



师资队伍

副高级职称

当前位置: 首页 / 师资队伍 / 教学科研岗 / 副高级职称 / 正文

师资队伍简介

教学科研岗

实验教辅岗

行政管理岗

人才招聘

彭华备



姓名: 彭华备
职称: 副教授
导师情况: 博士生导师
电话: 13350892726
传真:
邮箱: penghuabei@scu.edu.cn
招生方向: 材料加工工程、机械工程

教育背景及工作经历

教育背景

2002.09-2006.06, 四川大学材料成型及控制工程专业 学士
2006.09-2009.06, 四川大学钢铁冶金专业 硕士
2009.09-2012.06, 四川大学材料加工工程 博士
2016.04-2017.04, University of Glasgow 访问学者

工作经历

2012.07-2015.08, 四川大学机械工程学院 讲师
2015.09-至 今, 四川大学机械工程学院 副教授

总体介绍

研究领域涉及形状记忆合金、阻尼合金、高强高塑性钢、高熵合金等金属功能和结构材料及其马氏体相变行为。主持国家自然科学基金面上基金2项以及青年基金1项，四川省应用基础计划重点和面上项目以及多项企业和研究院的横向课题。以第一/通讯作者在Acta Biomaterialia、International Journal of Machine Tools and Manufacture、Journal of Materials Science & Technology、Corrosion Science、Scripta Materialia、Materials Science and Engineering A、金属学报等国内外重要期刊上发表50余篇，授权发明专利10多项。担任Acta Biomaterialia、Journal of Materials Science & Technology、Applied Materials Today、Bioactive Materials、Construction and Building Materials、Materials & Design、Materials Science and Engineering A、金属学报等国内外著名期刊审稿人。曾获“四川大学好未来优秀学者三等奖”，“四川大学先进个人”，“四川大学青年骨干教师奖”，“四川大学青年教师教学竞赛优秀奖”，“四川大学本科教学质量奖”。指导学生多次获得本科优秀毕业论文，“互联网+”大学生创新创业大赛四川省银奖，中国大学生机械工程创新创意大赛三等奖等。现担任内耗与力学谱青年委员会副主任，四川省增材制造产教融合专委会专家委员，《corrosion communications》和《稀有金属》杂志青年编委。

开设课程

本科生课程：《材料成型原理》
硕士生课程：《材料结构与性能》

研究领域及在研项目

研究领域：

- 形状记忆合金；
- 阻尼合金；
- 高强高塑性钢；
- 中/高熵合金；
- 马氏体相变行为；
- 纳米相及其相界面工程；
- 增材制造技术制备生物可降解金属材料

主持国家级项目：

1. 国家自然科学基金面上项目（批准号52271183），2023/01-2026/12
2. 国家自然科学基金面上项目（批准号51971152），2020/01-2023/12
3. 国家自然科学基金青年项目（批准号51401136），2015/01-2017/12

授权专利

- [1] 一种提高钴镍基合金形状记忆效应的方法，201911078269.0
- [2] 一种高超弹性铁锰铝镍基多主元合金，201911078267.1
- [3] 相变诱导塑性的高强度铁锰铝镍基多主元合金，201911077358.3
- [4] 一种腔体孔的密封结构，201910297471.6
- [5] 一种用于形状记忆合金紧固环的扩径装置，201910297472.0
- [6] 一种提高铁锰硅基形状记忆合金可恢复应变的方法，201811193767.5
- [7] 一种制备粗晶铁锰硅基形状记忆合金的方法，201811193766.0
- [8] 低镍型FeMnAlNi基形状记忆合金及其处理方法，201810280620.3
- [9] 一种提高FeMnAl合金形状记忆性能的方法，201810280667.X
- [10] 预测铁锰硅基合金奥氏体加高温铁素体双相区温区的方法，201810280668.4
- [11] 一种制备磁性铁锰硅基形状记忆合金的方法，201710858157.1
- [12] 一种提高铁锰阻尼合金耐腐蚀性能的方法，201710858158.6
- [13] 一种高温氧化制备磁性铁锰硅基形状记忆合金的方法，201710858289.4
- [14] 一种制备高屈服强度孪生诱导塑性钢的方法，201710604528.3
- [15] 一种提高高强度铁锰基阻尼合金阻尼性能的方法，201410143007.9
- [16] 一种制备免训练铁锰硅基形状记忆合金的方法，201410102165.X
- [17] 一种提高亚稳奥氏体不锈钢形状记忆效应的方法，201410026062.X
- [18] 含高温铁素体的免训练铸造铁基形状记忆合金，200810045202.2
- [19] 一种具有显著加工硬化能力的高硅奥氏体高锰钢，200910058542.3

发表论文

- [1] J. Wu, J. Yan, **H. Peng**, D. Bai, H. Shi, Z. Liu, R. Zhang, M. Li, Y. Wen, N. Li, Reaction mechanism and mechanical properties of SiC joint brazed by in-situ formation of Ti_3SiC_2 , *J. Eur. Ceram. Soc.* 44 (2024) 3777–3783.
- [2] Q. Liao, D. Wang, X. Yang, W. He, **H.B. Peng**, Y.H. Wen, Larger recovery strains in a CoNiSi alloy due to enhanced reversibility of FCC \rightleftharpoons HCP martensitic transformation, *J. Mater. Res. Technol.* 28 (2024) 235–243.
- [3] **H. Peng**, L. Sun, J. Zhang, Y. Zuo, R. Xiong, H. Wang, Y. Wen, H.S. Kim, Abnormal strain-hardening in Co-rich CoNiV medium-entropy alloys, *Scr. Mater.* 241 (2024) 115894.
- [4] W. Pan, S. Fan, Y. Zuo, L. Sun, Y. Fu, J. Yan, **H. Peng**, Y. Wen, Fabrication of single-crystal Fe-Mn-Al-Cu alloys by cyclic heat treatments, *Mater. Charact.* 207 (2024) 113465.
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- [6] Y. Fu, W. Xiao, J. Rong, L. Ren, **H. Peng**, Y. Wen, X. Zhao, C. Ma, Achieving large near-linear elasticity, low modulus, and high strength in a metastable β -Ti alloy by mild cold rolling, *J. Mater. Sci. Technol.* 189 (2024) 1–12.
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- [9] T. Jing, S. Dong, L. Shen, **H. Peng**, Y. Wen, Achieving strength-ductility synergy in nanotwinned steels prepared by cryogenic deformation, *Mater. Charact.* 195 (2023) 112512.
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