

## 朱景川

工学博士

材料科学系副主任

教授；硕士生导师\博士生导师

+86-451-86413792

zhujc1@gmail.com

### 主要研究方向

1. 梯度功能复合材料设计与制备
2. 特种合金相变与热处理
3. 材料多尺度计算机模拟与计算设计

### 社会兼职

- 黑龙江省材料与测试学会副秘书长  
黑龙江省金属学会理事  
中国金属学会高级会员  
黑龙江省新材料产业专家委员会委员  
黑龙江省冶金行业专家委员会委员

### 主要学术成果

- [1] ZHU J C, YIN Z D, LAI Z H. Microstructure and Mechanical Properties of ZrO<sub>2</sub>-Ni Functionally Gradient Material. *J Mater Sci Technol*, 1994;10(3):188. (EI)
- [2] Zhu Jingchuan, Yin Zhongda, Lai Zhonghong and Li Jian. Microstructure and Thermal Stress Relaxation of ZrO<sub>2</sub>-Ni Functionally Graded Material. *Transactions of Nonferrous Metals Society of China*, 1996;6(4): 94-99. (SCI)
- [3] ZHU J C, YIN Z D, LAI Z H. Fabrication and Microstructure of ZrO<sub>2</sub>-Ni functionally gradient material by Powder Metallurgy. *Journal of Materials Science*, 1996; 31(21): 5829-5834. (SCI)
- [4] Chu Chenglin, Zhu Jingchuan, Yin Zhongda, Wang Shidong. Hydroxyapatite-Ti functionally graded biomaterial fabricated by powder metallurgy. *Materials Science & Engineering A*, 1999; A271(1-2): 95-100. (SCI)
- [5] Chenglin Chu, Jingchuan Zhu, Zhongda Yin, Pinghua Lin. Structure optimization and properties of hydroxyapatite-Ti symmetrical functionally graded biomaterial. *Materials Science and Engineering A*, 2001, A316(1-2): 205-210. (SCI & EI)
- [6] J. C. Zhu, Z. H. Lai, Z. D. Yin, J. H. Jeon and S. Y. Lee. Fabrication of ZrO<sub>2</sub>-NiCr functionally graded material by powder metallurgy. *Materials Chemistry and Physics*, 2001; 68(1-3):130-135. (SCI & EI)
- [7] Zhu Jingchuan, Wu Shuyan, Cheng Huarong, Yin Zongda and Jeon Jaeho. Characterization of (Ba,Sr)TiO<sub>3</sub> Functionally Graded Dielectric Ceramics Fabricated From Chemical Coprecipitated Nano-particles. *Materials Science Forum*, 2003, 423-425:417. (SCI & EI & ISTP)
- [8] Cheng Huarong, Zhu Jingchuan, Yin Zongda and Jeon Jaeho. Preparation and Dielectric Property of Strontium-Lead Titanate Functionally Graded Ceramics. *Materials Science Forum*, 2003, 423-425:411. (SCI & EI & ISTP)
- [9] Wang Yang, Zhu Jingchuan, Lai Zhonghong, Cao Xian. Hot compressive deformation behavior and the microstructural variation of TA15 titanium alloy. *Materials Science and Technology*. 2005; 21(12): 1466-1470. (SCI & EI)
- [10] Jie Cheng, Jingchuan Zhu, Bo Liu. Molecular modeling investigation of adsorption of self-assembled peptide nanotube of cyclo-[(1R,3S)-c-Acc-D-Phe]3 in CHCl<sub>3</sub>. *Chem. Phys.*, 2007, 333(2-3):105-111 (SCI, IF: 1.9).
- [11] Zhu, Jing-Chuan; Wang, Yang; Lai, Zhong-Hong; Liu, Yong. Quantitative characterization of microstructure of thermal deformed TA15 titanium alloy by EBSD. *Key Engineering Materials*, 2007, v 353-358(n PART 1): 549-552. (SCI & EI)
- [12] ZHU Jing-chuan, WANG Yang, LIU Yong, LAI Zhong-hong, ZHAN Jia-jun. Influence of deformation parameters on microstructure and mechanical properties of TA15 titanium alloy. *Transactions of Nonferrous Metals Society of China*, 2007, 17:S490-S494. (SCI)
- [13] Wang, Y; Zhu, J C ; Liu, Y; Lai, Z H. Application of processing map in TA15 titanium alloy. *JOURNAL OF CENTRAL SOUTH UNIVERSITY OF TECHNOLOGY*, 2007,14(Suppl.2): 90-93. (SCI)
- [14] Hailiang Liu, Jingchuan Zhu, Yong Liu, Zhonghong Lai. First-principles study on the mechanical properties of vanadium carbides VC and V<sub>4</sub>C<sub>3</sub>. *Materials Letters*, 2008, 62(17-18):3084-3086. (SCI & EI)
- [15] Zhu, JC; Cheng, J; Liao, ZX; Lai, ZH; Liu, B. Investigation of structures and properties of cyclic peptide nanotubes by experiment and molecular dynamics. *JOURNAL OF COMPUTER-AIDED MOLECULAR DESIGN*, 2008, 22(11): 773-781. (SCI, IF: 3.6)
- [16] He D, Zhu JC, Wang Y, Liu Y. A STUDY OF DYNAMIC RECRYSTALLIZATION IN TA15 TITANIUM ALLOY DURING HOT DEFORMATION BY CELLULAR AUTOMATA MODEL. *INTERNATIONAL JOURNAL OF MODERN PHYSICS B*, 2009, 23(6-7): 934-939. (SCI)
- [17] Liu HL, Zhu JC, Lai ZH, Zhao RD, He D. A first-principles study on structural and electronic properties of Mo<sub>2</sub>C. *SCRIPTA MATERIALE*, 2009, 60(11): 949-952 (SCI & EI, IF: 2.887)
- [18] Jie Cheng, Jingchuan Zhu, Zhouxiong Liao, Zhonghong Lai, Bo Liu , Structure of Self-assembled Single Nanotube of Cyclo[(-D-Ala-L-Ala)<sub>4</sub>], *Molecular Simulation*, 2009, 35(8): 625-630 (SCI & EI)
- [19] Zhu JC, Zhao RD, Lai ZH, Liu Y. Microscopic Phase Field Study of the Spinodal Decomposition in Fe-Mo Alloys. *Journal of Wuhan University of Technology-Mater.(Sci. Ed.)*, 2009, 24(suppl.):9-12
- [20] Zhu, Jingchuan; Zhao, Rongda; Jiang, Chengwen; Lai, Zhonghong. Effect of aging temperature on modulated structures of 00Ni12Cr5Mo3TiAlV maraging steel. *Materials Science and Engineering A*, 2009, 516(1-2): 201-204. (SCI & EI)
- [21] 尹钟大, 朱景川等. “功能梯度材料的工艺研究”, 航天总公司科技进步二等奖, 1998
- [22] 朱景川, 王洋, 来忠红, 韩磊, 刘勇. 一种在双相钛合金中获得三态组织的热处理工艺。(已申请)
- [23] 毛卫民、朱景川等著. 金属材料结构与性能(全国工程硕士专业学位推荐教材), 清华大学出版社, 2008-2-1
- [24] 朱景川、来忠红编著. 固态相变原理, 科学出版社, 2010(待出版)