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## Sommario/riassunto

Advanced high-temperature materials are key players in the emerging new technologies which are pushing forward the structural-aerospace, propulsion-system, defense, nuclear, thermal and chemical industries. Accelerating efforts have been directed towards increasing the operating-temperature limits of existing material systems and developing new material compositions such as advanced ceramics, UHTCs, intermetallics and CMCs. Understanding and controlling the behavior of the microstructures and properties of such materials have become key elements in these research activities. Since processing m

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