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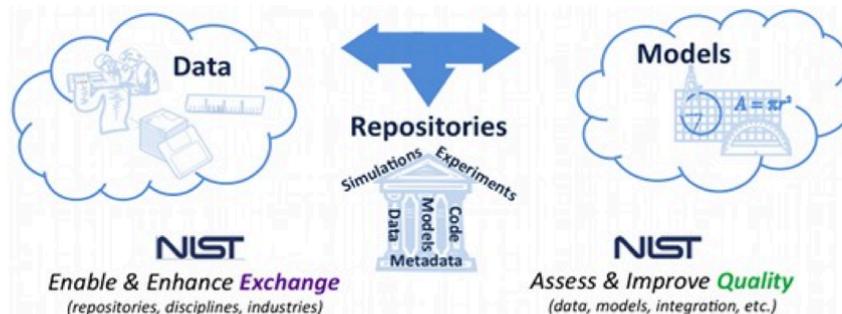
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# DSpace Data Entry Example: Digitized data reported in the literature

Demond, F. J., et al. (1983). "Study of Si self-diffusion by nuclear techniques."  
Physics Letters A 93(9): 503-506.

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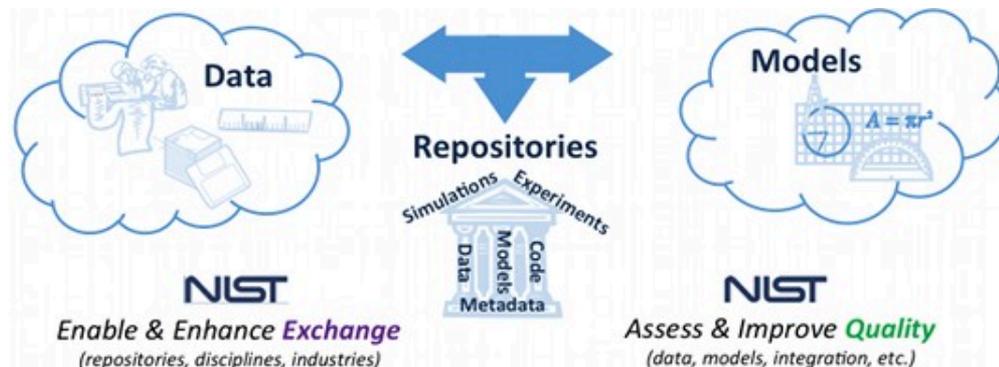
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### [Study of Si self-diffusion by nuclear techniques](#)

Demond, F. J.; Kalbitzer, S.; Mannsperger, H.; Damjantschitsch, H. (2014-02-10)

By using ion implantation for preparation and  $p$ ,  $\gamma$ -reactions for analysis of  $^{30}\text{Si}$  profiles the Si self-diffusion has been studied in the temperature range of 830–1200°C. The results reveal unambiguously that the diffusion ...

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Volin, T. E.; Balluffi, R. W. (2014-01-20)

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#### [Self-diffusion in aluminum at low temperatures](#)

Burke, J.; Ramachandran, T. R. (2014-01-20)

Values of the self-diffusivity of pure aluminum in the temperature range 130f to 200° have been determined by measuring the rate of annealing of prismatic and faulted dislocation loops in thin foils of quenched 99.999 pct ...

#### [Al Self-diffusion, Messer et al. 1974](#)

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## Diffusion Data

Data relating to the migration of host and foreign species through a material due to a variety of gradients such as electrical, chemical, thermal and mechanical, which provide the driving forces for diffusion. [Based on: "Definitions of Terms for Diffusion in the Solid State" Pure Appl. Chem., Vol. 71, No. 7, pp. 1307–1325, 1999. (IUPAC Recommendations 1999)]

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Volin, T. E.; Balluffi, R. W. (2014-01-20)

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#### [Al Self-diffusion, Messer et al. 1974](#)

Messer, R.; Dais, S.; Wolf, D. (2014-01-19)

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<input type="text" value="Demond"/>	<input type="text" value="F. J."/>	<input type="button" value="Add"/>
<small>Last name, e.g. Smith</small>	<small>First name(s) + "middle initial", e.g. Donald J.</small>	

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<input type="text" value="Damjantschitsch"/>	<input type="text" value="H."/>	<input type="button" value="Add"/>
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- Demond, F. J.
- Kalbitzer, S.
- Mannsperger, H.

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Study of Si self-diffusion by nuclear techniques

publication citation information,

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1983). "Study of Si self-diffusion by nuclear techniques." Physics Letters A 93(9): 503-506.

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http://dx.doi.org/10.1016/0375-9601(83)90641-2

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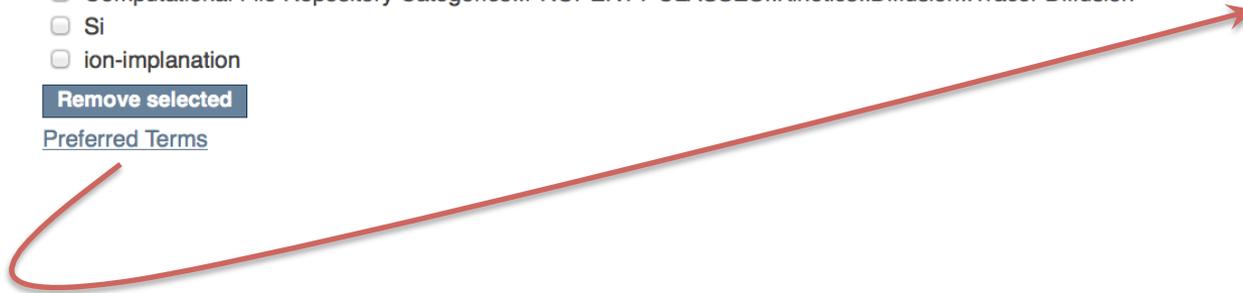
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By using ion implantation for preparation and p,  $\gamma$ -reactions for analysis of  $^{30}\text{Si}$  profiles the Si self-diffusion has been studied in the temperature range of 830–1200°C. The results reveal unambiguously that the diffusion process at the lower temperatures is characterized by parameters substantially smaller than those reported for the high-temperature regime.

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Experimental data from Demond-1983-Si self diffusion|

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### Describe Data Files

**Authors:**

Demond, F. J.

**Authors:**

Kalbitzer, S.

**Authors:**

Mannspenger, H.

**Authors:**

Damjantschitsch, H.

**Affiliations:**

Max-Planck-Institut für Kernphysik, D-6900 Heidelberg, Fed. Rep. Germany

**Contact Email:**

carelyn.campbell@nist.gov

**Title:**

Study of Si self-diffusion by nuclear techniques

**Primary Publication Citation:**

Demond, F. J., et al. (1983). "Study of Si self-diffusion by nuclear techniques." Physics Letters A 93(9): 503-506.

**DOI:**

[http://dx.doi.org/10.1016/0375-9601\(83\)90641-2](http://dx.doi.org/10.1016/0375-9601(83)90641-2)

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**Keywords:**

Computational File Repository Categories::PROPERTY CLASSES::Kinetics::Diffusion::Tracer Diffusion

**Keywords:**

Si

**Keywords:**

ion-implantation

**Abstract:**

By using ion implantation for preparation and p,  $\gamma$ -reactions for analysis of  $^{30}\text{Si}$  profiles the Si self-diffusion has been studied in the temperature range of 830–1200°C. The results reveal unambiguously that the diffusion process at the lower temperatures is characterized by parameters substantially smaller than those reported for the high-temperature regime.

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## Data Citation:

**Demond, F. J.; Kalbitzer, S.; Mannsperger, H.; Damjantschitsch, H.**  
**Study of Si self-diffusion by nuclear techniques**  
(2014-02-10)

<http://hdl.handle.net/11115/237>

**Affiliation:** Max-Planck-Institut für Kernphysik, D-6900 Heidelberg, Fed. Rep. Germany

**Contact Email:** carelyn.campbell@nist.gov

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## Files in this item



**Name:** Si-Demond-1983.xlsx

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**Format:** Microsoft Excel 2007

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