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Nota di contenuto Overview of Lanthanum Zirconate Based Thermal Barrier Coatings for

Energy Applications -- Properties of Lanthanum Zirconate Based
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Zirconate Based Thermal Barrier Coatings -- Modeling of Mechanical
Properties of Lanthanum Zirconate Based Thermal Barrier Coatings -Modeling of Thermal Properties of Lanthanum Zirconate Based Thermal
Barrier Coatings -- Modeling of Mechanical Properties of Interface in

Coatings.

Sommario/riassunto This book describes the latest developments of lanthanum zirconate

based thermal barrier coatings. The physical, thermal, and mechanical properties of lanthanum zirconate powder and coatings are critically evaluated. Processing and characterizations of lanthanum zirconate powder and coatings under various conditions are also examined. Theoretical studies on the powder and coating's properties are presented as well. Finally, future research directions of lanthanum zirconate as the next generation thermal barrier applications are proposed. Discusses fundamental mechanisms, processing, and applications of advanced coating materials; Addresses modeling methods of thermal barrier coatings focusing on surface and interface properties; A review suitable for industrial, academic and government