**substance: boron compounds with group IV elements**
**property: properties of boron-hafnium compounds**

A critical review and thermodynamic calculation of the binary system hafnium-boron in [88R].

Interaction in ZrN-$ZrB_2$ and HfN-$HfB_2$ systems (X-ray diffraction, metallography, microhardness, melting point) [84O]

**HfB**

Band structure of Ti, Zr, Hf monoborides [89I]

**critical temperature of superconductivity**

| | | |
|---|---|---|
| $T_c$ | 3.1 K | 91F, 32M |

**$HfB_2$**

Metallic; preparation [75S], crystalline structure [75S], electronic structure [76S].

For ternary compounds with Zr and Hf, see [79R].

Growth and crystal data for preparation by high temperature solution growth [84L] and references therein.

Heteroepitaxy of $HfB_2$ on a Hf (0001) single crystal surface [97B].

High temperature thermodynamic properties in [86B].

**carrier concentration**

| | | |
|---|---|---|
| $n$ | 0.04 electrons / unit cell | 91T |

**coeff. of electronic heat capacity**

| | | |
|---|---|---|
| $\gamma$ | 1.00 mJ $K^{-2}mol^{-1}$ | 69T, 91T |

Structural analysis of the (0001) surface by low energy electron diffraction in [94H].

Angular variation of the deHaas –van Alphen frequencies between different crystal orientations [91T].

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