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Robert Hanisch
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National Institute of Standards and Technology

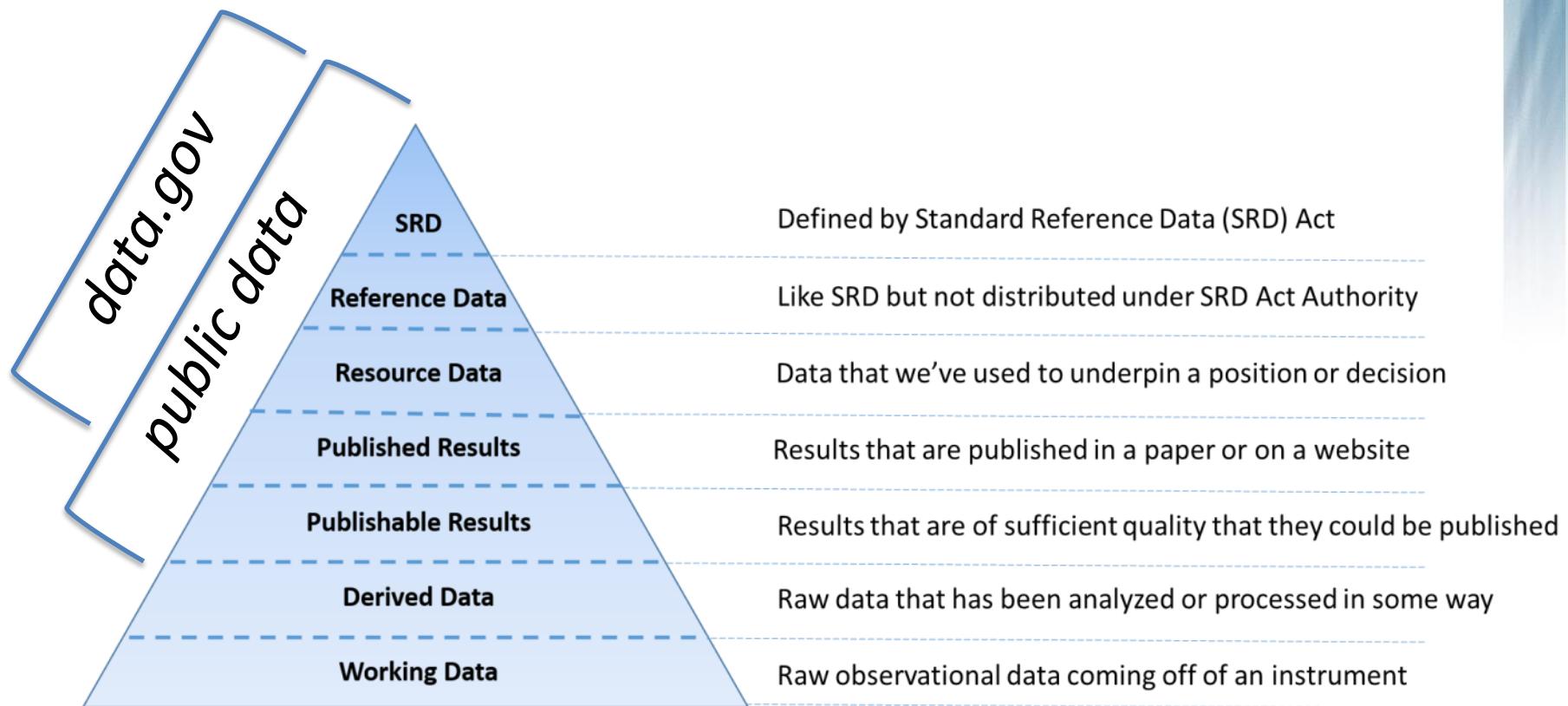
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Hanisch, Data Citation Workshop, July 12, 2016

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Antiperovskite Chalco-Halides $Ba_3(FeS_4)Cl$, $Ba_3(FeS_4)Br$, and $Ba_3(FeSe_4)Br$ with Spin Super-Super Exchange

1. Xian Zhang, Kai Liu, Jian-Qiao He, Hui Wu, Qing-Zhen Huang, Jian-Hua Lin, Zhong-Yi Lu, Fu-Qiang Huang

Sci Rep. 2015; 5: 15910. Published online 2015 November 3. doi: 10.1038/srep15910

PMCID: PMC4630630

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Survey statistics of automated segmentations applied to optical imaging of mammalian cells

2. Peter Bajcsy, Antonio Cardone, Joe Chalfoun, Michael Halter, Derek Juba, Marcin Kociolek, Michael Majurski, Adele Peskin, Carl Simon, Mylene Simon, Antoine Vandecreme, Mary Brady

BMC Bioinformatics. 2015; 16: 330. Published online 2015 October 15. doi: 10.1186/s12859-015-0762-2

PMCID: PMC4608288

[Article](#) [PubReader](#) [PDF-1.6M](#) [Citation](#)

Histone post-translational modifications in frontal cortex from human donors with Alzheimer's disease

3. Kyle W. Anderson, Illarion V. Turko

Clin Proteomics. 2015; 12: 26. Published online 2015 October 1. doi: 10.1186/s12014-015-9098-1

PMCID: PMC4591557

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Electric-field-induced local and mesoscale structural changes in polycrystalline dielectrics and ferroelectrics

4. Tedi-Marie Usher, Igor Levin, John E. Daniels, Jacob L. Jones

Sci Rep. 2015; 5: 14678. Published online 2015 October 1. doi: 10.1038/srep14678

PMCID: PMC4589771

[Article](#) [PubReader](#) [PDF-1.0M](#) [Citation](#)

Using mixtures of biological samples as process controls for RNA-sequenc

5. Jerod Parsons, Sarah Munro, P. Scott Pine, Jennifer McDaniel, Michele Me

BMC Genomics. 2015; 16(1): 708. Published online 2015 September 17. doi: 10.1186/s13073-015-1260-1

PMCID: PMC4574543

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Recently Added

[Al-Cu Symmetric/Asymmetric Tilt Grain Boundary Dataset](#)
Tschopp, Mark A.; Coleman, Shawn P.; McDowell, David L.
Symmetric and asymmetric tilt grain boundaries in Cu and Al were generated using molecular statics energy minimization in LAMMPS with in-plane grain boundary translations and an atom deletion criterion. The following ...

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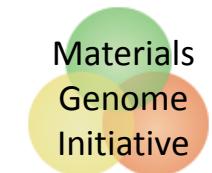
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Hanisch, Data Citation Workshop, July 12, 2016

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AI-Cr-Ni Diffusion Mobilities
Campbell, C.E. (2013-02-11)
This work presents the assessed diffusion mobilities in the gamma prime and B2 phases in the Ni-Al-Cr system. Available experimental data are used to validate the assessed mobilities.

NI-Al-Cr system Thermodynamics
Dupin, N.; Ansara, I.; Sundman, B. "Thermodynamic Re-Assessment of the Ternary System A1-Al-Cr." CALPHAD 2001;25:279. Publication: [http://dx.doi.org/10.1016/S0364-5916\(01\)00049-9](http://dx.doi.org/10.1016/S0364-5916(01)00049-9)
<http://hdl.handle.net/11115/10088>

Ag-Al Functional Description
Du, Zeteng; Jing, Zhan-Peng; Li, X. The energy expressions for G₁₂ and G₁₃ are established by comparing calculated and measured composition profiles for a variety of Ni-Al and Ni-Al-Cr diffusion couples, including B2/B2, γ(fcc)/γ' and γ/B2 couples.

Data Citation:
AI-Cr-Ni Diffusion Mobilities in Gamma Prime and B2
Campbell, C.E.
<http://hdl.handle.net/11115/51>

Publication Citation:
Campbell, C.E. "Assessment of the diffusion mobilities in the gamma prime and B2 phases in the Ni-Al-Cr system." *Acta Mater.* 2008;56:4277. <http://dx.doi.org/10.1016/j.actamat.2008.04.061>

Related Work:
Dupin, N.; Ansara, I.; Sundman, B. "Thermodynamic Re-Assessment of the Ternary System A1-Al-Cr." CALPHAD 2001;25:279. Publication: [http://dx.doi.org/10.1016/S0364-5916\(01\)00049-9](http://dx.doi.org/10.1016/S0364-5916(01)00049-9)
<http://hdl.handle.net/11115/10088>

Similar Work:
Zhang, L.; Du, Y.; Chen, Q.; Steinbach, I. "Atomic mobilities and diffusivities in the fcc, L1₂ and B2 phases of the Ni-Al system." *International Journal of Materials Research*, 2010;1461. <http://dx.doi.org/10.1016/j.ijmral.2010.11.0428>

Abstract:
This work presents the assessment of the diffusion mobilities in both the γ' (Ni₃Al-L1₂) and B2 phases in the Ni-Al-Cr system utilizing the phenomenological model developed by Helander and Sundman. Available experimental tracer diffusivities, interdiffusion coefficients and activation energies are evaluated and then used to optimize the composition- and temperature-dependent diffusion mobility. For both the B2 and γ' phases, the assessed diffusion mobility descriptions reproduce the Arrhenius temperature dependence for the Ni, Al and Cr tracer diffusivities and interdiffusion coefficients. The assessment reproduces the strong composition dependence of the diffusivities in the B2 phase observed experimentally. The measured composition dependences of the diffusivities in the γ' phase are also replicated by the present mobility descriptions. The assessed mobility descriptions are valid for comparing calculated and measured composition profiles for a variety of Ni-Al and Ni-Al-Cr diffusion couples, including B2/B2, γ(fcc)/γ' and γ/B2 couples.

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Persistent Identifier
Data files

Files In this item	
View/Open	Name: exp-b2.zip Size: 9.374Kb Format: application/zip Description: Experimental data for NiAl B2 phase
View/Open	Name: exp-ni3al.zip Size: 9.619Kb Format: application/zip Description: Experimental diffusion data files for Ni3Al
View/Open	Name: alcmi-mob-NIST-0 ... Size: 57.23Kb Format: application/tdb Description: Diffusion mobility description for Ni-Al-Cr using N. Dupin thermodynamics (CALPHAD 2001)
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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

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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)

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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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- Kim Tryka, Andrea Medina-Smith, Regina Avila, NIST Information Services Office (NIST Research Library)
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- And many others...