



High Performance Non-Oxide Ceramics II Structure and Bonding

By -

Springer. Paperback. Book Condition: New. Paperback. 172 pages. Dimensions: 9.2in. x 6.1in. x 0.4in. The nitrides and carbides of boron and silicon are proving to be an excellent choice when selecting materials for the design of devices that are to be employed under particularly demanding environmental and thermal conditions. The high degree of cross-linking, due to the preferred coordination numbers of the predominantly covalently bonded constituents equalling or exceeding three, lends these non-oxidic ceramics a high kinetic stability, and is regarded as the microscopic origin of their impressive thermal and mechanical durability. Thus it does not come as a surprise that the chemistry, the physical properties and the engineering of the corresponding binary, ternary, and even quaternary compounds have been the subject of intensive and sustained efforts in research and development. In the five reviews presented in the volumes 101 and 102 of Structure and Bonding an attempt has been made to cover both the essential and the most recent advances achieved in this particular field of materials research. The scope of the individual contributions is such as to address both graduate students, specializing in ceramic materials, and all scientists in academia or industry dealing with materials research and development...



READ ONLINE
[9 MB]

Reviews

This written publication is wonderful. It really is loaded with knowledge and wisdom You will not really feel monotony at at any time of your time (that's what catalogues are for relating to if you ask me).

-- **Desmond Becker**

Absolutely essential go through publication. I am quite late in start reading this one, but better then never. You will not feel monotony at at any time of the time (that's what catalogues are for regarding if you ask me).

-- **Ambrose Thompson II**