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Reduction Processes; 3.2.3 Synthesis of Composite Powders; 3.3 Reactive Processes for Oxygen Removing during Sintering; 3.3.1 Oxygen Removal by Reduction Using Boron/ Carbon-Containing Compounds; 3.3.2 Oxygen Removing by Transition Metal Carbides; 3.4 Reactive Sintering Processes
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Sommario/riassunto

"This book will capture historic aspects and recent progress on the research and development of ultra-high temperature ceramics. This will be the first comprehensive book focused on this class of materials in more than 20 years. The book will review historic studies and recent progress in the field. The intent is to provide a broad overview and critical analysis rather than focus on the latest scientific results. The content will include synthesis, powder processing, densification, property measurement, and characterization of boride and carbide ceramics. Emphasis will be on materials for hypersonic aerospace applications such as wing leading edges and propulsion components for vehicles traveling faster than Mach 5, but will also include materials used in the extreme environments associated with high speed cutting tools and nuclear power generation"--
"This book provides a snapshot of the current state-of-the-art in the processing, densification, properties, and performance of boride and carbide ceramics. The book contains contributions from leading experts who have active research in ultra-high temperature ceramics" --