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| ISBN | 981-13-0463-7 978-981-13-0463-7 |
| Edizione | [1st ed. 2018.] |
| Descrizione fisica | 1 online resource (XIV, 166 p. 124 illus., 10 illus. in color.) |
| Disciplina | 620.14 |
| Soggetti | Ceramics Glass Composite materials Phase transformations (Statistical physics) Crystallography Engineering—Materials Chemistry, Physical and theoretical Ceramics, Glass, Composites, Natural Materials Phase Transitions and Multiphase Systems Crystallography and Scattering Methods Materials Engineering Physical Chemistry |
| Lingua di pubblicazione | Inglese |
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| Nota di contenuto | Si3N4-Ceramics Systems -- SiC Dominated Ceramics Systems -- AlN-based Ceramics Systems -- Ultra High Temperature Ceramics (UHTCs) System. |
| Sommario/riassunto | This book explores new experimental phase diagrams of non-oxide ceramics, with a particular focus on the silicon nitride, silicon carbide and aluminum nitride, as well as the ultra-high temperature ceramic (UHTC) systems. It features more than 80 experimental phase diagrams of these non-oxide ceramics, including three phase diagrams of UHTC systems, constructed by the authors. Physical chemistry data covering the period since the 1970s, collected by the author Z.K.Huang, is |

presented in six tables in the appendixes. It also includes 301 figures involving about 150 material systems. Most of the phase diagrams have been selected from the ACerS-NIST database with copyright permission. The book methodically presents numerous diagrams previously scattered in various journals and conferences worldwide. Providing extensive experimental data, it is a valuable reference resource on ceramics development and design for academic researchers, R&D engineers and graduate students.
