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出生年月：1962年10月
学位：博士
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个人介绍

长期从事复合材料及其相关力学问题的研究，研究领域涉及数值模拟仿真、材料设计与制备以及使用性能表征等。近5年来，主持（或主持完成）了国家安全重大基础研究项目（副组长）、“863”项目、国家自然科学基金、武器装备预研项目、国防科技预研基金项目以及国防科工委基础科研项目的研究。2009年获国家发明奖二等奖一项（第六完成人），2010年获国防科学技术二等奖一项（第二完成人），授权专利6项，发表学术论文40余篇，其中包括：Applied Physical Letters、Surface and Coatings Technology、Composites Science and Technology等。

教育经历

北京理工大学材料专业博士
北京科技大学材料学院材料科学与工程专业博士后

工作经历

2006.05至2008.12 北京理工大学材料科学与工程学院院长
2008.12至2010.11 北京理工大学材料科学与工程学院党委书记
2010.12至今 北京理工大学科研院副院长

研究领域

非晶合金及其复合材料
热障涂层
材料行为的数值模拟和仿真

社会任职

获奖情况

2009年获国家发明奖二等奖一项（第六完成人）
2010年获国防科学技术二等奖一项（第二完成人）

科研项目

- 总装预研项目钛基非晶#####材料研究（2011-2015 年）项目负责人
- 国家重大基础研究项目（973 计划）#####关键基础问题研究（2010-2013 年）课题负责人
- 国家重大基础研究项目（973 计划）#####关键基础问题研究（2011-2014 年）专题负责人
- 国家自然科学基金项目多孔 W/Zr 基大块非晶合金复合材料准静态与动态力学行为研究（10872032）（2009-2011 年）项目负责人
- 总装预研基金#####非晶合金涂层研究（2005-2006 年）项目负责人
- 总装预研项目#####非晶材料研究（2004-2005 年）项目负责人
- #####材料技术研究（2006-2010 年）项目负责人

论文专著

- [1] Ma L L, Wang L, Xue Y F, Wang Y D, Li N, Ren Y, Zhang H F, Wang A M. An in situ high-energy X-ray diffraction study of micromechanical behavior of Zr-based metallic glass reinforced porous W matrix composite. *Materials Science and Engineering*, 2011, A530, 344-348.
- [2] Zhou Z, Wang L, He D Y, Wang F C, Liu Y B. Microstructure and Electrochemical Behavior of Fe-Based Amorphous Metallic Coatings Fabricated by Atmospheric Plasma Spraying. *Journal of Thermal Spray Technology*, 2011, 20(1-2): 344-350.
- [3] Xue Y F, Wang L, Cai H N, Wang F C, Cheng H W, Zhang H F, and Wang A M. Effect of Strain Rate on Plastic Flow in Zr-Based Metallic-Glass-Reinforced Porous Tungsten Matrix Composites. *Metallurgical and Materials Transactions A*, 2011, 42: 3521-3526.
- [4] Y.F. Xue, L. Wang, X.W. Cheng, F.C. Wang, H.W. Cheng, H.F. Zhang, A.M. Wang. Strain rate dependent plastic mutation in a bulk metallic glass under compression. *Materials and Design*, 2012, 10.1016/j.matdes.2011.11.025.
- [5] Zhou Z, Wang L, He D Y, Wang F C, Liu Y B. Microstructure and Wear Resistance of Fe-Based Amorphous Metallic Coatings Prepared by HVOF Thermal Spraying. *Journal of Thermal Spray Technology*, 2010, 19(6):1287-1293.
- [6] Xue Y F, Wang L, Cheng H W, Wang F C, and Zhang H F. Shear band formation and mechanical properties of Zr₃₈Ti₁₇Cu_{10.5}Co₁₂Be_{22.5} bulk metallic glass/porous tungsten phase composite by hydrostatic extrusion. *Mater. Sci. Eng.* 2010, A527: 5909-5914. SCI: IDS:642AO
UT:WOS:000281175300078
- [7] Xue Y F, Wang L, Cheng H W, Wang F C, Zhang H F, and Wang A M. Dynamic tensile property of Zr-based metallic glass/porous W phase composite. *Journal of Materials Science & Technology* 2010, 26: 908-913.
- [8] Zhou Z, Wang L, Wang F C, et al. Formation and corrosion behavior of Fe-based amorphous metallic coatings prepared by detonation gun spraying. *Transactions of Nonferrous Metals Society of China*, 2009, Sp. Iss. 3: S634-S638.
- [9] Zhou Z, Wang L, Wang F C, et al. Formation and corrosion behavior of Fe-based amorphous metallic coatings by HVOF thermal spraying. *Surface and Coatings Technology*, 2009, 204(5): 563-570.
- [10] Li J Q, Wang L, Cheng H W, Zhang H F, Hu Z Q, Cai H N. Fracture surface morphology of Mg-based bulk metallic glass and composite during quasi-static and dynamic compressive deformation. *Journal of Alloys and Compounds*. 2009, 478: 827-830.
- [11] Xue Y F, Cai H N, Wang L, Wang F C, and Zhang H F. Deformation and failure behavior of a hydrostatically extruded Zr₃₈Ti₁₇Cu_{10.5}Co₁₂Be_{22.5} bulk metallic glass/porous tungsten phase

- composite under dynamic compression. *Composites Science and Technology*. 2008, 68: 3396-3400.
- [12] Xue Y F, Cai H N, Wang L, Wang F C, and Zhang H F. Effect of loading rate on failure in Zr-based bulk metallic glass. *Mater. Sci. Eng.*, 2008, A473: 105-110.
- [13] Li J Q, Wang L, Cheng H W, Zhang H F, Hu Z Q, and Cai H N. Synthesis and compressive deformation of rapidly solidified magnesium alloy and composites reinforced by SiCp. *Mater. Sci. Eng.*, 2008, A474: 24-29. (SCI, IF=1.457)
- [14] Xue Y F, Cai H N, Wang L, Zhang H F, and Cheng H W. Testing of high-strength Zr-based bulk metallic glass with the Split Hopkinson Pressure Bar. *Journal of Beijing Institute of Technology/J. Beijing Inst. Technol.*, 2008, 17, 109-114.
- [15] Xue Y F, Cai H N, Wang L, Wang F C, and Zhang H F. Strength-improved Zr-based metallic glass/porous tungsten phase composite by hydrostatic extrusion. *Applied Physics Letters/Appl. Phys. Lett.*, 2007, 90: 081901. (SCI, IF=3.596)
- [16] Li J Q, Wang L, Zhang H F, Hu Z Q, and Cai H N. Synthesis and characterization of particulate reinforced Mg-based bulk metallic glass composites. *Mater. Lett*, 2007, 61: 2217-2221.
- [17] Xue Y F, Cai H N, Wang L, Wang F C, and Zhang H F. Dynamic compressive deformation and failure behavior of Zr-based metallic glass reinforced porous tungsten composite. *Mater. Sci. Eng.*, 2007, A445-446: 275-280.

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