



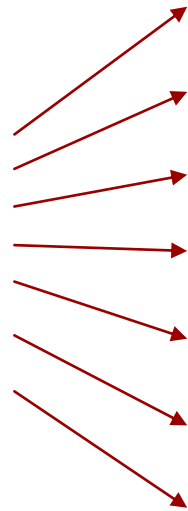
ENABLING DATA DISCOVERY IN THE U.S. DEPARTMENT OF ENERGY

SEPTEMBER 12, 2018, FDLP ACADEMY WEBINAR SERIES

DOE INVESTS \$12B PER YEAR IN R&D



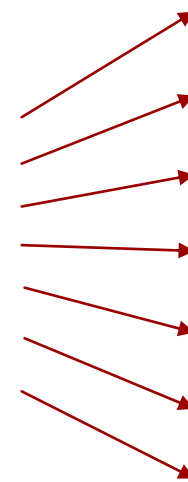
U.S. DEPARTMENT OF
ENERGY
R&D Funding



NATIONAL LABS

Ames
Argonne
Brookhaven
Fermi
Idaho
Los Alamos
Lawrence Berkeley
Lawrence Livermore
NETL
NREL
Oak Ridge
Pacific Northwest
Princeton
SLAC
Sandia
Savannah River
Thomas Jefferson

GRANTEES



SCIENTIFIC & TECHNICAL INFORMATION (STI/R&D Results)

Text

- Journal articles/accepted manuscripts
- Technical reports
- Conference papers
- Patents

Data

- Large and small datasets
- Images
- Visualizations

Software/Code

≥ 50,000 STI “products” annually



*OSTI works to improve discoverability
and use of all of this*

OSTI'S VISION AND MISSION

Vision

The Office of Scientific and Technical Information (OSTI) will fulfill a critical U.S. Department of Energy (DOE) mission to ensure long-term preservation of and access to the results of DOE research and development (R&D) investments. Across the full spectrum of DOE R&D programs, OSTI will provide accountability for all DOE scientific and technical information (STI)—in its many forms—through electronic, efficient, and user-friendly tools and technology.

Mission

Advance science and sustain technological creativity by making R&D findings available and useful to Department of Energy (DOE) researchers and the public.



How Do We Make R&D Results Accessible and Useful?

a) Partnership

STIP

b) Technology

EOLINK

c) Services

DOIs for data, technical reports, and software. Software repository services.

d) Search tools

OSTI.GOV



DOE Data Explorer

DOE CODE

DOepatents

SCIENCECINEMA

(Federated Search)



OSTI'S DATA TOOLS

DOE Data Explorer

- The DOE Data Explorer (DDE) launched in June 2008 as a tool to help users discover publicly available, DOE-sponsored data and other non-text information.
- DDE is the search tool for finding DOE-funded, publicly available, scientific data submitted by data centers, repositories, and other organizations funded by the Department. DDE includes data Project, data Collection, and individual Dataset records.

Data ID Service

- OSTI became DataCite member in 2011 – Allows OSTI to assign digital object identifiers (DOIs) to datasets.
- DOE Data ID Service – OSTI provides service of assigning DOIs to datasets for DOE-funded research. Also assigns DOIs for other agencies on a cost-reimbursable basis.

WHY REORGANIZE OSTI'S DATA DISCOVERY TOOL?

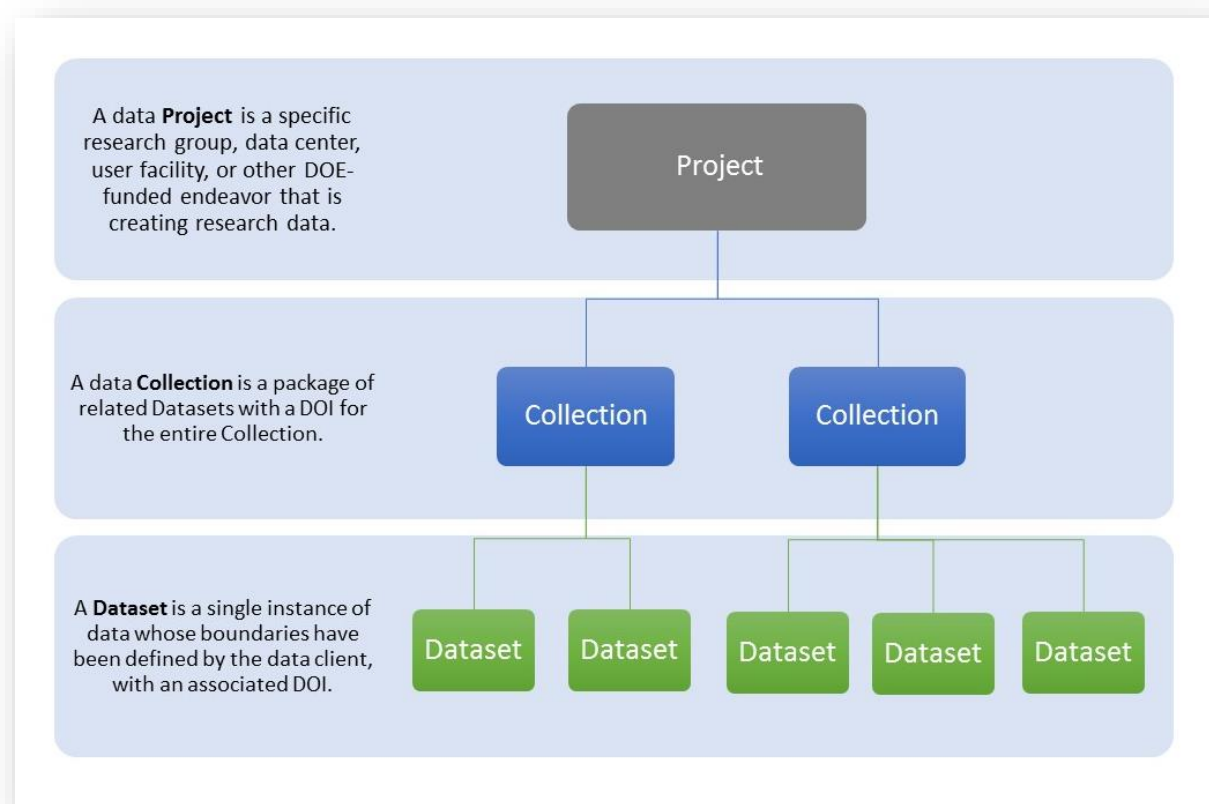
DOE Data Explorer – search tool for discovering DOE research data

- Feedback from lab workshops and meetings with data researchers
- Provide a more intuitive way to browse/find data
 - Hierarchical
 - Interrelated
 - Customizable

DOE Data Explorer

NEED FOR A NEW DATA PRODUCT “TYPE”

- Need for three “types” to organize data
 - data **Project**
 - data **Collection**
 - **Dataset**
- Thought experiment → published in Data Science Journal → now must execute!



A "NEW" DDE

DOE Data Explorer

Discover science, technology, engineering research and data collections from the US Department of Energy

Search DOE Data Explorer for Energy and Science Data

 [Advanced Search](#)

Explore: Recent DDE Content

Recent DDE Content

Titles: Datasets/Datastreams

Titles: Data Collections

Subject Categories

Sponsoring Organizations

Other Organizations

Microcrystal delivery by pulsed liquid droplet for semiconductor crystallography

"Crystal Genes" in Metallic Liquids and Glasses

Revised (R1) 2014 GGG TCCON measurements from the TCCON Tsukuba 125HR

Total Column Carbon Observing Network (TCCON) at Tsukuba 125HR

Adsorption of Dy on Graphite (001) Surface: Nucleation and Growth at 300 K

Discovery of Dirac Node Arcs in PtSn4

Imaging the magnetic nano-domains in Nd2Fe14B

Kinematic and Hydrometer Data Products from Scattering Radars during MC3E

Google Earth locations of USA and seafloor hydrothermal vents with associated data

MeshMaker: Configurable Meshing Framework for Hydrology Models

10 most recently added datasets / data collections displayed

Home About DDE FAQ DOE Data ID Service

DOE Data Explorer

Explore science, technology, and engineering data from the US Department of Energy

Explore DOE Data

Explore Projects



Explore Collections



A data Project is a specific research group, data center, user facility, or other DOE-funded endeavor that is creating research data.

A data Collection is a package of related datasets with a DOI for the entire Collection.

A Dataset is a single instance of data whose boundaries have been defined by the data creator, with a DOI associated.

Data Explorer / Search Results / Atmospheric Radiation Measurement (ARM) Data Center

Atmospheric Radiation Measurement (ARM) Data Center

Project Details Associated Collections (0) Associated Datasets (814)

ARM focuses on obtaining continuous measurements—supplemented by field campaigns—and providing data products that promote the advancement of climate models. ARM data include routine data products, value-added products (VAPs), field campaign data, complementary external data products from collaborating programs, and data contributed by ARM principal investigators for use by the scientific community. Data quality reports, graphical displays of data availability/quality, and data plots are also available from the ARM Data Center. Serving users worldwide, the ARM Data Center collects and archives approximately 20 terabytes of data per month. Datastreams are generally available for download within 48 hours.

Product Type: Project

Project Lead: Prakash, Giri

Research Org(s): Argonne National Lab. (ANL), Argonne, IL (United States); Brookhaven National Laboratory (BNL), Upton, NY (United States); Lawrence Berkeley National Lab. (LBL), Berkeley, CA (United States); Lawrence Livermore National Lab. (LLNL), Livermore, CA (United States); Los Alamos National Laboratory (LANL), Los Alamos, NM (United States); National Renewable Energy Lab. (NREL), Golden, CO (United States); Oak Ridge National Lab. (ORNL), Oak Ridge, TN (United States); Pacific Northwest National Lab. (PNNL), Richland, WA (United States); Sandia National Lab. (SNL-GA), Livermore, CA (United States)

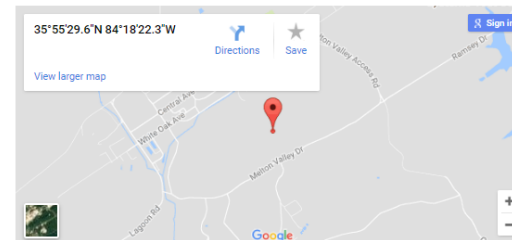
Sponsoring Org: USDOE Office of Science (SC), Biological and Environmental Research (BER) (SC-23)

Geolocation: -84.306185, 35.924878

Subject: 54 ENVIRONMENTAL SCIENCES; climate research; atmospheric radiation; precipitation radar; instrument; cloud radar; carbon flux; carbon concentration; climate model; broadband radiometer; ARM

OSTI Identifier: 1374161

Project Location: Oak Ridge, TN



VISUALLY REPRESENTING THE NEW ORGANIZATIONAL STRUCTURE

- Toggle between Projects, Collections, and Datasets using tabs at the top of the results list.
- Under each Project result is the number of associated Collections and Datasets.
- Refine options change based on results product type.

DOE Data Explorer

DOE Data Explorer / Search Results / Page 1 of 2

Search for: All records

Sorted by Relevance Save Results

RESEARCH ORGANIZATION

- Lawrence Berkeley National Lab. (LBL), Berkeley, CA (United States) (9)
- Oak Ridge National Lab. (ORNL), Oak Ridge, TN (United States) (6)
- National Renewable Energy Lab. (NREL), Golden, CO (United States) (4)
- Brookhaven National Laboratory (BNL), Upton, NY (United States) (3)
- Los Alamos National Lab. (LANL), Los Alamos, NM (United States) (3)

Projects (16) Collections (2) Datasets (71,862)

1. The Materials Project

LBL Materials Project; Lawrence Berkeley National Lab. (LBL), Berkeley, CA (United States); Oak Ridge National Lab. (ORNL), Oak Ridge, TN (United States); Argonne National Lab. (ANL), Argonne, IL (United States); University of California San Diego Supercomputing Center (SDSC), San Diego, CA (United States)

Hamessing the power of supercomputing and state of the art electronic structure methods, the Materials Project provides open web-based access to computed information on known and predicted materials as well as powerful analysis tools to inspire and design novel materials. Experimental research can be targeted [more »](#)

69,693 Datasets

0 Collections

DOE Data Explorer

DOE Data Explorer / Search Results / Page 2 of 7,187

Search for: All records

Sorted by Pub. Date (oldest first) Save Results

CREATOR

- Kristin Persson (69,693)
- Karen Johnson (191)
- Nitin Bharadwaj (119)
- Michael Jensen (107)
- Dan Nelson (105)

[See more »](#)

RESEARCH ORGANIZATION

- Lawrence Berkeley National Lab. (LBL), Berkeley, CA (United States) (69,717)
- LBL Materials Project (69,693)
- Atmospheric Radiation Measurement (ARM) Archive, Oak Ridge National Laboratory (ORNL), Oak Ridge, TN (US) (788)
- DOE Geothermal Data Repository (471)
- Atmosphere to Electrons (A2e) Data Archive and Portal, Pacific Northwest National Laboratory (211)

[See more »](#)

PUBLICATION YEAR

- 2017 (2,469)
- 2016 (32,286)
- 2015 (2,226)
- 2014 (33,783)

Projects (16) Collections (2) Datasets (71,862)

11. Snake River Plain FORGE Well Data for INEL-1

Robert Podgorney March 1979

Well data for the INEL-1 well located in eastern Snake River Plain, Idaho. This data collection includes caliper logs, lithology reports, borehole logs, temperature at depth data, neutron density and gamma data, full color logs, fracture analysis, photos, and rock strength parameters for the INEL-1 [more »](#)

0 Collections

10.15121/1261969

12. NREL Solar Radiation Research Laboratory (SRRL): Baseline Measurement System (BMS); Golden, Colorado (Data)

Stoffel, T.; Andreas, A. July 1981

The SRRL was established at the Solar Energy Research Institute (now NREL) in 1981 to provide continuous measurements of the solar resources, outdoor calibrations of pyranometers and pyrhemometers, and to characterize commercially available instrumentation. The SRRL is an outdoor laboratory located on South Table Mountain, [more »](#)

0 Collections

10.7799/1052221

13. GEOTHERM Data Set

DeAngelo, Jacob January 1983

GEOTHERM is a comprehensive system of public databases and software used to store, locate, and evaluate information on the geology, geochemistry, and hydrology of geothermal systems. Three main databases address the general characteristics of geothermal wells and fields, and the chemical properties of geothermal fluids; [more »](#)

0 Collections

10.15121/1149729

SEARCH AND NAVIGATION USING THE NEW RELATIONS

Can toggle among the Project and associated Collections and Datasets by tabs or hyperlinks.

Includes:

- List of related Projects, Collections, or Datasets
- Link out to data
- Suggested “similar” records
- Geolocation info for Projects

The screenshot displays the 'The Materials Project' page on a web interface. At the top, there are navigation tabs for 'Project Details', 'Associated Collections (2)', and 'Associated Datasets (69,693)'. The main content area features a descriptive paragraph about the project's mission: 'Harnessing the power of supercomputing and state of the art electronic structure methods, the Materials Project provides open web-based access to computed information on known and predicted materials as well as powerful analysis tools to inspire and design novel materials. Experimental research can be targeted to the most promising compounds from computational data sets. Supercomputing clusters at national laboratories provide the infrastructure that enables computations, data, and algorithms to run at unparalleled speed. Researchers are able to data-mine scientific trends in materials properties. By providing materials researchers with the information they need to design better, the Materials Project aims to accelerate innovation in materials research.'

Below the description is a metadata section with the following details:

- Product Type: Project
- Project Lead: Persson, Kristin ⁽¹⁾
- Research Org(s): LBNL, Materials Project, Lawrence Berkeley National Lab. (LBNL), Berkeley, CA (United States); Oak Ridge National Lab. (ORNL), Oak Ridge, TN (United States); Argonne National Lab. (ANL), Argonne, IL (United States); University of California San Diego Supercomputing Center (SDSC), San Diego, CA (United States)
- Sponsoring Org: USDOE Office of Science (SC), Basic Energy Sciences (BES) (SC-22); USDOE Office of Science (SC), Advanced Scientific Computing Research (ASCR) (SC-21); USDOE Office of Energy Efficiency and Renewable Energy (EERE), Vehicle Technologies Office (EE-3V)
- Geolocation: -122.246343,37.875069
- Subject: 36 MATERIALS SCIENCE; crystal structure; bandstructures; batteries; material analysis; supercomputing
- OSTI Identifier: 1374173
- Project Location: Berkeley, CA

At the bottom of the page, there is a Google Maps widget showing the project's location in Berkeley, CA. The map includes a red location pin, a text box with coordinates '37°52'30.3"N 122°14'46.8"W', and buttons for 'Directions' and 'Save'. A 'View larger map' link is also present. The map shows surrounding streets like Lawrence Rd and Centennial Dr, and a 'Molecular Foundry' building.

On the right side of the page, there are sections for 'PROJECT DETAILS' with a link to 'https://materialsproject.org/' and a note that the link will take users to the data Project's homepage. Below this is a 'SAVE / SHARE THIS RECORD' section with options for 'Citation Formats', 'Export Metadata', and 'Send to Email'. At the bottom right, there is a 'GO TO NEXT/PREVIOUS RECORD' section with 'Prev' and 'Next' buttons, and a 'Back to Search Results' link.

The Materials Project

Project Details Associated Collections (2) Associated Datasets (69,693)

Harnessing the power of supercomputing and state of the art electronic structure methods, the Materials Project provides open web-based access to computed information on known and predicted design novel materials. Experimental research can be targeted to the sets. Supercomputing clusters at national laboratories provide the infrastructure and algorithms to run at unparalleled speed. Researchers are able to provide materials researchers with the information they need to design and innovate in materials research.

Product Type:	Project
Project Lead:	Persson, Kristin ^[1] + Show Author Affiliations
Research Org(s):	LBNL Materials Project; Lawrence Berkeley National Lab. (ORNL), Oak Ridge, TN (United States); Argonne National Laboratory; University of California San Diego Supercomputing Center
Sponsoring Org:	USDOE Office of Science (SC), Basic Energy Sciences (BES) (SC-22), Scientific Computing Research (ASCR) (SC-11), Energy Efficiency & Renewable Energy (EERE), Vehicle Technologies Office (EE-3V)

Collection of SG:189 Materials Data

Collection Details Associated Project Associated Datasets (3)

Computed materials data using density functional theory calculations for bulk materials by solving approximations to the Schrodinger equation. For more information, see <https://materialsproject.org/docs/calculations>

Creators:	Persson, Kristin
Publication Date:	2017-04-14
Report Number(s):	mp-1024071; mp-1025404; mp-1021484
DOE Contract Number:	EDCBEE; AC02-05CH11231
Product Type:	Collection
Research Org(s):	Lawrence Berkeley National Lab. (LBNL), Berkeley, CA (United States)
Sponsoring Org:	USDOE Office of Science (SC), Basic Energy Sciences (BES) (SC-22)
Subject:	36 MATERIALS SCIENCE; ICSD-649608; Ce-Pd; Ce1 Se2; Ce-Se; Pt-Si; ICSD-649614; crystal structure; Ce3 Pd5; Pt2 Si1
OSTI Identifier:	1389158

Some links on this page may take you to non-federal websites. Their policies may differ from this site.

Collection of SG:189 Materials Data

Collection Details Associated Project Associated Datasets (3) Similar Collections

1. Materials Data on CeSe2 (SG:189) by Materials Project

Kristin Persson

Computed materials data using density functional theory calculations. These calculations determine the electronic structure of bulk materials by solving approximations to the Schrodinger equation. For more information, see <https://materialsproject.org/docs/calculations>

DOI: 10.17188/1351485

[Details](#)

[View Dataset](#)

2. Materials Data on SiPt2 (SG:189) by Materials Project

Kristin Persson

Computed materials data using density functional theory calculations. These calculations determine the electronic structure of bulk materials by solving approximations to the Schrodinger equation. For more information, see <https://materialsproject.org/docs/calculations>

DOI: 10.17188/1355020

[Details](#)

[View Dataset](#)

3. Materials Data on Ce3Pd5 (SG:189) by Materials Project

Kristin Persson

Computed materials data using density functional theory calculations. These calculations determine the electronic structure of bulk materials by solving approximations to the Schrodinger equation. For more information, see <https://materialsproject.org/docs/calculations>

DOI: 10.17188/1355340

[Details](#)

[View Dataset](#)

DATA ID SERVICE

- OSTI became DataCite member in 2011 – Allows OSTI to assign digital object identifiers (DOIs) to datasets.
- DataCite – An international organization supports data visibility, ease of data citation in scholarly publications, data preservation and future re-use, and data access and retrievability by assigning DOIs to datasets.
- **Data ID Service** allows data creators to obtain DOIs for datasets, encouraging and increasing data citation in publications.



submits to



assigns a

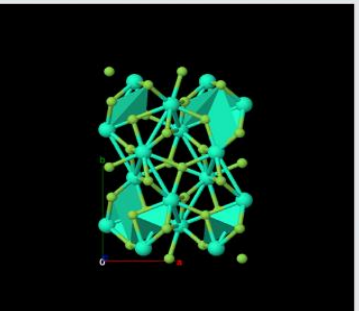
DOI "10.17188/1342472"

validated and minted by



Record with a live DOI becomes available in OSTI.GOV and DDE.

MATERIAL
TbF₃



Material Details

- Final Magnetic Moment: 0.0000 μ_B
- Formation Energy/Atom: -4.1520 eV
- Energy Above Hull: 0.0000 eV
- Density: 7.16 g/cm³
- Space Group: **Hermann Mauguin**
Pbnm

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OSTI.GOV / Search for 10.17188/1342472 / Dataset: Materials Data on Pm203 (SG:12) by Materials Project

Materials Data on Pm203 (SG:12) by Materials Project

Full Record Similar

Abstract

Computed materials data using density functional theory calculations. These calculations determine the electronic structure of bulk materials by solving approximations to the Schrodinger equation. For more information, see https://materialsproject.org/docs/calculations

Authors: Kristin Persson

Publication Date: 2017-02-04

OSTI Identifier: 1342472

Report Number(s): mp-556584

DOE Data Explorer

Search DOE Data Explorer for Energy and Science Data

Start new search - Place phrase in "double quotes" Find

Advanced Search

Data Explorer / Materials Data on Pm203 (SG:12) by Materials Project

Materials Data on Pm203 (SG:12) by Materials Project

Computed materials data using density functional theory calculations. These calculations determine the electronic structure of bulk materials by solving approximations to the Schrodinger equation. For more information, see https://materialsproject.org/docs/calculations

Authors: Kristin Persson

Publication Date: 2017-02-04

OSTI Identifier: 1342472

Report Number(s): mp-556584

SAVE / SHARE THIS RECORD NO

Citation Formats

Export Metadata

DATASET View Dataset (-0.00 MB)

DOI: 10.17188/1342472

Select the DOI to obtain a copy of this

DOI links back to MP data.

Journal article cites MP data.

Wind power forecasting: IEA Wind Task 36 & future research

ISSUES

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Full Record PDF

References

Abstract

The paper presents the new International Energy Agency Wind Task 36 on Forecasting, and invites to collaborate within the group. Wind power forecasts have been used extensively for over 20 years. Despite the fact that there are still several prohibitions to improve the forecasts, both from the weather prediction side and from the usage of the forecasts, the new International Energy Agency (IEA) Wind Task 36 on Forecasting the Wind Energy tries to engage international collaborations, using national meteorological centres with an interest and/or large projects on wind forecast improvement (DRAA, DWD, MetOffice, etc.) on the one hand, operational forecasts and forecast users on the other hand.

The Task is divided in three work packages. Firstly, a collaboration on the improvement of the scientific basis for the wind prediction themselves. This includes numerical weather prediction model physics, but also widely distributed observations on accessible datasets. Secondly, we will be using an international pre-standard (as IEA Recommendation Practice) on benchmarking and comparing wind power forecasts, including probabilistic forecasts. This WP will also register benchmarks, in cooperation with the IEA Wind Visualization. Thirdly, we will be engaging end users using it disseminations of the best practice in the usage of wind power predictions. An first results are mentioned at several times for research in short-term forecasting of wind power, as presented.

Export citation as xml | pdf | doc

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References

(1) Limberg, L. and Watson, S.J. 2004 Boundary-Layer Meteorology: Short-term Prediction of Local Wind Conditions 70-87.

(2) Hansen, T.S., Stokken, H. and Telling, J. 2005 Proceedings of the European Wind Energy Conference: Experiences with National Networks for Wind Power Prediction 5096-5106 (ISBN: 1-4020-8310-1) 5-12, Naxos.

(3) Limberg, L., Stokken, H., Stokken, J., Carl, U., Jonck, R. and Hovell, J. 2006 European Wind Energy

BENEFITS TO ASSIGNING DOIS

1. RDA WGDC: assigning a persistent identifier to data ensures preservation and access to data, allowing for citation and reuse
2. Data updates/versioning
3. Permanence of large data
4. Dynamic data
5. Data can be independently indexed and discovered
6. Visibility and use/reuse apart from associated article

USE CASES



- DOI granularity level - dynamic data, beamline experiments, etc.
- DOE researchers produce huge datasets, other people use portions of this data for other research
- Sharing data within a community
- Much data is not directly associated with a publication
- Researcher may submit slice of data to publisher
- Need a DOI for the data prior to submitting article to publisher
- Including DOI in reference list prior to publication

DOE CODE



CREATE

Create code inside or outside DOE CODE.



SUBMIT

Submit your DOE-funded code.



DISCOVER

Discover DOE-funded software and code.

DOE CODE is an open source product on GitHub that other institutions can download and deploy for their own purposes.



DOE CODE resources provide you information on best practices and policies for software.

EASY

DOE CODE is easy to use and requires minimal metadata, often autopopulated.

DOE CODE seamlessly interfaces with common development platforms (e.g., open web API).



DOE CODE FEATURES

doi[®]

DOE CODE issues digital object identifiers (DOIs) for code so software is more easily cited and discoverable. This allows for stronger connections between code, publications, and data through citation in reference sections.

DOE CODE is the DOE Software Catalog.



DOE CODE offers public and private repository services in GitHub and GitLab.

STRATEGIC PRIORITIES INTERLINKING RESEARCH RESULTS

End goal: interlink all related research outcomes (e.g., from publication to related data to related software)

Publication

OSTI.GOV / Journal Article: Modelling and validation of particle size distributions of supported nanoparticles using the pair distribution function technique

Modelling and validation of particle size distributions of supported nanoparticles using the pair distribution function technique

Other Related Research

Similar records in OSTI.GOV collections:

Modelling and validation of particle size distributions of supported nanoparticles using the pair distribution function technique

JOURNAL ARTICLE

Gamez-Mendoza, Liliana ; Terban, Maxwell W. ; Billinge, Simon J. L. ; ... - Journal of Applied Catalysis B: Environmental

The particle size of supported catalysts is a key characteristic for determining their catalytic activity. It is a challenge to obtain this information accurately and in situ using crystallographic techniques such as X-ray diffraction (XRD) because of the small size of the particles (<5 nm) and the fact that they are supported. In this work, a pair distribution function (PDF) analysis technique was used to obtain the particle size distribution of supported Pt nanoparticles synthesized under various conditions. The PDF of Pt nanoparticles grown on zeolite X was compared with a monodisperse spherical model (single particle size) and a lognormal distribution model.

Correlating size and composition-dependent effects with magnetic, Mössbauer, and pair distribution function measurements in a family of catalytically active ferrite nanoparticles

Dataset

ARM DATA DISCOVERY SEARCH RESULTS

Search Text:

Start Date: End Date:

Showing 1-20 of 217 measurements

- acrad1long c1 @ nra // Surface Radiation Measurement Quality
- acrad1long c1 @ nra // Shortwave broadband total downwelling irradiance // Downwelling
- acrad1long c1 @ nra // Longwave broadband downwelling irradiance // Downwelling
- acrad1long c1 @ nra // Surface Radiation Measurement Quality
- acrad1long c1 @ nra // Shortwave broadband total downwelling irradiance // Downwelling
- acrad1long c1 @ nra // Longwave broadband downwelling irradiance // Downwelling
- acrad1long c1 @ nra // Surface Radiation Measurement Quality
- acrad1long c1 @ nra // Shortwave broadband total downwelling irradiance // Downwelling
- acrad1long c1 @ nra // Longwave broadband downwelling irradiance // Downwelling
- acrad1long c1 @ nra // Surface Radiation Measurement Quality
- acrad1long c1 @ nra // Shortwave broadband total downwelling irradiance // Downwelling
- acrad1long c1 @ nra // Longwave broadband downwelling irradiance // Downwelling
- acrad1long c1 @ nra // Surface Radiation Measurement Quality
- acrad1long c1 @ nra // Shortwave broadband total downwelling irradiance // Downwelling
- acrad1long c1 @ nra // Longwave broadband downwelling irradiance // Downwelling
- acrad1long c1 @ nra // Surface Radiation Measurement Quality
- acrad1long c1 @ nra // Shortwave broadband total downwelling irradiance // Downwelling
- acrad1long c1 @ nra // Longwave broadband downwelling irradiance // Downwelling

Software

ARM-DOE / ADI

ARM Data Integrator

57 commits

1 branch

0 releases

2 contributors

- kgastad Update README.md
- ADL_source.zip
- LICENSE
- README.md
- Vagrantfile
- README.md

ADI

ARM Data Integrator, ADI, is an open source framework that automates the process of retrieving and preparing data for analysis, simplifies the design and creation of output data products produced by the analysis, and provides a modular, flexible software development architecture for implementing algorithms. These capabilities are supported through the use of a workflow for data integration, a source code generator that produces C, IDL and Python templates, and a graphical interface through which users can efficiently define their data input, preprocessing, and output characteristics.

ADDITIONAL AREAS FOR EXPLORATION IN THE DATA ENVIRONMENT

- How can we better communicate/educate data producers of the value of assigning DOIs to data to increase linkages in the scholarly record?
- How do we create additional hierarchical associations such as “lab rollups,” associating user facilities (like Argonne National Lab-Advanced Photon Source) to the overarching lab (Argonne National Lab) so that a user can find data related to an instrument instead of an individual project?
- Some data can logically be related to more than one Project. How can we address these linkages and expose them in DDE?



QUESTIONS?

SARA STUDWELL

LIBRARIAN/PRODUCT MANAGER

DOE OFFICE OF SCIENTIFIC AND TECHNICAL INFORMATION

STUDWELLS@OSTI.GOV

