substance: boron compounds with group III elements
property: properties of boron-scandium compounds

Sc-Al-B

Crystal growth of scandium aluminium borides and scandium borides by Sc-Al-B ternary system solutions [99O].

$Sc_3B_{0.75}C_3$

$Sc_3B_{0.75}C_3$ a novel compound of rare-earth boron carbide [99S].

lattice parameters

a	3.3308(3)Å	*T* = 300 K	O content 0.13 wt.%	99S
c	7.680(2) Å			

density

d	3.53 g cm^{-3}	*T* = 300 K		99S

Physical properties of a layered scandium boron carbide $Sc_3B_{0.75}C_3$ [99M].

$Sc_2B_{1.1}C_{3.2}$

$Sc_2B_{1.1}C_{3.2}$ a novel compound of rare-earth boron carbide with graphite-like layer structure [99S].

Structure: trigonal

Space group: P3m1

lattice parameters

a=b	23.710(9)Å	*T* = 300 K	X-ray diffraction	99S
c	6.703(2) Å			

Sc_2BC_2

Electronic structure of Sc_2BC_2 [90H].

On boron-carbon chains [97B].

ScB_2

metallic conduction (?); preparation [70P, 75S], crystalline structure [70P, 75S], electronic structure [79A], entropy [86B].

ScB_4

preparation [79S]

ScB_{12}

preparation [70P, 75S], crystalline structure [70P, 75S], electronic structure [77P]

LaB_6 – "ScB_6"-system

preparation [79S]

$ScRu_4B_4$

Comparative critical field study of superconducting ternary borides [87L].

critical temperature of superconductivity

T_c	0.39 K			91F, 68M

entropy

S	96(13) J $mol^{-1}K^{-1}$			86B

On the preparation of ScB_6 in cubic and tetragonal structures [94P].

$ScB_{17}C_{0.25}$

A single crystal XRD and TEM study of $ScB_{17}C_{0.25}$: a novel structure with boron-based "nanotubular" molecular units [99L].

Structure: hexagonal

Space group: P6/mmm

lattice parameters

a	1.4476 nm	T = 300 K	whisker-like crystals	99L
c	0.89375 nm			

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