

Crystallography Key Resources

- *Atlas of Crystal Structure Types for Intermetallic Phases 4 volumes
Located: TN690.4 .D33 1991 Engineering & Science Library Reference
- *Binary Alloy Phase Diagrams 3 volumes
Located: TN690. B528 1990 Engineering & Science Library Reference
- *Binary Alloy Phase Diagrams, Featuring: Crystal Structure Tables
Located: Engineering & Science Library, loaded on 1 public computer
- *Crystal Structures by R.W.G. Wyckoff 6 volumes
Located: QD951 .W82 Engineering & Science Library Reference
- *International Tables for Crystallography
A=Space-Group Symmetry B=Reciprocal Space
C=Mathematical, Physical and Chemical Tables D=Physical Properties of Crystals
Located: QD908.I56 Engineering & Science Library Reference
ONLINE: <http://it.iucr.org> OR <http://www.springerlink.com/content/n86j42>
- *International Tables for X-Ray Crystallography
Located: QD945 .I55 Engineering & Science Library Reference Vol. 1-3
Also at Mellon Institute Library: QD908 .I61 Volumes 1-4
- *Landolt-Börnstein Numerical Relationships in Science and Technology
Select volumes located: QC61 .L332 Engineering & Science Library Reference
ONLINE: [SpringerMaterials](#): The Landolt-Börnstein Database
- *Pearson's Handbook: Crystallographic Data for Intermetallic Phases
2nd edition, 4 volumes and Desk Edition, 2 volumes
Located: TN690.4 .V55 Engineering & Science Library Reference
- *Smithells Metals Reference Book
Located: TN 671 .S55 2004 Engineering & Science Library Reference
ONLINE: thru Knovel: <http://www.knovel.com/web/portal/browse>
- *Structure reports / International Union of Crystallography
Located: QD921 .I611 Engineering & Science Library Reference

**Structure of Materials: An Introduction to Crystallography,
Diffraction and Symmetry** by Marc De Graef and Michael E. McHenry
Engineering and Science Library: TA403.6 .D447X 2007

Crystallography -- Select online resources and databases

American Crystallographic Association, Inc:

<http://www.amerystalassn.org/content/pages/main-education-careers>

See: "Resources & Links of Interest": Learning Crystallography

American Mineralogist Crystal Structure Database

<http://rruff.geo.arizona.edu/AMS/amcsd.php>

Cambridge Crystallographic Data Centre <http://www.ccdc.cam.ac.uk/>

Cambridge Structural Database (CSD) Go to "Databases A-Z" list to install
Search and visualize crystal structures

CRC Handbook of Chemistry and Physics (Online) <http://hbcnetbase.com/>

Crystal Lattice Structures/ NRL, Center for Computational Materials Science:

<http://cst-www.nrl.navy.mil/lattice/index.html>

Crystallography and Phase Equilibria, A Review: Part 1- Basics, *Journal of Phase Equilibria and Diffusion* provided by ASM:

<http://www.asminternational.org/pdf/spotlights/JPED2505p405.pdf>

Crystallography Open Database <http://www.crystallography.net/>

International Union of Crystallography <http://www.iucr.org/education/resources>

"Educational web sites and resources of interest"

Teaching Pamphlets: <http://www.iucr.org/education/pamphlets>

National Institute of Standards and Technology--NIST Online Databases

<http://www.nist.gov/ts/msd/srd/onlinelist.cfm>

Includes: Biological Macromolecule Crystallization Database

<http://xpdb.nist.gov:8060/BMCD4/index.faces>

Open Crystallography Journal <http://www.bentham.org/open/tocryj/>

Reciprocal Net: <http://www.reciprocalnet.org/index.html>

"a distributed crystallography network for researchers, students and the general public"

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Engineering and Science Library Reference desk, sciref@andrew.cmu.edu, 412-268-2427
Carnegie Mellon University Libraries Research Guides: <http://guides.library.cmu.edu/>