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Initial Stages in the Oxidation of TiAl

18 Development and Microstructure of the Al-Depleted Layer of Oxidized TiAl  
19 Beneficial and Detrimental Effects of Nitrogen on the Oxidation Behaviour of TiAl-Based Intermetallics;  
20 Influence of Moisture on the Oxidation of -TiAl;  
21 Ion Implantation as a Tool to Study the Oxidation Behaviour on TiAl-Based Intermetallics;  
22 Protection of Titanium Aluminides by FeCrAlY Coatings;  
23 Hot Salt Corrosion of Titanium Aluminides; Index

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Sommario/riassunto

Over the last ten years vast efforts were made in the research and development of intermetallic compounds to attain improved high temperature strength and low temperature ductility. These new structural materials are used in several high-temperature applications like engines and turbines. Oxidation and corrosion resistance are as important for the current applications of these materials as mechanical properties. This book gives a sound review of the present knowledge of the oxidation kinetics and mechanisms of intermetallics. Especially Ti-, Ni- and Fe-aluminides are treated in detail b

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