

目 次

(航空发动机涡轮叶片热障涂层)

先进热障涂层的强韧和破坏机制的标准规范研究..... 杨 丽(1)

不同制备工艺的热障涂层高温下 TGO 生长规律及微观结构的演变分析
..... 葛龙飞,朱 旺,杨 丽(13)

铬对 $(\text{CuFeNiMn})_{1-x}\text{Cr}_x$ 高熵合金显微组织与腐蚀性能的影响研究.....
..... 陈 旭,胡佳宣,张 彦,等(24)

共沉淀强化 ODS 铁素体合金的机械合金化制备及其时效工艺研究.....
..... 刘 烨,吕再捷,章 林,等(32)

航空发动机热端钛合金铝基涂层制备及抗高温氧化的研究进展
..... 胡孝愿,熊诗琪,施东明,等(43)

同质外延 YSZ 薄膜的制备与结构表征 李俊宝,杨 丽,周益春(56)

$\text{La}_2\text{Ce}_2\text{O}_7/\text{YSZ}$ 热障涂层抗 CMAS 腐蚀及机制研究 尹冰冰,夏 杰,刘巍巍,等(62)

CMAS 对钇稳定氧化锆热障涂层的微观结构变化及元素损失影响
..... 王 冉,张 帆,朱 旺,等(73)

基于相场法的高温烧结条件下等离子喷涂热障涂层微结构演化模拟
..... 谭振宇,杨紫涵,朱 旺(82)

关于热障涂层工况模拟试验涡轮模型设计的一些探讨 罗 毅,杨 丽,朱 旺(90)

CMAS 组分对 EB-PVD 热障涂层微结构退化的影响 聂晓旭,张 勇,孙忠祥,等(95)

涡轮叶片热障涂层隔热性能和应力数值模拟 刘志远,肖 杰,杨 丽,等(107)

航空发动机压气机叶片防护涂层冲蚀破坏模拟 肖逸奇,唐 雯,杨 丽,等(116)

特约主编:李应红 魏悦广 周益春 编辑校对:龙顺潮 罗 联 王利剑

CONTENTS

Research on the Standard Specification for the Toughness and Failure Mechanism of Advanced Thermal Barrier Coatings YANG Li(1)

Analysis of TGO Growth Law and Microstructure Evolution of Thermal Barrier Coatings with Different Preparation Processes at High Temperature GE Long-fei,ZHU Wang,YANG Li(13)

Effect of Chromium on Microstructure and Corrosion Properties of $(\text{CuFeNiMn})_{1-x}\text{Cr}_x$ High-Entropy Alloy CHEN Xu,HU Jia-xuan,ZHANG Yan ,et al(24)

Research on Aging Process of Co-Precipitation Strengthening ODS Ferrite Alloy Prepared by Mechanical Alloying LIU Ye,LV Zai-jie,ZHANG Lin ,et al(32)

Progress in Preparation and High Temperature Oxidation Resistance of Al-Based Coating on Aero-Engine Hot End Ti Alloy HU Xiao-yuan ,XIONG Shi-qi ,SHI Dong-ming ,et al(43)

Preparation and Structural Characterization of Homogeneous Epitaxial YSZ Films LI Jun-bao ,YANG Li ,ZHOU Yi-chun(56)

Experimental Study on CMAS Corrosion Resistance Performance of $\text{La}_2\text{Ce}_2\text{O}_7$ /YSZ Thermal Barrier Coatings YIN Bing-bing ,XIA Jie ,LIU Wei-wei ,et al(62)

Microstructural Changes and Element Mitigation of CMAS Attack on Yttria Stabilized Zirconia Thermal Barrier Coatings WANG Ran ,ZHANG Fan ,ZHU Wang ,et al(73)

Simulation of Microstructure Evolution of Plasma-Sprayed Thermal Barrier Coatings During High-Temperature Sintering Based on Phase Field Method TAN Zhen-yu ,YANG Zi-han ,ZHU Wang ,et al(82)

Exploration on Turbine Model Design of Thermal Barrier Coating Simulation Test of Working Condition LUO Yi ,YANG Li ,ZHU Wang(90)

Effect of CMAS Composition on the Microstructural Degradation of EB-PVD Thermal Barrier Coatings NIE Xiao-xu ,ZHANG Yong ,SUN Zhong-xiang ,et al(95)

Numerical Simulation of Thermal Insulation Performance and Stress of Thermal Barrier Coatings on Turbine Blades LIU Zhi-yuan ,XIAO Jie ,YANG Li ,et al(107)

Simulation of Erosion Damage of Protection Coating for Aero-Engine Compressor Blades XIAO Yi-qi ,TANG Wen ,YANG Li ,et al(116)