

<<陈国良院士纪念文集>>

图书基本信息

书名：<<陈国良院士纪念文集>>

13位ISBN编号：9787030339324

10位ISBN编号：7030339320

出版时间：2012-4

出版时间：科学出版社

作者：新金属材料国家重点实验室 编

页数：356

字数：659000

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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。

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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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