

<<陈国良院士纪念文集>>

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## <<陈国良院士纪念文集>>

### 内容概要

陈国良院士是我国著名材料科学家、教育家，我国高温合金领域的先驱。本文集收录了有关人士的题词、序言，陈国良院士传略，在高温合金、高性能金属间化合物、块体非晶态合金以及高硅钢与新能源材料等方面的精选论文36篇，缅怀文章，以及陈国良院士年谱、主要论著目录等，并收录有陈国良院士各个时期的珍贵照片。内容丰富、资料翔实。

《陈国良院士纪念文集》是材料科学与工程领域广大师生以及相关专业科研工作者的的重要参考文献。

<<陈国良院士纪念文集>>

书籍目录

序1

序2

序3

序4

前言

陈国良院士传略

高温合金文选

13 Grain Boundary Embrittlement by  $\mu$  and Phases in Iron-base Superalloys

24 Induced Creep and Creep/Fatigue of a Nickel-base Superalloy at Ambient Temperatures

29 The Role of Small Amounts of Magnesium in Nickel-base and Iron-nickel-base Superalloys after High Temperature Long Time Exposures

39 A New Fatigue-Creep Interaction Map for a Big ESR-cast-to~shape Gas Turbine Disc ( ECD )

45 A Maximum Stress Modified Life Equation on the Basis of a Fatigue-Creep Interaction Map

56 The Influence of Stacking Fault Energy and Resisting Stress on the Steady State Creep Rate of Refractoloy26

67 The Effects of Small Amounts of Mg on the Creep Performance of a Ni-base Superalloy

71 Effect of Interfacial Segregation of Magnesium on High Carbon ( 18%Cr ) Cast Steel

高性能金属间化合物文选

79 Oxidation and Mechanical Behavior of Intermetallic Alloys in the Ti-Nb-Al Ternary System

84 Ti-Al-Nb Intermetallic Alloys Based on the Ternary Intermetallic Compound

90 Oxidation of Intermetallic Alloys in Ti-Al-Nb Ternary System

98 Microstructure and Properties of High-Nb Containing TiAl-Base Alloys

108 Investigation on the 1000, 1150 and 1400C Isothermal Section of the Ti-Al-Nb System

118 Effects of Nb and Al on the Microstructures and Mechanical Properties of High Nb Containing TiAl Base Alloys

125 Formation of Stress-induced 9R Structure in a Hot-deformed TI-45Al-IONb Alloy

131 Pilot Processing and Microstructure Control of High Nb Containing TiAl Alloy

136 High Temperature Deformation Behaviors of a High Nb Containing TiAl Alloy

143 Microstructural Control of TiAl-Nb Alloys by Directional Solidification

<<陈国良院士纪念文集>>

块体非晶态合金文选

155 Microstructure and Mechanical Properties of As-Cast

2r52.5Cu17.9N114.6Al10Ti5 Bulky Glass Alloy

161 Investigation of Shear Bands under Compressive Testing for  
Zr-base Bulk Metallic Glasses Containing Nanocrystals

167 Molecular Dynamic Simulations and Atomic Structures of  
Amorphous Materials

170 Atomistic Mechanism for Nanocrystallization of Metallic  
Glasses

180 Atomic Structure of 2r41.2Ti13.8Cu12.5Ni10Be22.5 Bulk Metallic  
Glass Alloy

196 Metallic Liquids and Glasses: Atomic Order and Global  
Packing

200 Bulk Metallic Glass Composites with Transformation-Mediated  
Work-Hardening and Ductility

204 Effects of Drawing on the Tensile Fracture Strength and Its  
Reliability of Small-sized Metallic Glasses

高硅钢与新能源材料文选

219 Surface Reaction of Polycrystalline Fe<sub>3</sub>Si Alloys with Oxygen  
and Water Vapor

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缅怀文集

附录

## 章节摘录

版权页：插图： Ab initio molecular dynamics(AIMD)calculations were performed on the atomic configuration of  $Zr_{41.2}Ti_{13.8}Cu_{12.5}Ni_{10}Be_{22.5}$  bulkmetallic glass.The local structures were characterized in terms of structure factors(SF),pair correlation functions(PCF),coordinatenumbers,bond pairs and Voronoi polyhedra.The glass transition temperature,generalized PCF and SF predicated by AIMD are ingood agreement with the experimental data.Icosahedral short—range orders ( ISRO ) are found to be the most dominant,in view ofthe presence of the majority of bond pairs with 1551,1541 and 1431,and Voronoi polyhedra with 0,3,6,1 , 0,2,8,1 , 0,0,12,0 and 0,2,8,4 , Icosahedral medium range orders(IMROs)are formed from icosahedra Via the linkage of vertex- , edge- , face-and inter-cross-shared atoms.The glass structure on the nanometer scale is accumulated by polyhedra through an efficient packing mode.It issuggested that the extraordinary glass-forming ability of this alloy is essentially attributable to the formation of ISRO and IMRO,and the dense packing of atoms.

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