

substance: boron compounds, general properties

property: general papers on borides

General surveys

Boron and boron compounds [68M].

Gmelin, Handbook of Inorganic Chemistry ; Boron, Boron Compounds [96G].

Boridy [75S].

Borides [94L].

Boridi (24 articles in Russian) [90S].

Production, fabrication and uses of borides [90T].

Critical survey of rare earth borides: occurrence, crystal chemistry and physical properties [85E].

Phase diagrams of ternary metal-boron-carbon systems [98R]

Interrelation between icosahedral aluminium-based quasicrystals and boron-rich solids [95K].

Nanocrystalline borides and related compounds [97A].

Activation characteristics of relaxation processes in pure and alloyed boron [97T2].

High-strength boride base hard materials [97T1].

Solid state chemical investigations on aluminium carbide of boron, silicon, nitrogen and oxygen [98M].

Superconducting borides [91F].

Preparation, structure and bonding

Extended modulation of the X-ray Raman edge-new method for the structural investigation of low atomic number non-crystalline materials [79P].

Preparation of borides [91E].

Bond variation in icosahedra of group-III elements: Metallic and covalent [97F].

Growth habit of crystals of refractory borides (silicides and other compounds of transition and rare –earth metals included) prepared from high temperature solutions [93G].

Structure, defects and properties of some refractory borides [88L3].

A study of cation arrays in MB₂, MB₄ and MB₆ borides [95V].

On the preparation of refractory boride single crystals [87G].

Electron-irradiation-induced crystalline-to-amorphous transition in transition-metal borides [93M1].

Structural chemistry of ternary metal borides: rare earth metal-nobel metal-boron [80R].

Problems of stoichiometry and structural defects in single crystals of numerous boron compounds prepared by different methods [88L1].

Point defects and microhardness in transition metal borides and β-rhombohedral boron [83L].

Preparation and annealing effects of boron-rich films: Search for semiconducting quasicrystals [91K].

A comparative study of ab initio SCF-CI and DFT. Example of small boron clusters [95B1].

Structure and stability of small boron clusters. A density functional theoretical study [95B2].

Solid solutions of transition and inner transition metals in boron [91L].

Isotopicity: implications and applications [92B].

Order and disorder in boron phases [96F].

Isotopic order by phonon-induced interactions [95G1].

Chemical state analysis of light elements by undulator-radiation-excited X-ray fluorescence [93M2].

Systematic LSD investigation of cationic boron clusters B_n⁺(n=2...14) [94B].

Borides in thin film technology [97M].

Selectively excited B K_{α} emission spectra of boron compounds using undulator radiation [94M].

Extended modulation of the X-ray Raman edge-new method for the structural investigation of low atomic number non-crystalline materials [79P].

Transmission electron microscopy of M_7B_3 borides [87M].

Preparation of refractory boride single crystals [87P2].

The possibility of obtaining pure borides of rare-earth metals [88K].

Floating zone growth and high temperature hardness of refractory boride crystals [99O].

Real structure of REE boride single crystals [99P].

Lattice properties

Thermal expansion studies on the IV-VI transition metal diborides [87L, 88L2].

Thermal properties

The enthalpy of formation of solid borides of transition and noble metals compared with carbides, nitrides and phosphides [81N].

Equation for calculation of standard enthalpy of formation of metal borides [94T2].

Thermodynamic properties of the rare-earth borides [93B].

Thermodynamic properties of borides of metals of groups IV – VI of the periodic system [91B].

Thermodynamical and physical aspects of the occurrence of absolutely pure substances [91G].

The peculiarity of cage rare earth borides specific heat [87P1].

Electronic properties

Electrical properties of high-temperature oxides, borides, carbides, and nitrides [95W].

Disorder-induced small-polaron formation [94E].

The energy and valent state of RE elements in compounds with boron [90G].

Prediction of novel superconductors based on semiconducting boron in [95G2].

Superconductivity in ternary compounds [83R].

Optical properties

Optical properties of the crystalline modifications of boron and boron-rich borides [88W].

Further properties

Point defects and microhardness in transition metal borides and β -rhombohedral boron [83L].

Application

Use of boron compounds in lightweight armor [77W].

Theoretical model calculations on the role of interfaces in plastic deformation processes in nanostructured boride and nitride films [98G].

Production, fabrication and uses of borides. Aspects for the application of boron and borides [87K].

Strengthening and toughening of boride and carbide hard material composites [88T].

Sintering behaviour of reactive sintered ternary boride base cerment [92K].

Application of borides to wear resistant materials [94T1].

Transition metal carbides, nitrides and borides for electronic applications [97W].

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