研究生导师简介

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本科：华东交通大学

硕士：华东理工大学（211）

博士：上海交通大学（211&985）

研究领域：海洋用合金材料腐蚀与防护；金属 3D/4D 打印（增材制造）；机械先进设计与智能制造；先进制造方法-工艺-性能。

教学科研情况（项目）：

主持项目：

(1)搅拌摩擦加工镍铝青铜合金耐腐蚀疲劳组织优化及机理研究(51801115)，国家青年基金，23 万，2019.01-2021.12

(2)海洋环境下镍铝青铜合金抗腐蚀疲劳裂纹扩展组织优化及机理研究(ZR2018BEM005)，山东省博士基金，8 万，2018.3-2020.12

(3)多相多组态镍铝青铜腐蚀疲劳裂尖多因素耦合损伤机理（2020M671112），中国博士后基金面上二等，8 万，2020.9-2023.9

参与项目：

(1) 国家重点基础研究(973 计划)-高服役性能海洋动力定位装备制造的基础研究，课题一、海洋动力装备构件腐蚀疲劳形成机理与组织精确调控(2014CB046701)，418 万，2014.1-2018.8

(2) 国家基金面上，基于共晶反应的新型 NiTi-Nb 多孔金属可控制备及力学行为研究(51674167)，61 万，2016.01-2019.12

(3) 国家青年基金，TiB2 颗粒增强超细晶镁基复合材料的组织调控与强韧化机理研究(5188044187)，23 万，2019.01-2021.12

学术成果（论文、专利、获奖等）

[1] **Yuting Lv**, Bin Nie, Liqiang Wang, Hongzhi Cui, Lei Li, Rui Wang, Fuyan Lyu, Optimal microstructures on fatigue properties of friction stir processed NiAl bronze alloy and its resistant fatigue crack growth mechanism, Materials Science and Engineering: A. 2020, 771.

[2] **Yuting Lv**, Yang Ding, Hongzhi Cui, Guohao Liu, Binghao Wang, Lianmin Cao∗ , Lei Li, Zhenbo Qin, Weijie Lu∗ Investigation of microscopic residual stress and its effects on stress corrosion behavior of NiAl bronze alloy using in situ neutron diffraction/EBSD/tensile corrosion experiment, Materials Characterization, 2020, 164: 110351

[3] **Yuting Lv**, Bingjie Zhao, Hongbin Zhang, Chunjian Su, Bin Nie, Rui Wang, Lianmin Cao, Fuyan Lyu, Improving Corrosion Resistance Properties of Nickel-Aluminum Bronze (NAB) Alloys via Shot Peening Treatment, Materials

Transactions. 2019, 60: 1629-1637.
[4] **Yuting Lv**, Zihao Ding, Xueyan Sun, Lei Li, Gang Sha, Rui Liu, Liqiang Wang, Gradient Microstructures and Mechanical Properties of Ti-6Al-4V/Zn Composite Prepared by Friction Stir Processing, Materials. 2019, 12.
[5] **Yuting Lv**, Zihao Ding, Jing Xue, Gang Sha, Eryi Lu, Liqiang Wang, Weijie Lu, Chunjian Su, Lai-Chang Zhang, Deformation mechanisms in surface nano-crystallization of low elastic modulus Ti6Al4V/Zn composite during severe plastic deformation, Scripta Materialia. 2018, 157:142-147.
[6] Yang Ding, **Yuting Lv**, Bingjie Zhao, Yuanfei Han, Liqiang Wang, Weijie Lu Effects of microstructure on the stress corrosion cracking behavior of nickel-aluminum bronze alloy in 3.5% NaCl solution. Materials Science and Engineering A. 2018, 733(22): 361-37324.
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[9] Chenyuan Zhu, **Yuting Lv (共同一作)**, Chao Qian, Zihao Ding, Ting Jiao, Xiaoyu Gu, Eryi Lu, Liqiang Wang, Fuqiang Zhang, Microstructures, mechanical, and biological properties of a novel Ti-6V-4V/zinc surface nanocomposite prepared by friction stir processing, International Journal of Nanomedicine. 2018, 13: 1881-1898.
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[11] **Yuting Lv**, Yang Ding,Yuanfei Han, Lai-Chang Zhang, Liqiang Wang, Weijie Lu. Strengthening mechanism of friction stir processed and post heat treated NiAl bronze alloy: Effect of rotation rates. Materials Science and Engineering A. 2017, 685: 439-446.
[12] Liqiang Wang, Lechun Xie, **Yuting Lv**, Lai-Chang Zhang, Liangyu Chen, Qiang Meng, Jiao Qu, Di Zhang, Weijie Lu, Microstructure evolution and superelastic behavior in Ti-35Nb-2Ta-3Zr alloy processed by friction stir processing, Acta Materialia. 2017, 143: 214-226.
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[14] Chenyuan Zhu, **Yuting Lv (共同一作)**, Chao Qian, Haixin Qian, Ting Jiao, liqiang wang, and Fuqiang Zhang. Proliferation and osteogenic differentiation of rat BMSCs on a novel Ti/SiC metal matrix nanocomposite modified by friction stir processing. Scientific Reports. doi: 10.1038/srep38875(2016).
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on Deformation Behavior of Nickel Aluminum Bronze by Neutron Diffraction and Transmission Electron Microscopy. Metallurgical and Materials Transactions A. 2016, 47(5): 2081-2092.
[16] **吕玉廷**, 王立强，徐小严，毛建伟，吕维洁. 镍铝青铜（NAB）合金的研究进展. 稀有金属材料科学与工程, 2016, 45(3): 815-820.
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[19] **Yuting Lv**, Liqiang Wang, Yuanfei Han, Xiaoyan Xu, Weijie Lu. Investigation of microstructure and mechanical properties of hot worked NiAl bronze alloy with different deformation degree. Materials Science and Engineering A. 2015, 643(3): 17-24.
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授权发明专利：

【1】 一种镍铝青铜的制备方法，吕玉廷，吕维洁，王立强，徐小严，毛建伟；专利号： ZL201410541694. X

【2】 一种高耐疲劳性能铸态镍铝青铜合金的制备方法，吕玉廷，聂彬，刘国浩，王柄皓，王瑞，吕馥言，专利号：ZL201910347096.1

荣誉称号：

上海交通大学校优秀毕业生（2017）