Open Data and Data Citation at NIST

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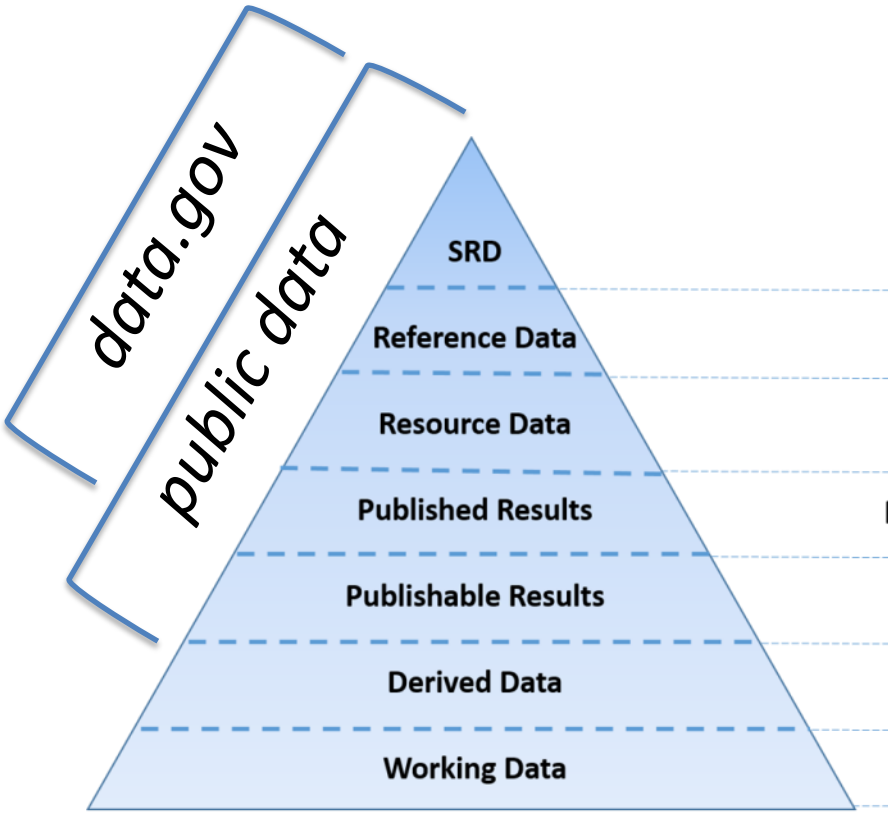
U.S. Department of Commerce

NIST Public Data Access Policy

- Strengthen NIST's commitment to providing public access to scientific research results
- Support governance of and best practices for managing peer-reviewed scholarly publications and digital scientific data across NIST
- Ensure effective access to and reliable preservation of NIST peer-reviewed scholarly publications and digital scientific data for use in research, development, education, and scientific discovery
- Increase use to NIST research results to enhance scientific discovery, education, and research and development across the US
- Enhance innovation and competitiveness by maximizing the potential to create new business opportunities

http://www.nist.gov/open/

Data Categories



Defined by Standard Reference Data (SRD) Act

Like SRD but not distributed under SRD Act Authority

Data that we've used to underpin a position or decision

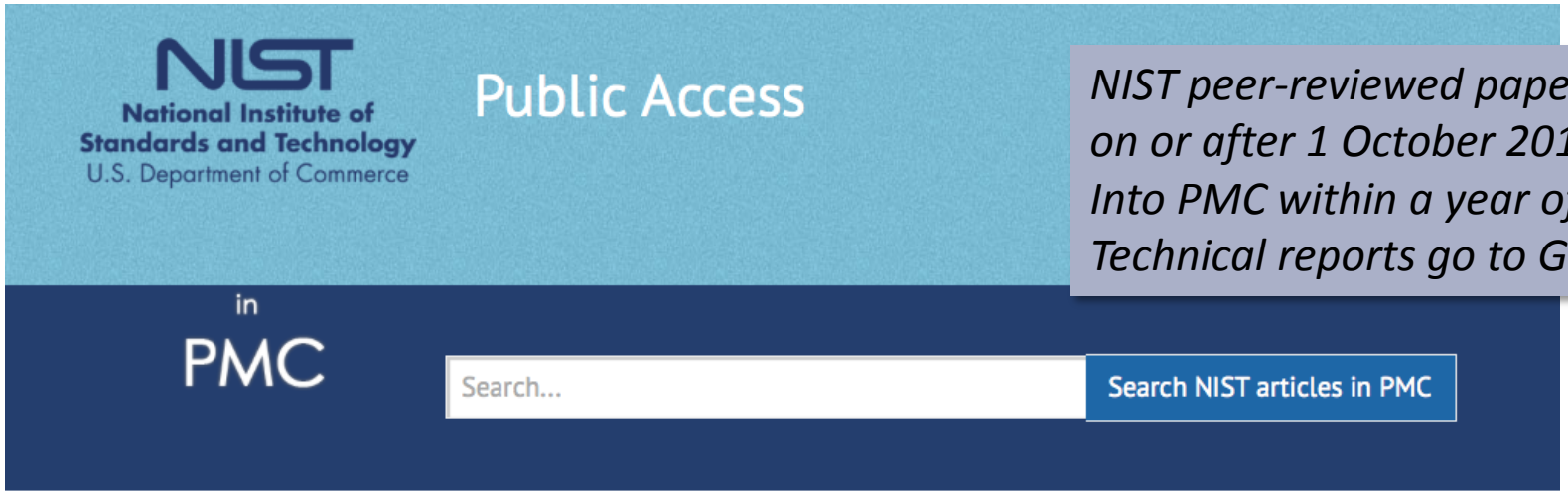
Results that are published in a paper or on a website

Results that are of sufficient quality that they could be published

Raw data that has been analyzed or processed in some way

Raw observational data coming off of an instrument

NIST Publications in PMC



NIST peer-reviewed papers published on or after 1 October 2015 must be put Into PMC within a year of publication. Technical reports go to GPO FDsys.

http://www.ncbi.nlm.nih.gov/pmc/funder/nist/

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NIST Publications in PMC

NIST publications will be discoverable through PMC, FDsys, CHORUS, nist.gov, Google Scholar, and publisher websites

Materials Science Data Repository

Materials Genome Initiative

- Experiment
- Computation
- Data

http://materialsdata.nist.gov/

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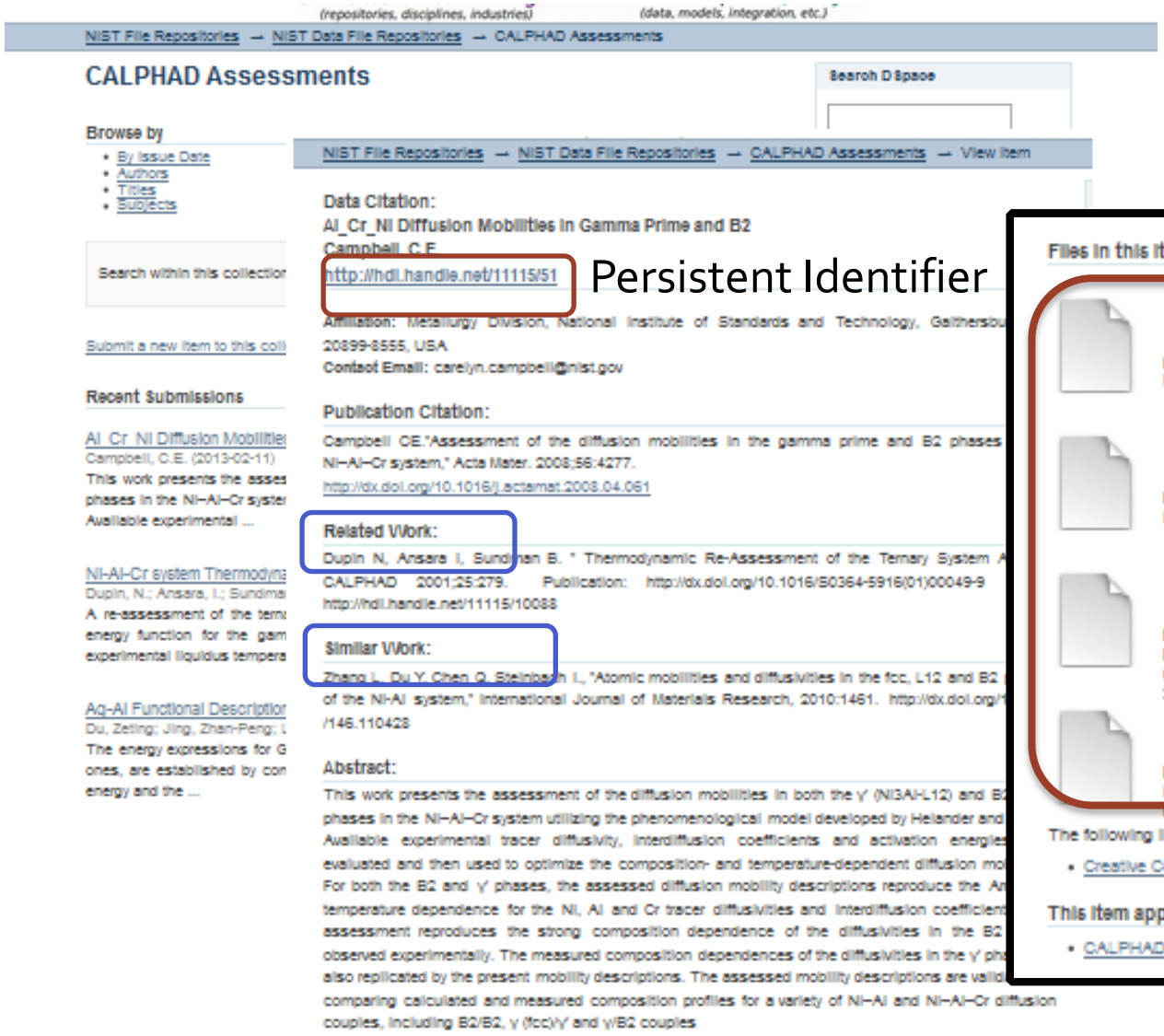
Materials Science Data Repository

DSpace



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Open Access to Research (OAR)

- Program dedicated to improving public access to NIST research data outputs
- Management of Institutional Data Assets (MIDAS) tool
  - Data management plans
  - Resulting data described in Enterprise Data Inventory (EDI)
    - Project Open Data schema https://project-open-data.cio.gov/v1.1/schema/ with extensions
    - All public-facing NIST data
    - All published data objects assigned DOIs
    - JSON records uploaded to Dept. of Commerce, data.gov
- Data repository and discovery portal
  - Integrated search across all NIST public data assets
  - Likely to use Fedora-based repository

NIST Data Citation Guidance

Cite NIST Datasets

NVL Quick Links

- About ISO
- Article and Research Databases
- NVL Electronic Resources
- Journal of Research of NIST
- Lab Liaisons
- Library Board
- Library Catalog
- NIST Digital Archives
- NIST Technical Series Publications
- Museum

Find NVL Content

- News
- How Do I
- Services

Contact ISO
Information Desk:
301-975-3052 Phone
301-975-6793 Fax
reflib@nist.gov Lync (IM)
library@nist.gov

Description

Journals often have their own citing format for publications and other items included in article reference lists. NIST's data citation recommendations are consistent in using the same citation elements (author, title, publisher, year of publication, etc.) as used by journals. In the absence of other (e.g., journal) defined requirements, these recommendations provide a consistent manner for appropriate attribution to scientific datasets that are made available under NIST's public access policy.

The following minimum requirements and format should be used to cite NIST datasets (a URL is used if a PID is not available):

Recommended Format:

Author/editor (Publication Year), Title, Publisher, Persistent Identifier (PID) or URL (Access date)

Example:

D.W. Siderius, V.K. Shen, R.D. Johnson III, R.D. van Zee, eds. (2013), NIST/ARPA-E Database of Novel and Emerging Adsorbent Materials, NIST Standard Reference Database 205, National Institute of Standards and Technology, http://adsorbents.nist.gov (Accessed December 1, 2014)

It may also be desirable to include information from two optional properties, Version and Type of Medium, as appropriate. If so, the recommended format with NIST example is as follows:

Recommended Format:

Author/editor (Publication Year), Title, Version, Publisher, [Type of Medium] Persistent Identifier (PID) or URL (Access date)

Example:

J.E. Sansonetti, W.C. Martin, and S.L. Young (2005), NIST Basic Atomic Spectroscopic Data, NIST Standard Reference Database 108, Version 1.1.2, National Institute of Standards and Technology, [Online] http://www.nist.gov/pml/data/handbook/ (Accessed May 26, 2015)

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- Jim Warren, Carrie Campbell, NIST Materials Genome Initiative
- And many others…