook ; Jenni Prell ; Michael Ritsche	1996 Feb 06		
<input type="checkbox"/>	1025034	ARM Surface Meteorological Observation Station (SMOS): 1-minute averaged data	Michael Ritsche ; Jenni Prell	1993 Jul 01		
<input type="checkbox"/>	1025035	ARM Eddy Correlation CO2 Flux Data, 25 m samples, 30-min stats	Marc Fischer ; Sebastian Braud	2002 Dec 18		
<input type="checkbox"/>	1025036	ARM Eddy Correlation CO2 Flux Data, 4 m samples, 30-min stats	Marc Fischer ; Sebastian Braud	2002 Dec 18		
<input type="checkbox"/>	1025037	ARM Eddy Correlation CO2 Flux Data, 4 m samples, meteorological data, 30-min stats	Marc Fischer ; Sebastian Braud	2002 Dec 18		
<input type="checkbox"/>	1025038	ARM Eddy Correlation CO2 Flux Data, 50 m samples, 30-min avg	Marc Fischer ; Sebastian Braud	2001 Jan 01		
<input type="checkbox"/>	1025039	ARM ECOR: surface fluxes of momentum, sensible heat, and latent heat, at 30-min avg	David Cook ; Timoth Martin	1990 Jan 01		
<input type="checkbox"/>	1025121	ARM Surface Meteorological Observation Station (SMOS): 30-min averaged data	Michael Ritsche ; Jenni Prell	1993 Apr 22		
<input type="checkbox"/>	1025122	ARM 915-MHz Radar Wind Profiler/RASS (RWP915): high power, wind consensus data	Richard Coulter ; Timoth Martin	1997 Apr 01		
<input type="checkbox"/>	1025124	ARM 915-MHz Radar Wind Profiler/RASS (RWP915): high power, wind moments data	Richard Coulter ; Timoth Martin	1997 May 01		
<input type="checkbox"/>	1025125	ARM 915-MHz Radar Wind Profiler/RASS (RWP915): low power, consensus wind data	Richard Coulter ; Timoth Martin	1997 Apr 01		

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 Page 1 of 15 [100%](#)

The screenshot shows the Energy Citations Database (ECD) interface. At the top, there are navigation links: Home, Basic Search, Fielded Search, Alerts, and Document Availability. The main title of the record is "ARM Energy Balance Bowen Ratio (EBBR) station: surf. heat flux and related data, 30-min".

Description/Abstract:
 The Energy Balance Bowen Ratio (EBBR) system produces 30-min estimates of the vertical fluxes of sensible and latent heat at the local surface. Flux estimates are calculated from observations of net radiation, soil surface heat flux, and the vertical gradients of temperature and relative humidity. Meteorological data collected by the EBBR are used to calculate bulk aerodynamic fluxes, which are used in the Bulk Aerodynamic Technique (BAT) EBBR value-added product (VAP) to replace sunrise and sunset spikes in the flux data. A unique aspect of the system is the automatic exchange mechanism (AEM), which helps to reduce errors from instrument offset drift.

Full Text:
 Includes links for PDF, HTML, and a DOI: <http://dx.doi.org/10.5439/1023895>

Metadata:
 Authors: Cook, David
 Publication Date: 1993 Jul 04
 OSTI Identifier: 1023895
 DOE Contract Number: DE-AC05-00OR22725
 Resource Type: Dataset - Numeric Data
 Research Org: Atmospheric Radiation Measurement (ARM) Archive, Oak Ridge National Laboratory (ORNL), Oak Ridge, TN (US)
 Sponsoring Org: DOE Biological and Environmental Research Program (BER)
 Country of Publication: United States
 Language: English
 Subject: 54 Environmental Sciences
 Related Subject: Atmospheric moisture; Atmospheric pressure; Atmospheric temperature; Horizontal wind
 Availability: ORNL
 Update Date: 2011 Sep 29

At the bottom of the page, there are logos for the Department of Energy, Office of Science, and various programs like Science Accelerator, Science.gov, and WorldWideScience.org. The last updated date is 01/12/2012.

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Videos and Images

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The screenshot shows the ScienceCinema website interface. At the top, there is a banner with the text "SCIENCECINEMA" and a blue glowing sphere. Below the banner, there is a navigation menu with links: Home, About ScienceCinema, Help, Audio Search, and Bibliographic Search. A search bar is present with the text "Search ScienceCinema for" and a "SEARCH" button. Below the search bar, there is a "Welcome to ScienceCinema!" message. The main content area contains a paragraph describing the service: "ScienceCinema uses innovative, state-of-the-art audio indexing and speech recognition technology from Microsoft Research, allowing you to search for specific words and phrases spoken within video files. You can then easily access the exact point in the video where the words were spoken by the presenter. Videos in ScienceCinema highlight leading-edge research from the U.S. Department of Energy as well as the European Organization for Nuclear Research (CERN). Launched in February 2011, ScienceCinema is constantly expanding with new content. Simply enter a term in the search box and start exploring!" Below this text is a logo for "A SCIENCE Accelerator Resource". At the bottom of the page, there are logos for the U.S. Department of Energy, Office of Science, Website Policies/Contact Us, Microsoft Research, science.gov, and WorldWide Science.org. The Microsoft Research logo is prominently displayed. At the very bottom, it says "Last Updated: 01/17/2012".

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26 results for "nanotechnology" All DOE CERN

nanotechnology Search 1 2 3

Pegram Lectures
by George M. Whitesides - 2003 Sep 22

Download "Pegram Lectures" (170 Mb)

TRANSCRIPT RESULTS

Occurs at	Result snippet
0:05:03	... terrorism on the committee on nanotechnology for the intelligence community ...
0:13:30	... primary think is secondary to the and nanotechnology for a variety of reasons has begun to ...
0:23:51	... the apocalyptic view of nanotechnology spent some time on violent biological and biomimetic stuff ...

click on the snippet to begin playing the video at the segment where the search term was spoken.

The Art of the Start: Moving Science from the Lab to the Marketplace
by Larry Bock - 2009 Jun 01

Download "The Art of the Start: Moving Science from the Lab to the Marketplace" (129 Mb)

TRANSCRIPT RESULTS

Occurs at	Result snippet
0:13:44	... of nanotechnology ...
0:14:29	... world at that point was working on organic nanotechnology ...
0:14:39	... of organic nanotechnology ...
0:15:31	... of intellectual property in the field of nanotechnology ...

click on the snippet to begin playing the video at the segment where the search term was spoken.

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Search In	For Term(s)	Limit To
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Title	Description/Abstract	System Entry Date
Identifier Numbers		Media Type

Publication Date (This field must be set for year and month only):
From [] [] [] [] To [] [] [] []
System Entry Date: From [] [] [] [] To [] [] [] []
Media Type: All Audio Video Multimedia CERN

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1943 - present

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Search: Submit

Sorted By: Entry Date, Descending

Results: 1-25 of exactly 407 matches. (39.37 seconds)

Sort Results By: Ascending

Size	Member / Entry Date	Title	Creator/Author (s)	Pub Date
1027995	Mon Nov 07 07:32:49 EST 2011	Center for Materials at Irradiation and Mechanical Extremes at LANL (A "Life at the Frontiers of Energy Research" contest entry from the 2011 Energy Frontier Research Centers (EFRCs) Summit and Forum)	Michael Nastasi, CMME Staff	2011 May 01
1027996	Mon Nov 07 07:32:49 EST 2011	Solar Cells from Plasmas? Mission Possible at the Pritzker Energy Research Center, UMass Amherst (A "Life at the Frontiers of Energy Research" contest entry from the 2011 Energy Frontier Research Centers (EFRCs) Summit and Forum)	Russell, Thomas P., LANL, Paul M., Pritzker Staff	2011 May 01
1027998	Mon Nov 07 07:32:49 EST 2011	Electric: The Energy of Tomorrow (A "Life at the Frontiers of Energy Research" contest entry from the 2011 Energy Frontier Research Centers (EFRCs) Summit and Forum)	Abouia, Hector D., smc2 Staff	2011 May 01
1028109	Mon Nov 07 07:32:51 EST 2011	Enabling Energy Efficiency (A "Life at the Frontiers of Energy Research" contest entry from the 2011 Energy Frontier Research Centers (EFRCs) Summit and Forum)	Coltrin, Mike, Simmons, Jerry, SSLS Staff	2011 May 01
1028110	Mon Nov 07 07:32:51 EST 2011	Moons from Petroleum to Plants to Energize our World (A "Life at the Frontiers of Energy Research" contest entry from the 2011 Energy Frontier Research Centers (EFRCs) Summit and Forum)	McCann, Maureen, C3Bio Staff	2011 May 01
1028113	Mon Nov 07 07:32:51 EST 2011	Energy Frontier Research Center Materials Science of Adhesives (A "Life at the Frontiers of Energy Research" contest entry from the 2011 Energy Frontier Research Centers (EFRCs) Summit and Forum)	Burns, Peter, MRA Staff	2011 May 01
1028114	Mon Nov 07 07:32:51 EST 2011	EFRC-CST at the University of Texas at Austin - A DOE Energy Frontier Research Center (A "Life at the Frontiers of Energy Research" contest entry from the 2011 Energy Frontier Research Centers (EFRCs) Summit and Forum)	Zhu, Xiaoyang, CST Staff	2011 May 01
1028115	Mon Nov 07 07:32:52 EST 2011	The Center for Frontiers of Subsurface Energy Recovery (A "Life at the Frontiers of Energy Research" contest entry from the 2011 Energy Frontier Research Centers (EFRCs) Summit and Forum)	Pope, Gary A., CFSEER Staff	2011 May 01
1028116	Mon Nov 07 07:32:52 EST 2011	Center for Defect Physics - Energy Frontier Research Center (A "Life at the Frontiers of Energy Research" contest entry from the 2011 Energy Frontier Research Centers (EFRCs) Summit and Forum)	Stoda, G. Malcolm, CDF Staff	2011 May 01
1028117	Mon Nov 07 07:32:52 EST 2011	CFRS - Green Energy for Our Nation's Future (A "Life at the Frontiers of Energy Research" contest entry from the 2011 Energy Frontier Research Centers (EFRCs) Summit and Forum)	Jan Jaworski, Saxe, Richard T., CFRS Staff	2011 May 01
1028118	Mon Nov 07 07:32:52 EST 2011	EFRC - Scientific Exchange Program (A "Life at the Frontiers of Energy Research" contest entry from the 2011 Energy Frontier Research Centers (EFRCs) Summit and Forum)	Blanchette, Robert E., PABC Staff	2011 May 01
1028106	Mon Nov 03 07:25:11 EDT 2011	Search for the ANSER (A "Life at the Frontiers of Energy Research" contest entry from the 2011 Energy Frontier Research Centers (EFRCs) Summit and Forum)	Wasieleski, Michael R., ANSER Staff	2011 May 01
1027931	Mon Nov 03 07:25:11 EDT 2011	Buffed about Robotics (A "Life at the Frontiers of Energy Research" contest entry from the 2011 Energy Frontier Research Centers (EFRCs) Summit and Forum)	Balds, Marc, Center for Robotics Staff	2011 May 01
1027932	Mon Nov 03 07:25:11 EDT 2011	Heart of the Solution - Energy Frontiers (A "Life at the Frontiers of Energy Research" contest entry from the 2011 Energy Frontier Research Centers (EFRCs) Summit and Forum)	Green, Peter F., CSTEC Staff	2011 May 01

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- Weather Data (113)
- Weather Conditions (70)
- Climate (54)
- Weather Forecasting (52)
- Weather Variables (37)
- More...

▼ Dates


- 2012 (3)
- 2011 (23)
- 2010 (27)
- 2009 (31)
- 2008 (23)
- More...

- Computer Simulations of Severe Weather in Space**




...weather... today as the space weather modeling framework? ...space weather in general and ...the space weather modeling frames are roughly that all definition ...the space weather? ...about the weather ...

ScienceCinema
- Faces of the Recovery Act: National Weatherization Conference**



ScienceCinema
- Dr. Michael MacCracken, Climate Institute, Washington, DC**



I don't know enough about the weather... we've been having some rather unusual weather

Wikipedia

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Weather

Weather is the state of the atmosphere, to the degree that it is hot or cold, wet or dry, calm or stormy, clear or cloudy[1] ...

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EurekaAlert!

Every cloud has a silver lining. **Weather** forecasting models could predict brain tumor ...

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1 – 10 of 3,150 Sort By: Rank Limit to: All Sources [Refine Search](#)

Topics Visual

All Results (3150)

- Topics
 - Model (234)
 - Weather Conditions (167)
 - National Weather Service (88)
 - Weather Station (74)
 - Cold Weather (61)
 - [More...](#)
- Authors
 - United States. Federal Highway Administration (12)
 - Spangler, Tim (10)
 - Fries-Gaither, Jessica (9)
 - United States. Dept. of Transportation. Research

- Weather news**

★★★★★

NASA Astrophysics Data System (ADS)
 Not Available
Weather
 2012-09-01
- Weather Radar**

★★★★★

Science.gov Websites
 content | links on this page search NOAA National Severe Storms Laboratory about nssl **weather** research field & media education research divisions | organization...
 2012-09-11
- Weather Safety**

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Topics Visual

All Results (436)

- Topics
 - Weather Conditions (24)
 - Space Weather (19)
 - Image ID (17)
 - Weather Satellite (16)
 - Weather Station (14)
 - [More...](#)
- Authors
 - gsfvideo (9)
 - Holly Zell (6)
 - Robert Garner (5)
 - Karl Hille (4)
 - Christopher O (4)
 - [More...](#)
- Dates

- Weather Station**



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USGS Multimedia Gallery
Weather station site, Shenandoah National Park...
 2010-08-16
- Computer Weather Simulation**



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NSF Multimedia
 2012-07-27
- Severe Weather System: March 2, 2012**

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Text (3150) Multimedia (436)

1 - 10 of 3,150 Sort By: Rank Limit to: All Sources

1 Weather news
 NASA Astrophysics Data System (ADS)
 Not Available
Weather
 2012-09-01

2 Weather Radar
 Science.gov Websites
 content | links on this page search NOAA National Severe Storms Laboratory about research field observations news & media education research divisions | organization
 2012-09-11

3 Weather Safety
 Science.gov Websites
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Ciencia en las noticias	Sitios Web Destacados	Colecciones Especiales
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3,631 primeros resultados de al menos 891,877 encontrados.
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Temas Visual

Todos los resultados (3194)

- Tópicos de Resultados
 - Model (261)
 - Weather Conditions (238)
 - National Weather Service (168)
 - Weather Station (80)
 - Cold Weather (71)
 - Más...
- Autores
 - United States. Federal Highway Administration (12)
 - United States. Dept. of

Texto (3194) Multimedia (437)

Resultados 1 – 10 de 3,194 Ordenar por: Relevancia Limitar a: Todos los recursos

- Weather news**
★★★★★
NASA - Sistema de Datos Astrofísicos (ADS) No disponible
Weather
2012-09-01
- Clima Radar**
★★★★★
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contenido | enlaces en esta página de búsqueda laboratorio nacional de tormentas severas de NOAA s campo observaciones Noticias & medios educación investigación divisiones de investigación | Organiza
2012-09-11
- Clima Seguridad**
★★★★★
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CASA previsión gráfica Aviación Marina ríos y lagos huracanes de fuego de clima severo clima sol/lun

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- CSIR Research Space (South Africa)
- Czech Academy of Sciences Publication Activity Database
- Czech Academy of Sciences Repository
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- DEFF Research Database (Denmark)
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- Digital Repository Service at National Institute of Oceanography (India)
- Directory of Open Access Journals (Sweden)
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- Energy Technology Data Exchange (EIDWEB)

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- DRIVER (Chinese)
- DRIVER (French)
- DRIVER (German)
- DRIVER (Japanese)
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- DRIVER (Russian)
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- J-EAST (Japan) (Japanese)
- J-STAGE (Japan) (Japanese)
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- Journal@rchive (Japan) (Japanese)
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2 873 top results from at least 148,041 found

85 of 85 collections complete

Papers (2798) Multimedia (75) Translate Results

Results 1 - 10 of 100 Sort by Rank Limit to J-STAGE (Japan) 1 2 3 4 5 Search

RESULT TOPICS

All Results (2798)

- Topics
 - Climate Change (292)
 - Model (202)
 - Development (144)
 - Greenhouse Gases (83)
 - Greenhouse Gas (69)
 - More...
- Authors
 - Türkiye Bilimsel ve Teknolojik Arastirma Kurumu (32)
 - 出版年別 (16)
 - Istituto Nazionale di Geofisica e Vulcanologia. Sezione Bologna. Bologna. Italia (9)
 - Mathur, A. (8)
 - インベントリ作業部会 (6)
 - More...
- Publications
 - BL CP (138)
 - Global change biology (Print) (47)
 - NASA Website (44)
 - Conference 8. global warming international conference and expo. Nice... (38)
 - Korean J Anesthesiol (31)
 - More...
- Publishers
 - Science gov (United States)

1 地球温暖化と繊維産業

J-STAGE (Japan) (Japanese)

2 温暖化による積雪水量減少の気候的特性

J-STAGE (Japan) (Japanese)

3 地球温暖化が北日本のイネの収量変動に及ぼす影響

J-STAGE (Japan) (Japanese)

4 温暖化何でもそう国際研

J-STAGE (Japan) (Japanese)

5 土壌呼吸における根糸の役割

J-STAGE (Japan) (Japanese)

WIKIPEDIA

EUREK ALERT!

Global warming 'not slowing down', say researchers

Researchers have added further clarity to the global climate trend, proving that global warming is showing no signs of slowing down and that further increases are to be expected in the next few decades.

Global warming target to stay below 2 degrees, made at the United Nations conference in

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2,873 top results from at least 148,041 found
85 of 85 collections complete

RESULT TOPICS

All Results (2798)

- ▼ Topics
 - Climate Change (292)
 - Model (202)
 - Development (144)
 - Greenhouse Gases (83)
 - Greenhouse Gas (69)
 - More...
- ▼ Authors
 - Turkiye Bilimsel ve Teknolojik Arastirma Kurumu (32)
 - 【北振昇】 (16)
 - Istituto Nazionale di Geofisica e Vulcanologia. Sezione Bologna, Bologna, Italia (9)
 - Mathur, A. (8)
 - イベントリ作部会 (8)
 - More...
- ▼ Publications
 - BL CP (138)
 - Global change biology (Print) (47)
 - NASA Website (44)
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 - Korean J Anesthesiol (31)
 - More...
- ▼ Publishers
 - Science.gov (United States)

Papers (2798) Multimedia (75) **Translate Results**

Results 1 - 10 of 100 Sort by Rank Limit to J-STAGE (Japan) 1 2 3 4 5 Search

- Global warming and the textile industry**
Original Title: 地球温暖化と繊維産業
J-STAGE (Japan) (Japanese)
著者: 北振昇
雑誌: 繊維学誌
2008-01-01
- Climatic characteristics of the snow water loss due to global warming**
Original Title: 温暖化による積雪水量減少の気候的特性
J-STAGE (Japan) (Japanese)
著者: 北振昇
雑誌: 雪氷学
2008-01-01
- Effect of global warming on North Japan rice yield fluctuation**
Original Title: 地球温暖化が北日本のイネの収量変動に及ぼす影響
J-STAGE (Japan) (Japanese)
著者: 北振昇
雑誌: 日本作物学協会誌(農業と環境)
2008-01-01
- Warming occasions country environment lab**
Original Title: 温暖化何でそろう環境研
J-STAGE (Japan) (Japanese)
著者: 藤原一樹, 藤原朝子
雑誌: 電気学誌
2008-01-01

WIKIPEDIA
Global warming "hot slowing down," say researchers
Researchers have added further clarity to the global climate trend, proving that global warming is showing no signs of slowing down and that further increases are to be expected in the next few decades.
Global warming target to stay below 2 degrees requires more action this decade
Climate scientists say the world's target to stay below a global warming of 2 degrees, made at the United Nations conference in

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Search: Full Text: "reducing our carbon footprint" [Get Automatic Updates on This Search](#) | My Selections (0) | Clear Selections | Print Results | Email Results | Collection Status

157 top results from at least 2,067 found
85 of 85 collections complete

RESULT TOPICS

All Results (154)

- ▼ Topics
 - Indian Academy of Sciences (22)
 - Информатика Словарь по Информатике (21)
 - Journal (19)
 - Resource (16)
 - Energy (15)
 - More...
- ▼ Authors
 - Rothwell, G. W. (2)
 - Kemp, W. (2)
 - Verne, Jules, 1828-1905 (2)
- ▼ Publications
 - Science.gov Websites (10)
 - NASA Website (7)
 - NASA Astrophysics Data System (ADS) (2)
 - BL CP (2)
- ▼ Publishers
 - Indian Academy of Sciences (India) (55)
 - VINITI Projects Database (Russian) (54)
 - Science.gov (United States) (19)
 - Trove (Australia) (13)
 - Energy Technology Data

Papers (154) Multimedia (3) **Translate Results**

Results 1 - 10 of 154 Sort by Rank Limit to All Collections 1 2 3 4 5 Search

- Reducing Our Carbon Footprint One Step at a Time a Municipal Perspective**
German National Library of Science and Technology (Gefino) [4/5]
Report, IV
BL CP
2008-01-01
- Reducing our Carbon Footprint - an initial action plan for Northern Ireland**
Energy Technology Data Exchange (ETDEWEB) [4/5]
In the Energy White Paper, Our Energy Future - Creating a low carbon economy, the UK Government accepted the Royal Commission on Environmental Pollution's (RCEP) recommendations on how the UK should address the threat of climate change. These recommendations included the early development of a concerted, coordinated and integrated strategy across all Government Departments that would put the UK economy on an early path to reducing carbon dioxide (CO₂) emissions by at least 60% by 2050...
WOME
2005-11-14
- Reducing Our Carbon Footprint: Converting Plants to Fuel (LBLN Science at the Theater)**
Energy Technology Data Exchange (ETDEWEB) [4/5]
Berkeley Lab's Chris Somerville is a leading authority on the structure and function of plant cell walls, which comprise most of the body mass of higher plants. He views the knowledge of cell wall structure and function as furthering the development of plants with improved usefulness. These plants are strong potential sources of renewable materials and biofuel feedstocks. His scientific expertise defines an ideal match of his interest — in the development of cellulose, and other solar-to-fu...
Somerville, Chris
Conference: Science at the Theater Lecture Series, Lawrence Berkeley National Laboratory, Berkeley, California, presented on November 10, 2007

WIKIPEDIA
reducing_our_carbon_footprint

EUREKA ALERT!
Collecting carbon in a concrete jungle
Land unsuitable for tree planting could still be used to reduce levels of carbon dioxide in the atmosphere thanks to new research.
Microscopic tubes that suck in carbon dioxide from the air are being developed by
APS urges rapid action on House reauthorization of 2007 bipartisan America COMPETES bill
The APS urges rapid action on House reauthorization of the 2007 bipartisan

The screenshot shows the WorldWideScience.org search results page. The search query is "reducing our carbon footprint". The page displays 157 top results from at least 2,567 found, with 85 of 85 collections complete. The search results are sorted by Rank and limited to All Collections. The top three results are:

- 1 Reducing Our Carbon Footprint: A Low-Energy House** (ScienceCinema video)
- 2 Reducing Our Carbon Footprint, A Low Energy House** (ScienceCinema video)
- 3 Reducing Our Carbon Footprint: Converting Plants to Fuel** (ScienceCinema video)

On the right side, there are sections for WIKIPEDIA (reducing_our_carbon_fo) and EUREKALERT! (Collecting carbon in a concrete jungle, Land unsuitable for tree planting could still be used to reduce levels of carbon dioxide in the atmosphere thanks to new research, Microscopic tubes that suck in carbon dioxide from the air are being developed by APS urges rapid action on House reauthorization of 2007 bipartisan America COMPETES bill, The APS urges rapid action on House reauthorization of the 2007 bipartisan).

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2. TOUCHREACTIVITY 2: Simulation Program for Non-isothermal Multiphase Reactive Geochemical Transport
3. SIMC2 1E-121: Building Energy Consumption Analysis
4. DYNA3D2007: Explicit 3-D Hydrodynamic FEM Program
5. NIKE3D96: Static & Dynamic Response of 3D Solids

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Computational Fluid Dynamics Library: CFLUB05 is the Los Alamos Computational Fluid Dynamics Library. This is a collection of hydrocodes using a common data structure and a common numerical method, for more



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PACKAGE ID	009835JUN02J CFLUB05
KWIC Title	Computational Fluid Dynamics Library
AUTHORS	B.A. Kashiwa, N.T. Padiel, R.H. Ravenzani, & W.S. Vanderheyden
LIMITATION/AUDIENCE CODE	CONF/UNL
COMPLETION DATE	03/04/2005
PUBLICATION DATE	03/04/2005
DESCRIPTION	CFLUB05 is the Los Alamos Computational Fluid Dynamics Library. This is a collection of hydrocodes using a common data structure and a common numerical method, for problems ranging from single-field, incompressible flow, to multi-species, multi-field, compressible flow. The data structure is multi-block, with a so-called structured grid in each block. The numerical method is a Finite-Volume scheme employing a state-vector that is fully cell-centered. This means that the integral form of the conservation laws is solved on the physical domain that is represented by a mesh of control volumes. The typical control volume is an arbitrary quadrilateral in 2D and an arbitrary hexahedron in 3D. The Finite-Volume scheme is for time-unsteady flow and remains well-coupled by means of face and space centered fluxes. If a steady state solution is required, the problem is integrated forward in time until the user is satisfied that the state is stationary.
PACKAGE CONTENTS	Software Abstract, Program note for CFLUB05, LA-UR-05-3022, Issues includes Media Directory, Source Code, Auxiliary Material, Completion instructions, Linking instructions, Object Module, Sample Problem input and Output, 1 CD-ROM
SOURCE CODE INCLUDED?	Y
MEDIA QUANTITY	0
METHOD OF SOLUTION	Cell-centered ICE method
COMPUTER	SUN
OPERATING SYSTEMS	UNIX
UNIQUE FEATURES	Handles either compressible or incompressible flow equations. The system allows the user to stipulate 2D or 3D as needed for the codes of interest. This version includes the possibility of auto-tuning in the SGI clusters, a new improved loop routine and a new turbulence model. Many users have grid generators capable of output in the HADA PLOT format. CFLUB05 contains a translator for converting the PLOT3D data into a form readable by CFLUB05, and which generates some of the CFLUB05 input data as well (see the directory/plot in the library). For post-processing many users employ TecPlot, so the option exists to write a TecPlot-Formatted output file.
OTHER PROGRAMS	The following codes are included in this package: CAVEAT and compressible, single-velocity, explicit Godunov hydro, van Leer advection, mixed-cell interface tracking, numerical physics packages (E burn, compressive turbulence transport, etc.), COMAC, incompressible, single-fluid, ALE, semi-implicit, TVD hydro, COSE, compressible, single-fluid, ALE semi-implicit, TVD hydro, US3AC, incompressible, multi-species, ALE, semi-implicit, TVD hydro, S3CE, compressible, multi-species, ALE, explicit, TVD hydro, optional 11-species, 11-reaction, gas-phase finite-rate chemical kinetics, MFIAC, incompressible, multiphase, ALE, semi-implicit, TVD hydro, SIFCE, compressible, multiphase, ALE semi-implicit, TVD hydro, SIFW0, compressible, multi-field, magnetohydrodynamic, semi-implicit, TVD hydro, Lagrangian or Eulerian, 11-species, 11-reaction gas-phase chemical kinetics, global mixing, COSE2, general iterative mesh generator.
ABSTRACT STATUS	CFLUB05 made available AS-IS March 2005.
SPONSOR	DOE/DP, DOD
RESEARCH ORG	Los Alamos National Laboratory
PACKAGE TYPE	AS-IS

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- PPMLIB, a scalable library for computational fluid dynamics: Final report**

 This report summarizes the results of the PPMLIB project.
 Woodward, Paul R.
 Other Information: PBD: 14 Dec 2002; PBD: 14 Dec 2002
 2002-12-14
 DOE Information Bridge
- CFDLIB05**

 000663SUN0002 Computational Fluid Dynamics Library
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- Algal Biofuels Research Laboratory (Fact Sheet)**
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Advanced drop in hydrocarbon **biofuels** require biofuel alternatives for refinery products other than gasoline. Candidate **biofuels** must have performance characteristics equivalent to conventional petroleum based fuels. The technology pathways for biofuel alternatives also must be plausible, sustainable (e.g. positive energy balance, environmentally benign, etc.) and demonstrate a reasonable pathway to economic viability and end user affordability. Viable **biofuels** technology pathways must address feedstock production and environmental issues through to the fuel or chemical end products. Potential end products include compatible replacement fuel products (e.g. gasoline, diesel, and JP8 and JP5 jet fuel) and other petroleum products or chemicals. [more >](#)

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- BioFuels Atlas (Presentation)**
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DOE Contract Number:	DE-AC07-05ID14517
Resource Type:	Technical Report
Research Org:	Idaho National Laboratory (INL)
Sponsoring Org:	DOE - EE
Country of Publication:	United States
Language:	English
Subject:	02 PETROLEUM; 09 BIOMASS FUELS; AVAILABILITY; BIOFUELS; ECONOMICS; ENERGY BALANCE; ENGINEERS; GASOLINE; HYDROCARBONS; PERFORMANCE; PETROLEUM PRODUCTS; PRODUCTION; VIABILITY Biofuels Fuels Technology Pathway Options for Adva;

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fuel or chemical end products. Potential end products include compatible replacement fuel products (e.g., gasoline, diesel, and JP8 and JP5 jet fuel) and other petroleum products or chemicals typically produced from a barrel of crude. Considering the complexity and technology diversity of a complete biofuels supply chain, no single entity or technology provider is capable of addressing in depth all aspects of any given pathway, however, all the necessary expert entities exist. As such, we propose the assembly of a team capable of conducting an in-depth technology pathway options analysis (including sustainability indicators and complete LCA) to identify and define the domestic biofuel pathways for a Green Fleet. This team is not only capable of conducting in-depth analyses on technology pathways, but collectively they are able to trouble shoot and/or engineer solutions that would give industrial technology providers the highest potential for success. Such a team would provide the greatest possible down-side protection for high-risk advanced drop-in biofuels procurement(s).

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DOE Contract Number: DE-AC07-05ID14517

Resource Type: Technical Report

Research Org: Idaho National Laboratory (INL)

Sponsoring Org: DOE - EE

Country of Publication: United States

Language: English

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cellulose/sugar route in the future. 1/2 Advanced **Biofuels** (Lignocellulose and Algae) Route â€” this would ...

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also has capabilities in algae **biofuels**, including participation in many of the legacy algae programs ... of the DOE advanced **biofuels** algae centers, with focus on the development of algae-based **biofuels**.

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Go to Fossil Fuels

narrower terms ... broader terms ... related terms ...

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biofuels Submit Query

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- Coal >
- Lignite >
- Peat >

01 Coal, Lignite, and Peat Summary Sample Results

Information on coal and coal products, including lignite and peat, as energy sources. Reserves, geology and exploration; surface and underground mining; transport, handling, and storage; properties and composition; preparation processing; combustion; waste management; environmental aspects; products and by-products; health and safety aspects; legislation and regulations; and economic, industrial, and business aspects are included.

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All Topics > Fossil Fuels > 01 Coal, Lignite, and Peat > Coal

no subcategories

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- Brown Coal >
- Coal Fines >
- Sapropelic Coal >
- Subbituminous Coal >

Coal

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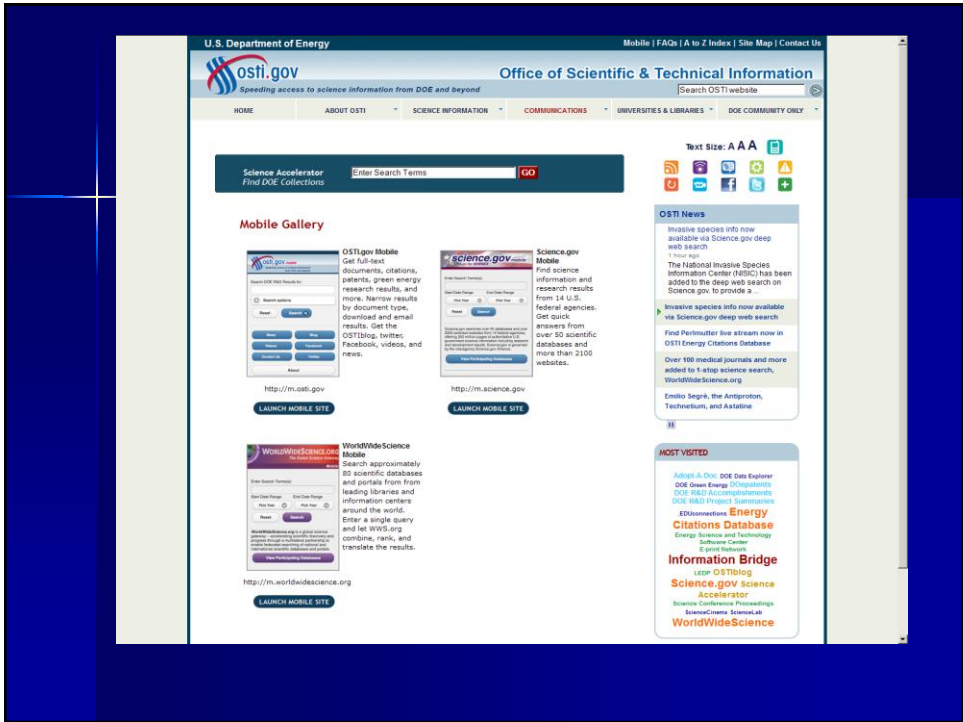
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Questions?

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