Bringing The Past Into The Present: the NIST Legacy Publications

Archives 2015
August 21, 2015

Katelynd Bucher, Metadata Librarian
katelynd.bucher@nist.gov
Regina Avila, Digital Services Librarian
regina.avila@nist.gov
Andrea Medina-Smith, Metadata Librarian
andrea.medina-smith@nist.gov
National Institute of Standards and Technology

• Non-regulatory federal agency made up of about 3,000 science and technology researchers
• NIST promotes U.S. innovation and industrial competitiveness by advancing measurement science, standards, and technology
• The Information Services Office (ISO) supports and enhances research activities of the NIST scientific community through a comprehensive program of knowledge management
Digitizing the Agency’s Legacy Collection

- Drivers
- The Pubs
- Selection and Planning
  - Internet Archive
  - FDsys
- Customer Feedback
- Up Next
Drivers

• Increased customer requests for digitized publications
• Trend toward digitizing library materials in the 2000s
• Release of Office of Science and Technology Partnership (OSTP) memo on increasing access to results of federally-funded scientific research
NIST Technical Series Publications

- First published in 1902
- Comprised of 92 series
- Approximately 37,000 publications, 24,000 to be digitized
- Still publishing today

http://dx.doi.org/10.6028/NBS.TN.1
Selection and Planning

• Conducted a survey of legacy publications in order to get an idea of the scope of the project
• No complete index of every NIST publication existed
• Dissemination restrictions
• Time management

http://beta.diylol.com/
Internet Archive

https://archive.org/details/NISTresearchlibrary
Federal Digital System (FDsys)

- Observes metadata standards
- Addresses digital preservation
- Conducts self-audit using TRAC
- Recognized for government publications
- Authentication and digital signatures
FDsys Implementation

- Testing, testing
- Decisions - standard vs custom collection
- Navigation - landing pages
The Finished Product

http://www.gpo.gov/fdsys/
DETERMINATION OF OXYGEN CONCENTRATION IN SILICON AND GERMANIUM BY INFRARED ABSORPTION

Download Files

<table>
<thead>
<tr>
<th>Entire Issue</th>
<th>PDF (1426 KB)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Descriptive Metadata</td>
<td>MODS</td>
</tr>
<tr>
<td>Authenticity Metadata</td>
<td>PREMIS</td>
</tr>
<tr>
<td>All Format &amp; Metadata Files</td>
<td>ZIP file</td>
</tr>
</tbody>
</table>

Metadata

<table>
<thead>
<tr>
<th>Branch</th>
<th>Executive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category</td>
<td>Executive Agency Publications</td>
</tr>
<tr>
<td>SuDoc Class Number</td>
<td>C 13</td>
</tr>
<tr>
<td>Government Author</td>
<td>Commerce Department, National Institute of Standards and Technology (NIST)</td>
</tr>
<tr>
<td>Series Title</td>
<td>NBS Technical Notes</td>
</tr>
<tr>
<td>Publication Title</td>
<td>Determination of oxygen concentration in silicon and germanium by infrared absorption</td>
</tr>
<tr>
<td>Date Issued</td>
<td>January 1, 1970</td>
</tr>
</tbody>
</table>

Abstract

Infrared absorption measurements were made at room temperature, 80 K, and 20 K to determine the absorption coefficient of oxygen in silicon and germanium single crystals. A study was done to compare the results of four experimental methods, which involved both absolute and difference procedures. Sources of error were identified, including that due to calculating the absorption coefficient with an approximate equation which neglects multiple internal reflections. Measurements made on the same specimen at several temperatures give additional data on the relation of oxygen concentration to absorption coefficient at low temperatures.

Series Description

Studies or reports which are complete in themselves but restrictive in their treatment of a subject. Analogous to monographs but not so comprehensive in scope or definitive in treatment of the subject area. Often serve as a vehicle for final reports of work performed at NIST under the sponsorship of other government agencies.

Note

NOTE: THE “DATE ISSUED” ABOVE MAY DEFAULT TO JANUARY 1ST OF A GIVEN YEAR, TO THE VIEW THE MOST ACCURATE DATE OF ISSUE, REVIEW THE TITLE PAGE OF THE PUBLICATION.

Document in Context

Determination of oxygen concentration in silicon and germanium by infrared absorption
Customer Feedback

• Very positive customer feedback
• Increased customer demand for digital pubs

http://www.clipartsheep.com/
Up Next

- FDsys NextGen
- More digitizing and deposits

http://diylol.com/meme-generator/
The identification of any commercial product or trade name does not imply endorsement or recommendation by the National Institute of Standards and Technology.
Questions?