



NBS TECHNICAL NOTE **983**

U.S. DEPARTMENT OF COMMERCE / National Bureau of Standards

**Properties of Selected  
Superconductive Materials  
1978 Supplement**

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(Extends Survey of Superconductive Materials and Critical  
Evaluation of Selected Properties, B. W. Roberts, J. Phys.  
Chem. Ref. Data 5, 581 (1976) and supersedes NBS Technical Note 825.)



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PROPERTIES OF SELECTED SUPERCONDUCTIVE MATERIALS

1978 SUPPLEMENT\*

B. W. Roberts

This report includes data on additional superconductive materials extracted from the world literature up to fall 1977 and is an addendum to the data set published in J. Phys. Chem. Ref. Data 5, #3, 581-821 (1976)(Reprint #84). The data presented are new values and have not been selected or compared to values (except for selected values of the elements) previously assembled by the Superconductive Materials Data Center. The properties included are composition, critical temperature, critical magnetic field, crystal structure and the results of negative experiments. Special tabulations of high magnetic field materials with Type II behavior and materials with organic components are included. All entries are keyed to the literature. A list of recent reviews centered on superconductive materials is included.

Key words: Bibliography; composition; critical fields; critical temperature; crystallographic data; data compilation; low temperature; superconductive materials; superconductivity.

INTRODUCTION

This Technical Note extends the data set on superconductive materials published in Journal of Physical and Chemical Reference Data 5, #3, 581-821 (1976)\*\*. Because the world activity in the study of superconductive materials continues at a high rate a few hundred references are in hand awaiting translation or delivery of the original.

It is hoped that the users of these data will inform the author of needed corrections, deletions and additional information which may include unpublished results to be included and referenced under the contributor's name and/or institution.

BACKGROUND

Nearly seventy years of research on the phenomena of superconductivity has led to a substantial technical utilization in coils to produce large magnetic fields in special configurations. A major user and benefactor has been the very high energy particle physicist who by judicious choice and substitution of superconductive coils has been able to produce suitable magnetic fields to upgrade accelerators to the next round of particle energies. This substitution has been possible in an era of decreasing resources because of magnet size and operating power cost reduction. Other high field applications include test train car levitation in Japan and Germany, superconductive motors to test drive pumps and propel ocean vessels and recently the assignment of contracts to build three large prototype fusion reactor magnet sectors at about  $\$5 \times 10^6$  each. The application to alternating current devices is progressing with larger prototype generators in the planning stages.

\*This work has been partially supported by the NBS Office of Standard Reference Data.

\*\*Available as Reprint #84 from the American Chemical Society, 1155 Sixteenth Street, N. W., Washington, D. C. 20036 at \$12.50 U.S. prepaid.

Laboratory research magnets have attained 177 kG in a  $\text{Nb}_3\text{Sn}-\text{V}_3\text{Ga}$  assembly and 301 kG in a hybrid magnet.

On the micro scale a serious study is underway on the possible use of the Josephson junction in a computer with increased speeds of 2 or 3 orders of magnitude.

A series of superconductive temperature standards provided by NBS are gaining more widespread application.

Active study of superconductive materials continued throughout the world in anticipation of applications. The 1976 Applied Superconductivity Conference at Stanford University attracted 330 papers of which 230 are published in IEEE Transactions of Magnetics, Vol. MAG-13, No. 1, January 1977 (938 pages).

Prof. John Bardeen was denoted 1976 Scientist of the year by Industrial Research (See Ind. Res. pp. 37-42 Nov. 1976).

#### GENERAL PROPERTIES OF SUPERCONDUCTORS

The historically first observed and most distinctive property of a superconductive body is the near total loss of resistance at a critical temperature  $T_c$  characteristic of each material.

Figure 1 illustrates schematically, two types of possible transitions. The sharp vertical discontinuity is indicative of that found for a single crystal of a very pure element or one of a few well annealed alloy compositions. The broad transition, illustrated by broken lines, is typical of the transition shape seen for materials which are inhomogeneous or contain unusual strain distributions. The temperature interval, over which the transition between the normal and superconductive states takes place, may be of the order of as little as  $2 \times 10^{-5}$  K or several K in width, depending upon the material state. The narrow transition width was observed in 99.9999% purity gallium single crystals.

Careful testing of the resistivity limit for superconductors has shown that it is less than  $4 \times 10^{-25}$  ohm-m, while the lowest normal state resistivity observed in metals is of the order of  $10^{-15}$  ohm-m. Comparison of the resistivity of a superconductive body to that of copper at room temperature reveals that the superconductive body is at least  $10^{17}$  times less resistive.

A Type I superconductive body, as exemplified by many pure metals, exhibits perfect diamagnetism (the Meissner state) below  $T_c$  and excludes a magnetic field up to some critical field  $H_c$ , whereupon it reverts to the normal state as shown in the H-T diagram of figure 1.

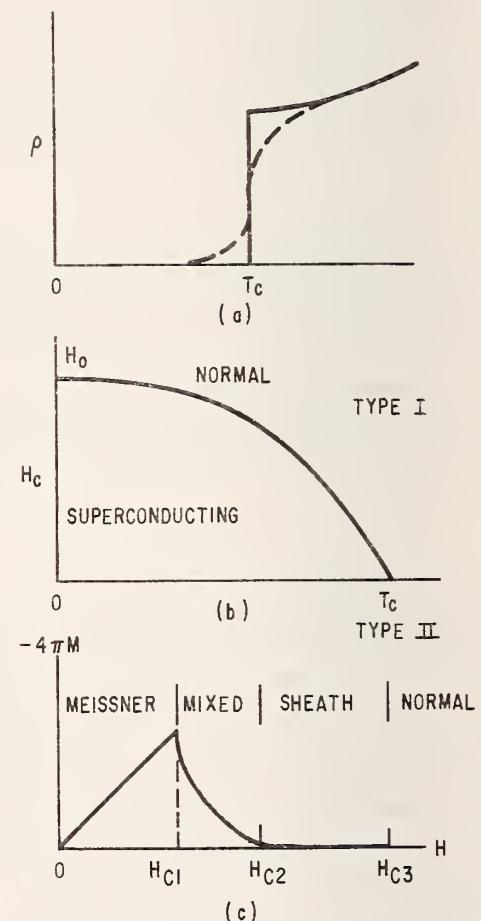


Figure 1. Physical properties of superconductors. (a) Resistivity versus temperature for a pure and perfect lattice (solid line). Impure and/or imperfect lattice (dashed line). (b) Magnetic field-temperature dependence for Type I or "soft" superconductor. (c) Schematic magnetization curve for "hard" or Type II superconductor

The discovery of the high-magnetic-field large-current-carrying capability of  $\text{Nb}_3\text{Sn}$  and other compounds and alloys has led to an extensive study of their physical properties. In brief, a high magnetic field superconductor, or Type II superconductor, passes from the perfect diamagnetic state at low magnetic fields to a mixed state and finally to a sheath state before attaining the normal resistive state of the metal. The magnetization of a typical high-field superconductor is shown in figure 1. The magnetic field values separating the four stages are given as  $H_{c1}$ ,  $H_{c2}$ , and  $H_{c3}$ . The superconductive state below  $H_{c1}$  is perfectly diamagnetic and identical to the state of most pure metals of Type I. Between  $H_{c1}$  and  $H_{c2}$  a "mixed state" is found in which magnetic flux penetrates the superconductor in a nonuniform manner. Specifically, a lattice array of supercurrent vortices is formed, the magnetic flux contained within each vortex cell being equal to the magnetic flux quantum ( $\sim 2 \times 10^{-7}$  gauss cm $^2$ ). At  $H_{c2}$  the fluxon density has become so great as to drive the interior volume of the material completely normal. Between  $H_{c2}$  and  $H_{c3}$  the superconductor has a sheath of current carrying superconductive material at its surface, and above  $H_{c3}$  the normal conducting state exists throughout the material. With careful measurement, it is possible to determine  $H_{c1}$ ,  $H_{c2}$ , and  $H_{c3}$ . Table 4 contains data on high field superconductive materials.

A more complete representation of the states present in a high field superconductor is given in figure 2 with the additional phenomenon called fluctuation superconductivity. The latter phenomenon is evidenced in several physical properties above the appropriate critical fields and critical temperatures.

High field superconductive phenomena are also related to specimen dimension and configuration. For instance, the Type I superconductor, Hg, has entirely different magnetization behavior in high magnetic fields when contained in the very fine set of filamentary tunnels in an unprocessed Vycor glass. The great majority of superconductive materials are Type II. Most, but not all, elements in very pure form are Type I.

A further complication exists in the description of superconductive materials. In some instances a transition from Type II behavior to Type I behavior occurs as temperature is increased between absolute zero and  $T_c$ .

This survey has included the parameters  $T_c$ ,  $H_c$ ,  $H_{c1}$ ,  $H_{c2}$ ,  $H_{c3}$ , and has noted the crystal structure by code or crystal system. The values of  $H_c$  are sometimes noted to be taken at a specific temperature below  $T_c$  and denoted  $T_{\text{obs}}$ .

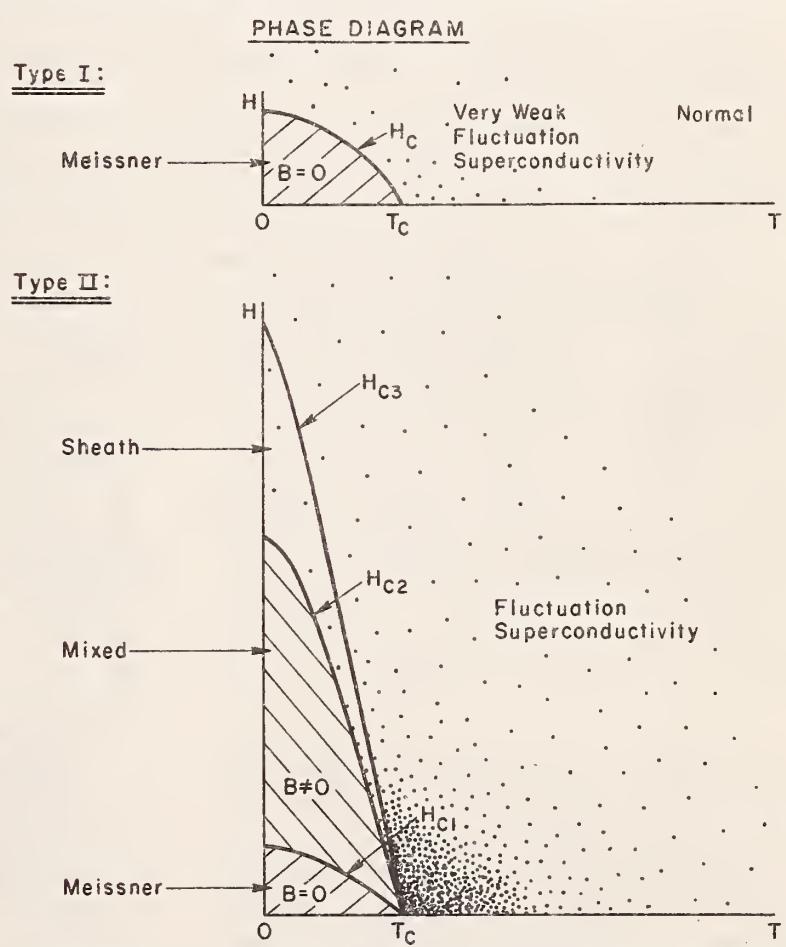


Figure 2. H-T phase diagram representation of Type I and Type II superconductors with locations for fluctuation superconductivity indicated. (R. R. Hake, personal communication and J. Applied Phys. 40, 5148 (1969). "The Thermodynamics of Type I and Type II Superconductors.")

$H_0$  is  $H_c$  extrapolated to 0 K. Methods of extrapolation are critical in the case of high-magnetic-field parameters  $H_{c1}$ ,  $H_{c2}$ , and  $H_{c3}$ .

The metallurgy, chemistry, and physics of superconductors is a complex and sometimes subtle subject. Therefore, readers are referred to the many texts and review articles listed in Reprint #84 and the "Recent Reviews" section of this report for complete and additional information. "Superconductivity" by E. A. Lynton (Metheun and Co., London; John Wiley and Co., New York) is a brief and useful introduction. For additional general information see "Superconducting Materials" by E. M. Savitskii, V. V. Baron, Yu. V. Efimov, M. I. Bychkova, and L. F. Myzenkova (Plenum Press, New York-London, 1973); an updated translation of "Metallovedenie Sverkhprovodimykh Materialov" (Nauka Press, Moscow, 1969); "The Science and Technology of Superconductivity" Vol. 1 and 2, edited by W. D. Gregory, W. N. Mathews, Jr., and E. A. Edelsack (Plenum, New York-London, 1973) and "The Effect of Metallurgical Variables on Superconducting Properties", J. D. Livingston and H. W. Schadler in Progr. Materials Sci. (G. B.), Vol. 12, No. 3, 185-274 (1964). For theoretical aspects start with "Superconductivity", Vols. 1 and 2, edited by R. D. Parks, (Marcel Dekker, New York, 1969).

#### NEW DEVELOPMENTS IN SUPERCONDUCTIVE MATERIALS

The discovery of the high probability of superconductivity in the Chevrel phases,  $M\text{Mo}_6\text{S}_8$ , where M is a metallic atom, has broadened to 51 entries in Table 2. The highest  $T_c$  reported is 14.7K for  $\text{PbMo}_6\text{S}_8$ , and even though lower than the highest  $T_c$  in A-15 compounds, the critical fields have been found to be 50% higher (see Figure 3). A modification,  $\text{PbGd}_{0.2}\text{Mo}_6\text{S}_8$ , has an  $H_{c2}$  at 0K of greater than 600kG. (See Science 196, 966-8, 1977.)

A series of ternary borides has been described of form  $(\text{RE})\text{Rh}_4\text{B}_4$  with critical temperatures in the range of 2.5 to 11.9K where (RE) denotes a rare earth element. And most exciting is the discovery that  $\text{ErRh}_4\text{B}_4$  of the series is the first single phase re-entrant superconductor which is normal to 8.7K, superconductive from 8.7 to 0.9K and ferri-magnetic below 0.9K. Careful study of this system should answer several of the scientific puzzles in relating the superconductive and magnetic states (Science 196, 966-8 (1977) and B. T. Matthias, E. Corenzwit, J. M. Vandenberg and H. E. Barz, Proc. Nat. Acad. Sci., USA 74, 1334-5 (1977)).

A tantalizing observation in the  $\text{Nb}_3\text{Ge}$  preparation series suggests further careful study. R. D. Blaughar (to be published) has observed an onset  $T_c$  of 25.6K in a single  $\text{Nb}_3\text{Ge}$  film annealed for a substantial time. Efforts to reproduce the properties have not been successful and are still underway. Blaughar believes that the sample with the 25.6 K critical temperature will be reproduced and that it is part of a distribution dependent upon subtle composition or preparation variables.

A series of studies have developed a "standard" curve of  $T_c$  decrease as a function of irradiation

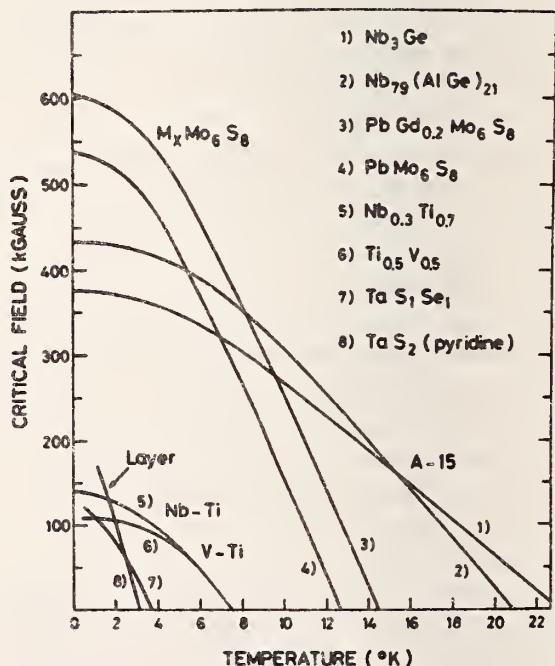


Figure 3. Critical magnetic fields versus temperature for selected superconductive materials. (From Oe. Fischer, Low Temp. Phys. - LT14. Ed. M. Krusius and M. Vuorio (Amer. Elsevier, N. Y., 1975). Vol. V, page 188).

level in the A15 compounds. In some instances, total recovery of  $T_c$  has been observed upon annealing.

Thorough investigation of  $(\text{SN})_x$  by several experimental techniques has shown it to be a three dimensional superconductive material with anisotropic properties.

A definitive correlation of the  $T_c$ 's of 28 A15 ( $\text{A}_3\text{B}$ ) compounds with the phase diagram solid solution range has been reported. Two groupings are found--those with ranges only on the A-rich side and those extending on both sides or only on the B-rich side. (F. E. Wang, to be published.)

$\text{Nb}_3\text{Ge}$  films with high critical temperatures have been found to require oxygen in their preparation or in their final composition. How the oxygen enhances the material properties has apparently not been specified (see  $\text{GeNb}_3\text{O}_x$  entries in Table 2).

A "round robin" testing for  $T_c$  of sputtered  $\text{Nb}_3\text{Ge}$  films has been reported. The midpoint of the superconductive transition was found to be the most reproducible (see R. Roy and D. A. Rogowski, Phys. Letters 57A, 60-62 (1976)).

Carlo Reale has claimed novel superconductive material results for quench condensed thin films in several papers: Vacuum 27, 3-6 (1977); J. Low Temp. Phys. 24, 289-95 (1976); Appl. Phys. Letters 27, 157-8 (1975); Thin Solid Films 28, L29-30 (1975);<sup>†</sup> Acta Physica Acad. Sci. Hung. 37, 53-60 (1974); Phys. Letters 57A, 65-6 (1976); 55A, 165 (1975)<sup>†</sup> and 51A, 353-4 (1975)<sup>†</sup>. A selection of his reported findings are listed in Table A with film thickness range and are compared to literature data as well as recent negative experimental data of N. Jacobsen, C. G. Granqvist and T. Claeson (Z. Physik B25, 265-8 (1976))<sup>‡</sup> and M. Belzons, R. Blanc and R. Payan, C.R. Acad. Sc. Paris 283B, 241-4 (1976) in reference to magnesium.

Table A. Comparison of  $T_c$  determinations for some alkali metals, alkaline earth metals and lanthanides.  
(After Jacobsen, Granqvist and Claeson)

Metal	Results by Reale (+)		$T_c$ [K]	Literature Data	
	$T_c$ [K]	Thickness [Å]		$T_c$ [K]	$T_c$ [K]
Li	2.4-1.1	100-2000			
Be	9.2-3.7	100-2000	6-9.95		
Mg	5.5	100	< 0.35	< 0.32	200,300 < 1.5
Ca	4.3	100	< 2		
Sr	3.6	100	< 2		
Cs	1.05-0.4	100-2000			
Ba	3.0	100		< 0.35	100-1000
La	9.8-6.8	100-2100	4.5		
Ce	5.8-3.0	100-2100	< 1.5	< 0.32	200-700
Pr	5.0-2.5	100-2100		< 0.33	200-1000
Nd	4.6-2.1	100-2100		< 0.33	300
Eu	3.4-1.7	100-2100			
Yb	2.9-1.4	100-2100	< 1.5	< 0.35	200-600

A new type of "superconducting domain" in a bulk insulating state has been claimed to explain several electrical and magnetic measurements in compounds such as sodium dioxycholate and sodium cholinate. Changes in properties are observed at temperatures up to 277K for the latter (see Proc. IEEE, March 1976, pp. 357-359 and Physiol. Chem. Phys. 8, 135-42 (1976)).

Intensive study of a variety of organic compounds such as (TTF)(TCNQ) and (TSeF)(TCNQ) has continued. The latter is one of the most electrically conductive materials discovered. At room temperature it has a conductivity of  $800 \text{ (ohm-cm)}^{-1}$  and a peak value at 40K. A superconductive organic material has not been claimed. (IBM Research Highlights, October, 1975) (Chemical and Engineering News July 4, 1977, pp. 14-17.)

The calibration and the standardization of techniques and temperatures for the measurement of superconductive critical temperatures has been widely accepted and continues the work of R. J. Soulen, Jr. and J. H. Colwell (J. Low Temp. Phys. 5, 325 (1971)) and J. F. Schooley and R. J. Soulen, Jr. (Proc. 12th Intern. Conf. on Low Temp. Phys. (Academic Press of Japan, Tokyo, 1971) and the XIII Inter. Congress of Refrigeration, pp. 192-198). They have carefully measured, compared and tested the reproducibility and width of the critical temperature of Pb, In, Al, Zn and Cd for thermometric fixed points as well as having looked very carefully at the equivalence of the transition temperature when measured by the three techniques: (1) Electrical resistance, (2) magnetic susceptibility and (3) heat-capacity measurements. In the case of well-annealed polycrystalline and pure (99.999%) indium they find that the midpoints of each type transition are identical to within 0.1 mK. Arrangements have been made to provide cryogenic experimenters with samples and devices through the NBS Office of Standard Reference Materials. (NBS Special Publication 260-44, "Preparation and Use of Superconductive Fixed Point Devices SRM 767." Superintendent of Documents, U. S. Government Printing Office, Washington, D. C. 20402. (Order by SD Catalog No. C13.10:260-44.) Price 75 cents.)

## METALLURGICAL AND SOLID-STATE ASPECTS OF SUPERCONDUCTIVE MATERIALS

The sensitivity of superconductive properties to the material state is most pronounced and has been used on occasion in the reverse to study and specify the detailed state of alloys. The mechanical state, the homogeneity, and the presence of impurity atoms and other electron-scattering centers are all capable of controlling the critical temperature, critical field, and the current-carrying capabilities in high magnetic fields. Well-annealed specimens usually show sharper transitions than those that are strained or inhomogeneous. This sensitivity to mechanical state underlies a general problem in the tabulation of properties of superconductive materials. The occasional divergent values of the critical temperature and of the critical fields quoted for a Type II superconductor may lie in the variation in sample preparation. Critical temperatures of materials studied early in the history of superconductivity must be evaluated in light of the probable metallurgical state of the material as well as the availability of less-pure starting elements. It has been noted that recent work has given extended consideration to the metallurgical aspects of sample preparation as well as to ingenious application of new and exotic materials preparation techniques to obtain the desired high critical temperatures and high critical magnetic fields. Figure 4 outlines the onset critical temperature as a function of the effective quenching or cooling rate for Nb<sub>3</sub>Ge alloys as research exploration continued to yield higher and higher values of T<sub>c</sub>. See the section on new developments for further comment on the Nb<sub>3</sub>Ge system.

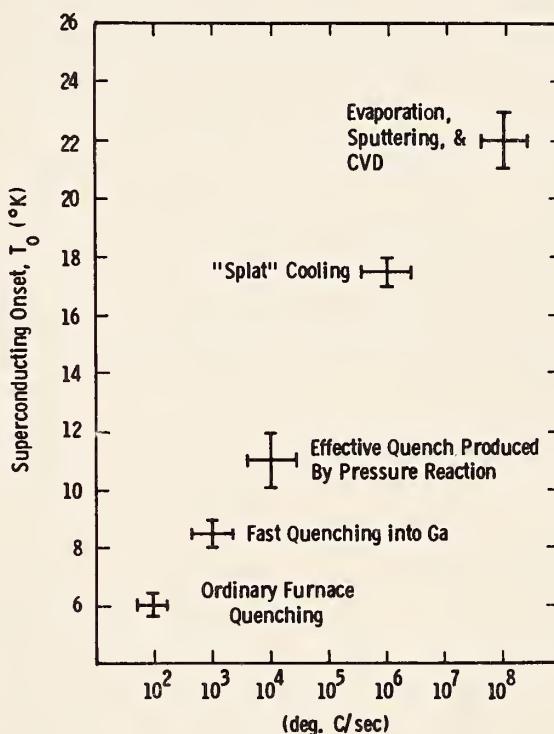


Figure 4. Onset critical temperature as function of quenching or cooling rate of various Nb<sub>3</sub>Ge preparations (From R. D. Blaughter, IEEE Trans. Magn. MAG-13, 821 (1977)).

## HOW TO USE THE DATA TABLES\*

Properties of the superconductive elements are covered in table 1(a) for bulk values, 1(b) for thin-film preparations, and 1(c) for high-pressure modifications and metastable forms prepared by the application of high pressure.

Metallic and inorganic materials including the elements are listed and referenced in table 2 except that superconductive materials with organic and related constituents are cited in table 3.

Tables 1 through 3 contain references to "HF" signifying that critical magnetic-field data  $H_{c1}$ ,  $H_{c2}$ , or  $H_{c3}$  are reported in table 4 with appropriate references to the literature.

Tables 2 through 4 list the bulk material values for alloy systems first, then results of special studies such as pressure or dispersal in porous media, and finally, thin-film data with notations of temperature of deposition and film thickness in Angstroms ( $\text{\AA}$ ).

The probable error limits are given for most of the bulk elements in table 1(a) and are derived from all the values collected in the data set. The procedure to determine error limits included the assembly of all acquired data on an element. Where possible, a selection was made of data obtained on samples with recorded high purity. If a sufficient number of values were available, the standard deviation was determined and listed. Error limits in a few instances were increased over the standard deviation if the element was known to be difficult of purification.

Tables 2-3 contain data on negative experiments in the column headed " $T_n$ ", which is the temperature in K down to which the material has been checked specifically for a superconductive transition without success. If a material has been found to be only ferrimagnetic, antiferromagnetic, or ferromagnetic it has not been included in this survey.

All compositions are denoted on an atomic basis; i.e., one atomic weight of A and one of B to form the AB composition. Exceptions are noted. Solid solutions or a range of compositions may be denoted as  $A_{1-x}B_x$  or  $A_xB_yC_{1-x-y}$ , or by the actual atomic fraction range such as  $A_{1-0.4}B_{0-0.6}$ . The critical temperature or magnetic fields may then be denoted either by a range of values or a maximum value (Max.).

A continuing point of difficulty lies in the method of selecting  $T_c$  from an experimental transition measurement whether it be the change in effective permeability, resistance, optical reflectivity, electron diffraction signal, specific heat or ultrasonic absorption. Most authors choose the midpoint of the curve (fig. 1(a)), but in the search for very high  $T_c$  materials often the "onset" temperature is chosen as the critical temperature. Some authors quote the width of the transition, and where a single alloy and single reference is given a range in  $T_c$  denotes the upper and lower limits to the transition.

Table 3 contains those special superconductive materials containing organic constituents. Most of the entries are layered compounds with an intercalated organic substance. These special materials exhibit both two- and three-dimensional superconductivity and have highly anisotropic high magnetic field properties.

In some instances a single line in a table will summarize the discoveries and measurements of two or three full research papers. It is therefore probable and reasonable for the researcher to explore the original references to obtain a full background of the abstracted data.

For problems in solders for low-temperature research, the paper by W. H. Warren, Jr. and W. G. Bader (Rev. Sci. Instruments 40, 180 (1969) is useful. Also see Meijer, H. C., Bots, G.J.C. and Coops, G. M. Proc. of Sixth Inter. Cryogenic Eng. Cong. (Paper K11) 6, 404-5 (1976).

\*The NBS Office of Standard Reference Data, as administrator of the National Standard Reference Data System, has officially adopted the use of SI units for all NSRDS publications, in accordance with NBS practice. This publication does not use SI units uniformly because contractual commitments with the author predate establishment of a firm policy on their use by NBS. Some appropriate conversion factors will be found in Tables 1 and 2. We urge that specialists and other users of data in this field accustom themselves to SI units as rapidly as possible.

SYMBOLS AND ABBREVIATIONS (RELATING TO TABLES 1 TO 4)

T <sub>n</sub>	The lowest temperature to which a material has been tested with negative results for a transition to the superconductive state.
▽	Given in front of reference number, it denotes a thin-film study.
#	After a reference number indicates electronic specific heat, Debye theta or related parameter values are given in the reference. See end of table 1(a) for general references to these data.
n, p	Denotes the number of carriers per cubic centimeter in semiconductors that exhibit a superconductive state at very low temperature.
T' <sub>c</sub> (...)	Denotes incremental changes in temperature (K) from T <sub>c</sub> of the pure metal. For example, T' <sub>c</sub> (+0.05) denotes that two or more measurements have been made by adding a small amount of alloying element to a metal to form a dilute alloy (or mixture) and in so doing T <sub>c</sub> has been raised by 0.05K. T' <sub>c</sub> (-0.03+0.14) denotes an initial decrease and then an increase to 0.14K over the pure metal.
P	Denotes pressure (quoted in kbar; may be rounded units of katm or other unit).
ppm	Parts per million.
T <sub>obs</sub>	Denotes temperature of observation of H <sub>c</sub> , H <sub>c1</sub> , H <sub>c2</sub> , and H <sub>c3</sub> .
oersted	Is equivalent to 79.57 amperes/meter.
RRR	Denotes "residual resistivity ratio" and is used only as an indicator of sample purity. In most instances it is the room temperature resistivity divided by the resistivity at 4.2K. The original reference should be consulted for details.
Å	Denotes 10 <sup>-10</sup> m or 10 <sup>-8</sup> cm or one Angstrom unit.
Max.	Indicates that the value given is the maximum value of 3 or more measured values of a variable.
Crystallographic System Abbreviations	
CUB	Cubic
TET	Tetragonal
HEX	Hexagonal
ORTHO	Orthorhombic
MONO	Monoclinic
RHOMB	Rhombohedral (sometimes described in hexagonal format)
TRI	Triclinic

The "Strukturbericht" types are described in W. B. Pearson, Handbook of Lattice Spacings and Structures of Metals (Pergamon, New York, 1958), p. 79, also Vol. II (Pergamon, New York, 1967) p. 3. A condensed set is also presented in Reprint #84 (see abstract for this report.).

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TABLE 1(a). Properties of the Superconductive Elements (See Table 2 for recent References, Crystal Structure Data, and Parameters of Non-Superconductive Elements where tested).

Element	$T_c$ (K)	$H_o$ (oersted)	$\theta_D$ (K) <sup>b</sup>	$\gamma$ (mJmol <sup>-1</sup> K <sup>-1</sup> ) <sup>b</sup>
Al	1.75±0.002	104.9±0.3	420	1.35
Am* ( $\alpha, ?$ )	0.6			
Am* ( $\beta, ?$ )	1.0			
Be	0.026			0.21
Cd	0.517±0.002	28±1	209	0.69
Ga	1.083±0.001	58.3±0.2	325	0.60
Ga ( $\beta$ )	5.9,6.2	560		
Ga ( $\gamma$ )	7	950, HF <sup>a</sup>		
Ga ( $\Delta$ )	7.85	815, HF		
Hf	0.128	12.7		2.21
Hg( $\alpha$ )	4.154±0.001	411±2	87,71.9	1.81
Hg ( $\beta$ )	3.949	339	93	1.37
In	3.408±0.001	281.5±2	109	1.672
Ir	0.1125±0.001	16±0.05	425	3.19
La ( $\alpha$ )	4.88±0.02	800±10	151	9.8
La ( $\beta$ )	6.00±0.1	1096,1600	139	11.3
Lu	0.1±0.03	350±50		
Mo	0.915±0.005	96±3	460	1.83
Nb	9.25±0.02	2060±50, HF	276	7.80
Os	0.66±0.03	70	500	2.35
Pa	1.4			
Pb	7.196±0.006	803±1	96	3.1
Re	1.697±0.006	200±5	4.5	2.35
Ru	0.49±0.015	69±2	580	2.8
Sn	3.722±0.001	305±2	195	1.78
Ta	4.47±0.04	829±6	258	6.15
Tc	7.8±0.1	1410, HF	411	6.28
Th	1.38±0.02	160±3	165	4.32
Ti	0.40±0.04	56	415	3.3
Tl	2.38±0.02	178±2	78.5	1.47
V	5.40±0.05	1408	383	9.82
W	0.0154±0.0005	1.15±0.03	383	0.90

\*J.L. Smith and R.G. Haire, Science 200, 535-6 (1978).

TABLE 1(a)(continued)

Element	$T_c$ (K)	$H_0$ (oersted)	$\theta_D$ (K) <sup>b</sup>	$\gamma$ (mJmol <sup>-1</sup> K <sup>-1</sup> ) <sup>b</sup>
Zn	0.85±0.01	54±0.3	310	0.66
Zr	0.61±0.15	47	290	2.77
Zr ( $\omega$ )	0.65, 0.95			

<sup>a</sup>HF denotes high field superconductive properties. See Table 4 for recent values.

<sup>b</sup>For a complete data set, see Phillips, N. E., Critical Reviews in Solid State Sciences 2, 467-554 (1972), "Low Temperature Heat Capacity of Metals." Also Mendelsohn, K., in Cryophysics (Interscience, New York, 1960), p. 178, Gschneidner, K. A. Jr., in Solid State Physics 16, 275-426 (1964), Parkinson, D. H., Rep. Progr. Phys. 21, 226 (1958) and Heiniger, F., Bucher, E., and Muller, J. "Low Temperature Specific Heat of Transition Metals and Alloys" Phys. Kondens. Materie 5, 243-284 (1966).

TABLE 1(b). Range of Critical Temperatures  
Observed for Superconductive  
Elements in Thin Films Condensed  
Usually at Low Temperatures (See  
Table 2 for Recent Data and  
References and Table 4 for "HF"  
Critical Magnetic Field Property  
Data)

TABLE 1(b)(continued)

Element	$T_c$ Range (K)	$H_0$ (oersted)	Element	$T_c$ Range (K)	$H_0$ (oersted)
Al	1.15~5.7	HF <sup>a</sup>	Ta	<1.7-4.51	HF
Be	5-9.75	HF	Tc	4.6-7.7	
Bi	6.17-2.6		Ti	1.3 Max	
Cd (Disordered)	0.79-0.91		Tl	2.33-2.96	
(Ordered)	0.53-0.59		V	1.8-6.02	
Ga	2.5-8.5	HF	W	<1.0-4.1	
Hg	3.87-4.5		Zn	0.77-1.70,~1.9	
In	2.2-5.6	HF			
La	3.55-6.74				
Mo	3.3-8.0				
Nb	2.0-10.1				
Pb	1.8-7.5				
Re	1.7~7				
Sn	3.5~6				

<sup>a</sup>HF denotes high magnetic field superconductive properties in Table 4.

TABLE 1(c). Elements Exhibiting Superconductivity Under or After Application of High Pressure (See Table 2 for Recent References, Table 4 for "HF" Critical Magnetic Field Properties)

Element	T <sub>c</sub> Range (K)	Pressure (kbar) <sup>b</sup>
Al	1.98-0.075	0-62
As	0.31-0.5	220-140
	0.2-0.25	~140-100
Ba II	~1-1.8	~55-85
III	1.8-5	~85-144
IV	4.5-5.4	144-190
Bi II	3.9	25-27
III	6.55-7.25	28-38
IV	7.0, 8.7-6.0	43, 43-62
V	6.7, 8.3	48-80
VI	8.55	90, 92-101
VII(?)	8.2	30
Ce ( $\alpha$ )	0.020-0.045	20-35
Ce ( $\alpha'$ )	1.9-1.3	45-125
Cs V	~1.5	>125
Ga II	6.38	>35
II'	7.5	>35 then P removed
Ge	5.35	115
La	~5.5-12.9	0-210
Lu	0.022-1.0	45-190
P	5.8	170
Pb II	3.55	160
Re II	2.3 Max.	"Plastic" compression
Sb(Prepared 120 kbar, held below 77K)	2.6-2.7	
Sb III	3.55-3.40	85-~150
Se II	6.75, 6.95	~130
Si	6.7-7.1	120-130

TABLE 1(c)(continued).

Element	T <sub>c</sub> Range(K)	Pressure(kbar) <sup>b</sup>
Sn II	5.2-4.85	125-160
III	5.30	113
Te II	2.4-5.1	38-55
III	4.1-4.2	~53-62
IV	4.72-4	63-80
( )	3.3-2.8	100-260
Tl(cubic form)	1.45	35
(hexagonal form)	1.95	35
U	2.4-0.4	10-85
Y	2.3-1.7-2.5	110-125-160
Zr (omega form, metastable)	1-1.7	60-~130

<sup>b</sup> 1 kbar = 10<sup>8</sup> newton/meter<sup>2</sup> = 0.987 katm

TABLE 2. Properties of Superconductive Materials (including those proven non-superconductive)

Note: "HF" signifies critical magnetic field data in Table IV.

Material	$T_c$ (K)	$H_o$ (oersted)	Crystal Structure	$T_n$ (K)	Refs.
Ag					2070
$\text{Ag}_{0.82}\text{Al}_{0.18}$	0.022				2147
$\text{AgBi}_{0-0.8}\text{Se}_{2}\text{Sn}_{1-0.2}$	5.68-5.68, 5.81-5.82				2411
$\text{Ag}_{0-0.4}\text{DxPd}_{1-0.6}$ (Implant)	10-14.5-4				2347
$\text{Ag}_{0.895-0.828}\text{Ga}_{0.105-0.172}$	0.0065-0.116				2070
$\text{Ag}_{0.92}\text{Ge}_{0.08}$	0.0248				2147
$\text{Ag}_{0.5}\text{Ge}_{0.5}$ (Quench condensed)	1.2				▽2365
$\text{Ag}_{0.5}\text{Ge}_{0.5}\text{Kr}_x$ (Implant)	2.5 (Quench condensed)				▽2365
$\text{Ag}_{0-0.4}\text{H}_x\text{Pd}_{1-0.6}$ (Implant)	9-15-9				2347
$\text{Ag}_{0.05}\text{H}_{0.8-0.89}\text{Pd}$	2.2-4.3				2325
$\text{Ag}_{0.1-0.34}\text{H}_{0.5-0.85}\text{Pd}$				1.4	2325
$\text{Ag}_{0.81}\text{In}_{0.19}$	0.0074				2070
AgLu			B2	0.04	2006
$\text{AgMo}_4\text{S}_5$	8.9		RHOMB		2287
$\text{Ag}_{0-0.02}\text{Nb}_{0.33}\text{Ti}_{0.66}$		HF			2262
$\text{AgS}_{0.2}\text{Se}_{1.8}\text{Sn}$	5.90-5.55(Quenched) 5.79-5.72(Plus 400C)		B1		2411
$\text{Ag}_{0.9}\text{S}_{0.2}\text{Se}_{1.8}\text{Sn}_{1.1}$	6.79-6.54		B1		2411
$\text{AgSb}_{1-0}\text{Se}_{2}\text{Sn}_{0-1}$	<1.5-5.5		B1		2411
AgSc			B2	0.04	2006
$\text{Ag}_{1.1-0.7}\text{Se}_{2}\text{Sn}_{0.9-1.3}$	4.6-6.9-6.5 (Quenched) 4.5-4.5-5.6-5.5 (Annealed) 6.2-6.5 (Anneal 500C)		B1		2411
$\text{AgSe}_2\text{Sn}$	4.71		B1		2411
$\text{Ag}_{1-0.81}\text{Se}_2\text{Sn}_{1-1.19}$	4.71-6.47 ( $n = 1.1-1.7 \times 10^{22}$ )		B1		2411
$\text{Ag}_{1-0.8}\text{Se}_{2.1-1.9}\text{Sn}_{1-1.2}$	6.96-5.4				2411
$\text{Ag}_{0.8}\text{Se}_{1.9}\text{Sn}_{1.2}$	6.96		B1		2411
$\text{Ag}_{0.8}\text{SeSn}_{1.2}$	6.75		B1		2411
AgY			B2	0.04	2006

TABLE 2 (continued)

Material	$T_c$ (K)	$H_o$ (oersted)	Crystal Structure	$T_n$ (K)	Refs.
$\text{Ag}_{0.70}\text{Zn}_{0.30}$	0.0125				2070
$\text{Ag}_{0.265}\text{Zn}_{0.735}$	0.18				2278#
$\text{Ag}_{0.205}\text{Zn}_{0.775}$	0.17				2278#
$\text{Ag}_{0.155}\text{Zn}_{0.845}$	0.090				2278#
$\text{Ag}_{0.125}\text{Zn}_{0.875}$	0.100				2278#
$\text{Ag}_{0.13-0.305}\text{Zn}_{0.87-0.695}$	0.10-0.09-0.19		HEX		2279#
$\text{Al}(150-50\text{A diam.})$	1.5-2.5				2294
$\text{Al}(100\text{A diam.})$	1.68				2064
$\text{Al}(\text{P}=0-62\text{k bar})$	1.18-0.075				2043
$\text{Al}(\text{Implants of O}_2, \text{He}, \text{H}, \text{D and Al})$					$\nabla_{2015}$
$\text{Al}(\text{Al implant})(1500\text{A}) 10\text{K}$	2.6 Max.				$\nabla_{2015}$
$\text{Al}$ (350A)	3.46				$\nabla_{2230}$
$\text{Al}$ (380-1400A)	1.42-2.37 ( $T \sim$ to grain size)		A1		$\nabla_{2270}$
$\text{Al}$ (1000A; deposited 4.2K)	1.3				$\nabla_{2160}$
$\text{Al}$ (70-450A)	2.83-2.67				$\nabla_{2199}$
$\text{Al}$ ( $\text{SiO}_2$ coating)	2.83-3.7				$\nabla_{2199}$
$\text{Al}$ (RRR $\sim$ 2000)	1.180; 1.175				$\nabla_{2387}$
$\text{Al}$ (Ar) (350A plus)	4.2-3.1				$\nabla_{2230}$
$\text{Al}_{0.04-0.14}\text{Au}_{0.96-0.86}$	0.008-0.385		CUB		2070
$\text{AlAu}_2\text{La}$			B2	0.04	2006
$\text{AlAu}_2\text{Sc}$	4.40		B2		2006
$\text{AlAu}_2\text{Y}$			B2	0.04	2006
$\text{Al}_{0.8}\text{B}_{0\sim 0.1}\text{Ge}_{0.2}\text{Nb}_3$	19-18 (As cast) 19.4-18 (900C/14 days) 17-12-18 (Rapid quench)		A15		2053
$\text{Al}_{0.1}\text{Be}_{1-0}$ (Quenched $< 6.6\text{K}$ ; 125-255A)	8.8-6.0-5.6				$\nabla_{2264}$
$\text{Al}_{0.3}\text{Be}_{0.7}$ (Quenched $< 2\text{K}$ )	Data given				$\nabla_{2307}$
$\text{Al}_{\sim 0.75}\text{C}_{\sim 0.25}$ (Implant:) 500-1000A	4.2				$\nabla_{2296}$

TABLE 2 (continued)

Material	$T_c$ (K)	$H_o$ (oersted)	Crystal Structure	$T_n$ (K)	Refs.
$\text{Al}_{0.8}\text{C}_{0-\sim 0.1}\text{Ge}_{0.2}\text{Nb}_3$	18.5-18 (As cast) 17-17.5-16.5(900°C/14 days) 17-19.3-14 (Rapid quench)		A15		2053
$\text{Al}_2\text{Ce}_{0.00626}\text{La}_{0.994}$ (Re-entrant)	1.3 ( $T_{c2} = 0.15$ )	HF			2098
$\text{Al}_2\text{Ce}_{0.0064}\text{La}_{0.9936}$ (Re-entrant)	1.1 ( $T_{c2} = 0.25$ )				2055
$\text{Al}_2\text{Ce}_{0-0.0066}\text{La}$	3.3-~1.5				2332
$\text{Al}_2\text{Ce}_{0.0066-0.009}\text{La}$ (Re-entrant)	~1.5-0.2	HF			2332
$\text{Al}_2\text{Ce}_{0-0.906}\text{La}_{0.991}$				0.3	2055
$\text{AlCe}_{0.018}\text{La}_{2.982}$				0.02	2333
$\text{AlCe}_{0-0.017}\text{La}_{3-2.983}$	6-0.8	HF			2333#
$\text{AlCr}_{0-0.015}\text{Nb}_3$	Data given		A15		2322
$\text{Al}_{0.7}\text{D}_{0.3}$ (1000A; deposited 4.2K)	5.7				▽ 2160
$\text{AlFe}_{0-0.06}\text{Nb}_3$	$T_c/T_{co} = 1-0.95$		A15		2322
$\text{Al}_{0.24}\text{Ga}_{0.05}\text{Ge}_{0.05}\text{Nb}_{0.69}$	18.35 (As cast) 19.4 (700°C/3 weeks) 20.0 (700°C/4 weeks)		A15		2305
$\text{Al}_{1-0}\text{Ga}_{0-1}\text{Ge}_{1-0}\text{Nb}_3$	20.4-6.1		A15		2305
$\text{Al}_{0.05-0.29}\text{Ga}_{0.05-0.2}\text{Nb}_{0.67-0.85}$	9.8-19		$\text{A}15, \text{Nb}_5\text{Ga}_3 + \text{D}8_b$		2004
$\text{Al}_{0.175}\text{Ga}_{0.075}\text{Nb}_{0.75}$	19.0		$\text{A}15, \text{D}8_b$		2004
$\text{Al}_{0.15}\text{Ga}_{0.05}\text{Nb}_{0.80}$	17.8		A15		2004
$\text{Al}_{0.285}\text{Ga}_{0.05}\text{Nb}_{0.665}$			$\text{D}8_b$	4.2	2004
$\text{Al}_{1-0}\text{Ga}_{0-1}\text{Nb}_3$ (co-sputtered)	16-14.5		A15		▽ 2067
$\text{Al}_{0.1-0.85}\text{Ga}_{0.9-0.15}\text{V}_3$	12.9-10		A15		▽ 2069
$\text{Al}_{0-0.08}\text{Ga}_{0.2-0.12}\text{V}_3$	15-14.1	HF			2010
$\text{Al}_{10.5}\text{Ga}_{0.1}\text{V}$	1.60-1.64				2363
$\text{Al}_{9.9}\text{Ga}_{0.1}\text{V}$	1.5-1.8				2363
$\text{Al}_{9.9}\text{Ga}_{0.1}\text{V}$	(No anneal)			1.3	2363
$\text{Al}_{10.5}\text{Ga}_{0.1}\text{V}$	(No anneal)			1.3	2363
$\text{AlGd}_{0-0.009}\text{La}_{3-2.991}$	6-0.9				2333
$\text{Al}_2\text{Gd}_{0.0038}\text{La}_{0.996}$	1.728				2057

TABLE 2 (continued)

Material	$T_c$ (K)	$H_o$ (oersted)	Crystal Structure	$T_n$ (K)	Refs.
$Al_{\sim 0.75}Ge_{\sim 0.25}$ (Implant, 500-1000A)	7.35, 6.2				▽ 2296
$Al_{1-0}Ge_{0-1}Nb_3$	18.7-20-12 (Rapid quench) 18.7-20-6.5 (As cast, annealed)				2268, 2258
$Al_{1-0.91}Ge_{0-0.09}Nb$	18.6-20-19.7		A15		2323, 2019
$Al_{0.8}Ge_{0.2}Nb_3$	19.7 (1000K/110 hrs.)				2130#
$Al_{0.8}Ge_{0.2}Nb_3$	18.5 (Arc melted powder)				2130#
$Al_{0.6}Ge_{0.4}Nb_3$	16.8 Max.(750C/ 1hr-20days)		A15		2113, 2180
$Al_{0.75}Ge_{0.25}Nb_3$ (Sputter deposited)	18.5 Max.(750C/ 1 day) 15.9 Max.(1240C/ 2 hr; 750/20 days) 16.5 Max.(Same, deposited 485C)		A15		2113
$Al_{0.81}Ge_{0.29}Nb_{4.15}$ (Sputter deposited, 200C)	18.5-7.9 (Various treatments) 14.7-15.5 (1240C/4 hr; 750C/20 days)		A15		2113
$Al_{0.84}Ge_{0.16}Nb_{2.52}$ (Sputter deposited)	16.9-17.2 (750C/5 days)				2133
$AlGeNb_3$	19.8 (Powder prep.)		A15		2259
$Al_{0.2-0.9}Ge_{0.8-0.1}Nb$ (Co-sputtered)	13-16.5-15.5		A15		▽ 2067
$Al_{0.9-0.1}Ge_{0.1-0.9}V_3$	12.5 Max.				2157
$Al_{0.1-0.85}Ge_{0.9-0.15}V_3$	4.5-9.7-11.2		A15		▽ 2069
$AlH_{\sim 2}$ (Implant; 10K; 1650A)	6.75 Max.				▽ 2015
$Al_{0.7}H_{0.3}$ (1000A; deposited 4.2K)	5.95				▽ 2160
$Al(H_2)$ (350A of Al)	4.8-4.2				▽ 2230
$Al(He)$ (Implant)	3.7 Max.				▽ 2015
$AlHf_{0-0.12}Nb_{3-2.88}$	18.6-15.2		A15		2323
$Al(In)$ (280A, 185A)	2.282, 3.178	HF			▽ 2211
$Al_{0-0.44}Ir_{0-0.40}Nb_{0.91-0.54}$	16.84- < 2				2003

TABLE 2 (continued)

Material	$T_c$ (K)	$H_c^0$ (oersted)	Crystal Structure	$T_n$ (K)	Refs.
$Al_{0.20}Ir_{0.025}Nb_{0.77}$	14.56				2003
$Al_2La$	3.273				2057
$Al_2La$	3.3	HF			2332
$Al_{1-0.92}Mg_{0-0.08}$	$T_c^1(-0.08+0.11)$				2311
$Al_{0.2-0.08}Mg_{0.8-0.2}(50-1000A)$	$\sim 4- < 0.32$				$\nabla 2192$
$Al_{0.1}Mg_{0.9}(50-1000A)$				Not Super-conductive	$\nabla 2192$
$Al_xMo$ (Implant)				1.2	2382
$AlMo_{0-0.30}Nb_{3-2.70}$	18.6-12.3		A15		2323
$Al_{0-0.6}Mo_{6.35}S_8Sn_{1.2}$	11.8-14.3	HF			2408, 2089
$Al_{0-0.03}Mo_{0.05-0.05}Ti_{0.95-0.92}$	3.197-2.7				2340#
$Al_{0-0.03}Mo_{0.05}Ti_{0.95}$ ( $\alpha'$ phase)	1-3.1-2.7				2152
$Al_{0-0.06}Mo_{0.25}Ti_{0.75}$ ( $\beta$ phase)	3.8-2.1				2152
$Al_{0-0.03}Mo_{0.1}Ti_{0.9}$ ( $\omega+\beta$ phases)	3.45-3.2				2152
$Al_{0.15-0.30}Nb_{0.85-0.70}$	15-18.8-10 17.0-11.7 (Liquid quenched)				2245, 2166
$Al_{0.235-0.29}Nb_{0.765-0.71}$	17.5-19-18.4		A15		2150
$Al_{0-0.07}Nb_{1-0.93}$			B2		2002
$Al_{0.1-0.42}Nb_{0.9-0.58}$	8.7-10-17.5-13- < 4.2				2002
$Al_{0-0.15}Nb_{1-0.85}$	9.03-5.15 (Cast) 8.8-8.1-10 (1750C/25 Hr) HF		B2		2049
$AlNb_3$	18.5				2272#, 2180, 2131, 2258
$AlNb_3$	17.43 (As cast) 18.53 (Annealed)		A15		2075
$AlNb_3$	$\approx 17.5$	HF	A15		2193
$Al_{0.21}Nb_{0.79}$	16.84		A15		2003
$Al_{0.22}Nb_{0.78}$	$\sim 15$		A15		2002
$AlNb_2$	0.74	HF	D8 <sub>b</sub>		2170, 2193 2002 1810

TABLE 2 (continued)

Material	T <sub>c</sub> (K)	H <sub>o</sub> (oersted)	Crystal Structure	T <sub>n</sub> (K)	Refs.
Al <sub>0.45-0.40</sub> Nb <sub>0.55-0.60</sub>			D8 <sub>b</sub>	1.3	1810
Al <sub>3</sub> Nb	0.64	HF	D0 <sub>22</sub>		2170, 2002
AlNb <sub>3</sub> (Sputter deposit)	15.2-17.5 (1 hr-20 days/750C)		A15		2113
AlNb <sub>2.33</sub> (Sputter deposit)	15.1-15.9 (750C/5 days)				2113
Al <sub>~0.15-0.3</sub> Nb <sub>0.85-0.7</sub> (Co-sputtered)	12.5~17		A15		▽2067
AlNb <sub>3</sub> (Neutron irradiated)	18.6- < 1.4		A15		2216, 2285, 2190, 2019
AlNb <sub>3</sub> Ni <sub>0-0.05</sub>	$\frac{T_c}{T_{co}} = 1-1.04-0.85$		A15		2322
Al <sub>0.85-0.1</sub> Nb <sub>3</sub> P <sub>0.15-0.9</sub> (Sputtered)	11.5-6.5-5				▽2067
Al <sub>1-0.90</sub> NbSe <sub>0-0.10</sub>	18.6-17.5		A15		2323
Al <sub>0.04-0.10</sub> NbSe <sub>2</sub>	5.4-1.1		HEX		2210
AlNb <sub>3</sub> Si <sub>0~0.1</sub>	17-19.1-17.5(As cast) 19.1-18.8-19(900C/14 days) 16-15-15.5(Rapid Quench) 15-13.5-12.5(Rapid Quench)		A15		2053
Al <sub>1-0.93</sub> NbSi <sub>0-0.07</sub>	18.6-18.4		A15		2323
Al <sub>0.255</sub> Nb <sub>0.73</sub> Si <sub>0.015</sub>	~16 (Liquid Quench) 18.4 (750C/162 hrs)				2179
Al <sub>1-0</sub> Nb <sub>3</sub> Si <sub>0-1</sub> (Co-sputtered)	16-14-6		A15		▽2067
Al <sub>0-0.1</sub> Nb <sub>3</sub> Sn <sub>1-0.9</sub>	17.8-18.0-17.9	HF			2374
Al <sub>x</sub> Nb <sub>3</sub> Sn <sub>1-x</sub>	~16.6	HF			2108
AlNb <sub>3-2.64</sub> Ta <sub>0-0.36</sub>	18.6-14.5		A15		2323
AlNb <sub>3-2.58</sub> Ti <sub>0-0.42</sub>	18.6-9		A15		2323
Al <sub>0-0.025</sub> Nb <sub>0.33</sub> Ti <sub>0.66</sub>	9.1-8.2	HF			2262
AlNb <sub>3-0.55</sub> V <sub>0-0.45</sub>	18.6-14		A15		2323
AlNb <sub>3-2.85</sub> W <sub>0-0.15</sub>	18.6-15.3		A15		2323
AlNb <sub>3-0.85</sub> Zr <sub>0-0.15</sub>	18.6-15.7		A15		2323
Al(0)(Implant, 10K, 1300A)	4.0 Max.				▽2015

TABLE 2 (continued)

Material	$T_c$ (K)	$H_o$ (oersted)	Crystal Structure	$T_n$ (K)	Refs.
$Al_{\sim 0.75}Si_{0.25}$ (Implant, 500-1000A)	4-8.35				2296
$Al_{0.1-0.85}Si_{0.9-0.15}V_3$	11.5-12-10.5		A15		2069
$Al_{11}V$	$\approx 1.5$				2363
$Al_{10.6}V$	1.61-1.77(Aannealed)			1.3 (Unannealed)	2363
$Al_{10}V$	1.7-1.6 0.99-1.06				2363
$Al_7V$	0.86,0.99				2363
$Al_6V_1 Al_3V$				1.3	2363
$Al_{0.25}V_{0.75}$ (Liquid quench and various treatments)				< 4.2	2245
$Al_{0-0.265}V_{1-0.735}$	5.43- < 0.5	HF	CUB		2320
$Al_{0.21-0.32}V_{0.79-0.68}$ (Co-sputtered at 530C)	8.8-9.7- < 2.5,11.7				2069
$AlV_{\sim 3}$ (Sputtered, 600-850C, 3500-12,200A in Ar, Ne Kr and Xe)	11.8 - < 1.1				2025
$AlV_{\sim 3}$ (Deposit 800C, in argon, 11,450A)	11.8-11.2		A15		2025
$As_2B_{12}$	.			2	2359#
$As_{0.99},0.96Ge_{0.01},0.04$				0.38	2330
$As_{0.04}Ge_{0.15}Te_{0.81}$	0.90-0.88	HF	RHOMB		2330
AsGeTe	0.43(750C/1 hr)				2330
$As_{0.39}Ge_{0.01}Te_{0.60}$				0.4	2330
$As_{0.04}Ge_{0.15}Te_{0.81}$ (Amorphous)				0.05	2330
$As_{0.01}Ge_{0.49}Te_{0.50}$				0.4	2330
$As_{0.005}Ge_{0.005}Te_{0.99}$				0.4	2330
$As_3La_4$	0.65		CUB		2338
$As_{0-0.3}Mo_{1-0.7}$ (Implant)	7.7- < 2				2382
$AsNb_3$	$\approx 0.31$	HF	TET		2237#
$As_{0.05}Te_{0.95}$				0.38	2330
$As_2Te_3$ (P=100 k bar, ~4000A)	4.4				2232

TABLE 2 (continued)

Material	T <sub>c</sub> (K)	H <sub>o</sub> (oersted)	Crystal Structure	T <sub>n</sub> (K)	Refs.
Au					2070
Au <sub>0.2</sub> Cu <sub>0.2</sub> Ge <sub>0.6</sub> (Deposit 12K, 3700A)	2.80- < 1.1				2263
Au <sub>0.15</sub> Cu <sub>0.10</sub> La <sub>0.75</sub>	3.795 (Liquid quench)				2241
Au <sub>1-0.90</sub> Ga <sub>0-0.10</sub>	0.008-0.260				2401#
Au <sub>0.97</sub> -0.90Ga <sub>0.03</sub> -0.10	0.0078-0.264				2070
Au <sub>2</sub> GaLa			B2	0.04	2006
Au <sub>2</sub> GaSc			B2	0.04	2006
Au <sub>2</sub> GaY			B2	0.04	2006
Au <sub>0.20</sub> Gd <sub>0-0.007</sub> La <sub>0.80-0.793</sub>	3.6- < 1 (Amorphous)				2173
Au <sub>0.975</sub> Ge <sub>0.025</sub>	0.0141				2147
Au <sub>0.057</sub> H <sub>0.7-0.75</sub> Pd				1.4	2325
Au <sub>0.94</sub> -0.90In <sub>0.06</sub> -0.10	0.0114-0.0625				2070
Au <sub>2</sub> InLa			B2	0.04	2006
Au <sub>2</sub> InSc	3.02		B2		2006
Au <sub>2</sub> InY	1.90		B2		2006
Au <sub>0.24</sub> La <sub>0.76</sub> (Liquid quench)	3.3 (Amorphous) 4.05 (Crystalline)	HF			2023
Au <sub>0.22</sub> La <sub>0.78</sub> (Liquid quench)	3.934 (Amorphous)				2241
AuLu	0.37				2006
Au <sub>0.24</sub> -0.34Mo <sub>0.76</sub> -0.66 (Implant)	2-2.7				2382
AuNb <sub>3</sub>	10.5- ~9		A15		2157
Au <sub>0.24</sub> Nb <sub>0.76</sub>	10.56		A15		2132#
Au <sub>1-0</sub> Nb <sub>2.33</sub> Pt <sub>~0-1</sub>	8.2-9.3-8.7 (Splat quenched) 9.2-10.1-8.2 (As cast) 10.7-11.5-6.7-6.3 (Annealed)		A15		2076
Au <sub>1-0</sub> Nb <sub>4</sub> Pt <sub>~0-1</sub>	8.4-9.4-5.7 (Splat quenched) 8.7-10.3-5.5 (As cast) 7.7-8.2-5 (Annealed)		A15		2076

TABLE 2 (continued)

Material	$T_c$ (K)	$H_o$ (oersted)	Crystal Structure	$T_n$ (K)	Refs.
$Au_xSb_{1-x}$ (Deposited 4.2K)	3.1 Max.				2072
AuSc	2.00		B2		2006
$Au_{0.96-0.95}Sn_{0.04-0.05}$	0.0184-0.047				2070
$AuTi_3$				0.015	2035#
$Au_{0.24}V_{0.76}$	2.97 (1100C...500C)				2132#
$AuV_3$	2.65		A15		1999#
$AuV_3$	$\sim$ 1.0		A15		1999#
$AuV_3$			A2	0.03	1999#
AuY			B2	0.04	2006
$Au_{0.80}Zn_{0.20}$	0.102				2147
$Au_{0.82}Zn_{0.18}$	0.093				2147
$AuZn(P=0-23$ K bar)	0.4-1.3-1.25		B2		2006
$B(\beta)$				2	2359#
$B(P=0-100$ K bar) ( $B_{300-600}$ Ca or Al or Si?)			CUB ( $a=23.32A$ )	0.04	2191
$B_xCr_{\sim 0.85}Sc_{2.15}$	6.4		CUB		2111
$B_4ErRh_4$	8.7(Magnetic < 0.9K)		TET		2120 2316
$B_{0.072}H_{0.55-0.75}Pd$	< 1.4-3.5				2325
$B_{0.105-0.258}H_{0.7-0.4}Pd$	< 1.4-1.5				2325
$B_2IrMo_2$	3.60-3.45		ORTHO		2041
$B_2Ir_{1.2}V_{1.8}$	1.25		ORTHO		2041
$B_2IrV_2$	1.12		ORTHO		2041
$B_4LuRh_4$	11.76-11.54		TET		2316
$B_4Lu_{0.75}Rh_{4-0.25}Th_{0.25}$	11.93-11.3		TET		2316
$B_2Mo_{1.5}Ru_{1.5}$	3.72-3.60				2041
$B_2Mo_{1.75}Ru_{1.25}$	3.70-3.48		ORTHO		2041
$B_{0.5}Mo_5S_6Sn$	12.3				2161
$B_{0.047}N_{0.950}Nb_{0.949}O_{0.003}$	14.0		B1		2036
BNb			ORTHO	1.1	2041
$B_4NdRh_4$	5.36-5.26		TET		2316
$B_2Os$	2.1-1.98		ORTHO		2041

TABLE 2 (continued)

Material	T <sub>c</sub> (K)	H <sub>o</sub> (oersted)	Crystal Structure	T <sub>n</sub> (K)	Refs.
B <sub>3</sub> Re <sub>7</sub>	3.08-2.95		HEX		2041
B <sub>4</sub> Rh <sub>4</sub> Sc <sub>0.75</sub> Th <sub>0.25</sub>	8.74-8.49				2316
B <sub>4</sub> Rh <sub>4</sub> Sm	2.51-2.45		TET		2316
B <sub>4</sub> Rh <sub>4</sub> Th	4.34-4.29		TET		2316
B <sub>4</sub> Rh <sub>4</sub> Tm	9.86-9.73		TET		2316
B <sub>4</sub> Rh <sub>4</sub> Y	11.34-11.26		TET		2316
B <sub>2</sub> Ru	1.60-1.57		ORTHO		2041
B <sub>1.1</sub> Ru			HEX	1.1	2041
B <sub>3</sub> Ru <sub>7</sub>	3.38-3.32		HEX		2041
B <sub>2</sub> RuMo <sub>2</sub>	2.57-2.48				2041
B <sub>2</sub> Ru <sub>1.5</sub> W <sub>1.5</sub>	3.28-2.83				2041
B <sub>2</sub> Ru <sub>1.25</sub> W <sub>1.75</sub>	3.38-3.18		ORTHO		2041
B <sub>2</sub> RuW <sub>2</sub>	3.42-3.32				2041
B <sub>66</sub> Y				2	2359#
B <sub>61.7</sub> Y				2	2359#
Ba <sub>0.9</sub> Bi <sub>0.25</sub> K <sub>0.1</sub> O <sub>3</sub> Pb <sub>0.75</sub>	11.73-11.32(P=0-14 kbar)				2149
BaBiO <sub>3</sub>			ORTHO	4.2	2056
BaBi <sub>0.05-0.3</sub> O <sub>3</sub> Pb <sub>0.95-0.7</sub>	~9- ~13				2056
BaBi <sub>0.2</sub> O <sub>3</sub> Pb <sub>0.8</sub>	~11				2056
Be (Deposited low temp., 60A)	8.6				▼2013
Be (Deposited low temp., 20-175A)	6.3-8.6-5.1				▼2013
Be <sub>1-0</sub> Bi <sub>0-1</sub> (Quench cond. < 5.6K, 180-700A)	9.0-4.1-6.1				▼2264
Be <sub>1-0.68</sub> Ga (Quench cond. < 5.2K, 250-620A)	8.7-6.4-8.4				▼2264
Be <sub>1-0.68</sub> Li <sub>0-0.32</sub> (Quench cond. < 6.1K, 260-410A)	8.8-1.7				▼2264
Be <sub>1-0</sub> Pb <sub>0</sub> (Quench cond. < 6.2K, 110, 450A)	9.0-5.2-7.2				▼2264
Be <sub>0.031</sub> V <sub>0.969</sub> (RRR=9.7)	4.86				2242#
Bi(III, IV, V)	6.8-7.2-7.1, 7.3-6.3 (P=30-38-47, 48-80 kbar)				2328
Bi (Deposited < 2K, 650-35A)	6-2.6				▼2307

TABLE 2 (continued)

Material	$T_c$ (K)	$H_o$ (oersted)	Crystal Structure	$T_n$ (K)	Refs.
$\text{Bi}_{1-0}\text{Ga}_{0-1}$ (Deposited < 7.3K, 580-340A)	6.1-8.4				$\nabla_{2264}$ $\nabla_{2073}$
$\text{Bi}_{0.01}\text{H}_{3.75}\text{Th}_{0.985}$	3.1		CUB		2159
$\text{Bi}_{0.22}\text{In}_{0.78}$	4.53, 5.61	HF			2243
$\text{Bi}_{0.006}\text{In}_{0.994}$ (RRR=10, 18 micron spheres)	3.4949	284.1			2240
$\text{Bi}_{0.004}\text{In}_{0.996}$ (RRR=14.6, 18 micron spheres)	3.4396	280.4			2240
$\text{Bi}_{0.0019}\text{In}_{0.9981}$ (RRR=28.2, 18 micron spheres)	3.4051	277.9			2240
$\text{Bi}_{0-0.05}\text{In}_{1-0.95}$ (Change Type I to II)	3.4-4.27	HF			2102
$\text{Bi}_{0-0.05}\text{In}_{1-0.95}$		HF			2355
$\text{Bi}_3\text{La}_4$	0.155		CUB		2338
$\text{Bi}_2\text{La}_4\text{Pb}$	2.3		CUB		2338
$\text{BiLa}_4\text{Pb}_2$	2.4		CUB		2338
$\text{Bi}_{1.5}\text{La}_4\text{Sb}_{1.5}$	0.158		CUB		2338
$\text{Bi}_{0-0.5}\text{Pb}_{1-0.5}$	7.3-7.8-8-9				2012
$\text{Bi}_{0-0.3}\text{Pb}_{1-0.7}$	7.2-8.65-7.9	HF			2110
$\text{Bi}_{0.1-0.35}\text{Pb}_{0.9-0.65}$ (~2000A)	7.65-8.95				$\nabla_{2228}$
$\text{Bi}_{0-1}\text{Pb}_{1-0}$ (Deposited < 6.1K, 800, 600A)	7.2-7.8, 6.85-7.0-6.15				$\nabla_{2264}$
$\text{Bi}_{0.05,0.2}\text{Pb}_{0.9,0.6}\text{Tl}_{0.05,0.2}$ (2000A)	7.20, 7.26				$\nabla_{2228}$
$\text{Bi}_{1-0.4}\text{Sb}_{0-0.6}$ (Deposited ~3K, < 3000A)	6-3				$\nabla_{2051}$
$\text{Bi}_{0.97-0.8}\text{Sb}_{0.03-0.2}$ (II', III, IV, V, VI)	7.2-6.3 (P=30-80 kbar)				2328
$\text{Bi}_{0.80}\text{Sb}_{0.20}$ (P=35-46, 49-63, 69-80 k bar)	6.3-6.4-6.2, 6.4-5.7, 5.7-5.3				2328
$\text{Bi}_{0.022}\text{Sn}_{0.978}$ (Whiskers)	$T_c^1(0.20)$ (At 1.5% strain)				2235
$\text{Bi}_2\text{Te}_3$ (P=2x10 <sup>19</sup> )				1.5	2085

TABLE 2 (continued)

Material	$T_c$ (K)	$H_o$ (oersted)	Crystal Structure	$T_n$ (K)	Refs.
$\text{Bi}_2\text{Te}_3(p=2 \times 10^{19})$	1.7-2.75-2.1 (I) (P=60-65-70 kbar) ~3 (IV) (P=80-100 kbar)				2085
$\text{Bi}_2\text{Te}_3(n=9 \times 10^{19})$	1.5-2.65-2.3 (I) (P=68-76-88 kbar) 2.7-2.9 (IV) (P=88-100 kbar)				2085
$\text{Bi}_2\text{Te}_3(p=1.5 \times 10^{18})$	1.5-3 (I) (P=64-76 kbar) 4.3-3.9 (II) (P=71-85 kbar) 2.85 (IV) (P=80-100 kbar)				2085
$\text{Bi}_2\text{Te}_3(n=2 \times 10^{18})$	1.5-2.2-1.75 (I) (P=75-80-90 kbar) 2.2-2.4 (IV) (P=88-100 kbar)				2085
$\text{Bi}_{0.1}\text{Tl}_{0.9}(\sim 2000\text{\AA})$	2.30				▽ 2228
$\text{Br}_{0.4}\text{NS}$	0.25-0.32				2119
$\text{C}_{1.3-1.6}\text{La}$	11.1	HF	Data given		2219#
$\text{C}_{1-x}\text{Mo}$ (Eta phase)	9.0				2094
$\text{CMo}_{0.05-0.85}\text{Nb}_{0.95-0.15}$	11.18-8.62 12.1-13.45-11.67 (1500°C/30 min. at 120 kbar)		B1		2094
$\text{C}_{0.5-2}\text{Mo}_{5}\text{S}_6$	4.14-3.5				2161
CNNb (wires)					2078
$(\text{C}+\text{N})_{0-1.6}\text{Nb}$	7.2- < 5-15-7		Data given		▽ 2321
$\text{C}_{0.14-0.27}\text{N}_{0.44-0.74}\text{Nb}$	Data given		Data given		2310
$\text{C}_{0.318}\text{N}_{0.662}\text{Nb}_{0.996}\text{O}_{0.001}$	16.4 (Considers vacancies)				2036
$\text{C}_{0-0.005}\text{N}_{-.921-0.807}\text{Nb}_{0.984-0.924}\text{O}_{0-0.23-0.094}$ 13.3-12.2 (Considers vacancies)			B1		2036
$\text{C}_{0.03-0.98}\text{N}_{0.95-0}\text{Nb}_{0-0.01}\text{O}_{0-0.01}$	5.7-16.4 (Considers vacancies)		B1		2036
$\text{C}_{0.002-0.97}\text{N}_{0.937-0.004}\text{Ta}$	7.73-10.8 (Some pressure data)		B1		2144
$\text{C}_{0.89}\text{plus}\text{Nb}$ (Implant)	3.7-11.3-4				2382
$\text{C}_{0.89}\text{Nb}$	3.7				2382
CNb (Fine powder)					2283
$\text{C}_{0.03}\text{Nb}_{0.56}\text{Rh}_{0.41}$	10.3 (1150°C/24 hrs.)		CUB		2024
$\text{C}_{0.03}\text{Rh}_{0.43}\text{Ta}_{0.54}$	6.3-10				1997
$\text{C}_{0.98}\text{Ta}$	9.46		B1		2144
$\text{C}_{1.55}\text{Th}_{0.3}\text{Y}_{0.7}$	17.1	HF	CUB		2188
$\text{C}_{0.88}\text{plus}\text{V}$ (Implant)	3.2				2382
$\text{C}_{0.66}\text{Zr}_{0.34}$	1.35, 0.93, 0.8				2082
$\text{C}_{0.365}\text{Zr}_{0.635}$	4.....0.75		B1		2082
$\text{C}_{0.39-0.495}\text{Zr}_{0.61-0.505}$			B1	0.3	2082

TABLE 2 (continued)

Material	$T_c$ (K)	$H_o$ (oersted)	Crystal Structure	$T_n$ (K)	Refs.
$C_{0.111}Zr_{0.889}$				0.3	2082
$Ca_xMoS_2$	4.0	HF			2273
Cd(99.9999)	0.503 (Single crystal)				2251
Cd(99.999)	0.52				2236
Cd(Whiskers, 4 orientations)	0.506-0.484 (Also at 0.7% strain, also at $3 \times 10^8 N/m^2$ )				2236
$Cd_{0.945}Cu_{0.055}Mn_{0-0.004}$ (Quench cond.)	1.15- < 0.070				2392
$Cd_{1-0.999}Mn_{0-0.001}$ (Quench cond.)	0.9-0.5				2392
$CdMn_{0-20}$ ppm atomic	0.5- < 0.02				2134
$Cd_{0.002}Sn_{0.998}$ (whisker)	$T'_c(0.20)$ (At 0.5% strain)				2235
Ce(RRR= $\sim$ 80)	0.020-0.045(P=20-35 kbar)		A1		2362
Ce	1.9-1.3(P=45-125 kbar)				2362
$Ce_{0.1}H_{3.75}Th_{0.9}$			CUB	1.8	2159
$Ce_{0.01}H_{3.75}Th_{0.99}$	5.6		CUB		2159
$Ce_{0-0.025}In_{1-0.975}$	4.4- < 1.3				2213
$Ce_{0.008}La_{0.992}$	4.84		Data given		2400#
$Ce_{0-0.017}La_{1-0.983}$	4.61-2.37		Data given		2400#
$Ce_{0.2}La_{0.8}Mo_6Se_8$	8.9	HF	RHOMB		2196
$Ce_{0-0.01}La_{1-0.99}Pb_{3.0}$	4.18- < 1.5				2212
$Ce_{0-0.1}La_{1-0.9}Sn_{3.0}$	6.45- < 1.5				2212 2297
$Ce_{0.0075}La_{0.80}Th_{0.20}$ (Re-entrant)	5.25- < 0.045	HF	CUB		2167
$Ce_{0.0075}La_{0.80}Th_{0.20}$	$\sim$ 1.3 (Magnetic at < 0.045K)	HF	CUB		2167
$Ce_{0.004}La_{0.80}Th_{0.20}$	3.6	HF	CUB		2167
$Ce_{0-0.007}La_{0.90}Th_{0.10}$	5.41-3.03				2400#
$Ce_{0-0.006}La_{0.75}Th_{0.25}$	4.82-1.45				2400#
$Ce_{0.004}La_{0.55}Th_{0.45}$	3.85-1.45				2400#
$Ce_{0-0.003}La_{0.35}Th_{0.65}$	2.48-1.26				2400#
$Ce_{0-0.005}La_{0.2}Th_{0.80}$	1.83-1.00				2400#

TABLE 2 (continued)

Material	$T_c$ (K)	$H_o$ (oersted)	Crystal Structure	$T_n$ (K)	Refs.
$Ce_x La_{3-x} Y$		HF			2360
$Ce_2 Mo_6 S_8$				0.6	2161
$Ce Mo_6 S_8$			HEX	1.1	2050
$Ce_{0-0.06} Pb_{1-0.94}$	6.7- < 1.3				2213
$Ce_{1-0.6} Pr_{0-0.4} Ru_2$	6.20-6.55- < 1.5		C15		2292#
$Ce Ru_2$	6.28	HF	C15		2096
$Ce Ru_2$	6.20		C15		2292#
$Ce_{0-0.10} Sc_{0.2} Th_{0.8}$	1.75-0.07				2334
$Ce_{0-0.09} Th_{1-0.91}$	1.36-0.05				2334
$Ce_{0.007} Th_{0.993}$	1.09				2400#
$Ce_{0-0.04} Th_{0.8} Y_{0.2}$	1.65-0.07				2334
$Ce_{0-0.015} Th_{0.65} Y_{0.35}$	1.45-0.06				2334
$Ce_{0-0.002} Th_{0.44} Y_{0.56}$	0.65-0.11				2334
$Ce_{0-0.105} Th_{0.9} Zr_{0.1}$	1.93-0.2				2334
$Co_{0.075} NbSe_2$	4.5	HF			2225
$Co_{0-0.09} NbSe_2$	7-1-4.2- < 1		HEX		2210
$Co_{0-0.07} Nb_3 Sn$	$T_c/T_{co} = 1-0.98$		A15		2322
$Co_{0-0.059} Tc_{1-0.941}$	7.85-5.98				2337
$Co_{0-0.02} Ti_{1-0.98}$					2256
Cr (Evap. films on carbon)			A15	0.5	▼2205
$Cr_{0-3} GaV_{3-0}$	13.5-5.5		A15		2011
$Cr_{0-0.09} Nb_{1-0.91}$ (Weight fractions)	9.2-5.4-9.4				2052
$Cr_x Nb_3 Sn$	$T_c' (-1.6-0.9)$				2052
$Cr_{0-0.044} Tc_{1-0.956}$	7.85-6.60				2337
$Cr_{0-0.04} Ti_{1-0.96}$					2256
$Cs_{0.1} F_{0.1} O_{2.9} W$	4.87-4.94	HF	HEX		2046
$Cs_{0.3} MoS_2$	6.9	HF			2273
$Cs_2 Mo_6 S_8$				0.6	2161
Cu					2070
$Cu_{0.86-0.81} Ga_{0.14-0.19}$	0.0074-0.048				2070

TABLE 2 (continued)

Material	$T_c$ (K)	$H_0$ (oersted)	Crystal Structure	$T_n$ (K)	Refs.
$\text{Cu}_{0.036}\text{Ga}_{0.25}\text{Nb}_{0.71}$	6-8 (Liquid quenched)				2245
$\text{Cu}_{0.20}\text{Ga}_{0.18}\text{V}_{0.62}$ (Liquid quenched)				4.2	2245
$\text{Cu}_{0.90}\text{Ge}_{0.10}$	0.0177		CUB		2147
$\text{Cu}_{0.3-0.7}\text{Ge}$ (Implant, $\sim 2500\text{\AA}$ )	1.8-3.2-1.9				$\nabla_{2365}$
$\text{Cu}_{0.26}\text{Ge}_{0.74}\text{Kr}_x$ (Implant, $\sim 2500\text{\AA}$ )	1.4-3.3				$\nabla_{2365}$
$\text{Cu}_{0.158-0.359}\text{H}_{0.85-0.55}\text{Pd}$	< 1.4-6.3				2325
$\text{Cu}_{0.081}\text{H}_{0.65-0.85}\text{Pd}$	3-8.7				2325
$\text{Cu}_x\text{Kr}_y\text{Te}_{1-x}$ (Implant)(Quench condensed)				0.37	$\nabla_{2365}$
$\text{CuLu}$			B2	0.04	2006
$\text{Cu}_{0.1}\text{Mn}_{0-0.003}\text{Pb}_{0.9-0.897}$ (Deposited < 3K, $\sim 500\text{\AA}$ )	6.5- < 0.3				$\nabla_{2364}$
$\text{Cu}_{1.7}\text{Mo}_3\text{S}_4$ ( $P=0-22$ kbar)	4.5-6.2-7				2128
$\text{Cu}_{1.2}\text{Mo}_3\text{S}_4$ ( $P=0-22$ kbar)	10.6-11.5-10.4				2128
$\text{Cu}_{1-1.9}\text{Mo}_3\text{S}_4$	10.9-10.5, 6.5-5.8, 4.6-4.1				2128
$\text{Cu}_2\text{Mo}_6\text{S}_8$	10.4	HF	RHOMB		2408
$\text{CuMo}_3\text{S}_4$	10.6, 10.4	HF	RHOMB		2408
$\text{Cu}_{0.7}\text{Mo}_3\text{Se}_4$	5.8, 5.9	HF			2408 2287
$\text{Cu}_{1.3}\text{Mo}_3\text{Se}_4$	4.6		RHOMB		2408
$\text{Cu}_{0.40-0.56}\text{Nb}_{0.35-0.19}\text{Sn}_{\sim 0.25}$ (Deposited 900C, 3000-10,000A)	17.5-18.1				$\nabla_{2265}$
$\text{Cu}_{0-0.03}\text{Nb}_{0.33}\text{Ti}_{0.66}$	9.3-8.8-9.2	HF			2262
$\text{Cu}_{0.97-0.84}\text{Pb}_{0.03-0.16}$ (Weight Fraction)	7.2-0.3				2157
$\text{CuRh}_2\text{S}_4$	3.81, 4.70, 4.76, 4.7-5.8, 3.8-4.4 ( $P=0-22$ kbar)		H1 <sub>1</sub>		2148
$\text{CuRh}_2\text{Se}_4$	3.38-3.7( $P=0-22$ kbar)		H1 <sub>1</sub>		2148
$\text{Cu}_{0.2-0.8}\text{Sb}_{0.8-0.2}$ (Deposited 4.2K, 600-1700A)	1.5-2.5-1.4				$\nabla_{2072}$
$\text{CuSc}$			B2	0.04	2006

TABLE 2 (continued)

Material	$T_c$ (K)	$H_o$ (oersted)	Crystal Structure	$T_n$ (K)	Refs.
$\text{Cu}_{0.905}\text{Si}_{0.095}$	0.0129		CUB		2147
$\text{Cu}_{0.90}\text{Si}_{0.10}$	0.0206		CUB		2147
$\text{Cu}_{15}\text{Si}_4$			CUB	1.5	2155
$\text{Cu}_{0.38}\text{Si}_{0.62}\text{Kr}_x$ (Implant, quench cond.)	1.02				▽ 2365
$\text{Cu}_{0.103-0.182}\text{Sn}_{0.90-0.82}$ (590-1700A)	6.29-6.57				▽ 2077
CuY	0.47		B2		2006
$\text{D}_{0-1}\text{HfV}_2$	9.7-3.4	HF			2122
$\text{D}_{0-1}\text{HfV}_2$	9.7-3.3		C15		2339
$\text{D}_{0.5}\text{HfV}_2$	5.8	HF	C15		2339
$\text{D}_{0.97-0.72}\text{Pd}$	8.2-1.3				2229
$\text{D}_{0.87-0.91}\text{Pd}$	3.8-3.5-5.4				2324#
$\text{D}_x\text{Pd}_{1-0.85}\text{Rh}_{0-0.15}$ (Implant)	10-3.5				2347
$\text{D}_{15}\text{Th}_4$	8.42		CUB		2155
$\text{D}_{15}\text{Th}_4$	8.00				2239#
$\text{D}_{15}\text{Th}_4$	7.9				2353
$\text{Dy}_x\text{LaSn}_3$	$T_c^*(-)$				2297
$\text{Dy}_2\text{Mo}_6\text{S}_8$	2.1				2161
$\text{Dy}_{1.2}\text{Mo}_6\text{Se}_8$	5.77-5.30		HEX		2050
$\text{Er}_x\text{LaSn}_3$	$T_c^*(-)$				2297
$\text{Er}_2\text{Mo}_6\text{S}_8$	2.19				2161
$\text{Er}_{1.2}\text{Mo}_6\text{Se}_8$	6.17-5.70, 1.9		HEX		2050
$\text{Eu}_{0-0.007}\text{La}_{1-0.993}$	5.12-3.5		HEX		2127
$\text{Eu}_{0-0.012}\text{La}_{1-0.987}$	4.7- <0.6 (Ferro- magnetic <~0.8K)				2168
$\text{Eu}_{0.2}\text{La}_{0.8}\text{Mo}_6\text{Se}_8$	10.7-11.4	HF	RHOMB		2196
$\text{EuMo}_6\text{S}_8$			RHOMB	1.1	2008
$\text{Eu}_{0.67}\text{Mo}_6\text{S}_8\text{Sn}_{0.33}$	8		RHOMB		2008
$\text{Eu}_{0.5}\text{Mo}_6\text{S}_8\text{Sn}_{0.5}$	13.0				2121
$\text{Eu}_{0.33}\text{Mo}_6\text{S}_8\text{Sn}_{0.67}$	10.6		RHOMB		2008
$\text{Eu}_{0.1-0.8}\text{Mo}_{6.35}\text{S}_8\text{Sn}_{1.1-0.24}$	11.5	HF			2408
$\text{Eu}_{1.2}\text{Mo}_6\text{Se}_8$			HEX	1.1	2050
$\text{EuSm}_x\text{Sn}_3$	$T_c^*(-)$				2297

TABLE 2 (continued)

Material	$T_c$ (K)	$H_o$ (oersted)	Crystal Structure	$T_n$ (K)	Refs.
$\text{Fe}_{0-0.8}\text{GaV}_{3-2.2}$	13.5-2		A15		2011
$\text{Fe}_{0.3}\text{HfV}_{1.7}$	5	HF	C14		2081
$\text{Fe}_{0.15}\text{HfV}_{1.85}$	9.5	HF	C14		2081
$\text{Fe}_{0-0.3}\text{HfV}_{2-1.7}$	9.3-5				2081
$\text{Fe}_{0-0.07}\text{Nb}_{0.72-0.81}\text{Pt}_{0.28-0.19}$	8.56- < 0.5		CUB		2398
$\text{Fe}_{0-0.05}\text{Nb}_{0.76}\text{Pt}_{0.24-0.19}$	8.56-1.80(Disordered) 10.10-1.40(Ordered)	HF			2398
$\text{Fe}_{0-0.04}\text{Nb}_{0.76}\text{Pt}_{0.24-0.19}$		HF			2398
$\text{Fe}_{0-0.0125}\text{NbSe}_2$	7- < 1		HEX		2210
$\text{Fe}_{0.05}\text{NbSe}_2$				~1.5	2042
$\text{Fe}_{0.034}\text{Nb}_3\text{Sn}$	17	HF	A15		2322
$\text{Fe}_{0.017}\text{Nb}_3\text{Sn}$	17.5	HF	A15		2322
$\text{Fe}_{0-0.07}\text{Nb}_3\text{Sn}$	$T_c/T_{co}=1-0.96-0.91$		A15		2322
$\text{Fe}_{0.05}\text{S}_2\text{Ta}_{0.95}$	3.2-2.7	HF			2042
$\text{Fe}_{0-0.10}\text{S}_2\text{Ta}$	0.8-3.3- < 1.3	HF			2225
$\text{Fe}_{0-0.06}\text{SiV}_3$	$T_c/T_{co}=1-0.88$		A15		2322
$\text{Fe}_{0-0.037}\text{Tc}_{1-0.963}$	7.85-4.9				2337
$\text{Fe}_{0.025}\text{Ti}_{0.975}$	3.1 <sub>5</sub> -3.6 <sub>5</sub>				2256
$\text{Fe}_{0.98}\text{U}_6$ (Neutron irradiation)	3.92- < 2.08				2300
$\text{Fe}_{0.3}\text{V}_{1.7}\text{Zr}$	4.4	HF	C15		2081
$\text{Fe}_{0-0.3}\text{V}_{2-1.7}\text{Zr}$	8.8-4.2				2081
Ga (Alpha)		58.3			2022
Ga (Deposited < 2K, 400-35A)	8.3-4.2				▽2307
$\text{Ga}_{0-1}\text{Ge}_{1-0}\text{Nb}_3$ (Co-sputtered)	16-13-14.5		A15		▽2067
$\text{GaHf}_{0.015}\text{V}_{0.985}$					2254
$\text{Ga}_{0.05-0.345}\text{Ir}_{0.02-0.15}\text{Nb}_{0.625-0.835}$	16- < 4.2				2158
$\text{Ga}_x\text{Ir}_y\text{Nb}_{0.625-0.80}$	.		D8 <sub>b</sub>	4.2	2158
$\text{GaMn}_{0-1.2}\text{V}_{3-1.8}$	13.5-2		A15		2011
$\text{Ga}_{0.5}\text{Mo}_5\text{S}_6\text{Sn}$		HF			2089
$\text{Ga}_{0.5}\text{Mo}_5\text{S}_6\text{Sn}$ (P=0-100 kbar)	13.5-4	HF			2317

TABLE 2 (continued)

Material	$T_c$ (K)	$H_o$ (oersted)	Crystal Structure	$T_n$ (K)	Refs.
$\text{Ga}_{0.5}\text{Mo}_5\text{S}_6\text{Sn}$	14.2		Data given		2307
$\text{GaNb}_3$	20.7		A15		2125
$\text{Ga}_{0.20-0.25}\text{Nb}_{0.80-0.75}$	7-20.7(650C/1 mon.) 7-18(Argon quenched)				2125 2166
$\text{GaNb}_3$	16.0		A15		2158 2180 2295
$\text{GaNb}_3$ (Neutron irradiation)					2190
$\text{Ga}_{0.16-0.35}\text{Nb}_{0.84-0.65}$	10.4-15.9-14.1(As cast) 6.0-14.8-7.8(Liquid quenched)				2245
$\text{GaNb}$	17.3 from 16.3(Laser beam quenched)				2106
$\text{GaNb}_3$	16.8				2299
$\text{Ga}_4\text{Nb}_5$ (With Ir <sub>0.005</sub> )				4.2	2158
$\text{Ga}_{0.08-0.35}\text{Nb}_{0.92-0.65}$ (Deposited 50C-750C)	17.3-5		A15		▽2370
$\text{Ga}_{\sim 0.23-0.35}\text{Nb}_{0.77-0.65}$ (Sputtered)	~13-~16-15		A15		▽2067
$\text{Ga}_{0.85-0.1}\text{Nb}_3\text{P}_{0.15-0.9}$	12-5.5(Co-sputtered)				▽2067
$\text{Ga}_{1-0}\text{Nb}_3\text{Si}_{0-1}$ (Co-sputtered)	13.5-6		A15		▽2067
$\text{Ga}_{0.01-0.04}\text{Nb}_{0.73-0.82}\text{Sn}_{0.26-0.14}$	17.8-18.1-18.0	HF			2374
$\text{Ga}_{0-1}\text{Pb}_{1-0}$ (Deposited <7K, 750-575A)	7.2-6.8-8.4				▽2264
$\text{Ga}_{0.40}\text{Re}_{0.60}$	2.8		HEX		2207
$\text{Ga}_{0.028}\text{Re}_{0.972}$	3.02		HEX		2207
$\text{Ga}_{0.205}\text{Re}_{0.795}$	2.655		HEX		2207
$\text{Ga}_{0.20}\text{Re}_{0.80}$	2.7		HEX		2207
$\text{Ga}_{0.16}\text{Re}_{0.84}$	2.9		HEX		2207
$\text{Ga}_{\sim 0.05}\text{Re}_{0.95}$	2.9		HEX		2207
$\text{Ga}_{0.5}\text{Sn}_{0.5}\text{V}_3$	5.6				2272#
$\text{GaV}_3$	14.3				2272#
$\text{GaV}_3$	14.02-14.82				2254
$\text{GaV}_3$	15.1				2138#
$\text{GaV}_3$	13.8, 13.5				2138#
$\text{GaV}_3$	15.85, 13.6		A15		2125

TABLE 2 (continued)

Material	$T_c$ (K)	$H_o$ (oersted)	Crystal Structure	$T_n$ (K)	Refs.
$Ga_{0.248}V_{0.752}$	15.7-14.3(0.95-0.84)	Order from	A15		2343
$GaV_3$ (Irradiation)		HF			2381
$Ga_{0.205-0.318}V_{0.795-0.682}$	9.53-15.26-5.61 (1400C/4 hrs.)		A15		2280
$Ga_{0.219-0.282}V_{0.781-0.718}$	13.25-14.56-9.69 (Above plus 1150C/ 7 hrs.)		A15		2280
$Ga_{0.15-0.36}V_{0.85-0.64}$	8.0-14.8-7.0(As cast) <4.2-<13.9- <4.2 (Liquid quench)				2245
$Ga_{0-0.12}V_{1-0.88}$	5.1-1.6		CUB		2266
$GaV_{0.97}Zr_{0.03}$					2254
$Gd_{0-0.005}La_{1-0.995}Pb_{3.0}$	4.18- $\gtrsim$ 4.2				2212
$Gd_xLaSn_3$	$T_c'$ (-)				2297
$Gd_{0-0.055}La_{1-0.945}Sn_3$	6.43, 6.39-4.79				2358
$Gd_{0.01-0.055}La_{0.99-0.945}Sn_3$ (P=0-18, 19 kbar)	$T_c'$ (-0.015, -0.075, -0.21)				2358
$Gd_{0.4}Mo_{6.35}Pb_{0.6}S_8$	4.9	HF	RHOMB		2408
$Gd_{0.6}Mo_{6.35}Pb_{0.4}S_8$	3.0	HF	RHOMB		2408
$Gd_{0-0.6}Mo_{6.35}Pb_{1-0.4}S_8$	12-14-2.8		RHOMB		2408
$Gd_2Mo_6S_8$	2.2				2161
$Gd_{0-0.6}Mo_{6.35}S_8Sn_{1.2-0.6}$	10.3-12.5-6.7		RHOMB		2408
$Gd_{0.6}Mo_{6.35}S_8Sn_{0.6}$	6.7	HF	RHOMB		2408
$Gd_{1.2}Mo_6Se_8$	5.59-5.24		HEX		2050
$Gd_{1.2}Mo_6Se_8$	5.6		RHOMB		2287
$Gd_{0.00125-0.09}Nb_{0.999-0.91}$ (Implant, 400A)	$T_c'$ (-3.8, 2, 1.3)				▽2233
$Gd_{0-0.25}Nb_{\sim 0.5}Sn_{0.5-0.25}$ (Deposited 900C, 3000-10,000A)	18-16.5-18-15, 16-14.5				▽2265
$Gd_{0-0.11}Ru_2Th_{1-0.89}$	3.3-3.4-2.3				2288
$Gd_{0.0015}Th$	0.9	85			2336
$GeMo_{0.09-0.39}Nb_{2.91-2.61}$ (Deposited 700-900C)	18-12-13-11				▽2282
$GeNb_{2.6}$ (Deposited 720C, ~2000A)	23.2-21.9		A15		▽2214

TABLE 2 (continued)

Material	$T_c$ (K)	$H_o$ (oersted)	Crystal Structure	$T_n$ (K)	Refs.
GeNb <sub>3</sub> (Deposited ~975C, ~4000A)	23.0-20.85		A15		▽2184 ▽2380 ▽2118 ▽2221 ▽2117 ▽2306 ▽2115 ▽2180 ▽2284 2166
GeNb <sub>5.52-1.96</sub> (Deposited 720-800C, 2000-3500A)	9.6-23.2-12.8-19.6				▽2214
Ge <sub>0.1-0.17</sub> Nb <sub>0.9-0.83</sub> (50-4000A)	~9-22		A15		▽2112
Ge <sub>0.16-0.3</sub> Nb <sub>0.84-0.7</sub> (On Nb <sub>3</sub> Ir films)	8-21.5-18.5		A15		▽2410
GeNb <sub>3</sub> (Co-sputtered films)	23- < 1.4		A15		▽2395 ▽2309 ▽2060 ▽2067 ▽2017 ▽2290 ▽2284 ▽2372 ▽2007 ▽2367
GeNb <sub>3</sub> ("Round Robin," Sputtered, Al <sub>2</sub> O <sub>3</sub> , ~930C)	22.7-17.7 19.7-18.4				▽2194 ▽2376
GeNb <sub>3</sub> (Irradiated, helium ions) (Neutrons)	22-3.5 20.6- < 1.5 (Recovers 900C)		A15		▽2372 ▽2044 ▽2060 ▽2397 ▽2190
GeNb <sub>3</sub> (Chem. vapor. deposition 750-900-1000C)	21.7, 21.2	HF	A15		2341 2018 2397 2260# 2367
GeNb <sub>3</sub> (P of 70-90 kbar, 2000C, 15-30 sec.)	22.2-19.7		A15		2315
Ge <sub>0.16-0.29</sub> Nb <sub>0.84-0.71</sub>	5.7-6.9-5.8-6.0-5.9(As cast) 5.3-5.7-6.1(Liquid quenched)				2245
GeNb <sub>3</sub> (Laser heated)	17.3 from ~14				2106
GeNb <sub>3</sub> (Granular)	10.3-7.5	HF			▽2345

TABLE 2 (continued)

Material	$T_c$ (K)	$H_0$ (oersted)	Crystal Structure	$T_n$ (K)	Refs.
GeNb <sub>3</sub> (Amorphous, RF sputtered)	3.342				2241
Ge <sub>2</sub> Nb				2.5	2115
GeNb <sub>3</sub> O <sub>x</sub> (Deposited 950-1050C)	20.5-19.5		A15		▽2368
Ge <sub>1-x</sub> Nb <sub>3</sub> O <sub>x</sub> (RRR=1.1-2.6)	21.5				▽2153
GeNbO <sub>x</sub> (Low oxygen)	10-13				2182
GeNb <sub>3</sub> (O <sub>2</sub> C1)(Deposited 875-600C)	21.5				▽2369
GeNb(Plus 0.05 O,C,N)(Implant 2000-4000A)	15-21.6				▽2060
GeNb <sub>3</sub> O <sub>x</sub> (Various O <sub>2</sub> pressures)	15-21-20				2182
Ge <sub>0.85-0.9</sub> Nb <sub>3</sub> P <sub>0.15-0.9</sub> (Co-sputtered films)	6-5-5.8-4.5				▽2067
Ge <sub>1-0</sub> Nb <sub>3</sub> Si <sub>0-1</sub> (Co-sputtered films)	16.5-12.5-11.5-6				▽2067
Ge <sub>0-0.02</sub> Nb <sub>0.33</sub> Ti <sub>0.66</sub>	8.9-8.2	HF			2262
Ge <sub>0.04,0.01</sub> Sb <sub>0.96,0.99</sub>				0.38	2330
Ge <sub>0.45</sub> Te <sub>0.55</sub>	0.51	HF			2330
Ge <sub>0.05</sub> Te <sub>0.95</sub>	0.40	HF			2330
Ge <sub>0.01</sub> Te <sub>0.99</sub>	0.41(850C/2 hr. slow cool)	HF			2330
Ge <sub>0.55</sub> Te <sub>0.45</sub>			RHOMB	0.38	2330
Ge <sub>0.01</sub> Te <sub>0.99</sub>	(Water quench)			0.45	2330
Ge <sub>0.001</sub> Te <sub>0.999</sub>				0.4,0.45	2330
Ge <sub>0.20-0.30</sub> V <sub>0.80-0.70</sub>	5.8-6.1-6.0 6.0-6.5-5.4-5.9(Liquid quench)				2245
GeV <sub>~3</sub> (Sputtered on hot surface, ~2500-4000A)	7-6				▽2221
GeV <sub>3</sub> (Irradiated, helium ions)	7-1.0				▽2372 ▽2118 ▽2221
H <sub>0-1.6</sub> HfV <sub>2</sub>	9.7-22	HF	C15		2122 2339
H <sub>15</sub> La <sub>0.048</sub> Th <sub>3.952</sub>	5.9		CUB		2155
H <sub>3.75</sub> La <sub>0.01</sub> Th <sub>0.99</sub>	5.2		CUB		2159
H <sub>3.7-3.0</sub> La <sub>0.1-0.99</sub> Th <sub>0.9-0.01</sub>				1.8	2159
H <sub>15</sub> Lu <sub>0.048</sub> Th <sub>3.952</sub>	6.2		CUB		2155
H <sub>0.51</sub> Mo <sub>0.1</sub> Nb <sub>0.765</sub> Pd <sub>0.135</sub>	5.56-4.90				2257

TABLE 2 (continued)

Material	$T_c$ (K)	$H_o$ (oersted)	Crystal Structure	$T_n$ (K)	Refs.
$H_{0-0.46}Mo_{0-0.1}Nb_{0.765-0.61}Pd_{0.15-0.24}$	5.46- < 1.2		Data given		2257
$H_2Nb$				1.2	2156
$H_{0.39}Nb_{0.8}Pd_{0.2}$	2.7-2.5		CUB		2071
$H_{0-0.74}Nb_{0.80}Pd_{0.20}$	1.52- < 1.3-4.07				2257
$H_{0.12-0.75}Nb_{0.85-0.65}Pd_{0.15-0.35}$	4.66- < 1.3				2257
$H_{0.47}Nb_{0.72}Pd_{0.18}W_{0.1}$	3.99-2.54				2257
$H_{0.10}Nb_{0.8}Rh_{0.2}$	5.96-5.64		B2		2071
$H_{0.51}Nb_{0.80}Ru_{0.20}$	5.52-5.36-5.21		CUB		2061
$H_{0.35}Nb_{0.75}Ru_{0.25}$	4.97-4.78-4.64				2061
$H_{0.21}Nb_{0.67}Ru_{0.33}$	$\approx$ 2.0				2061
$H_{0.11}Nb_{0.80}Ru_{0.20}$				0.9	2061
$H_xNb_3Sn$			A15		2180
$H_xNi_{0.07}Pd_{0.93}$	1.7				2347
HPd	9.62	HF			2349
$H_{1-0.933}Pd$	9.62-5.5	HF			2349
$H_{0.99-0.82}Pd$	7.3-1.3				2229
$H_{0.78-0.96}Pd$	< 3.2-6.2				2080#
$H_{\sim 0.82-0.88}Pd$	1.7-3.1 1.43-2.43(Calorimetric)				2034#
$H_{0.65}Pd$				1.8	2033
$H_{0.225}Pd$				1.8	2033
$H_{0.88-0.94}Pd(\sim 2000A)$	2-6.8				$\nabla^{2350}$ $\nabla^{2058}$ $\nabla^{2198}$ $\nabla^{2348}$
$H_xPd_{0.8}Pt_{0.2}$ (Implant)	9				2347
$H_xPd_{1-0.4}Pt_{0.06}$ (Implant)	8.7-9- < 1				2347
$H_{0.72-0.82}PdRh_{0.06}$	2.5-4.2				2304#
$H_xPd_{1-0.85}Rh_{0-0.15}$ (Implant)	9-2.5				2347
$H_4Pd_5Th_3$				1.8	2033
$H_4PdTh$				1.8	2033
$H_6PdTh_2$				1.8	2033
$H_{15}Sc_{0.048}Th_{3.952}$	6.4		CUB		2155

TABLE 2 (continued)

Material	T <sub>c</sub> (K)	H <sub>o</sub> (oersted)	Crystal Structure	T <sub>n</sub> (K)	Refs.
HTa				1.2	2156
H <sub>15</sub> Th <sub>4</sub>	8.5, 7.97, 7.9, 7.5				2156 2353# 2239# 2159
H <sub>15</sub> Th <sub>4</sub>	8.8, 7.5		(Two Modifications)		2155
H <sub>15</sub> Th <sub>4</sub>				1.8	2033
H <sub>2</sub> Th				1.2	2033 2156
H <sub>15</sub> Th <sub>0.048</sub> Y <sub>3.952</sub>	7.25		CUB		2155
H <sub>3.75</sub> Th <sub>0.99</sub> Y <sub>0.01</sub>	3.5		CUB		2159
H <sub>3.7</sub> Th <sub>0.95</sub> Y <sub>0.05</sub>			CUB	1.8	2159
H <sub>15</sub> Th <sub>3.84</sub> Zr <sub>0.16</sub>	6.6		CUB		2155
H <sub>3.75</sub> Th <sub>0.99</sub> Zr <sub>0.01</sub>	4.9		CUB		2159
H <sub>7</sub> Th <sub>2</sub> Zr <sub>2</sub>				1.2	2156
H <sub>3.5,3.0</sub> Th <sub>0.9,0.5</sub> Zr <sub>0.1,0.5</sub>			CUB	1.8	2159
H <sub>2</sub> V				1.2	2156
Hf	0.128	12.7			1996#
Hf <sub>0.65</sub> Nb <sub>0.35</sub>	6.5-7.5 6.5-6.4				2286
Hf <sub>0.063-0.657</sub> Nb <sub>0.94-0.34</sub>	9.76-9.81-6.18				2074#
Hf <sub>0.26</sub> Nb <sub>0.74</sub>	9.3		HF		2222#
Hf <sub>0-0.05</sub> Nb <sub>1-0.95</sub> (Weight fractions)	9.2-9.4				2052
Hf <sub>x</sub> Nb <sub>3</sub> Sn	T <sub>c</sub> '(-0.8)				2052
Hf <sub>0.30</sub> Ta <sub>0.70</sub>			A2	2404#	
Hf <sub>0-0.07</sub> Th <sub>1-0.93</sub>	1.36-1.7				2334
HfV <sub>2</sub>	9.7, 9.3, 8.4		HF	C15	2312# 2081 2339 2005#
HfV <sub>2</sub> (Irradiated 6K, Fast neutrons)	9.22-8.8			C15	2285
Hf <sub>0.15-0.6</sub> V <sub>0.85-0.4</sub>	9-9.3-8.4		HF		2005
Hf <sub>0.009</sub> V <sub>0.991</sub> (RRR=29.5)	5.34				2319#
Hf <sub>0.55</sub> V <sub>2</sub> Zr <sub>0.45</sub>			HF		2005
Hf <sub>0.5</sub> V <sub>2.3</sub> Zr <sub>0.5</sub>	10.1				2005

TABLE 2 (continued)

Material	$T_c$ (K)	$H_o$ (oersted)	Crystal Structure	$T_n$ (K)	Refs.
$Hf_{0.5}V_2Zr_{0.5}$	10.1	HF			2005#
$Hf_{0.4-0.3}VZr_{0.6-0.7}$	10.2	HF	C15		2183
$Hf_{0-1}V_2Zr_{1-0}$	8.5-10.1-9.2	HF	C15		2005
$Hf_xV_yZr_{1-x-y}$	10.1-7.8	HF			2005
Hg(Deposited 2.3K, >1000-100-70A)	3.87-4.08-4.05				▽2090
Hg(64.5-92A)	4.07-4.05-4.5 (0 to 80K anneals)				▽2090
Hg(300-10,880A)	$T_c^1(\sim 0.2)$	HF			▽2091
Hg(23A pores in asbestos)	3-5				2327
$Hg_{0.007}In_xTl$	$T_c^1(-0.14+0.22)$				2101
$Hg_xIn_{0.02}Tl$	$T_c^1(0+0.12-0.01)$				2101
$Hg_xIn_{0.01}Tl$	$T_c^1(+0.5-0.1)$				2101
$Hg_{0.007}Sb_xTl$	$T_c^1(-0.014+0.14)$				2101
$Hg_xSb_{0.0008}Tl$	$T_c^1(-0.001-0-0.012)$				2101
$Hg_xTl_{1-x}$	$T_c^1(-0.14)$				2101
$Hg_xTl$	$T_c^1(-0.014)$ Also P to 12 kbar				2101
$Ho_xLaSn_3$	$T_c^1(-)$				2297
$Ho_{1.2}Mo_6Se_8$	6.10-5.54		HEX		2050
In					2394
In(RRR>16,000g 18 micron spheres)	3.4089	278.2			2240
In(Particles, 100A)	3.9				2064
In(290-20,000A)	3.52-3.39(From intermediate to mixed state at ~6000A)				▽2066
In(TypeI to Type II)	Data given	Data given			▽2065
In(Multilayered films)	3.6-5.6				▽2000
In(On PbTe, 15-340A)	2.2~5.5	HF			▽2250
In(In)(Implant at 2K)	3.65-4.4 4.26-4.54				▽2195
$In_3La$			$L1_2$	1.0	2274
$In_{0.98-0.874}Mg_{0.02-0.126}$		HF			2104
$InMn_{0.0003}$ (Deposited 4.2K, 3900A)	2.51				▽2247

TABLE 2 (continued)

Material	$T_c$ (K)	$H_o$ (oersted)	Crystal Structure	$T_n$ (K)	Refs.
InMn <sub>0-700ppm</sub> (Implant 2K)	3.5-1.4 3.7-2 (With In ion implant)				2171
In <sub>0.01-0.04</sub> Nb <sub>0.78-0.73</sub> Sn <sub>0.21-0.23</sub>	17.8-18.1	HF			2374
In <sub>0.9-0.2</sub> Pb <sub>0.1-0.8</sub>	4.6-6, 6.6-7				2012
In <sub>0.17</sub> Pb <sub>0.83</sub>		HF			2375
In <sub>0.013-0.10</sub> Pb <sub>0.987-0.90</sub>		HF			2103
In <sub>1-0.933</sub> Pb <sub>0-0.067</sub> (Whiskers)	$T_c'$ (0.015)(0.2% strain) $T_c'$ (0.012)(0.46% strain) $T_c'$ (-0.004+0.002)(0.6% strain)				2235
In <sub>1-0.93</sub> Sn <sub>0-0.07</sub>	3.4-3.4-4.1				2356 2394
In <sub>1-0</sub> Sn <sub>0-1</sub>					▽2223
InSn <sub>4</sub>	4.54	HF	HEX		2326
In <sub>1-0.921</sub> Sn <sub>0-0.079</sub>	$T_c'$ (0.017)(At 0.25% strain) $T_c'$ (-0.003-0.002)(At 0.32% strain)				2235
In <sub>0.06</sub> Sn <sub>0.94</sub>	$T_c'$ (0.34)(At 2% strain)				2235
In <sub>x</sub> Tl <sub>1-x</sub>	$T_c'$ (+0.4)(Also P to 12 kbar)				2101
InTl(190A, 90A)	4.145, 3.880	HF			▽2211
InTl(300A, 180A)	2.910, 3.530	HF			▽2211
InTl <sub>0-0.048</sub> (Whiskers)	$T_c'$ (To+0.18)(0.25% strain)				2235
In <sub>0.94</sub> Zn <sub>0.06</sub> (Implant)	3.65-4.3				▽2195
Ir <sub>0.42</sub> Nb <sub>0.58</sub>	4-9(As cast), 7-9(Quenched)		Data given		1997
IrNb <sub>3</sub>	1.66		A15		2132#
Ir <sub>0.22-0.29</sub> Nb <sub>0.78-0.71</sub>			A15	4.2	2158
Ir <sub>0.455</sub> Nb <sub>0.455</sub> O <sub>0.09</sub>	8-9.2				1997
Ir <sub>0.40</sub> Nb <sub>0.55</sub> O <sub>0.05</sub>	10.5, 11.7		TET		1997
Ir <sub>x</sub> Os <sub>y</sub> Ti <sub>1-x-y</sub>	4.2-4				2035
Ir <sub>0.25-0</sub> Pt <sub>0-0.25</sub> Ti <sub>0.75</sub>	4.2-5.6-0.6				2035#
Ir <sub>0.2</sub> Pt <sub>0.05</sub> Ti <sub>0.75</sub>	5.53				2035#
Ir <sub>~0.45</sub> Ta <sub>0.55</sub> (Evaporated, ~1000A)	2				2126
Ir <sub>0.42</sub> Ta <sub>0.58</sub> (Liquid quenched)	6.6		Data given		1997
IrTi <sub>3</sub>	4.3				2035#

TABLE 2 (continued)

Material	$T_c$ (K)	$H_0$ (oersted)	Crystal Structure	$T_n$ (K)	Refs.
$\text{Ir}_{0.18-0.32}\text{Ti}_{0.82-0.68}$	3.7-5-4.5		Data given		2035
$\text{Ir}_{0.05-0.18}\text{Ti}_{0.95-0.82}$	2.7-4- <1		Data given		2035
$\text{Ir}_{0.38}\text{V}_{0.62}$	1.94	HF			2175
$\text{Ir}_3\text{Zr}$				1.85	2269
$\text{Ir}_2\text{Zr}$	4.03				2269
$\text{IrZr}$	2.3 2.1 (As cast)			1.85	2269
$\text{Ir}_{0.375}\text{Zr}_{0.625}$				1.85	2269
$\text{IrZr}_3$	2.55, 7.05 2.1				2269
$\text{Ir}_{0.3}\text{Zr}_{0.7}$	2.5, 7.35 7.3				2269
$\text{IrZr}_2$	2.75, 7.35 7.3				2269
$\text{Ir}_{0.2}\text{Zr}_{0.8}$	4.3 3.15, 6.2				2269
$\text{Ir}_{0.1}\text{Zr}_{0.9}$	5.5 3.5, 3.9, 4.35, 2.1				2269
$\text{K}_{0.4}\text{MoS}_2$	6.9	HF			2273
$\text{K}_2\text{Mo}_6\text{S}_8$	2.7				2161
$\text{Kr}_{0-0.043}\text{Nb}_{1-0.957}(2000\text{A})$	9.8-9.3-9.4		CUB		2281
La	5.99		87% CUB		2400
La	5.12		HEX		2127 2400
La(P=0-25 kbar)	4.8-7.5		HEX		2354
La(P=0-25-53-210 kbar)	5.9-8.7-10-12.9		CUB		2354
La(Deposited $\approx$ 150K, 5000-10,000A)	4.90	HF			2145
$\text{La}_{0.92}\text{Lu}_{0.08}$	3.72				2068
$\text{LaLu}_x\text{Sn}_3$	$T_c'(-)$				2297
$\text{La}_{0.2}\text{Mo}_{6.35}\text{Pb}_{0.8}\text{S}_8$	13.2	HF	RHOMB		2408
$\text{La}_{0-0.6}\text{Mo}_{6.35}\text{Pb}_{1-0.4}\text{S}_8$	12-13.4-5		RHOMB		2408
$\text{La}_{0.5}\text{Mo}_5\text{S}_6\text{Sn}$	12.2-11.4				2161
$\text{La}_{1.0}\text{Mo}_6\text{Se}_8$	11.39-11.05		HEX		2050

TABLE 2 (continued)

Material	$T_c$ (K)	$H_o$ (oersted)	Crystal Structure	$T_n$ (K)	Refs.
$\text{LaMo}_6\text{Se}_8$	11.3	HF	RHOMB		2196
$\text{La}_{0.98}\text{Nd}_{0.02}$	3.60				2068
$\text{LaNd}_x\text{Sn}_3$	$T_c^*(-)$				2297
$\text{LaOs}_2$	9	HF	C15		2096
$\text{LaPb}_3$	4.05		L1 <sub>2</sub>		2274
$\text{LaPb}_{0.3}\text{Tl}_{3.0}$	1.7-0.5-2.2-0.1-4.5-4.2 (Also P study)				2059
$\text{La}_{0.84}\text{Pr}_{0.16}$	2.20				2068
$\text{LaPr}_x\text{Sn}_3$	$T_c^*(-)$				2297
$\text{La}_{1-0.958}\text{Pr}_{0-0.042}\text{Sn}_3$	6.5-1.3	670-180			2357#
$\text{La}_{1-0.97}\text{Pr}_{0-0.03}\text{Sn}_3$	6.43-2.33				2358
$\text{La}_{0.99-0.97}\text{Pr}_{0.01-0.03}\text{Sn}_3$ (P=0-18 kbar)	$T_c^*(-0.30, -0.24, -0.26)$				2358
$\text{LaRu}_2$	4.45		C15		2403#
$\text{La}_3\text{S}_4$	8.12-11.5(P=0-22 kbar) ~6-~5(P=10-150 kbar, non-hydrostatic)				2040
$\text{La}_4\text{Sb}_3$	0.25		CUB		2338
$\text{La}_3\text{Sb}_3\text{Y}$	0.13		CUB		2338
$\text{La}_3\text{Se}_4$ (n=1.20-3.67×10 <sup>21</sup> )	2.60-6.86	HF			2079#
$\text{La}_3\text{Se}_4$	7.63-9.4-8.7(P=0-22 kbar) ~4.5-3(P=30-160 kbar, non-hydrostatic)				2040
$\text{La}_{1-0.987}\text{Sm}_{0-0.013}\text{Sn}_3$	6.38-0.3		L1 <sub>2</sub>		2154#
$\text{LaSm}_x\text{Sn}_3$	$T_c^*(-)$				2297
$\text{LaSm}_3\text{Tb}_x$	$T_c^*(-)$				2297
$\text{LaSn}_3$	6.54, 6.628, 6.45		L1 <sub>2</sub>		2057 2274 2297
$\text{LaSn}_3$ (P=0-7-22 kbar)	$T_c^*(0-+0.02-0.045)$		CUB		2054
$\text{LaSn}_3$ (P=0-19 kbar)	$T_c^*(-0.10)$				2358
$\text{LaSn}_3\text{Tm}_x$	$T_c^*(-)$				2297
$\text{LaSn}_3\text{Yb}_x$	$T_c^*(-)$				2297
$\text{La}_3\text{Te}_4$ (P=0-22 kbar) (P=10-50 kbar) (P=80-160 kbar)	4.61-~3 3-2.5 3.5-4.2(Non-hydrostatic)				2040

TABLE 2 (continued)

Material	$T_c$ (K)	$H_o$ (oersted)	Crystal Structure	$T_n$ (K)	Refs.
$\text{LaTl}_3$	1.57		$\text{L1}_2$		2274
$\text{La}_{0.2}\text{Y}_{0.8}$	2.70				2068
$\text{La}_{0.93}\text{Yb}_{0.07}$	3.56				2068
$\text{Li}_2\text{Mo}_6\text{S}_8$	4.2-3.5				2161
$\text{Li}_{2.6}^0\text{Ti}_{1.5-2.7}$	10.9-11.4-10.9	HF			2146
$\text{Li}_{2.6}^0\text{Ti}_{1.9}$	11.2	HF			2146
$\text{Li}_{2.6}^0\text{Ti}_{1.7}$	11.4	HF			2146
$\text{Li}_{0.395}\text{Ti}_2$	11.7	1970	$\text{H1}_1$		2391#
$\text{Li}_{1.1}\text{Ti}_{3.95}\text{Ti}_{1.9}$	9.6		$\text{H1}_1$		2391#
$\text{Li}_{1.05}^0\text{Ti}_{1.95}$	12.0	1970	$\text{H1}_1$		2391#
$\text{Li}_{0.39}\text{Ti}_2$	11.26 11.26-11.5 ( $P=0-22$ kbar)		$\text{H1}_1$		2148
$\text{Li}_{2.6}^0\text{Ti}_4$	$\approx$ 11.4	HF			2378
$\text{Li}_{0.8}^0\text{Ti}_{2.2}$	11.2-11.45 ( $P=0-22$ kbar)		$\text{H1}_1$		2148
$\text{Li}_0\text{Ti}$	12.5		$\text{H1}_1$		2390
$\text{Li}_{1.05}^0\text{Ti}_{1.95}$			$\text{H1}_1$	1.5	2390
$\text{Li}_{1.33}^0\text{Ti}_{1.67}$			$\text{H1}_1$	1.5	2390
$\text{Li}_{2.6}^0\text{Ti}_{1.3,4.0}$				4.2	2146
Lu	0.10	350			2084
Lu ( $P=45-190$ kbar)	0.022-1.0				1996
$\text{Lu}_{1.2}\text{Mo}_6\text{Se}_8$	6.20-5.47		HEX		2050
$\text{Lu}_{0-0.58}\text{Th}_{1-0.42}$	1.36-1.8-1.4				2334
Mg (Flash evaporation, 50-1000A)				0.32	2192
$\text{Mn}_{0-0.012}\text{NbSe}_2$	7.4- <1		HEX		2176
$\text{Mn}_{0-0.07}\text{Nb}_3\text{Sn}$	$T_c/T_{co} = 1-0.95$		A15		2322
$\text{Mn}_{0.00047-0.0016}\text{Pb}$ (Deposited 4.2K, 1600-4000A)	6.2-3.45				2247
$\text{Mn}_{0-0.004}\text{Pb}_{1-0.996}$ (Deposited <3K, $\approx$ 500A)	7.2-4.4-4.8-<0.3 (Crystalline) 7-<0.3 (Amorphous)				2364 2095
$\text{Mn}_x\text{Zn}_{1-x}$ (Implant)					2095
$\text{Mn}_{0-45\text{ppm}}\text{Zn}$ (Quench cond. 6K, $\approx$ 400A)	$T_c'(-1.3)$				2255

TABLE 2 (continued)

Material	$T_c$ (K)	$H_o$ (oersted)	Crystal Structure	$T_n$ (K)	Refs.
Mo(99.995)	0.912				2217 2029
Mo( $\sim$ 300A)	8.0	HF			$\nabla$ 2140
Mo <sub>1-x</sub> N <sub>x</sub> ( Deposited $< 160$ K, $\sim 1000$ A)	$\sim 8.5$				$\nabla$ 2342
MoN <sub>x</sub>	6.8	HF			$\nabla$ 2027
MoN <sub>x</sub>	$\sim 6.4$	HF			$\nabla$ 2027
MoN <sub>0~0.33</sub> ((RRR)4, N <sub>2</sub> in at 4.2K or room temp., 1500-3000A)	2.0-9.2 1.5-7.0		Data given		$\nabla$ 2143
Mo <sub>1-0.77</sub> N <sub>0-0.23</sub> (Implant, RRR=4.6)	9.4-<1.8				2382
Mo <sub>6</sub> Na <sub>2</sub> S <sub>8</sub>	8.6-8.0				2161
MoNa <sub>x</sub> S <sub>2</sub>	3.6	HF			2273
Mo <sub>0.02-0.95</sub> Nb <sub>0.98-0.05</sub>	8.465-0.428(As cast)				2029
Mo <sub>0-0.05</sub> Nb <sub>1-0.95</sub>	9.2-7.8				2052
Mo <sub>0.1-0.2</sub> Nb <sub>0.765-0.61</sub> Pd <sub>0.135-0.19</sub>	1.53-0.94-1.34				2257
Mo <sub>0-0.2</sub> Nb <sub>1-0.8</sub> Se <sub>2</sub>	7.30-1.20		HEX		2293
Mo <sub>0.03-0.20</sub> Nb <sub>0.97-0.8</sub> Se <sub>2</sub>	6.0-1.2		HEX		2100
Mo <sub>0-0.1</sub> Nb <sub>1-0.8</sub> Zr <sub>0-0.1</sub>	9.130-7.775				2399#
Mo <sub>6</sub> Nd <sub>2</sub> S <sub>8</sub>	3.45-3.2				2161
Mo <sub>6</sub> Nd <sub>1.0</sub> Se <sub>8</sub>	8.22-7.65		HEX		2050
MoNe <sub>x</sub> (Implant)				1.2	2382
Mo <sub>0.18</sub> Np <sub>0-0.73</sub> U <sub>1-0.27</sub>	$\sim 2- < 0.05$		CUB		2406
Mo <sub>x</sub> Xe <sub>y</sub>	Data given				2382
MoOs	12.7- $\sim$ 10.7(Order; S=0.91-0.57)		A15		2174
Mo <sub>4</sub> P <sub>3</sub>	2.5		ORTHO		1995
Mo <sub>1-0.72</sub> P <sub>0-0.28</sub> (Implant, RRR=4.54)	9.4-<1.8				2382
Mo <sub>6</sub> PbS <sub>8</sub>	14.7, 14.4		RHOMB		2137 2162
Mo <sub>6.35</sub> PbS <sub>8</sub>	12.6	HF	RHOMB		2408
Mo <sub>6</sub> PbS <sub>7</sub> (Irradiated 6K, neutrons)	12.30-4.8 $\sim$ 13.5(Aannealed 11C)		RHOMB		2285

TABLE 2 (continued)

Material	$T_c$ (K)	$H_o$ (oersted)	Crystal Structure	$T_n$ (K)	Refs.
$\text{Mo}_6\text{Pb}_y\text{S}_{8-0}\text{Se}_{0-8}$	11.3-3.3-5.8-3.5		RHOMB		2038
$\text{Mo}_{6.3}\text{PbS}_6\text{Se}_2$	5.4	HF	RHOMB		2408
$\text{Mo}_{6.35}\text{Pb}_{0-1}\text{S}_8\text{Sn}_{1.2-0}$	11.8-10.1-12.8	HF	RHOMB		2408
$\text{Mo}_6\text{PbS}_{8-7}\text{Te}_{0-1}$	11.3-2.6		RHOMB		2038
$\text{Mo}_6\text{Pb}_{1.2}\text{Se}_8$	3.6		RHOMB		2408
$\text{Mo}_6\text{PbSe}_7\text{Te}$	4.0	HF	RHOMB		2408
$\text{Mo}_6\text{Pb}_y\text{Se}_{8-4}\text{Te}_{0-4}$	3.5-4.1-<2		RHOMB		2038
$\text{Mo}_6\text{PrSe}_8$	9.2, 9.16	HF	RHOMB(HEX)		2196 2050
$\text{Mo}_{0.85-0.55}\text{Pt}_{0-0.2}\text{Re}_{0.5-0.35}$	3.4-11.0				2252
$\text{MoRb}_{0.3}\text{S}_2$	6.9	HF			2273
$\text{Mo}_6\text{Rb}_2\text{S}_8$				0.6	2161
$\text{Mo}_{0.95-0.7}\text{Re}_{0.05-0.3}$	1.461-11.015(As cast)				2029
$\text{Mo}_{0.85-0.70}\text{Re}_{0.15-0.30}$	6.6-9.1, 7.1-10.5 7.05-10.7, 7.3-11		A2		2252
$\text{Mo}_{0.3}\text{Re}_{0.7}$ (Amorphous, sputtered)	7.62				2241
$\text{Mo}_{0.55-0.85}\text{Re}_{0.45-0.15}$ (Deposited 300-900C, 10,000-20,000A)	14.2-15-12.8				▽2302
$\text{Mo}_{0.7}\text{Re}_{0.3}$ (10,000-20,000A)	15		A15		▽2302
$\text{Mo}_{0.98-0.6}\text{Rh}_{0.02-0.4}$ ( $\sim$ 1000A)	$\sim$ 7.8-8.2-5.5				▽2126
$\text{Mo}_3\text{S}_4$			RHOMB	1.1	2287 2408
$\text{Mo}_5\text{S}_6\text{Sc}_{1-2}$	2.6-2.8				2161
$\text{Mo}_5\text{S}_6\text{Sc}_{0.5}\text{Sn}$	11.4-12.0				2161
$\text{Mo}_6\text{S}_{4-0}\text{Se}_{4-8}$	2-6.2		RHOMB		2038
$\text{Mo}_3\text{S}_2\text{Se}_2$	2.1	HF	RHOMB		2408
$\text{Mo}_6\text{S}_8\text{Sm}_6$				0.6	2161
$\text{Mo}_5\text{S}_8\text{Sn}$ (Irradiated 6K, neutrons)	12.06-5.9		RHOMB		2285
$\text{Mo}_6\text{S}_8\text{Sn}$	12.6, 13.3		RHOMB		2008 2121
$\text{Mo}_5\text{S}_6\text{Sn}$	10.8, 11.3	HF	RHOMB		2161 2317 2287

TABLE 2 (continued)

Material	T <sub>c</sub> (K)	H <sub>o</sub> (oersted)	Crystal Structure	T <sub>n</sub> (K)	Refs.
Mo <sub>6.35</sub> S <sub>8</sub> Sn <sub>1.2</sub>	11.8	HF	RHOMB		2408
Mo <sub>5</sub> S <sub>6</sub> SnTl <sub>0.5</sub>	9.3-8.1				2161
Mo <sub>5</sub> S <sub>6</sub> SnY <sub>0.5</sub>	9.95-7.65				2161
MoS <sub>2</sub> Sr <sub>x</sub>	5.6	HF			2273
Mo <sub>5</sub> S <sub>6</sub> Y <sub>0.5-2</sub>	2.5-2.6				2161
Mo <sub>6</sub> S <sub>8</sub> Yb <sub>2</sub>	8.18-7.3				2161
Mo <sub>5</sub> S <sub>6</sub> Zn	3.0		RHOMB		2287
Mo <sub>0.69-0.66</sub> Sb <sub>0.31-0.34</sub> (Implant)	~1.7, 1.8				2382
Mo <sub>3</sub> Se <sub>4</sub>	6.3, 6.25		RHOMB		2287 2408
Mo <sub>6</sub> Se <sub>8</sub> Sm <sub>1.2</sub>	6.83-6.35		HEX		2050
Mo <sub>6</sub> Se <sub>8</sub> Tb <sub>1.2</sub>	5.70-5.34		HEX		2050
Mo <sub>6</sub> Se <sub>8-4</sub> Te <sub>0-4</sub>	6.2-6.6-<5.5		RHOMB		2038
Mo <sub>6</sub> Se <sub>8</sub> Tm <sub>1.2</sub>	6.33-5.68		HEX		2050
Mo <sub>6</sub> Se <sub>8</sub> Y <sub>1.0</sub>	6.21-5.97		HEX		2050
Mo <sub>6</sub> Se <sub>8</sub> Yb <sub>1.0</sub>	5.80-4.70		HEX		2050
Mo <sub>5</sub> Se <sub>6</sub> Zn			RHOMB	1.5	2287
Mo <sub>0-0.7</sub> Tc <sub>1-0.3</sub>	8.3-14.5-10-14-12				2267
Mo <sub>0.5-0.7</sub> Tc <sub>0.5-0.3</sub>	14-12		CUB		2267
Mo <sub>0-0.3</sub> Tc <sub>1-0.7</sub>	8.3-14.5		HEX		2267
M <sub>0.4</sub> Tc <sub>0.6</sub>	10		D8 <sub>b</sub>		2267
Mo <sub>3</sub> Te <sub>4</sub>			RHOMB	0.03	2287 2408
MoTi	0.2-4-2.8				2152 2256
MoXe <sub>x</sub> (Implant)				1.2	2382
N <sub>0-0.0007</sub> Nb	9.25-9.22				2209
NNb		HF			2310 2114
NNb(Fine powder)					2283
NNb	16-4	HF			▼2007
NNb	13.5-7.5	HF			▼2345
N <sub>0-1.4</sub> Nb	8.5-<4.5-16-<4.5				▼2321

TABLE 2 (continued)

Material	$T_c$ (K)	$H_o$ (oersted)	Crystal Structure	$T_n$ (K)	Refs.
NNb(Deposited, ~1000A)	14.67-8.85	HF			▽2366#
NNb(Implant, ~2000A)	10				▽2016
$N_{0.884}Nb_{0.955}O_{0.069}$	13.3		B1		2036
$N_{0.955-0.967}O_{0.005-0.01}Zr_{0.982-0.967}$	9.5-8.7		B1		2036
(NS) <sub>x</sub> (RRR>100)	0.33				2037
NS	0.28, 0.254, 0.24				2224 2063
NS(RRR=70)	0.29	HF			2136
NS	0.205, 0.235	HF			2124
NS					2231
NS(P=0-9 kbar)	0.33-0.54				2045
NS(Films on mylar)				0.02	▽2379
NTa	8.68		B1		2144
$N_{0-0.0038}Ta$	4.48-4.22	Type I to II			2209
$N_{\sim 0.5}Ta_{0.5}$	<4.2-8.15-<4.2		A1		▽2031
$N_{\sim 0.1}W_{0.9}$	<4.2-4.85-<4.2				▽2031
NxW	~4.2, ~4.7	HF			▽2027
NxW	4.1	HF			▽2027
$Na_{15}Pb_4$			CUB	1.5	2155
NaPb	6.1-6.2				2351
NaPb <sub>3</sub> (β-form)	5.6	590, HF			2351#
$Na_{0.068}Pb_{0.932}$	6.68				2351#
$Na_{0-0.07}Pb_{1-0.93}$ (100-1000A particles)		HF			2253
Nb(RRR=97, 223)	9.29, 9.27				2074
Nb(Marz grade)	9.164-9.126(As cast)				2029
Nb(99.99)	9.55(As rolled)				2178
Nb(99.99)	10.1(After 4 to 16 laser pulses)				2178
Nb(RRR=20)	9.255 9.415(Deformed 50%)				2244
Nb	9.130, 9.154				2399#

TABLE 2 (continued)

Material	$T_c$ (K)	$H_0$ (oersted)	Crystal Structure	$T_n$ (K)	Refs.
Nb(<50 ppm O <sub>2</sub> <115 ppm interstitials)	9.30-9.36-9.28 (0-99% reduction by rolling)				2249
Nb(RRR=30.6)(O <sub>2</sub> ?)	9.25-9(Irradiated 400-1100C, fast neutrons)	HF			2377
Nb(Rolled foils)	9.55-10(0-16 laser pulses)				2169
Nb(Outgassed 2300C)		HF			2114 2331 2099
Nb(Irradiated oxygen ions at <20K)	$T_c^1(-0.07, -0.1$				2177
Nb(Deposited ~550C, ~2500-4000A)	9.3-9.1				▽2221
Nb(Deposited-130 to 700C)	9-<4.2				▽2384
Nb(Deposited room temp., 14,400A to 27A)	9.3-2.0				▽2032
Nb <sub>3</sub> Mo <sub>x</sub> Sn	$T_c^1(-0.7-0.6-1.3)$				2052
Nb <sub>0.60</sub> Ni <sub>0.40</sub> (Liquid quenched)	1.5				2023
Nb <sub>0.56</sub> Ni <sub>0.16</sub> Rh <sub>0.28</sub> (Liquid quenched)	3.3	HF			2023
NbNi <sub>0-0.07</sub> Se <sub>2</sub>	7-2-2.8-<1		HEX		2210
Nb <sub>0.2</sub> Np <sub>0-0.7</sub> U <sub>1-0.3</sub>	~2-<0.08		Data given		2406
Nb <sub>0</sub> 1.00	1.61	147.6			2276#
Nb <sub>0</sub> 1.02	1.38	HF			2276
Nb <sub>0</sub> 0.96-1.02	1.37-1.55-1.38	129.7-143.6- 131.0			2276#
Nb <sub>0</sub> 0-0.00015	9.34-9.22	HF			2227
Nb <sub>3</sub> Os	0.94		A15		2132#
Nb <sub>3</sub> P	2.0		TET		1995
NbP(Co-sputtered)	6.0-5.6 4.8-6.8-5.6(Aannealed 700C) 6.5-7.5-6(Aannealed 750C)				▽2067
Nb <sub>3</sub> P <sub>0.15-0.9</sub> Si <sub>0.85-0.1</sub> (Co-sputtered)	5-7-6.5(Aannealed 700C)				▽2067
Nb <sub>3</sub> Pb(Simultaneous evap. room temp.)			A15	1.5	▽2346
Nb <sub>0.66-0.70</sub> Pb <sub>0.003-0.02</sub> Sn <sub>0.34-0.29</sub>	17.8-18.0	HF			2374

TABLE 2 (continued)

Material	$T_c$ (K)	$H_0$ (oersted)	Crystal Structure	$T_n$ (K)	Refs.
$\text{Nb}_{0.8}\text{Pd}_{0.2}$	1.87-2.02				2071
$\text{Nb}_{0.9-0.65}\text{Pd}_{0.1-0.35}$	3.34-1.84		CUB		2257
$\text{Nb}_{0.72}\text{Pd}_{0.18}\text{W}_{0.1}$	1.57-1.44				2257
$\text{Nb}_3\text{Pt}$	9.20		A15		2132#
$\text{Nb}_{0.76}\text{Pt}_{0.24}$ (Order 0.96 to 0.85)	10.7-7				2398
$\text{Nb}_{0.74-0.79}\text{Pt}_{0.26-0.21}$					2166
$\text{Nb}_{0.8}\text{Rh}_{0.2}$	2.65				2071
$\text{Nb}_{0.58}\text{Rh}_{0.42}$ (Liquid quenched)	10.2		CUB		2024
$\text{Nb}_{0.58}\text{Rh}_{0.42}$ (Microcrystalline)	~4.8				2023
$\text{Nb}_{0.80-0.67}\text{Ru}_{0.20-0.33}$	0.39-<0.35				2061
$\text{Nb}_{\sim 0.7-0.5}\text{Ru}_{\sim 0.3-0.5}$ (~1000A)	~6-5				2126
$\text{NbS}_2$ (P=1 bar-10 kbar)	5.9-5.9		HEX		1266 1853
$\text{Nb}_3\text{Sb}$	0.2				2272#
$\text{NbSe}_2$ (See Table 3)					
$\text{NbSe}_2$	7.39	HF	HEX		2352
$\text{NbSe}_2$ (RRR=30-35)	7.34, 7.29, 7.18	HF	HEX		2393
$\text{NbSe}_2$	7.3, 7.1	HF	HEX		2273 2226
$\text{NbSe}_2$	7.25, 7.2		HEX		2352# 2405# 2201# 2123#
$\text{NbSe}_2$	7.16-6.3	1260(2141#)	HEX		2181# 2141# 2386# 2405
$\text{NbSe}_2$	7.1	1280, 1200, HF	HEX		2386#
$\text{NbSe}_2$	6.3	943	HEX		2386#
$\text{NbSe}_2$ (P=1 bar-17 kbar)	6.9-8.5		HEX		2373
$\text{NbSe}_2$ (P=0-35 kbar)	7.11-~9				2151
$\text{NbSe}_2$ (P=1-20 kbar)	~7.2-7.8		HEX		2234
$\text{NbSe}_3$			MONO	1.0	2361
$\text{Nb}_{0.94}\text{Se}_{2}\text{Ti}_{0.06}$	3.25		HEX		2293

TABLE 2 (continued)

Material	$T_c$ (K)	$H_o$ (oersted)	Crystal Structure	$T_n$ (K)	Refs.
$\text{Nb}_{0.97}\text{Se}_2\text{Ti}_{0.03}$	5.97		HEX		2293
$\text{NbSe}_2\text{Ti}_{300 \text{ ppm}}$	~7.19				2141#
$\text{Nb}_{1-0.7}\text{Se}_2\text{V}_{0-0.3}$	7.2-<1.5				2383
$\text{Nb}_{0.7}\text{Se}_2\text{V}_{0.3}$			HEX	1.5	2383
$\text{NbSe}_2\text{Sn}_{0-0.09}$	7-3		HEX		2210
$\text{Nb}_{0.83-0.68}\text{Si}_{0.17-\sim 0.32}$ (Co-sputtered)	4.8-6.2-4.6-5.1 (Annealed 800C) 4.4-5.5-3.2 (Annealed 750C)				2067
$\text{Nb}_{0.78-0.91}\text{Si}_{0.225-0.086}$ (Chem. vapor deposition 800-900C)	8.05-7.35 4.30-3.55	HF	A15		2206
$\text{Nb}_3\text{Si}$ (1 megabar implosion)	18.5-19 15-16 13-14		A15		2088 1998 2180
$\text{Nb}_3\text{Si}$	0.29	HF	TET		2237# 2088
$\text{NbSi}$ (Sputtered, 650-750C)	8.6-4.65 5.2-6.5, 5.4				2395
$\text{Nb}_{0.74}\text{Si}_{0.26}$			(as prepared) (liquid quench)	<4.2 <4.2	2245
$\text{Nb}_{0.82}\text{Si}_{0.09}\text{Sn}_{0.09}$	5.6				2125
$\text{Nb}_3\text{Sn}$	17.9, Data given	HF	A15		2180 2389# 2166 2298# 2272#
$\text{Nb}_3\text{Sn}$		HF	A15		2107 2322 2375 2189
$\text{Nb}_3\text{Sn}$	17.6 17 (After drawing) 12-13 (After drawing)				2407
$\text{Nb}_{0.8}\text{Sn}_{0.2}$	18.2 (Laser preparation)				2106
$\text{Nb}_3\text{Sn}$ (0-99% reduction in area)	17.8-17.2				2109
$\text{Nb}_3\text{Sn}$ (Irradiated fast neutrons)	18-14.5 (Irradiated in superconductive state)				2396
$\text{Nb}_3\text{Sn}$ (Irradiated <30K, oxygen ions)	16.3-4.4 (Order 0.95-0.5)				2197
$\text{Nb}_3\text{Sn}$ (Irradiated <30K, oxygen ions)	16-7.5	HF			2133
$\text{Nb}_3\text{Sn}$ (Irradiated neutrons)	18-2.5 (Order 0.98-0.6)	HF			2301 2019 2190

TABLE 2 (continued)

Material	$T_c$ (K)	$H_o$ (oersted)	Crystal Structure	$T_n$ (K)	Refs.
Nb <sub>2.87</sub> Sn(Deposited 800C)	18.3-16.8				▼2289
Nb <sub>2.72-3.69</sub> Sn(Deposited 700-800C)	18.3-11.4				▼2289
Nb <sub>3</sub> Sn(In bending ~1500A)	+0.1K to -0.1K (-20 to kp/mm <sup>2</sup> )				▼2028
Nb <sub>2.17-4.38</sub> Sn(Sputtered)	6.6-17.21		A15		▼2372
NbSn(Deposited 12,500-600A)	17.3-17.1				▼2135
Nb <sub>3</sub> Sn(Deposited 800C, 4500A)			A15		▼2105
Nb <sub>3</sub> Sn(Deposited 700-800C, 2000-3000A)	18.1-2.95(Irradiated helium ions)		A15		▼2118
Nb <sub>3</sub> Sn(Deposited 560-750C, 1000-10,000A)	14-17.6				▼2246
Nb <sub>3</sub> Sn(Vapor deposition, 50,000A)		7.3-3.5-41(Irradiated oxygen-ions)			▼2165
Nb <sub>3</sub> Sn		18-2.95(Irradiated helium ions)	A15		▼2372
Nb <sub>3</sub> SnTi <sub>x</sub>		$T_c'$ (+0.7±0.2)			2052
Nb <sub>0.78-0.77</sub> Sn <sub>0.22-0.22</sub> Ti <sub>0.002-0.01</sub>	17.8-18.1		HF		2374
Nb <sub>3</sub> SnZr <sub>x</sub>		$T_c'$ (-1.5±1.0)			2052
Nb <sub>0.297</sub> Ta <sub>0.702</sub>	5.26				2371
NbTa <sub>0-20,000 ppm</sub>		HF			2215
Nb <sub>0.2</sub> Ta <sub>0.4</sub> Ti <sub>0.4</sub> (Weight fractions)	9.2				2048
Nb <sub>1-0.95</sub> Ti <sub>0-0.05</sub> (Weight fractions)	9.2-9.9-9.3				2052
Nb <sub>0.34-0.8</sub> Ti <sub>0.66-0.2</sub>	7~10	HF			2097
Nb <sub>0.4</sub> Ti <sub>0.6</sub>	9.19(As drawn- $1.3 \times 10^6$ ) 9.19-9.35(Aannealed)				2030
Nb <sub>0.2</sub> Ti <sub>0.8</sub> (Laser pulse anneals)	6.9-5.2				2178 2169
Nb <sub>0-0.11</sub> Ti <sub>1-0.89</sub>					2256
Nb <sub>0.5</sub> Ti <sub>0.5</sub> (Foils, 50,000A, weight fractions)		$T_c'$ (-0.13-0.09)(Irradiated < 30K oxygen ions)			2208
Nb <sub>0.33</sub> Ti <sub>0.66</sub> Zr <sub>0-0.06</sub>		HF			2262
Nb <sub>1-0.95</sub> Zr <sub>0-0.05</sub> (Weight Fractions)	9.2-9.1-10.8				2052
Nb <sub>0.75</sub> Zr <sub>0.25</sub>	10.61(As drawn $3.0 \times 10^5$ )				2030
Nb <sub>0.75</sub> Zr <sub>0.25</sub>	10.9				2026#
Nb <sub>0.67</sub> Zr <sub>0.33</sub>	11.2, 10.75 (Laser treated)				2106

TABLE 2 (continued)

Material	$T_c$ (K)	$H_o$ (oersted)	Crystal Structure	$T_n$ (K)	Refs.
$\text{Nb}_{0.2-0.95}\text{Zr}_{0.8-0.05}$		7.907-10.853-10.5(Cast) 7.78-10.883-10.525(Aannealed)			2029 2014 2139
$\text{Ni}_{0-0.0233}\text{Tc}_{1-0.977}$		7.85-7.25			2337
$\text{O}_3\text{Rb}_x\text{W}$		3.26-3.73(Thermal vapor growth at 1050C)			2142
$\text{O}_3\text{Rb}_{0.2}\text{W}$			HF		2142
$\text{O}_x\text{Sn}(\sim 100\text{\AA})$	$T_c^*(-)$				▽ 2314
$\text{O}_{1.06}\text{Ti}$	0.94		HF		2276#
$\text{O}_{0.95}\text{Ti}$	0.65		HF		2276#
$\text{O}_{0.96-1.17}\text{Ti}$					2276#
$\text{Os}_{0.3,0.7}\text{Re}_{0.7,0.3}$			A3		2404#
$\text{Os}_{0.5}\text{Tc}_{0.5}$	4.3-4.2				2267
$\text{Os}_{0.25}\text{Tc}_{0.75}$	5.92		HEX		2267
$\text{P}_3\text{Rh}_4$	2.5		ORTHO		1995
$\text{PTa}_3$	0.4		TET		1995
$\text{PTb}$	~0.2				2402
$\text{PZr}_3$	4.5		TET		1995
$\text{Pb}(99.9999)$	7.190				2399
$\text{Pb}(\text{Particles } 100\text{\AA})$	Bulk $T_c$				2064
$\text{Pb}(\text{P}=16-129 \text{ kbar})$	6.53-3.74	661-318			2318
$\text{Pb}(\text{On PbTe, Te } 0-130\text{\AA})$	<1.8-7.3	HF			▽ 2250
$\text{Pb}(\text{Evaporated on Si } 60-100\text{K}$ $11-200\text{\AA})$	2.8-7.3				▽ 2220
$\text{Pb}(17\text{\AA}, \text{ Extrapolated})$	6.2				▽ 2172
$\text{Pb}(\text{Deposited } \sim 77\text{K on glass,}$ $330\text{\AA}-100\text{\AA})$	7.194-6.594				▽ 2200
$\text{PB}(10,000\text{\AA})$	7.25 <sub>7</sub>				▽ 2164
$\text{Pb}(\sim 50\text{\AA}, \text{ Plus } \sim 30\text{\AA} \text{ coat of Ge,}$ $\text{Si, C, Zn, Bi, Mo, Se and PbTe})$					▽ 2329
$\text{Pb}(2700\text{\AA})$	7.20-7.15				▽ 2204
$\text{Pb}(\text{"Bulk amorphous"})$	6.6				▽ 2172
$\text{Pb}(\text{Vapor quenched on mica})$	6.65				▽ 2172
$\text{Pb}(200-400\text{\AA}, \text{ on Cu } 300-600\text{\AA})$	2.4-3.88				▽ 2248
$\text{Pb}(\sim 2000\text{\AA})$	7.20				▽ 2228
$\text{Pb}(250-11,000\text{\AA})$		HF			▽ 2066

TABLE 2 (continued)

Material	$T_c$ (K)	$H_0$ (oersted)	Crystal Structure	$T_n$ (K)	Refs.
PbSe(P~300-340 kbar)	6.4-6.6				2086
PbTe(P~175-260 kbar)	8-6.4				2086
PbTe( $n=7 \times 10^{23}$ at 4.2K)	(Eddy currents produce effects thought to be superconductive at 20K)			2.0	2062 1884
PbTe(Pb, In, Tl, Al and Sn films on PbTe monocrystals, 0-8A)	<1-6.7				2218
Pb <sub>0.4-0.8</sub> Tl <sub>0.6-0.2</sub> (~2000A)	4.6-6.80				2228
Pd <sub>0.395</sub> Rh <sub>0.605</sub>					2304#
Pd <sub>0.25</sub> Tc <sub>0.75</sub>	8.8-5		HEX		2267
Pd <sub>0.30</sub> Zr <sub>0.70</sub>	2.4	HF			2023
Pt(RRR 5000,6000)				0.04	2187
PtTi <sub>3</sub>	0.49				2035#
Pt <sub>0-0.3</sub> Ti <sub>1-0.7</sub>	0.4-2.2-4.5-3- <1.2(As cast) 0.6-0.4(Aannealed)				2035
PtV <sub>3</sub>	2.63	HF	A15		2175
Pt <sub>0.24</sub> V <sub>0.76</sub>	2.70	HF	A15		2175
Re <sub>0.88</sub> W <sub>0.12</sub>			A3		2404#
Re <sub>0.50</sub> W <sub>0.50</sub>			D8 <sub>b</sub>		2404#
Re <sub>0.05-0.75</sub> W <sub>0.95-0.25</sub>			A2		2404#
Rh <sub>0.5</sub> Tc <sub>0.5</sub>	7.85-7.3-6.0		HEX		2267
Rh <sub>0.25</sub> Tc <sub>0.75</sub>	7.9-7.5-6.2		HEX		2267
RhZr <sub>2</sub>	10.8	HF			2202
Rh <sub>0-0.36</sub> Zr <sub>1-0.64</sub>	6-6-11-11.5-10.5 6-4-8(As quenched)		(Rapid quench)		2021
Rh <sub>0.23</sub> Zr <sub>0.77</sub> (Liquid quench)	4.1	HF			2202
Ru <sub>0.5</sub> Tc <sub>0.5</sub>	7.5-7.0-4.2		HEX		2267
Ru <sub>0.25</sub> Tc <sub>0.75</sub>	8.1-7.15-5.6				2267
Ru <sub>0-0.043</sub> Tc <sub>1-0.957</sub>	7.85-7.07				2337
Ru <sub>~0.45</sub> Zr <sub>0.55</sub> (Evaporated ~1000A)	2.8				2126
S <sub>1.6</sub> Se <sub>0.4</sub> Ta(See Table 3)					
S <sub>1.6</sub> Se <sub>0.4</sub> Ta	4.1	485, HF			2226 2386
S <sub>1.6</sub> Se <sub>0.4</sub> Ta(Monocrystals)	3.85	551, HF			2386# 2181
S <sub>2</sub> Ta(See Table 3)					

TABLE 2 (continued)

Material	$T_c$ (K)	$H_o$ (oersted)	Crystal Structure	$T_n$ (K)	Refs.
$S_2Ta$	0.8			HEX(2H)	2405#
$S_2Ta$				HEX(4Hb)1.1	2405# 2386#
STh	0.49				2402
$Sb_{0.002}Sn_{0.998}$ (Whiskers)	$T_c'$ (0.6)(At 3% strain)				2235
$Sb_xTl$	$T_c'$ (-0.001+0.022)				2101
ScSe	3.7				2402
$Sc_{0-0.5}Th_{1-0.5}$	1.36-1.75-0.95				2334
Se <sub>2</sub> Ta(See Table 3)					
Se <sub>3</sub> Ta(Fibrous, RRR ~80)	2.1	HF	MONO		2291
SeTh	1.72				2402
SiV <sub>3</sub> (RRR=17)	16.7(Monocrystal)	HF			2344 2189 2020
SiV <sub>3</sub>	16.5				2272#
SiV <sub>3</sub>	16.6(Monocrystal)				2271# 2238#
Si <sub>0.227-0.26</sub> V <sub>0.773-0.74</sub>	14.8-16.87		A15		2261
SiV <sub>3</sub> (RRR=22)	16.9(Monocrystal)	HF			2009
Si <sub>0.2-0.3</sub> V <sub>0.8-0.7</sub>	14.5-17.2-15.8 13.0-16-10.1(Liquid quenched)				2245
Si <sub>3</sub> V <sub>5</sub>				0.076	2238#
SiV <sub>3</sub> (P=0-29 kbar)	16.70-17.5				2039
SiV <sub>3</sub> (Irradiated, helium ions)	16.5-2.2				▽2372 2019
SiV <sub>~3</sub> (Getter sputtered, ~2500-4000A)	16.7-16.1				▽2221
SiV <sub>~3</sub>	~4-16.7				▽2221
SiV <sub>3</sub> (Sputtered)	3.5-17				▽2116
SiV <sub>3</sub> (Deposited 700-800C, 2000-3000A)	16.8-2.2(Irradiated helium ions)		A15		▽2118
SiV <sub>~3</sub> (Deposited 650-1250C, 400-7650A)	15.8-12.2				▽2025
SiV <sub>~3</sub> (Deposited 1150C, 4875A)	15.8-15.4				▽2025
Sn(RRR=10,000)	$T_c'$ (-, +)Deformed vs orientation				2385

TABLE 2 (continued)

Material	$T_c$ (K)	$H_o$ (oersted)	Crystal Structure	$T_n$ (K)	Refs.
Sn(Whiskers 0-0.67% strain)	3.7249-4.109	315-343, HF			2185 2235 2186 2185
Sn(99.9995, 54-500A)	4.027-3.792-3.932				▽ 2129
Sn(270-11, 500A)	3.88-3.72	Data given			▽ 2066
Sn(730A, 1390A)	4.30, 4.59				▽ 2077
$Sn_{0.22-0.37}Tc_{0.78-0.63}$	7.4-6.4		HEX		2267
$SnV_3$	3.8				2272#
$Sn_{0-0.075}V_{1-0.925}$	5.43-1.3		CUB		2320
Ta(RRR=3900, 2400, 400)	4.53, 4.52, 4.50(Monocrystals)				2388
Ta	4.41		A2		2144
Ta(RRR=29)	4.415(Deformed 70%) 4.385				2244
$TaV_2$	3.6		C15		2313#
$Ta_{0.036}V_{0.964}$	4.55				2319#
$Ta_{0.056}V_{0.944}$	4.7	HF			2087
$Ta_{0.84-0.10}W_{0.16-0.90}$			A2		2404#
$Ta_{0.81}Zr_{0.19}$	6.5	HF			2303
$Ta_{0.71}Zr_{0.29}$	6.5	HF			2303
$Tc(RRR=80)$	7.85	HF			2337 2267
$Tc(P=70-110$ kbar)	7.4-6.8 7.35-6.7(Aannealed)				2267
$Tc(55-1600A)$	6.2-5.9-7.7				▽ 2093
$Tc(80A)$	6.3	HF	CUB		▽ 2093
$Tc(\sim 50,000A)$	7.46				▽ 2164
$Tc_{0.97}Ti_{0.03}$	10.89-10.23		HEX		2001
$Tc_{0.85}Ti_{0.15}$	9.87-7.20(As cast) 8.10-7.73(Aannealed)		A12		2001
TcTi			B2	1.7	2001
$Tc_{0-1}Ti_{1-0}$	~0.4-10.89-~7.8				2001
$Te(P=1-3 \times 10^{14})$	2.0-4.2( $P=40-60$ kbar)				2083
$Te(P=1-4 \times 10^{18})$	II 2.4-5.1( $P=38-55$ kbar) III 4.1-4.2( $P=\sim 53-62$ kbar) IV 4.72-4( $P=63-80$ kbar)				2083

TABLE 2(continued)

Material	$T_c$ (K)	$H_o$ (oersted)	Crystal Structure	$T_n$ (K)	Refs.
Th	1.360				2400# 2335#
Th	1.38	160			2336
Th <sub>0.001</sub> U	0.7	70(0.3K)			2336
Th <sub>0.0005</sub> U	1.0	105(0.3K)			2336
Th <sub>0-0.00110</sub> U	1.360-0.550				2335#
Th <sub>1-0.3</sub> Y <sub>0-0.7</sub>	1.36-1.65-0.8				2334
Th <sub>1-0.85</sub> Zr <sub>0-0.15</sub>	1.36-2.22				2334
Ti <sub>0.97, 0.91</sub> V <sub>0.03, 0.09</sub>	< 2.2, 3.7-4.3				2256
Tl	2.382	177.20			2047#
Tl(~2000A)	2.36				▽2228
U(Alpha)	0.2-0.45				2277#
U(Alpha)	0.27, 0.20, 0.27				2277#
U <sub>0.028</sub> V <sub>0.972</sub>	4.16	HF			2242#
V(RRR=24)	5.24				2319# 2242#
V(RRR=10)	4.90 5.13(Deformed)				2244
V(Amorphous, ~20-300A)	1.4-3	HF			▽2092
V(Crystalline, 60-500A)	3.3-4.5	HF			▽2092
V(Evaporated room temp. 100-2300A)	< 1.5-5	HF			▽2308 ▽2275
V <sub>0.948</sub> W <sub>0.052</sub>	4.08				2319#
V <sub>2</sub> Zr	8.9	HF	C15		2081
V <sub>2</sub> Zr	7.3		C15		2312#
W			A2		2404#
Zn(See Table 3)					
Zn(Whiskers many orientations)	$T_c^1(+0.07 \text{ to } -0.04)$ (at 0.3% strain) $T_c^2(0.185 \text{ to } -0.035)$ (at $4 \times 10^8 \text{ N/m}^2$ )				2236
Zn(Quench condensed 6K)	0.83				▽2255
Zn(Quench condensed 6K, ~400A)	1.51				▽2255
Zn(50-1000A)	1.4				▽2163

TABLE 3. Properties of Superconductive Materials with Organic and Related Constituents.

NOTE: "HF" signifies critical-magnetic-field data in Table 4.

Material	$T_c$ (K)	$H_o$ (oersted)	Crystal Structure	$T_n$ (K)	Refs.
$\text{NbSe}_2$ (ammonia)	0.6		HEX		2405
$\text{NbSe}_2$ (cyclopentylamine)	0.90		HEX		2405
$\text{NbSe}_2$ (cyclopropylamine)	1.1		HEX		2405
$\text{NbSe}_2$ (dimethylamine)	3.0		HEX		2405
$\text{NbSe}_2$ (ethylamine) <sub>0.5</sub>	1.20		HEX		2405
$\text{NbSe}_2$ (ethylene diamine) <sub>0.25</sub>			HEX	0.35	2405
$\text{NbSe}_2$ (ethylenediamine) <sub>0.25</sub>	1.05		HEX		2386# 2405
$\text{NbSe}_2$ (methylamine) <sub>0.5</sub>	0.95		HEX		2405
$\text{NbSe}_2$ (triethylamine)			HEX	1.3	2405
$\text{S}_{1.6}\text{Se}_{0.4}\text{Ta}$ (pyridine) <sub>0.5</sub>	2.30	194	HEX		2386#
$\text{S}_{1.6}\text{Se}_{0.4}\text{Ta}$ (pyridine) <sub>0.5</sub>		175,(HF data given)			2386
$\text{S}_2\text{Ta}$ (ammonia)	5.0 3.8		HEX(4H) HEX(2H)		2405 2405
$\text{S}_2\text{Ta}$ (aniline) <sub>0.75</sub>	2.9	(HF data given)			2226
$\text{S}_2\text{Ta}$ (collidine) <sub>0.167</sub>	2.80(Monocrystal)		HEX		2386#
$\text{S}_2\text{Ta}$ (cyclopentylamine)	3.15		HEX		2405
$\text{S}_2\text{Ta}$ (cyclopropylamine)	3.0		HEX		2405
$\text{S}_2\text{Ta}$ (dimethylamine)	3.4 3.8		HEX(2H) HEX(4H)		2405 2405
$\text{S}_2\text{Ta}$ (deuterium) <sub>0.05</sub>			HEX		2386#
$\text{S}_2\text{Ta}$ (ethylamine) <sub>0.5</sub>	3.5 3.4		HEX(4H) HEX(2H)		2405 2405
$\text{S}_2\text{Ta}$ (ethylenediamine) <sub>0.25</sub>	3.2 4.7		HEX HEX(4H) HEX(1T) HEX(2H)	0.35	2386# 2405# 2405 2405
$\text{S}_2\text{Ta}$ (methylamine) <sub>0.5</sub>	5.6 4.6		HEX(2H) HEX(4H)		2405 2405
$\text{S}_2\text{Ta}$ (pyridine) <sub>0.5</sub>	3.30(Monocrystal) 3.2 3.47 3.45(Monocrystal)		HEX(2H) HEX(4H)		2386 2405 2226 2181

TABLE 3 (continued)

Material	$T_c$ (K)	$H_o$ (oersted)	Crystal Structure	$T_n$ (K)	Refs.
$S_2Ta(\text{pyridine})_{1/2}$ (plus S)		208 (HF data given)			2386
$S_2Ta(\text{triethylamine})$	1.3		HEX(4H) HEX(2H)	1.3	2405 2405
$Se_2Ta(\text{ethylenediamine})_{0.25}$	0.95		HEX		2405
Zn(zinc etioporphyrin)	2.0				72163

TABLE 4. Critical Magnetic Fields  $H_{c1}$ ,  $H_c$ ,  $H_{c2}$  and  $H_{c3}$  of Superconductive Materials (Mainly Type II).

NOTE: Magnetic fields in kiloersteds.

Material	$T_c$ (K)	$H_{c1}$	$H_c$	$H_{c2}$	$H_{c3}$	$T_{obs}$	Refs.
$Al_0-0.02Nb_{0.33}Ti_{0.66}$				117-110		4.2	2262
$Al_2Ce_{0.00626}La_{0.994}$	1.3			0-0.042-0		0.15-1.3	2098
$Al_2Ce_{0.0066-0.009}La$	~1.5-0.2			Data given			2332
$AlCe_{0-0.017}La_{3-2.983}$	6-0.8			Data given			2333
$Al_{0-0.08}Ga_{0.2-0.12}V_3$	15-14.1			205-210-195		4.2	2010
$AlIn$	2.282, 3.178			Data given			2211
$Al_2La$	3.3			2.5		0	2332
$Al_{0-0.6}Mo_{6.35}S_8Sn_{1.2}$	11.8-14.3			325-560 (Estimated)		0	2408 2089
$AlNb_3$	~17.5			Data given			2193
$Al_3Nb$	0.64			0.70		0.56	2170
$AlNb_2$	0.74			0.31		0.68	2170
$Al_{0-0.15}Nb_{1-0.85}$	9.03-5.15(Cast) 8.8-8.1-10.0			19-22-8.5 3.9-20.8-11.6		4.2 4.2	2049
$Al_{0-0.1}Nb_3Sn_{1-0.9}$	17.8-18.0-17.9			230-290-280		4.2	2374
$Al_xNb_3Sn_{1-x}$	~16.6			~195		0	2108
$Al_{0-0.025}Nb_{0.33}Ti_{0.66}$	9.1-8.2			118-102		4.2	2262
$Al_{0-0.265}V_{1-0.735}$	5.43- < 0.5			Data given			2320
$As_{0.04}Ge_{0.15}Te_{0.81}$	0.90-0.88			3.4, 6		0	2330
$AsNb_3$	~0.31			0.22		0.2	2237
$Au_{0.24}La_{0.76}$ (Liquid quenched)	3.3(Amorphous) 4.05(Crystalline)			55 38		0	2023
$Bi_{0.22}In_{0.78}$	4.53, 5.61			Data given			2243
$Bi_{0-0.05}In_{1-0.95}$	3.4-4.27	0.3-0.32		0.6-1.6		0	2102
$Bi_{0-0.016}In_{1-0.984}$		0.276-0.28		0.28-1.6		0	2355
$Bi_{0.016-0.05}In_{0.986-0.95}$		0.28-0.35	0.28-0.60				
$Bi_{0-0.3}Pb_{1-0.7}$	7.2-8.65-7.9			Data given	Data given		2110
$C_{1.3-1.6}La$	11.1	0.022		95		4.2	2219

TABLE 4 (continued)

Material	$T_c$ (K)	$H_{c1}$	$H_c$	$H_{c2}$	$H_{c3}$	$T_{obs}$	Refs.
$Ce_{1.55}Th_{0.3}Y_{0.7}$	17.1			280		0	2188
$Ca_xMoS_2$	4.0			74(Parallel) 13 65 2.1(Perpend.)		0 2.4 0 2.4	2273
$Ce_{0.2}La_{0.8}Mo_6Se_8$	8.9			292 220		0 4.2	2196
$Ce_{0.004}La_{0.80}Th_{0.20}$	3.6			11		0	2167
$Ce_{0-0.0075}La_{0.80}Th_{0.20}$ (Re-entrant)	5.25- < 0.045			Data given			2167
$Ce_xLa_{3-x}Y$				Data given			2350
$CeRu_2$	6.28		1.2	50		0	2096
$Co_{0.075}NbSe_2$	4.5			Data given			2225
$Cs_{0.1}Fe_{0.1}O_{2.9}W$	4.87-4.94			1.3-1.72(Perpend.)		0	2046
$Cs_{0.3}MoS_2$	6.9			220 94.5(Parallel) 33 16(Perpend.)		0 4.1 0 4.1	2273
$CuMo_3S_4$	10.6, 10.4			45		8.8	2408
$Cu_2Mo_6S_8$	10.4			130		0	2408
$Cu_{0.7}Mo_3Se_4$	5.8			65		3.6	2408
$Cu_{0-0.03}Nb_{0.33}Ti_{0.66}$	9.3-8.8-9.2			117-114-118		4.2	2262
$D_{0-1}HfV_2$	9.7-3.4			Data given			2122
$D_2HfV_2$	5.8			40		2	2339
$Eu_{0.2}La_{0.8}Mo_6Se_8$	10.7-11.4			350		4.2	2196
$Eu_{0.1-0.8}Mo_{6.35}S_8Sn_{1.1-0.24}$	11.5			300-370-340		0	2408
$Fe_{0.3}HfV_{1.7}$	5			70		3	2081
$Fe_{0.15}HfV_{1.85}$	9.5			125		7	2081
$Fe_{0-0.05}Nb_{0.76}Pt_{0.24-0.19}$	8.56-1.80(Disordered) 10.10-1.40(Ordered)			145-20 ~145-20		0 0	2398
$Fe_{0-0.04}Nb_{0.76}Pt_{0.24-0.19}$				105-15(Disordered) 115-22(Ordered)			2398
$Fe_{0.034}Nb_3Sn$	17			265		0	2322
$Fe_{0.017}Nb_3Sn$	17.5			260		0	2322

TABLE 4 (continued)

Material	$T_c$ (K)	$H_{c1}$	$H_c$	$H_{c2}$	$H_{c3}$	$T_{obs}$	Refs.
$\text{Fe}_{0-0.10}\text{S}_2\text{Ta}$	0.8-3.3- < 1.3			~32(Parallel) 2.4(Perpend.)		1.6	2225
$\text{Fe}_{0.05}\text{S}_2\text{Ta}_{0.95}$	3.2-2.7			Data given			2042
$\text{Fe}_{0.3}\text{V}_{1.7}\text{Zr}$	4.4			40		3	2081
$\text{Ga}_{0.5}\text{Mo}_5\text{S}_6\text{Sn}$		~3( $0.5T_c$ )	75( $0.5T_c$ )	125( $0.75T_c$ )			2089
$\text{Ga}_{0.5}\text{Mo}_5\text{S}_6\text{Sn}$	13.5-4(P=0-100 kbar)			( $H_{c2}$ decreases with P increase)			2317
$\text{Ga}_{0.01-0.04}\text{Nb}_{0.73-0.82}\text{Sn}_{0.26-0.14}$	17.8-18.1-18.0			230-300		4.2	2374
$\text{GaV}_3$ (Irradiated and non-irradiated)				Data given			2381
$\text{Gd}_{0.4}\text{Mo}_{6.35}\text{Pb}_{0.6}\text{S}_8$	4.9			105		1	2408
$\text{Gd}_{0.6}\text{Mo}_{6.35}\text{Pb}_{0.4}\text{S}_8$	3.0			6		2.5-1	2408
$\text{Gd}_{0.6}\text{Mo}_{6.35}\text{S}_8\text{Sn}_{0.6}$	6.7			55		1.2	2408
$\text{GeNb}_3$ (Deposited ~740C, 600-15,000A)	22.7 Max.			33 36(Perpend.) 25 45(Parallel) (10,000A/2240A)		20	$\nabla$ 2309
$\text{GeNb}_3$	10.5-7.5			340-370		0	2007
$\text{Ge}_{\sim 0.25-0.14}\text{Nb}_{0.75-0.86}$ (Deposited 750-1000C)	22.3-20.7(Sputtered) 18.2-22-21(Chem. Vapor Deposition)			255-390 260-330		0	$\nabla$ 2367 $\nabla$ 2341
$\text{GeNb}_3$ (Granular)				360-340		0	$\nabla$ 2345
$\text{Ge}_{0-0.02}\text{Nb}_{0.33}\text{Ti}_{0.66}$	8.9-8.2			115-118-110		4.2	2262
$\text{Ge}_{0.01,0.05,0.45}\text{Te}_{0.99,0.95,0.55}$ 0.40-0.51				Data given			2330
$\text{Hf}_{0-1.6}\text{HfV}_2$	9.7-2.2			(Data given, $\text{HfV}_2\text{H}_{0.5}$ )			2122
HPd	9.62			0.98		0	2349
$\text{Hf}_{1-0.933}\text{Pd}$	9.62-5.5			Data given			2349
$\text{Hf}_{0.26}\text{Nb}_{0.74}$	9.3	0.9(4.14K)		70 74.5		1.6 0	2222#
$\text{HfV}_2$	9.7			120		7.2	2339
$\text{HfV}_2$	9.3			120		7	2081
$\text{HfV}_2$	9.2			268 200		0 4.2	2005
$\text{Hf}_{0.15-0.6}\text{V}_{0.85-0.4}$	9-9.3-8.4			150-220-180		4.2	2005

TABLE 4 (continued)

Material	$T_c$ (K)	$H_{c1}$	$H_c$	$H_{c2}$	$H_{c3}$	$T_{obs}$	Refs.
$Hf_{0.55}V_2Zr_{0.45}$				240		4.2	2005
$Hf_xV_yZr_{1-x-y}$	10.1-7.8			240-85		4.2	2005
$Hf_{0.5}V_2Zr_{0.5}$	10.1			275 230	0 4.2		2005#
$Hf_{0.4-0.3}VZr_{0.6-0.7}$	10.2			254(Extrapolated) 208	1.7 4.2		2183
$Hf_{0-1}V_2Zr_{1-0}$	8.5-10.1-9.2			105-240-200		4.2	2005
$Hg(300-10,880A)$	$T_c^1(\sim 0.2)$			Data given			▽2091
In(Type I to Type II)	Data given			Data given			▽2065
In(On Pb Te, 15-340A)	2.2~5.5			Data (perpend.) Shown(Parallel)			▽2250
$In_{0.98-0.874}Mg_{0.02-0.126}$				0.46-1.25		0	2104
$In_{0.01-0.04}Nb_{0.78-0.73}Sn_{0.21-0.23}$ 17.8-18.1				230-290		4.2	2374
$In_{0.05}Nb_3Sn_{0.95}$ (Nominal)				270-280(Sn bath) 230-280(Sn, Cu bath)	4.2 4.2		2374
$In_{0.17}Pb_{0.83}$				1.4		4.2	2375
$In_{0.013-0.10}Pb_{0.987-0.90}$				Data given	Data given		2103
$InSn_4$	4.54			1.349(Parallel a) 1.219(Parallel c)	0 0		2326
InTl(Superimposed films)				Data given			▽2211
$Ir_{0.38}V_{0.62}$	1.94			21.6		0	2175
$K_{0.4}MoS_2$	6.9			40(Perpend.)		0	2273
La(Deposited $\approx 150K$ , 5000, 10,000A)	4.90			12.5(Perpend.) 5.2(Parallel)	2.6 4.2		▽2145
$La_{0.2}Mo_{6.35}Pb_{0.8}S_8$	13.2			560 480	0 4.2		2408
$LaMo_6S_8$	11.3			463 370	0 4.2		2196
$LaOs_2$	9		1.6	30		0	2096
$La_3Se_4(n=1.20-3.67 \times 10^{21})$	2.60-6.86	0.0223- 0.1192	0.0742- 0.340			0	2079#
$Li_{2.6}O_4Ti_{1.9}$	11.2			185		4.2	2146
$Li_{2.6}O_4Ti_{1.5-2.7}$	10.9-11.4-10.9			123-185-77		4.2	2146
$Li_{2.6}OTi_{1.7}$	11.4			162 183	4.2 0		2146

TABLE 4 (continued)

Material	$T_c$ (K)	$H_{c1}$	$H_c$	$H_{c2}$	$H_{c3}$	$T_{obs}$	Refs.
$\text{Li}_2\text{O}_8\text{Ti}_4$	~11.4			>70		4.2	2378
$\text{Mo}(\sim 300\text{\AA})$	8.0			80 ~250(GLAG Theory)		6.4 0	▽2140
$\text{MoN}_x$	6.8, ~6.4			55		4.2	▽2027
$\text{MoNa}_x\text{S}_2$	3.6			50 23(Parallel) 7.6 3.2(Perpend.)		0 2.2 0 2.2	2273
$\text{Mo}_{6.35}\text{PbS}_8$	12.6			540 450		0 4.2	2408
$\text{Mo}_{6.3} \text{PbS}_6 \text{Se}_2$	5.4			130 70		3 4.2	2408
$\text{Mo}_{6.35}\text{Pb}_{0-1}\text{S}_8\text{Sn}_{1.2-0}$	11.8-10.1-12.8			395-325-540		0	2408
$\text{Mo}_6\text{PbSe}_7\text{Te}$	4.0			54		2.6	2408
$\text{Mo}_6\text{PrSe}_8$	9.2			204 144		0 4.2	2196
$\text{MoRb}_{0.3}\text{S}_2$	6.9			40(Perpend.)		0	2273
$\text{Mo}_3\text{S}_2\text{Se}_2$	2.1			40		1.2	2408
$\text{Mo}_{6.35}\text{S}_8\text{Sn}_{1.2}$	11.8			330		0	2408 2317
$\text{MoS}_2\text{Sr}_x$	5.6			46(Parallel) 20 13.6(Perpend.) 6.3		0 3.4 0 3.4	2273
NNb				4.06-4.63		4.2	2114
NNb	16-4			180-260-210		0	▽2007
NNb	16			180		0	▽2007
NNb	9			260		0	▽2007
NNb	13.5-7.5			280-250		0	▽2345
NNb( $\sim 1000\text{\AA}$ )	14.67-8.85			139-214		0	▽2366#
NS(RRR=70)	0.29			8.1(Parallel) 0.87(Perpend.)		0	2136 2124
$\text{N}_{0-0.0038}\text{Ta}$	4.48-4.22	Data given		0.828-0.784		0	2209
$\text{NW}_x$	4.1			42		1.7	▽2027
$\text{NaPb}_x$ (Particles 100-1000A)				Data given			2253

TABLE 4 (continued)

Material	$T_c$ (K)	$H_{c1}$	$H_c$	$H_{c2}$	$H_{c3}$	$T_{obs}$	Refs.
Nb(RRR 30.6)	9.25-9(Irradiated fast neutrons)			3.05-3.05-5.05		4.2	2377 2331
Nb(Outgassed 2300C)				2.74		4.2	2114
Nb		1.44 1.21			2.83 3.10	4.2	2099
$Nb_{0.56}Ni_{0.16}Rh_{0.28}$	3.3			34		2.2	2023
$Nb_{0.1.02}$	1.38	0.06		0.14		0.8	2276
$Nb_{0.0-0.00015}$	9.34-9.22			Data given	Data given		2227
$Nb_{0.66-0.70}Pb_{0.003-0.02}Sn_{0.34-0.29}$	17.8-18.0			230-290		4.2	2374
$Nb_3Pb_{0.05}Sn_{0.95}$ (Nominal)				190-280(Sn bath) 220-260(Cu Sn bath)		4.2	2374
$NbSe_2$ (RRR=30-35)	7.18-7.39(Monocrystals)			145(Parallel) 44-46(Perpend.)		0 0	2393
$NbSe_2$	7.3			140(Parallel) 68 40(Perpend.) 21		0 4.4 0 4.4	2273 2226
$Nb_{0.78-0.91}Si_{0.225-0.086}$ (Deposited 800-900C Chem. vapor)	8.05-7.35			19.3-14.9		4.2	2206
$Nb_3Si$	0.29			0.097-0.112		0	2237#
$Nb_3Sn$	18			255		0	2322 2189
$Nb_3Sn$		0.31				1.35	2375
$Nb_3Sn$ (Irradiation < 30K Oxygen ions)	7.5-16			75-155		0	2133
$Nb_3Sn$ (Irradiated neutrons)	18-2.5(Order from 0.98-0.6)			230-40		0	2301
$Nb_{0.78-0.77}Sn_{0.22-0.22}Tl_{0.002-0.01}$	17.8-18.1			230-300		4.2	2374
$Nb_{1-x}Ta_x$	.			Data given			2215
$Nb_{0.33}Ti_{0.66}Zr_{0-0.06}$				114-107-108		4.2	2262
$O_3Rb_{0.2}W$				48(Parallel c) 17.3,6.9(Perpend. c, phi=0°,30°)		0	2142
$O_{1.06}Ti$	0.94			32.9		0	2276
$O_{0.95}Ti$	0.65			30.5		0	2276

TABLE 4 (continued)

Material	$T_c$ (K)	$H_{c1}$	$H_c$	$H_{c2}$	$H_{c3}$	$T_{obs}$	Refs.
Pb(on PbTe,Te)(0-1304)	<1.8-7.3			Data shown			▽2250
Pd <sub>0.30</sub> Zr <sub>0.70</sub> (Liquid quenched)	2.4			16		1.8	2023
PtV <sub>3</sub>	2.63			35.1		0	2175
Pt <sub>0.24</sub> V <sub>0.76</sub>	2.70			29.9		0	2175
RhZr <sub>2</sub>	10.8			106.5		0	2202
Rh <sub>0.23</sub> Zr <sub>0.77</sub> (Liquid quench)	4.1			80.1		0	2202
S <sub>1.6</sub> S <sub>0.4</sub> Ta	4.1			Data given			2226 2386
S <sub>1.6</sub> Se <sub>0.4</sub> Ta				Data given			2181
S <sub>2</sub> Ta(Pyridine) <sub>1/2</sub>	3.47			Data given			2226 2386
S <sub>2</sub> Ta(Aniline) <sub>3/4</sub>	2.9			Data given			2226
Se <sub>3</sub> Ta(RRR~80)	2.1			Data given			2291
SiV <sub>3</sub> (RRR=17)	16.7(Monocrystal)			60		14	2344 2189 2020
SiV <sub>3</sub> (RRR=22)	16.9(Monocrystal)	0.77 0.72				0 4.2	2009
Sn(Whiskers)	3.73			Data given			2186
Ta <sub>0.056</sub> V <sub>0.944</sub>	4.7			~10		0	2087
Ta <sub>0.81</sub> Zr <sub>0.19</sub>	6.5			15		2	2303
Ta <sub>0.71</sub> Zr <sub>0.29</sub>	6.5			16		2	2303
Tc(RRR=100)	6.3-7.1-7.8			Data given			2267#
Tc(80A)	6.3			34		5.6	▽2093
U <sub>0.028</sub> V <sub>0.972</sub>	4.16			~50		0	2242#
V(Amorphous, ~20-300A)	1.4-3			55		0	▽2092
V(Deposited Room temp. 500-2300A)	2.5-5, <1.5-4.5			4.0-4.8-2.46(Parallel) 1.98-2.9-4.0(Perpend.)		4.2	▽2308
V <sub>2</sub> Zr	8.9			95		6	2081

## BIBLIOGRAPHY

1266. Jones, R. E., Jr., Shanks, H. R., Finnemore, D. K. and Morosin, B., Phys. Rev. B6, 835 (1972).
1810. Muller, A., Z. Naturforsch. 28a, 472 (1973).
1996. Probst, C., Dissertation, Technischen Hochschule, Munchen, Sept. 1974.
1997. Johnson, W. L. and Poon, S. J., J. Less Common Met. 42, 355 (1975).
1998. Geller, S., Appl. Phys., 7, 321 (1975).
1999. Kurmaev, E. Z., Belash, V. P., Flukiger, R., and Junod, A., Sol. State Commun., 16, 1139 (1975).
2000. Umeda, M., Bull. Electrotechnical Lab., 39, #8, 570 (1975).
2001. Koch, C. C., J. Less-Common Metals, 44, 177 (1976).
2002. Kokot, L., Horyn, R., and Iliew, N., J. Less-Common Metals 44, 215 (1976).
2003. Horyn, R., J. Less-Common Metals, 44, 221 (1976).
2004. Drys, M., and Iliew, N., J. Less-Common Metals 44, 235 (1976).
2005. Inoue, K. and Tachikawa, K., J. Japan Inst. Met., 39, 1266, 1274 (1975).
2006. Matthias, B. T., Corenzwit, E., Vandenberg, J. M., Barz, H., Maple, M. B., and Shelton, R. N., J. Less-Common Metals, 46, 339 (1976).
2007. Jones, H. C., Appl. Phys. Letters, 27, 471 (1975).
2008. Bolz, J., Hauck, J. and Pobell, F. Z. Physik B25, 351 (1976).
2009. Eckert, D. and Berthel, K. H., Cryogenics, 15, 479 (1975).
2010. Yoshida, Y., Tachikawa, K., and Iwasa, Y., Appl. Phys. Letters, 27, 632 (1975).
2011. Girsch, K., Odoni, W. and Ott, H. R., J. Less-Common Metals 46, 175 (1976).
2012. Savitskii, E. M., Baron, V. V., Efimov, Yu. V., and Gindina, S. D., Metalloved. Tsvet. Metal., Moscow, 181-4 (1972).
2013. Alexejewski, N. E. and Zebro, W. I., Wissenschaftliche Z. Techn. Univ. Dresden, 20, #2, 10 (1971).
2014. Narasimhan, S. L., Taggart, R., and Polonis, D. H., J. Mat. Sci., 11, 134 (1976).
2015. Lamoise, A. M., Chaumont, J., Meunier, F., and Bernas, H., J. Phys. (Paris) Lettres 36, L271, 1975.
2016. Masuda, K., Ohsawa, A., Gamo, K., Takai, M., Namba, S., and Mizobuchi, A., Japan J. Appl. Phys. 14, 1831 (1975).
2017. Rogowski, D. A. and Roy, R., Appl. Phys. Letters 28, 557 (1976).
2018. Kawamura, H. and Tachikawa, K., Trans. Nat. Res. Inst. Metals 17, 212 (1975).
2019. Bauer, H., Saur, E. J., and Schweitzer, D. G., J. Low Temp. Phys. 19, 171, 189 (1975).
2020. Kramer, E. J. and Knapp, G. S., J. Appl. Phys. 46, 4595 (1975).
2021. Togano, K. and Tachikawa, K., J. Appl. Phys. 46, 3609 (1975).

2022. Gubser, D. U. and Parr, H., Phys. Rev. B12, 3968 (1975) and personal communication.
2023. Johnson, W. L. and Poon, S. J., J. Appl. Phys. 46, 1787 (1975).
2024. Johnson, W. L. and Poon, S. J., J. Appl. Phys. 46, 2325 (1975).
2025. Schmidt, P. H., Bacon, D. D., Barz, H., and Cooper, A. S., J. Appl. Phys. 46, 2237 (1975).
2026. Wright, L. S., Pendrys, J. P., and Harrison, R. B., J. Appl. Phys. 46, 2745 (1975).
2027. Reichelt, K. and Bergmann, G., J. Appl. Phys. 46, 2747 (1975).
2028. Pupp, W. A., Sattler, W. W., and Saur, E. J., J. Low Temp. Phys. 14, 1 (1974).
2029. Smith, T. F. and Shelton, R. N., J. Phys. F: Metal Physics 5, 911 (1975).
2030. Hampshire, R. G., J. Phys. D: Appl. Phys. 7, 1847 (1974).
2031. Kilbane, F. M. and Habig, P. S., J. Vac. Sci. Technol. 12, 107 (1975).
2032. Wolf, S. A., Kennedy, J. J., and Nisenoff, M., J. Vac. Sci. Technol. 13, 145 (1976).
2033. Oesterreicher, H., Clinton, J., and Bittner, H., J. Solid State Chem. 16, 209 (1976).
2034. Mackliet, C. A., Gillespie, D. J., and Schindler, A. I., J. Phys. Chem. Solids 37, 379 (1976).
2035. Junod, A., Flukiger, R., and Muller, J., J. Phys. Chem. Solids 37, 27 (1976).
2036. Storms, E. K., Giorgi, A. L., and Szklarz, E. G., J. Phys. Chem. Solids 36, 689 (1975).
2037. Street, G. B., Arnal, H., Gill, W. D., Grant, P. M., and Greene, R. L., Mat. Res. Bull. 10, 877 (1975).
2038. Chevrel, R., Sergent, M., and Fischer, O., Mat. Res. Bull. 10, 1169 (1975).
2039. Shelton, R. N. and Smith, T. F., Mat. Res. Bull. 10, 1013 (1975).
2040. Shelton, R. N., Moodenbaugh, A. R., Dernier, P. D., and Matthias, B. T., Mat. Res. Bull. 10, 1111 (1975).
2041. Vandenberg, J. M., Matthias, B. T., Corenzwit, E., and Barz, H., Mat. Res. Bull. 10, 889 (1975).
2042. Fleming, R. M. and Coleman, R. V., Phys. Rev. Letters 34, 1502 (1975).
2043. Gubser, D. U. and Webb, A. W., Phys. Rev. Letters 35, 104 (1975).
2044. Poate, J. M., Testardi, L. R., Storm, A. R., and Augustyniak, W. M., Phys. Rev. Letters 35, 1290 (1975).
2045. Gill, W. D., Greene, R. L., Street, G. B., and Little, W. A. Phys. Rev. Letters, 35, 1732 (1975).
2046. Skokan, M. R., Morris, R. C., and Moulton, W. G., Phys. Rev. B13, 1077 (1976).
2047. Alterovitz, S., Phys. Rev. B13, 121 (1976).
2048. Bychkov, Yu. F., Vozilkin, V. A., and Uzlov, V. Yu., Fiz. Metal. Metalloved. 38(2), 295 (1974); translation Phys. Metals Metallography 38, (2) 61 (1974).
2049. Pan, V. M., Latysheva, V. I., Khusid, Ye. N., Dekhtyar, I. Ya., and Mikhalevko, V. S., Fiz. Metal. Metalloved. 38, (2) 303 (1974); translation, Phys. Metals Metallography 38, (2) 69 (1974).

2050. Shelton, R. N., McCallum, R. W., and Adrian, H., Phys. Letters 56A, 213 (1976).
2051. Kuz'menko, V. M., Lazarev, B. G., Mel'nikov, V. I., and Sudovtsov, A. I., Fiz. Metal. Metalloved. 37, (5) 1006 (1974); translation, Phys. Metals Metallography 37, (5) 98 (1974).
2052. Ronami, G. N. and Berezina, V. P., Fiz. Metal. Metalloved. 37, (4) 872 (1974); translation, Phys. Metals Metallography 37, (4) 175 (1974).
2053. Khan, H. R. and Raub, Ch. J., Metall. 29, 673 (1975).
2054. Huang, S., Chu, C. W., Fradin, F. Y., and Welsh, L. B., Solid State Commun. 16, 409 (1975).
2055. Bader, S. D., Phillips, N. E., Maple, M. B., and Luengo, C. A., Solid State Commun. 16, 1263 (1975).
2056. Sleight, A. W., Gillson, J. L., and Bierstedt, P. E., Solid State Commun. 17, 27 (1975).
2057. Herrman, G. and Bommel, H. E., Solid State Commun. 17, 241 (1975).
2058. Igelson, J., Sniadower, L., Pindor, A. J., Skoskiewicz, T., Bluthner, K., and Dettman, F., Solid State Commun. 17, 309 (1975).
2059. Damsma, H. and Havinga, E. E., Solid State Commun. 17, 409 (1975).
2060. Testardi, L. R., Solid State Commun. 17, 871 (1975).
2061. Robbins, C. G., Ishikawa, M., Treyvaud, A., and Muller, J., Solid State Commun. 17, 903 (1975).
2062. Leger, A., Klein, J., and Bok J., Solid State Commun. 17, 1131 (1975).
2063. Civiak, R., Junker, W., Elbaum, C., Kao, H. I., and Labes, M. M., Solid State Commun. 17, 1573 (1975).
2064. Matsuo, S., Sugiura, H., and Noguchi, S., J. Low Temp. Phys. 15, 481 (1974).
2065. Gray, K. E., J. Low Temp. Phys. 15, 335 (1974).
2066. Dolan, G. J., J. Low Temp. Phys. 15, 133 (1974).
2067. Johnson, G. R. and Douglass, D. H., J. Low Temp. Phys. 14, 575 (1974).
2068. Legvold, S., Green, R. W., Beaudry, B. J., and Ostenson, J. E., Solid State Commun. 18, 725 (1976).
2069. Pendrys, L. A. and Douglass, D. H., Solid State Commun. 18, 177 (1976).
2070. Hoyt, R. F. and Mota, A. C., Solid State Commun. 18, 139 (1976).
2071. Oesterreicher, H. and Clinton, J., J. Sol. State Chem. 17, 399 (1976).
2072. Muller, W. H.-G., Baumann, F., and Buckel, W., Thin Solid Films 28, 83 (1975).
2073. Petersen, J., Appl. Phys. 9, 283 (1976).
2074. Haen, P. and Teixeira, J., Rev. Phys. Appl. 9, 879 (1974).
2075. Hechler, K. and Volk, P., Z. Naturforschung 30a, 1779 (1975).
2076. Khan, H. R. and Raub, Ch. J., Z. Phys. B23, 127 (1975).
2077. Bolz, J. and Pobell, F., Z. Phys. B20, 95 (1975).
2078. Bernhardt, K.-H., Z. Naturforsch. 30a, 528 (1975).
2079. Sosnowski, J., Phys. Stat. Sol. b72, 403 (1975).

2080. Zimmermann, M., Wolf, G., and Bohmhammel, K., Phys. Stat. Sol. a31, 511 (1975).
2081. Duffer, P., Sankar, S. G., Rao, V. U. S., Bergner, R. L. and Obermyer, R., Phys. Stat. Sol. a31, 655 (1975).
2082. Nikitin, V. P., Novikov, V. I., Neshpor, V. S., and Popov, V. V., Fiz. Tverd. Tela 17, 3406 (1975); translation, Sov. Phys. Solid State 17, 2229 (1975).
2083. Il'ina, M. A. and Itskevich, E. S., Fiz. Tverd. Tela 17, 3461 (1975); translation, Sov. Phys. Solid State 17, 2266 (1975).
2084. Nikulin, E. I., Fiz. Tverd. Tela 17, 2795 (1975); translation, Sov. Phys. Solid State 17, 1864 (1975).
2085. Il'ina, M. A. and Itskevich, E. S., Fiz. Tverd. Tela 17, 154 (1975); translation, Sov. Phys. Solid State 17, 89 (1975).
2086. Brandt, N. B., Gitsu, D. V., Popovitch, N. S., Sidorov, V. I., and Chudinov, S. M., ZhETZ Pis. Red. 22, 225 (1975); translation, JETP Lett. 22, 104 (1975).
2087. Tittman, B. R., Phys. Letters 56A, 405 (1976).
2088. Pan, V. M., Alekseevskii, V. P., Popov, A. G., Beletskii, Yu. I., Yupko, L. M., and Yarosh, V. V., ZhETF Pis. Red. 21, 494 (1975); translation, JETP Lett. 21, 228 (1975).
2089. Alekseevskii, N. E., Bazan, Ch., Dobrovolskii, N. M., and Tsebro, V. I., ZhETZ Pis. Red. 20, 465 (1974); translation, JETP Lett. 20, 211 (1974).
2090. Tsymbalenko, V. L. and Shal'nikov, A. I., Zh. Eksp. Teor. Fiz. 65, 2086 (1973); translation, Sov. Phys. JETP 38, 1043 (1974).
2091. Appleyard, E. T. S., Bristow, J. R., London, H., and Misener, A. D., Roy. Soc. London: Proc. 172A, 540 (1939).
2092. Kuz'menko, V. M., Lazarev, V. G., Mel'nikov, V. I., and Sudovtsov, A. I., Zh. Eksp. Teor. Fiz. 67, 801 (1974); translation, Sov. Phys.-JETP 40, 396 (1974).
2093. Teplov, A. A., Mikheeva, M. N., and Golyanov, V. M., Zh. Eksp. Teor. Fiz. 68, 1108 (1975); translation, Sov. Phys. JETP 41, 549 (1975).
2094. Dubrovskaya, L. B. and Nazarova, S. Z., Zh. Eksp. Teor. Fiz. 68, 238 (1975); translation, Sov. Phys.-JETP 41, 115 (1975).
2095. Levin, H., Selisky, H., Heim, G., and Buckel, W., Z. Phys. B24, 65 (1976).
2096. Baberschke, K., Z. Phys. B24, 53 (1976).
2097. Kadikova, G. N., Metallovedeniye i Term. obrabotka Metallov. (2), 28-32 (1973).
2098. Winzer, K., Z. Phys. 265, 139 (1973).
2099. Mag. Meas. Group, Nanking Univ., Acta Phys. Sinica 24, (4) 307 (1975).
2100. Yamamoto, M., Thesis of Hokkaido University, Sapporo, Japan (1975) and private communication.
2101. Ignat'eva, T. A., Makarov, V. I., and Cherevan, Yu. A., Zh. Eksp. Teor. Fiz. 67, 994 (1974); translation, Sov. Phys. JETP 40, 492 (1974).
2102. Kirschner, I., Bankuti, J., Kiss, G. Y., Kovacs, I., Laszlof'fy, L., Remenyi, Gy., and Sajo, K., Zh. Eksp. Teor. Fiz. 66, 2141 (1974); translation, Sov. Phys.-JETP 39, 1054 (1974).

2103. Jastrzebska, T., Trojnar, E., and Makiej, B., *Acta Phys. Pol.* A49, 359 (1976).
2104. Sulkowski, C., Zacharko, W., and Mazur, J., *Acta Phys. Pol.* A50, 37 (1976).
2105. Mankorntong, N. and Neal, W. E. J., *Surface Tech.* 5, 78 (1977).
2106. Lekhtyar, I. Ya., Ivanov, L. I., Karlov, N. V., Kuz'min, G. P., Nischenko, A. M., Prokhorov, A. M., Rykalin, N. N. and Yanushkevich, V. A., *Kvantovaya Elek.* (Moscow) 3, 844 (1976); translation: *Sov. J. Quant. Electron.* 6, 460 (1976).
2107. Snead, C. L. Jr. and Parkin, D. M., *Nuclear Tech.* 29, 264 (1976).
2108. Dew-Hughes, D., Luhman, T. S. and Suenaga, M., *Nuclear Tech.* 29, 268 (1976).
2109. Savitskii, E. M., Baron, V. V., Korostelin, A. A., Kadyrbaev, A. R., Sumarokov, V. N. and Gusev, V. A., *Dokl. Akad. Nauk SSSR* 227, 840 (1976); translation: *Sov. Phys. Dokl.*, 21, 211 (1976).
2110. Lyon, M. and Zepp, G., *Can. J. Phys.* 55, 55 (1977).
2111. Vandenberg, J. M., Matthias, B. T., Corenzwit, E. and Barz, H., *J. Sol. State Chem.* 18, 395 (1976).
2112. Tarutani, Y. and Kudo, M., *Jap. J. Appl. Phys.* 16, 509 (1977).
2113. Dahlgren, S. D., *Metal. Trans.* 7A, 1375 (1975).
2114. Lippmann, G., Schelten, J., and Schmatz, W., *Phil. Mag.* 33, 475 (1976).
2115. Ghosh, A. K. and Douglass, D. H., *Phys. Rev. Letters* 37, 32 (1976).
2116. Testardi, L. R., Poate, J. M. and Levinstein, H. J., *Phys. Rev. Letters* 37, 637 (1976).
2117. Lutz, H., Weismann, H., Kammerer, O. F. and Strongin, M., *Phys. Rev. Letters* 36, 1576 (1976).
2118. Poate, J. M., Dynes, R. C., Testardi, L. R. and Hammond, R. H., *Phys. Rev. Letters* 37, 1308 (1976) and 38, 788 (1977).
2119. Gill, W. D., Bludau, W., Geiss, R. H., Grant, P. M., Greene, R. L., Mayerle, J. J. and Street, G. B., *Phys. Rev. Letters* 38, 1305 (1977).
2120. Fertig, W. A., Johnston, D. C., DeLong, L. E., McCallum, R. W., Maple, M. B. and Matthias, B. T., *Phys. Rev. Letters* 38, 987 (1977).
2121. Fradin, F. Y., Shenoy, G. K., Dunlap, B. D., Aldred, A. T. and Kimball, C. W., *Phys. Rev. Letters* 38, 719 (1977).
2122. Duffer, P., Gaultieri, D. M. and Rao, V. U. S., *Phys. Rev. Letters* 37, 1410 (1976).
2123. Kobayashi, N., Noto, K. and Muto, Y., *Solid State Commun.* 20, 1081 (1976).
2124. Dee, R. H., Berlinsky, A. J., Carolan, J. F., Klein, E., Stone, N. J., Turrell, B. G. and Street, G. B., *Solid State Commun.* 22, 303 (1977).
2125. Flukiger, R. and Jorda, J. L., *Solid State Commun.* 22, 109 (1977).
2126. Collver, M. M. and Hammond, R. H., *Solid State Commun.* 22, 55 (1977).
2127. Legvold, S., Beaudry, B. J., Ostenson, J. E. and Harmon, B. N., *Solid State Commun.* 21, 1061 (1976).
2128. Johnston, D. C., Shelton, R. N. and Bugaj, J. J., *Solid State Commun.* 21, 949 (1977).
2129. Kalra, S. B. and Dheer, P. N., *Solid State Commun.* 21, 651 (1977).

2130. Bohmhammel, K., Wolf, G., Alekseevskii, N. E. and Krasnoperov, E. P. Solid State Commun. 21, 519 (1977).
2131. Webb, G. W. and Matthias, B. T., Solid State Commun. 21, 193 (1977).
2132. Kurmaev, E. Z., Werfel, F., Brummer, O. and Flukiger, R., Solid State Commun. 21, 239 (1977).
2133. Besslein, B. and Ischenko, G., Solid State Commun. 19, 867 (1967).
2134. Claeson, T., Hanson, M. and Ivarsson, J., Solid State Commun. 20, 233 (1976).
2135. Moore, D. F., Rowell, J. M. and Beasley, M. R., Solid State Commun. 20, 305 (1976).
2136. Azevedo, L. J., Clark, W. G., Deutscher, G., Greene, R. L., Street, G. B. and Suter, L. J., Solid State Commun. 19, 197 (1976).
2137. Muhlratzer, A., Nickl, J. J., Seeber, B. and Sprenger, H., Solid State Commun. 19, 239 (1976).
2138. Junod, A., Flukiger, R., Treyvaud, A. and Muller, J., Solid State Commun. 19, 265 (1976).
2139. Lou, L. F., Solid State Commun. 19, 335 (1976).
2140. Koepke, R. and Bergmann, G., Solid State Commun. 19, 435 (1976).
2141. Garoche, P., Veyssie, J. J., Manuel, P. and Molinie, P., Solid State Commun. 19, 455 (1976).
2142. Stanley, R. K., Skokan, M. R., Morris, R. C. and Moulton, W. G., Solid State Commun. 19, 555 (1976).
2143. Linker, G. and Meyer, O., Solid State Commun. 20, 695 (1976).
2144. Thorwarth, E., Dietrich, M., and Politis, C., Solid State Commun. 20, 869 (1976).
2145. Hong, S. O. and Tomasch, W. J., Solid State Commun. 20, 965 (1976).
2146. Foner, S. and McNiff, E. J. Jr., Solid State Commun. 20, 995 (1976).
2147. Mota, A. C. and Hoyt, R. F., Solid State Commun. 20, 1025 (1976).
2148. Shelton, R. N., Johnston, D. C. and Adrian, H., Solid State Commun. 20, 1077 (1976).
2149. Chu, C. W., Huang, S. and Sleight, A. W., Solid State Commun. 18, 977 (1976).
2150. Siemens, R. E. and Griffiths, D. J., Solid State Commun. 18, 1097 (1976).
2151. Berthier, C., Molinie, P. and Jerome, D., Solid State Commun. 18, 1393 (1976).
2152. Collings, E. W. and Ho, J. C., Solid State Commun. 18, 1493 (1976).
2153. Sigsbee, R. A., Appl. Phys. Letters 29, 211 (1976).
2154. DeLong, L. E., McCallum, R. W., Fertig, W. A., Maple, M. B. and Huber, J. G., Solid State Commun. 22, 245 (1977).
2155. Caton, R. and Satterthwaite, C. B., J. Less-Common Met. 52, 307 (1977).
2156. Satterthwaite, C. B. and Peterson, D. T., J. Less-Common Met. 26, 361 (1972).
2157. Raub, CH. J. and Khan, H. R., J. Less-Common Met. 48, 1 (1976).
2158. Drys, M., J. Less-Common Met. 52, 81 (1977).

2159. Oesterreicher, H., Clinton, J. and Misroch, M., J. Less-Common Met. 52, 129 (1977).
2160. Dumoulin, L., Nedellec, P., Chaumont, J., Gilbon, D., Lamoise, A-M. and Bernas, H., C. R. Acad. Sc. Paris 283B, 285 (1976).
2161. Alekseevskii, N. E., Dobrovolskii, N. M. and Tsebro, V. I., Pisma Zh. Eksp. Teor. Fiz. 23, 694 (1976); translation: JETP Letters 23, 639 (1976).
2162. Decroux, M., Fischer, O. and Chevrel, R., Cryogenics 17, 291 (1977).
2163. Alekseevskii, N. E., Tsebro, V. I., Zakosarenko V. M., Al'shitz, A. I. and Personov, R. I., ZhETF Pis. Red. 15, 668 (1972); translation: JETP Letters 15, 472 (1972).
2164. Kurakado, M., Takabatake, T. and Mazaki, H., Bull. Inst. Chem. Res. Kyoto Univ., 55, No. 1, 38 (1977).
2165. Ischenko, G., Adrian, H., Klaumunzer, S., Lehman, M., Muller, P., Neumuller, H. and Szymczak, W., Phys. Rev. Letters 39, 43 (1977).
2166. Webb, G. W., Moehlecke, S. and Sweedler, A. R., Mat. Res. Bull. 12, 657 (1977).
2167. Fertig, W. A. and Maple, M. B., Solid State Commun. 23, 105 (1977).
2168. Steiner, P. and Gumprecht, G., Solid State Commun. 22, 501 (1977).
2169. Chang, C. C., Ho, W. C. and Chan, Y. W., Cryogenics 16, 433 (1976).
2170. Leyarovski, E., Leyarovska, L., Krasnopyorov, E., Kokot, L., Horyn, R. and Mydlarz, T., Z. Physik B27, 57 (1977).
2171. Bauriedl, W. and Heim, G., Z. Physik B26, 29 (1977).
2172. Ruhl, W. and Hilsch, P., Z. Physik B26, 161 (1977).
2173. Poon, S. J. and Durand, J., Solid State Commun. 21, 999 (1977).
2174. Sweedler, A. R., Moehlecke, S., Jones, R. H., Viswanathan, R. and Johnston, D. C., Solid State Commun. 21, 1007 (1977).
2175. Wulffers, L. A. G. M., Frijters, G. A. M., Kok, H. B., Klaassen, T. O. and Pouli, N.J., Physica 84B, 177 (1976).
2176. Haen, P., Monceau, P. and Waysand, G., Physica 86-88B, 470 (1977).
2177. Klaumunzer, S., Ischenko, G. and Muller, P., Z. Physik 268, 189 (1974).
2178. Chang, C. C., Ho, W. C. and Chan, Y. W., Cryogenics 16, 433 (1976).
2179. Lo, K., Bevk, J. and Turnbull, D., J. Appl. Phys. 48, 2597 (1977).
2180. Noolandi, J. and Testardi, L. R., Phys. Rev. B15, 5462 (1977).
2181. Prober, D. E., Beasley, M. R. and Schwall, R. E., Phys. Rev. B 15, 5245 (1977).
2182. Hallak, A. B., Hammond, R. H. and Geballe, T. H., Appl. Phys. Letters 29, 314 (1976).
2183. Inoue, K. and Tachikawa, K., Appl. Phys. Letters 29, 386 (1976).
2184. Rowell, J. M. and Schmidt, P. H., Appl. Phys. Letters 29, 622 (1976).

2185. Bibby, B. R., Nabarro, F. R. N., McLachlan, D. S. and Stephen, M. J., Philosophical Trans. Roy. Soc. (London) 278, 311-49, #1282 (1975).
2186. Lutes, O. S., Phys. Rev. 105, 1451 (1957).
2187. Uher, C., Lee, C.-W. and Bass, J., Phys. Letters 61A, 344 (1977).
2188. Francavilla, T. L., Carter, F. L. and Webb, A. W., Phys. Letters 59A, 388 (1976).
2189. Foner, S. and McNiff, E. J., Jr., Phys. Letters 58A, 318 (1976).
2190. Luhman, T. and Sweedler, A. R., Phys. Letters 58A, 355 (1976).
2191. McConville, G. T., Sullenger, D. B., Zielinski, R. E. and Gubser, D. U., Phys. Letters 58A, 257 (1976).
2192. Claeson, T. and Jacobsen, N., Phys. Letters 58A, 263 (1976).
2193. Khan, H. R., Raub, Ch. J., Luders, K. and Szucs, Z., Appl. Phys. 13, 123 (1977).
2194. Roy, R. and Rogowski, D. A., Phys. Letters 57A, 60 (1976).
2195. Bauriedl, W., Heim, G. and Buckel, W., Phys. Letters 57A, 282 (1976).
2196. Foner, S., McNiff, E. J. Jr., Shelton, R. N., McCallum, R. W. and Maple, M. B., Phys. Letters 57A, 345 (1976).
2197. Besslein, B., Ischenko, G., Klaumunzer, S., Muller, P., Neumuller, H., Schmelz, K. and Adrian, H., Phys. Letters 53A, 49 (1975).
2198. Silverman, P. J. and Briscoe, C. V., Phys. Letters 53A, 221 (1975).
2199. Sixl, H., Phys. Letters 53A, 333 (1975).
2200. Duggal, V. P. and Ashwini Kumar, P. K., Phys. Letters 53A, 397 (1975).
2201. Harper, J. M. E., Geballe, T. H. and DiSalvo, F. J., Phys. Letters 54A, 27 (1975).
2202. Togano, K. and Tachikawa, K., Phys. Letters 54A, 205 (1975).
2203. Barz, H., Phys. Letters 54A, 233 (1975).
2204. Karr, D., Rodewald, W. and Sollig, H., Phys. Letters 54A, 237 (1975).
2205. Granqvist, C. G., Milanowski, G. J. and Buhrman, R. A., Phys. Letters 54A, 245 (1975).
2206. Kawamura, H. and Tachikawa, K., Phys. Letters 55A, 65 (1975).
2207. Niculescu, D., Bradea, I., Popa, M., Ivanciu, O. and Cruceanu, E., Phys. Letters 55A, 233 (1975).
2208. Schmelz, K., Ischenko, G., Besslein, B., Greiner, A., Klaumunzer, S., Muller, P. and Neumuller, H., Phys. Letters 55A, 315 (1975).
2209. Auer, J. and Ullmaier, H., Phys. Rev. B7, 136 (1973).
2210. Hauser, J. J., Robbins, M. and DiSalvo, F. J., Phys. Rev. B8, 1038 (1973).
2211. Escher, J. S. and Ginsberg, D. M., Phys. Rev. B3, 735 (1971).
2212. Welsh, L. B., Wiley, C. L. and Fradin, F. Y., Phys. Rev. B11, 4156 (1975).

2213. Delfs, R. J., Beaudry, B. J. and Finnemore, D. K., Phys. Rev. B11, 4212 (1975).
2214. Testardi, L. R., Meek, R. L., Poate, J. M., Royer, W. A., Storm, A. R. and Wernick, J. H., Phys. Rev. B11, 4304 (1975).
2215. Ostenson, J. E. and Finnemore, D. K., Phys. Rev. B12, 114 (1975).
2216. Sweedler, A. R. and Cox, D. E., Phys. Rev. B12, 147 (1975).
2217. O'Hara, S. G. and Marshall, B. J., Phys. Rev. B8, 4175 (1973).
2218. Miller, D. L., Strongin, M., Kammerer, O. F. and Streetman, B. G., Phys. Rev. B8, 4416 (1973).
2219. Francavilla, T. L. and Carter, F. L., Phys. Rev. 14, 128 (1976).
2220. Miller, D. L., Phys. Rev. B15, 4180 (1977).
2221. Testardi, L. R., Poate, J. M. and Levinstein, H. J., Phys. Rev. B15, 2570 (1977).
2222. Missell, F. P., Oliveira, N. F. Jr. and Shapira, Y., Phys. Rev. B14, 2255 (1976).
2223. Moore, E. L., Reed, R. W. and Brickwedde, F. G., Phys. Rev. B15, 187 (1977).
2224. Civiak, R. I., Elbaum, C., Nichols, L. F., Kao, H. I. and Labes, M. M., Phys. Rev. B14, 5413 (1976).
2225. Whitney, D. A., Fleming, R. M. and Coleman, R. V., Phys. Rev. B15, 3405 (1977).
2226. Prober, D. E., PhD Thesis. Harvard Univ., 1975. (Quoted in Ref. 2225; page 3418).
2227. Kirschenbaum, J., Phys. Rev. B12, 3690 (1975).
2228. Dynes, R. C. and Rowell, J. M., Phys. Rev. B11, 1884 (1975).
2229. Schirber, J. E. and Northrup, C. J. M. Jr., Phys. Rev. B10, 3818 (1974).
2230. Deutscher, G. and Pasternak, M., Phys. Rev. B10, 4042 (1974).
2231. Harper, J. M. E., Greene, R. L., Grant, P. M. and Street, G. B., Phys. Rev. B15, 539 (1977).
2232. Sakai, N. and Fritzsch, H., Phys. Rev. B15, 973 (1977).
2233. Scholten, P. D. and Moulton, W. G., Phys. Rev. B15, 1318 (1977).
2234. Chu, C. W., Diatschenko, V., Huang, C. Y. and DiSalvo, F. J., Phys. Rev. B15, 1340 (1977).
2235. Cook, J. W. Jr., Davis, W. T., Chandler, J. H. and Skove, M. J., Phys. Rev. B15, 1357 (1977).
2236. Watlington, C. L., Cook, J. W. Jr. and Skove, M. J., Phys. Rev. B15, 1370 (1977).
2237. Gubser, D. U., Hein, R. A., Waterstrat, R. M. and Junod, A., Phys. Rev. B14, 3856 (1976).
2238. Lou, L. F., Phys. Rev. B14, 3914 (1976).
2239. Miller, J. F., Caton, R. H., and Satterthwaite, C. B., Phys. Rev. B14, 2795 (1976).
2240. Parr, H., Phys. Rev. B14, 2842, 2849 (1976).
2241. Johnson, W. L. and Tsuei, C. C., Phys. Rev. B13, 4827 (1976).

2242. Shikov, A. A., Chernoplekov, N. A., Panova, G. Kh., Samoilov, B. N. and Zhernov, A. P., Zh. Eksp. Teor. Fiz. 70, 687 (1976); translation, Sov. Phys. -JETP 43, 354 (1976).
2243. Currie, P. D., Finlayson, T. R. and Rachinger, W. A., Scripta Met. 11, 59 (1977).
2244. Dekhtjar, I. Ya. and Nishchenko, M. M., Ukr. Fiz. Zh. 22, 405 (1977).
2245. Savitsky, E. M., Saur, E., Raub, C. J. and Efimov, Yu. V., Z. Metallkde. 68, 128 (1977).
2246. Zubeck, R. B., King, C. N., Moore, D. F., Barbee, T. W. Jr., Hallack, A. B., Salem, J. and Hammond, R. H., Thin Solid Films 40, 249 (1977).
2247. Przybysz, J. X. and Ginsberg, D. M., Phys. Rev. B14, 1039 (1976).
2248. Deutscher, G., Entin-Wohlman, O. and Ovadyahu, Z., Phys. Rev. B14, 1002 (1976).
2249. Thompson, S. J. and Flewitt, P. E. J., J. Less-Common Met. 40, 269 (1975).
2250. Miller, D. L., Strongin, M., Kammerer, O. F. and Streetman, B. G., Phys. Rev. B13, 4834 (1976).
2251. Robbins, R. A. and Marshall, B. J., Phys. Rev. B13, 4852 (1976).
2252. Roschel, E. and Raub, E., Z. Metallkde. 61, 251 (1970).
2253. Petermann, J., Z. Metallkde. 61, 724 (1970).
2254. Nembach, E., Z. Metallkde. 61, 734 (1970).
2255. Falke, H., Jablonski, H. P., Kastiner, J. and Wasserman, E. F., Z. Physik 259, 135 (1973).
2256. Collings, E. W. and Ho, J. C., J. Less-Common Metals 41, 157 (1975).
2257. Robbins, C. G. and Muller, J., J. Less-Common Metals 42, 19 (1975).
2258. Muller, A., J. Less-Common Metals 42, 29 (1975).
2259. Cave, J. A., Davies, T. J. and Carpenter, F. C., J. Less-Common Metals 42, 335 (1975).
2260. Harper, J. M. E., Geballe, T. H., Newkirk, L. R. and Valencia, F. A., J. Less-Common Metals 43, 5 (1975).
2261. Smith, T. F., Finlayson, T. R. and Shelton, R. N., J. Less-Common Metals 43, 21 (1975).
2262. Zwicker, U., Lohberg, R. and Heller, W., Z. Metallkde. 61, 836 (1970).
2263. Zehl, O. and Bahl, S. K., Thin Solid Films 38, L1-L4 (1976).
2264. Petersen, J., Z. Physik B24, 273 (1976).
2265. Golovashkin, A. I., Levchenko, I. S., and Motulevich, G. P., Fiz. metal. metalloved. 40, 743 (1975); translation, Phys. Metals Metallography 40, (4) 52 (1975).
2266. Pan, V. M. Beletskiy, Yu. I., Flis, V. S., Firstov, S. A. and Sarzhan, G. F., Fiz. metal. metalloved., 40, 281 (1975); translation, Phys. Metals Metallography 40, (2) 43 (1975).
2267. Alekseevskii, N. E., Balakhovskii, O. A. and Kirillov, I. V., Fiz. metal. metalloved. 40, 50 (1975); translation, Phys. Metals Metallography 40, (1) 38 (1975).
2268. Alekseevskii, N. E. and Krasnoperov, E. P., Fiz. metal. metalloved. 39, 872 (1975); translation, Phys. Metals Metallography 39, (4) 176 (1975).

2269. Moiseyev, D. P., Semenova, E. L. and Uvarova, S. K., *Fiz. metal. metalloved.*, 39, 1163 (1975); translation, *Phys. Metals Metallography* 39, (6) 33 (1975).
2270. Pettit, R. B. and Silcox, J., *Phys. Rev.* B13, 2865 (1976).
2271. Viswanathan, R. and Johnston, D. C., *Phys. Rev.* B13, 2877 (1976).
2272. Knapp, G. S., Bader, S. D. and Fisk, Z., *Phys. Rev.* B13, 3783 (1976).
2273. Woollam, J. A. and Somoano, R. B., *Phys. Rev.* B13, 3843 (1976).
2274. Toxen, A. M., Gambino, R. J. and Stemple, N. R., *Bull. Amer. Phys. Soc.* 12, 57 (1967).
2275. Noer, R. J., *Phys. Rev.* B12, 4882 (1975).
2276. Okaz, A. M. and Keesom, P. H., *Phys. Rev.* B12, 4917 (1975).
2277. Bader, S. D., Phillips, N. E. and Fisher, E. S., *Phys. Rev.* B12, 4929 (1975).
2278. Matsuo, S., Mizutani, U., Massalski, T. B. and Noguchi, S., *Phys. Rev.* B12, 4941 (1975).
2279. Mizutani, U. and Massalski, T. B., *Proc. Roy. Soc. London* A343, 375 (1975).
2280. Das, B. N., Cox, J. E., Huber, R. W. and Meussner, R. A., *Metall. Trans.* 8A, 541 (1977).
2281. Heim, G. and Kay, E., *J. Appl. Phys.* 46, 4006 (1975).
2282. Cadieu, F. J., Chencinski, N. and Rosen, C. Z., *J. Appl. Phys.* 48, 686 (1977).
2283. Powell, R. M., Skocpol, W. J. and Tinkham, M., *J. Appl. Phys.* 48, 788 (1977).
2284. Daniel, M. R., Braginski, A. I., Roland, G. W., Gavaler, J. R., Bartlett, R. J. and Newkirk, L. R., *J. Appl. Phys.* 48, 1293 (1977).
2285. Brown, B. S., Hafstrom, J. W. and Klippert, T. E., *J. Appl. Phys.* 48, 1759 (1977).
2286. Jones, W. B., Taggart, R. and Polonis, D. H., *Materials Sci. Eng.* 28, 145 (1977).
2287. Lawson, A. C. and Shelton, R. N., *Mat. Res. Bull.* 12, 375 (1977).
2288. Davidov, D., Baberschke, K., Mydosh, J. A. and Nieuwenhuys, G. J., *J. Phys. F: Metal Phys.* 7, L47 (1977).
2289. Wu, C. T., Kampwirth, R. T. and Hafstrom, J. W., *J. Vac. Sci. Technol.* 14, 134 (1977).
2290. Rogowski, D. A. and Roy, R., *J. Appl. Phys.* 47, 4635 (1976); *J. Vac. Sci. Technol.* 14, 162 (1977).
2291. Sambongi, T., Yamamoto, M., Tsutsumi, K., Shiozaki, Y., Yamaya, K. and Abe, Y., *J. Phys. Soc. Japan* 42, 1421 (1977).
2292. Asada, Y., *J. Phys. Soc. Japan* 41, 26 (1976).
2293. Yamamoto, M. and Sambongi, T., *J. Phys. Soc. Japan* 41, 1146 (1976).
2294. Ohshima, K., Kuroishi, T. and Fujita, T., *J. Phys. Soc. Japan* 41, 1234 (1976).
2295. Ashby, D. A. and Rawlings, R. D., *J. Maters. Sci.* 12, 975 (1977).
2296. Lamouse, A. M., Chaumont, J. and Lalou, F., *J. Physique-Lettres* 37, L287 (1976).
2297. Schmid, W. and Umlauf, E., *Commun. on Phys.* 1, 67 (1976).
2298. Smith, T. F., Finlayson, T. R. and Taft, A., *Commun. on Phys.* 1, 167 (1976).
2299. Superconducting Materials Group of Beijing University, *Acta. Phys. Sinica* 25, 122 (1976).

2300. Gann, V. V., Skvortsov, A. I. and Van Den Bosch, A., phys. stat. sol. a41, 225 (1977).
2301. Karkin, A. E., Arkhipov, V. E., Goshchitskii, B. N., Romanov, E. P. and Sidorov, S. K., phys. stat. sol. a38, 433 (1976).
2302. Postnikov, V. S., Postnikov, V. V. and Zheleznyi, V. S., phys. stat. sol. a39, K21 (1977).
2303. Ortiz, W. A. and Missell, F. P., phys. stat. sol. a35, K135 (1976).
2304. Wolf, G. and Hohlfeld, C., phys. stat. sol. a36, K99 (1976).
2305. Somasundaram, R., Toth, L. E. and Spitzer, H., J. Appl. Phys. 47, 4656 (1976).
2306. Tongson, L. L., Rogowski, D. A. and Knox, B. E., J. Appl. Phys. 47, 5059 (1976).
2307. Granqvist, C. G. and Claeson, T., Thin Solid Films 34, 259 (1976).
2308. Alekseevskii, N. E. Sakosarenko, V. M., Bluthner, K. and Kohler, H.-J., phys. stat. sol. a34, 541 (1976).
2309. Braun, H. F., Haeussler, E. N. and Saur, E. J., IEEE Trans. Mag. MAG-13, 327 (1977); also Proc. ICEC 6, Grenoble 1976, pp. 411-413.
2310. Bauer, H., J. Low Temp. Phys. 24, 219 (1976).
2311. Rapp, O. and Fogelholm, R., J. Phys. F: Metal Phys. 5, 1694 (1975).
2312. Rapp, O. and Vieland, L. J., Phys. Letters 36A, 369 (1971).
2313. Wennerstrom, P., Bystrom, S., Larsson, M., Lindqvist, T. and Rapp, O., Phys. Scripta 11, 378 (1975).
2314. Würzbacher, G. and Gebhardt, P., Surface Sci. 21, 324 (1970).
2315. Vereshchagin, L. F., Savitskii, E. M., Evdokimova, V. V., Novoksenov, V. I. and Petrenko, V. G., Pis'ma Zh. Eksp. Teor. Fiz. 24, 193 (1976); translation JETP Letters 24, 193 (1976)
2316. Matthias, B. T., Corenzwit, E., Vandenberg, J. M. and Barz, H. E., Proc. Natl. Acad. Sci. USA 74, 1334 (1977); (J.M.V. and B.T.M.) 74, 1336 (1977).
2317. Alekseevskii, N. E., Dobrovols'kii, N. M., Nizhankovskii, V.I. and Tsebro, V.I., Zh. Eksp. Teor. Fiz. 69, 662 (1975); translation Sov. Phys. -JETP 42, 336 (1975).
2318. Brandt, N. B., Berman, I. V. and Kurkin, Yu. P., Zh. Eksp. Teor. Fiz. 69, 1710 (1975); translation, Sov. Phys. - JETP 42, 869 (1975).
2319. Shikov, A. A., Chernoplekov, N. A., Panova, G. KH., Samoilov, B. N. and Zhernov, A. P., Zh. Eksp. Teor. Fiz. 69, 1825 (1975); translation, Sov. Phys. - JETP 42, 927 (1975).
2320. Alekseevskii, N. E., Mitin, A. V. and Matveeva, N. M., Zh. Eksp. Teor. Fiz. 69, 2124 (1975); translation, Sov. Phys. - JETP 42, 1080 (1975).
2321. Aubert, A. and Spitz, J., Le Vide 30, 1 (1975).
2322. Alekseevskii, N. E., Bazan, C., Mitin, A. B., Mydlarz, T., Krasnoperov, E. P. and Raczka, B., phys. stat. sol. b77, 451 (1976).
2323. Ageev, N. V., Alekseevskii, N. E. and Shamray, V. F., phys. stat. sol. b77, K129 (1976).
2324. Wolf, G. and Zimmermann, M., phys. stat. sol. a37, 485 (1976).

2325. Szafranski, A. W., Skoskiewicz, T. and Baranowski, B., phys. stat. sol. a37, K163 (1976).
2326. Zacharko, W., Kubiak, R. and Mazur, J., phys. stat. sol. b76, K1 (1976).
2327. Bogomolov, V. N., Kumzerov, Yu. A., Prokof'ev, D. D., Smirnov, A. P. and Tsypkin, S. I., Fiz. Tverd. Tela 18, 971 (1976); translation, Sov. Phys. Solid State 18, 556 (1976).
2328. Il'ina, M. A., Fiz. Tverd. Tela 18, 1051 (1976); translation, Sov. Phys. Solid State 18, 600 (1976).
2329. Orlov, A. F., Milai, A. K. and Dmitriev, V. P., Fiz. Tverd. Tela 18, 1470 (1976); translation, Sov. Phys. Solid State 18, 854 (1976).
2330. Gerber, J. A. and Sample, H. H. and Neuringer, L. J., J. Appl. Phys. 47, 2134 (1976).
2331. Das Gupta, A., Gey, W., Halbritter, H., Kupfer, H. and Yasaitis, J. A. J. Appl. Phys. 47, 2146 (1976).
2332. Minnigerode, G. v., Armbruster, H., Riblet, G., Steglich, F. and Winzer, K., "Low Temperature Physics - LT13." Ed. Timmerhaus, K. D., O'Sullivan, W. J. and Hammel, E. F. (Plenum, New York-London, 1974) Vol. II, pp. 567-73.
2333. Aoi, T. and Masuda, Y., Ref. 2332; pp. 574-8.
2334. Huber, J. G. and Maple, M. B., Ref. 2332; pp. 579-584.
2335. Luengo, C. A., Cotignola, J. M., Sereni, J., Sweedler, A. R. and Maple, M. B., Ref. 2332; pp. 585-9.
2336. Watson, H. L., Peterson, D. T. and Finnemore, D. K., Ref. 2332; pp. 590-592.
2337. Koch, C. C., Gardner, W. E. and Mortimer, M.J., Ref. 2332; pp. 595-600.
2338. Hulliger, F. and Ott, H. R., AIP Conf. Proc.; Magn. Magn. Mater., Joint MMM-INTERMAG. Conf. 34, 70-1 (1976).
2339. Duffer, P., Gaultieri, D. M. and Rao, V. U. S., Ref. 2338, pp. 72-74.
2340. White, J. J. and Collings, E. W., Ref. 2338, pp. 75-77.
2341. Braginski, A. I., Daniel, M. R. and Roland, G. W., Ref. 2338, pp. 78-80.
2342. Schroeder, B., Johnson, W. L., Tsuei, C. C., Chaudhari, P. and Graczyk, J. F., AIP Conf. Proc.; Structure and Excitation of Amorphous Metals 31, 353-8 (1976).
2343. Flukiger, R., Staudenmann, J. L. and Treyvaud, A., Low Temp. Phys.-LT14. Ed. M. Krusius and M. Vuorio (Elsevier, N.Y., 1975) in 5 volumes. Vol. 2, pp. 1-4.
2344. Toyota, N., Fukase, T. and Muto, Y., Ref. 2343; pp. 5-8.
2345. Jones, H., Fischer, O. and Bongi, G., Ref. 2343; pp. 20-23.
2346. Ricci, M. V. and Spadoni, M., Ref. 2343; pp. 24-27.
2347. Stritzker, B., Ref. 2343; pp. 32-35.
2348. Sansores, L. E. and Glover, R. E. III, Ref. 2343; pp. 36-39.
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2350. Igalson, J., Sniadower, L. and Pindor, A. J., Ref. 2343; pp. 48-51.
2351. Freyhardt, H. C. and Culbert, H. V., Ref. 2343; pp. 67-70.
2352. Muto, Y., Toyota, N., Nakatsuji, H., Kobayashi, N. and Noto, K., Ref. 2343; pp. 89-92.
2353. Satterthwaite, C. B. and Miller, J. F., Ref. 2343; pp. 101-104.

2354. Balster, H. and Wittig, J., Ref. 2343; pp. 109-112.
2355. Kirschner, I., Ref. 2343; pp. 321-4.
2356. Fogelholm, R. and Rapp, O., Ref. 2343; pp. 429-32.
2357. McCallum, R. W., Luengo, C. A. and Maple, M. B., Ref. 2343; pp. 537-40.
2358. DeLong, L. E., McCallum, R. W. and Maple, M. B., Ref. 2343; pp. 541-4.
2359. Bilir, N., Phillips, W. A. and Geballe, T. H., Ref. 2343, Vol. 3, pp. 9-12.
2360. Masuda, Y., Takeuchi, J., Shibayama, H. and Aoi, T., Ref. 2343, Vol. 3, pp. 460-3.
2361. Haen, P., Monceau, P., Tissier, B., Waysand, G., Meerschaut, A., Molinie, P. and Rouxel, J., Ref. 2343, Vol. 5, pp. 445-8.
2362. Probst, C. and Wittig, J., Ref. 2343, Vol. 5, pp. 453-6.
2363. Claeson, T. and Ivarsson, J., Commun. on Phys. 2, 53 (1977).
2364. Zimmermeyer, G. and Roden, B., Z. Physik B24, 377 (1976).
2365. Stritzker, B. and Wuhl, H., Z. Physik B24, 367 (1976).
2366. Baixeras, J., Andro, P. and Cazabat, M., IEEE Trans. Magn. MAG-11, 1464 (1975).
2367. Braginski, A. I., Gavaler, J. R., Roland, G. W., Daniel, M. R., Janocko, M. A. and Santhanam, A.T., IEEE Trans. Magn. MAG-13, 300 (1977).
2368. Sigsbee, R. A., IEEE Trans. Magn. MAG-13, 307 (1977).
2369. Hallak, A. B., Hammond, R. H., Geballe, T. H. and Zubeck, R. B., IEEE Trans. Magn. MAG-13, 311 (1977).
2370. Burt, R. J. and Worzala, F. J., IEEE Trans. Magn. MAG-13, 323 (1977).
2371. Lyneis, C. M. and Turneaure, J. P., IEEE Trans. on Magn. MAG-13, 339 (1977).
2372. Dynes, R. C., Poate, J. M., Testardi, L. R., Storm, A. R. and Hammond, R. H., IEEE Trans. Magn. MAG-13, 640 (1977).
2373. Jerome, D., Grant, A. J. and Yoffe, A. D., Solid State Commun. 9, 2183 (1971).
2374. Akihama, R., Yasukochi, K. and Ogasawara, T., IEEE Trans. Magn. MAG-13, 803 (1977).
2375. Shaw, R., Rosenblum, B. and Bridges, F., IEEE Trans. on Magn. MAG-13, 811 (1977).
2376. Blaugher, R. D., IEEE Trans. Magn. MAG-13, 821 (1977).
2377. Koch, C. C., Freyhardt, H. C. and Scarbrough, J. O., IEEE Trans. Magn. MAG-13, 828 (1977).
2378. Roy, U., DasGupta, A. and Koch, C. C., IEEE Trans. Magn. MAG-13, 836 (1977).
2379. Soulen, R. J. Jr., and Utton, D. B., Solid State Commun. 21, 105 (1977).
2380. Rowell, J. M., Schmidt, P. H., Spencer, E. G., Dernier, P. D. and Joy, D. C., IEEE Trans. Magn. MAG-13, 644 (1977).
2381. Couach, M., Doulat, J. and Bonjour, E., IEEE Trans. Magn. MAG-13, 655 (1977).

2382. Geerk, J., Langguth, K. G., Linker, G. and Meyer, O., IEEE Trans. Magn. MAG-13, 662 (1977).
2383. Bayard, M. and Sienko, M. J., J. de Phys. Colloque C4, No. 10, 37, C4-169-174 (1976).
2384. Saito, Y. and Anayama, T., J. Low Temp. Phys. 21, 169 (1975).
2385. Wagner, D. and Stangler, F., J. Low Temp. Phys. 22, 507 (1976).
2386. Schwall, R. E., Stewart, G. R. and Geballe, T. H., J. Low Temp. Phys. 22, 557 (1976).
2387. Blackford, B. L., J. Low Temp. Phys. 23, 43 (1976).
2388. Reed, R. W. and Boyer, A. C., J. Low Temp. Phys. 24, 35 (1976).
2389. Viswanathan, R. and Johnston, D. C., J. Low Temp. Phys. 25, 1 (1976).
2390. Johnston, D. C., J. Low Temp. Phys. 25, 145 (1976).
2391. McCallum, R. W., Johnston, D. C., Luengo, C. A. and Maple, M. B., J. Low Temp. Phys. 25, 177 (1976).
2392. Roden, B. and Zimmermeyer, G., J. Low Temp. Phys. 25, 267 (1976).
2393. Toyota, N., Nakatsuji, H., Noto, K., Hoshi, A., Kobayashi, N., Muto, Y. and Onodera, Y., J. Low Temp. Phys. 25, 485 (1976).
2394. Skove, M. J. and Ott, H. R., J. Low Temp. Phys. 25, 717 (1976).
2395. Kammeroiner, L., Wu, C. T. and Luo, H. L., J. Low Temp. Phys. 24, 111 (1976).
2396. Soll, M., Boning, K. and Bauer, H., J. Low Temp. Phys. 24, 631 (1976).
2397. Sweedler, A. R., Cox, D. E., Moehlecke, S., Jones, R. H., Newkirk, L. R. and Valencia, F. A., J. Low Temp. Phys. 24, 645 (1976).
2398. Bongi, G., Flukiger, R., Treyvaud, A., Fischer, Oe., Jones, H., and Schneider, D., J. Low Temp. Phys. 17, 223 (1974).
2399. Ishikawa, M. and Cappelletti, R. L., J. Low Temp. Phys. 20, 407 (1975).
2400. Luengo, C. A., Huber, J. G., Maple, M. B. and Roth, M., J. Low Temp. Phys. 21, 129 (1975).
2401. Hoyt, R. F., Mota, A. C. and Luengo, C. A., Phys. Rev. B14, 441 (1976).
2402. Moodenbaugh, A. R., Johnston, D. C. and Viswanathan, R., Bull. Amer. Phys. Soc. 22, 52 (1977).
2403. Viswanathan, R., Lawson, A. C. and Pande, C. S., J. Phys. Chem. Solids 37, 341 (1976).
2404. Bucher, E., Heiniger, F. and Muller, J., Low Temp. Phys. -LT9 (Part B) (Plenum Press, 1965) pp. 1059-65.
2405. Meyer, S. F., Howard, R. E., Stewart, G. R., Acrivos, J. V. and Geballe, T. H., J. Chem. Phys. 62, 4411 (1975).
2406. Smith, J. L. and Elliott, R. O., Proc. 2nd Int. Conf. Electronic Structure Actinides, 1976 Wroclaw, Poland, pp. 257-62.
2407. Savitskii, E. M., Bychkova, M. I., Baron, V. V., Dzvitskii, B. E. and Savateev, N.I., Phys. Stat. Sol. a37, K165 (1976).
2408. Fischer, Oe., Colloques Inter. C.N.R.S., No. 242- Physique sous champs magnetiques intenses, 1975, pp. 79-85.
2409. Kobayashi, N., Noto, K. and Muto, Y., Ref. 2343; pp. 93-96.
2410. Dayem, A. H., Geballe, T. H., Zubeck, R. B., Hallak, A. B. and Hull, G. W. Jr., Appl. Phys. Letters 30, 541 (1977).
2411. Johnston, D. C. and Adrian, H., J. Phys. Chem. Solids 38, 355 (1977).

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Bethoux, O., "Les Supraconducteurs a base de Nb", Rev. de Physique Appliquée 5, 495-503 (1970).

Alekseevskii, N. E., "Phasenumwandlungen und Supraleitung", In Phasenumwandlungen in festen Zustand, Leipzig, 1973, pp 189-207 (Dresden conference by the I. Metalltagung der DDR, 16-18 Oktober 1972).

Fradin, F. Y. and Neumann, P., "Structure and Properties of Superconducting Materials in "Treatise on Materials Science and Technology"; Ed. Heyman, H. (Academic Press, New York and London, 1973) pp 231-278.

Lazarev, B. G. (Editor), Voprosy Atomnoi Nauki I Tekhniki. Ser. Fundamental'naia I Prikladnaia Sverkhprovodimost' 1(1), 99 pages, Khar'kov 1973.

Lazarev, B. G. (Editor), Voprosy Atomnoi Nauki I Tekhniki. Ser. Fundamental'naia I Prikladnaia Sverkhprovodimost' 1(2), 62 pages, Khar'kov 1974.

Tilley D. R. and Tilley, J., "Superfluidity and Superconductivity", (John Wiley & Sons, New York, 1974).

Krebs, H., "Superconductivity in Metals, Alloys, Semiconductors, and Glasses as a Result of Particular Bond Systems", Prog. in Solid State Chem. 9, 269-296 (Pergamon, Oxford, N.Y., 1975).

Grassie, A. D. C., "The Superconducting State", (Sussex Univ. Press, London, 1975).

Buckel, W., "Superconducting Materials - (Al5's, PdH(D), Sn, and metastable structures)". Low Temp. Phys. - LT14. Ed. M. Krusius and Vuorio, M. (Elsevier, N. Y., 1975). Vol. 5, pp 150-171.

Fischer, Oe., "Higher Critical Field Superconductors", Low Temp. Phys. - LT14. Ed. M. Krusius and M. Vuorio (Elsevier, N. Y., 1975) Vol. 5, pp 172-191.

Ullmaier, H., "Irreversible Properties of Type II Superconductors", Springer Tracts in Modern Physics 76, (Springer-Verlag, Berlin Heidelberg, New York, 1975) pp 1-165.

Webb, G. W. and Engelhardt, J. J., "Superconducting, Metallurgical and Synthesis Properties of Nb<sub>3</sub>Ga", IEEE Trans. Magn. MAG11, 208-213 (1975).

Etoh, M., "Superconductive Materials at High Critical Temperature", Oyo Butsuri 44, (10) 1110-4 (1975).

Poon, S. J. and Johnson, W. L., "Phenomenological Approach to High T<sub>c</sub> Superconducting Alloys", Phys. Rev. B12, 4816-4824 (1975).

Izyumov, Yu. A., Naish, V. E., and Syromyatnikov, V. N., "Structural Instability and Phase Transitions in Superconducting Al5, Cl5, and B2 Type Compounds", Tr. Ins. Fiz. Met. Ural. Nauchn. Tsentr. Akad. Nauk SSSR 31, 131-55 (1975).

Lazarev, B. G. (Editor), Voprosy Atomnoi Nauki I Tekhniki Ser. Fundamental'naia I Prikladnaia Sverkhprovodimost' 1(3), 36 pages, Khar'kov 1975.

Bergmann, G., "Amorphous Metals and Their Superconductivity", Physics Reports (Section C of Phys. Letters) 27, No. 4, 159-185 (1976) North-Holland Pub. Co., Amsterdam.

Abeles, B., "Granular Superconductors", Appl. Solid State Science 6, 64-88 (1976).

Sirota, N. N., "Chemical Bonding and Superconducting Properties of Compounds", V Sb., Khim. Svyaz' V Kristallakh I Ikh Fiz. Svoistva. (USSR No. 2, 8-24 (1976).

Savitskii, E. M., "Physical Chemistry of Superconductors", (Naukamoscow, USSR), 1976, 136 pp.

Wiesinger, H. D., "Sprungtemperatur zur Supraleitung von Al5-phasen", phys. stat. sol. a36, 61-72 (1976).

Izyumov, Yu. A. and Kurmaev, E. Z., "Superconductivity of Compounds Based on Transition Elements and Its Connection with Lattice Instability", Usp. Fiz. Nauk 118, 53-100 (Jan. 1976); translation Sov. Phys. Usp. 19, 26-52 (1976).

Savitskii, E. M., Efimov, Yu. V., Kozlova, N. D., Mikhalev, B. P., Mizenkova, L. F. and Doron'kin, E. D., "Superconducting Materials", (Metallurgiya Moscow, USSR)(1976), 295 pp.

MacLaughlin, D. E., "Magnetic Resonance in the Superconducting State" in Solid State Physics 31, 1-69 (1976). (Academic Press, New York, 1976).

Ed. Douglass, D. H., "Superconductivity in d- and f- Band Metals", 2nd Rochester Conference. (Plenum Press, N. Y. and London, 1976). 648 pp.

Kuz'menko, V. M., Lazarev, G. G., Mel'nikov, V. I. and Sudovcov, A. I., "Critical Parameters of Amorphous Metal Films", UKR. Fiz. Zh. 21, (6) 883-903 (1976).

Frindt, R. F. and Huntley, D. J., "Experimental Aspects of Superconductivity in Layered Structures" in Optical and Electrical Properties, Ed. by Lee, P. A. (Reidel Pub., Dordrecht-Holland, 1976) pp 403-422.

Savitskii, E. M., Efimov, Yu. V., Kozlova, N. D., Mikhailov, B. P., and Uchenskii, Yu. A., Superconducting Compounds of Transition Metals (Nauka Moscow, USSR)(1976) 215 pp.

Weber, H. W., Editor, "Anisotropy Effects in Superconductors" (Plenum Press, New York, London, 1977), 316 pp.

Dew-Hughes, D., "Superconducting Materials for Large Scale Applications", Advances in Cryogenic Engineering 22, 316-325 (1977).

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<b>16. ABSTRACT (A 200-word or less factual summary of most significant information. If document includes a significant bibliography or literature survey, mention it here.)</b> This report includes data on additional superconductive materials extracted from the world literature up to fall 1977 and is an addendum to the data set published in J. Phys. Chem. Ref. Data 5, #3, 581-821 (1976) (Reprint #84). The data presented are new values and have not been selected or compared to values (except for selected values of the elements) previously assembled by the Superconductive Materials Data Center. The properties included are composition, critical temperature, critical magnetic field, crystal structure and the results of negative experiments. Special tabulations of high magnetic field materials with Type II behavior and materials with organic components are included. All entries are keyed to the literature. A list of recent reviews centered on superconductive materials is included.				
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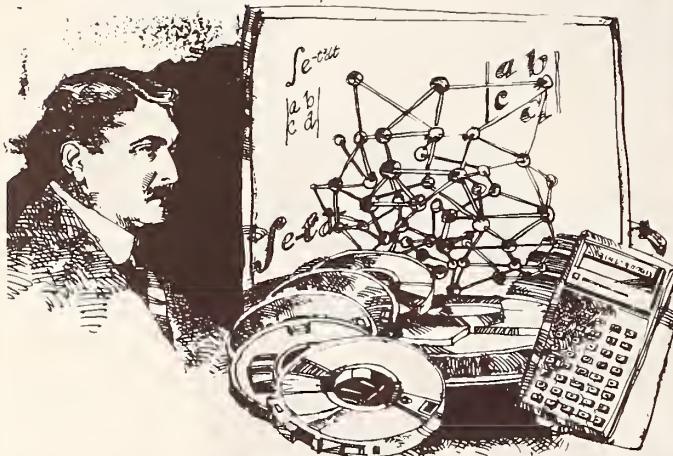
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