

## 个人情况

卫英慧，男，生于 1966 年，教授，博士生导师，发表学术论文 200 余篇，SCI 收录百余篇；授权国家发明专利 10 余项；主持国家自然科学基金 4 项，主持和参与国家 863 项目、省部级项目 20 余项；主编及参编的专著和教材 10 余部；获得国家及省部级科学技术奖励 7 项，其中以第一完成人完成 3 项。工作期间多次评为“优秀共产党员”等荣誉称号。另外，2004 年 10 月被评为山西省青年学科带头人；2004 年 10 月入选教育部新世纪优秀人才支持计划；2005 年入选教育部新世纪优秀人才，2006 年 5 月入选山西省 333 人才工程计划；2007 年 1 月荣获第四届“山西省优秀科技工作者”称号；2007 年 10 月荣获山西省“模范教师”光荣称号；2007 年 10 月入选山西省省委联系的高级专家；2008 年 9 月山西省青年科研专家称号。主要的社会兼职有山西省热处理协会/学会副理事长，中国机械工程学会高级会员，中国材料研究学会会员，中国机械工程学会热处理分会会员，中国电子显微镜学会会员，中国复合材料学会会员，山西省机械工程学会常务理事，山西省腐蚀与防护学会副理事长，中国体视学会金相分析委员会常务理事，机械管理开发杂志编委，山西省教授协会常务理事，太原理工大学学报编委，中国热处理学会青年委员会副主任委员，山西省青年科技工作者协会常务理事等。

### 学习经历：

1994/02-1997/06，西安交通大学，材料科学与工程学院，博士

1988/09-1991/08，太原理工大学（太原工业大学），材料系，硕士

1984/09-1988/08，太原理工大学（太原工业大学），材料系，学士

## 主要科研成果及荣誉

### 1、主要科研项目

(1) 国家自然科学基金面上项目, 51374151, 铜基合金非平衡组织塑性变形机制控制因素研究, 2014/01-2017/12, 82 万元, 已结题, 主持

(2) 国家自然科学基金主任基金, 51001079, 多因素交变/耦合作用下镁合金腐蚀机理研究, 2010/01-2010/12, 9 万, 已结题, 主持

(3) 国家自然科学基金主任基金, 50644041, 镁合金 G.P 区设计、制备及性能研究, 2007/01-2007/12, 10 万元, 已结题, 主持

(4) 国家自然科学基金面上项目, 50471070, 金属材料表面纳米化对离子注入及其性能的影响研究, 2005/01-2007/12, 24 万元, 已结题, 主持

### 2、2013-2018 年 SCI 收录论文 60 余篇。代表性论文如下:

[1] Feng Yang, Ze-ying Yan, Ying-hui Wei, Yong-gang Li, Huan Wei, Li-feng Hou, Fabrication of surface porous Mg-Al alloys with different microstructure in a neutral aqueous solution, *Corrosion Science*, 130 (2018) 138-142.

[2] Feng Yang, Yonggang Li, Yinghui Wei, Huan Wei, Zeying Yan, Lifeng Hou, L. F. Electrochemical synthesis of a surface-porous Mg 70.5 Al 29.5 eutectic alloy in a neutral aqueous NaCl solution. *Applied Surface Science*, 435, (2018): 1246-1248.

[3] Jia Xing, Yinghui Wei \*, Lifeng Hou. An Overview of the Effects of Alloying Elements on the Properties of Lightweight Fe-(15-35) Mn-(5-12) Al-(0.3-1.2) C Steel. *JOM*, 2018: 1-9.

[4] Huan W E I, HOU L, CUI Y, Wei YH. Effect of Ti content on corrosion behavior of Cu-Ti alloys in 3.5% NaCl solution. *Transactions of Nonferrous Metals Society of China*, 2018, 28(4): 669-675.

[5] Liu Xiaoda, Yin Ming, Zhang Shaohua, Wei Huan, Liu Baosheng, Du Huayun, Hou Lifeng, Wei Yinghui, Corrosion Behavior of the As-Cast and As-Solid Solution Mg-Al-Ge Alloy, *MATERIALS*, 11 (10) (2018):1812-1821.

[6] Zhang Shaohua, Hou Lifeng, Wei Huan, Wei Yinghui, Liu Baosheng, Failure analysis of an oil pipe wall perforated by pitting corrosion, *MATERIALS AND CORROSION-WERKSTOFFE UND KORROSION*, 69 (8) (2018):1123-1130.

[7] Wei Huan, Cui Yanchao, Cui Huiqi, Zhou Caizhi, Hou Lifeng, Wei Ying Hui, Evolution of grain refinement mechanism in Cu-4wt.%Ti alloy during surface mechanical

attrition treatment, *J. All. COMP.*, 763 (2018): 835-843.

[8] Li Xu, Li Yang, Wei Yinghui, Hou Lifeng, Liu Baosheng, Qu Hongbo, Wang Yide, Effect of surface self-nanocrystallization and Si infiltration on Si diffusion behavior, hardness and magnetic properties of pure Fe, *Journal of Iron and Steel Research International*, 2018,25:923-931

[9] Du Huayun, Ana Yanli, Zhang Xilu, Wei Yinghui, Hou Lifeng, Liu Baosheng, Liu Hu, Zhang Jiaoxia, Wang Ning, Umar Ahmad, Guo Zhanhu, Hydroxyapatite (HA) Modified Nanocoating Enhancement on AZ31 Mg Alloy by Combined Surface Mechanical Attrition Treatment and Electrochemical Deposition Approach, *J. NANOSCIENCE AND NANOTECHNOLOGY*, 19 (2) (2018): 810-818.

[10] Du Huayun, An Yanli, Wei Yinghui, Hou Lifeng, Liu Baosheng, Liu Hu, Ma Yong, Zhang Jiaoxia, Wang Ning, Umar Ahmad, Guo Zhanhu, Nickel Powders Modified Nanocoating Strengthened Iron Plates by Surface Mechanical Attrition Alloy and Heat Treatment, *SCIENCE OF ADVANCED MATERIALS*, 10 (7) (2018): 1063-1072.

[11] Yang Li, Lifeng Hou, Yinghui Wei, Huan Wei, Yang Cheng. Enhancement of siliconizing behaviors in pure iron induced by surface mechanical attrition treatment, *Surface and Coatings Technology*, 309 (2017) 462-470.

[12] Huan Wei, Yanchao Cui, Huiqi Cui, Yinghui Wei, Lifeng Hou, Effects of multiple trace alloying elements on the microstructure and properties of Cu-4wt.%Ti alloys, *Materials Science and Engineering A*, 707(2017) 392-398.

[13] Meng, Chuan-feng, Zhang Lei, Wang Cun-yu, Zhang, Yu-jie, Wei, Ying-hui, Wang Yi-de, Cao Wen-quan, Microstructure and mechanical properties of 20Si2CrNi3MoV steel treated by HDQP process, *Journal of iron and steel research international*, 24 (2017) 1137-1142 .

[14] Guo SQ, Hou LF, Guo CL, Wei YH, Characteristics and corrosion behavior of nickel-phosphorus coatings deposited by a simplified bath, *Materials and Corrosion-Werkstoffe And Korrosion*

[15] Lifeng Hou, Massimo Raveggi, Xiao-Bo Chen, Wanqiang Xu, Kevin J. Laws, Yinghui Wei, Michael Ferry, Nick Birbilis, Investigating the passivity and dissolution of a corrosion resistant Mg-33at.%Li alloy in aqueous chloride using online ICP-MS, *Journal of Electrochemical Society*, 2016,163(6):C324-329

[16] Lifeng Hou, Ning Dang, Haiyan Yang, Baosheng Liu, Yonggang Li, YinghuiWei, Xiao-Bo Chen, A Combined Inhibiting Effect of Sodium Alginate and Sodium Phosphate on the Corrosion of Magnesium Alloy AZ31 in NaCl Solution, *Journal of The Electrochemical Society*, 2016,163 (8): C486-C494

[17] Miaomiao Liang, Yinghui wei, Lifeng Hou, Haiyang Wang, YonggChunli Guo. Fabrication of a super-hydrophobic surface on a magnesium allsimple method, *Journal of Alloys and Compounds*, 2016,656(25):311-317

[18] Haiyang Wang, Yinghui Wei, Miaomiao Liang, Lifeng Hou, YonggChunli. Fabrication of stable and corrosion-resisted super-hydrophobic Mg alloy. *Colloids and Surfaces A: Physicochemical and Engineering Aspect*509(20): 351-358.

[19] Wei Huan, Wei Ying-hui, Hou Li-feng, Dang Ning. Correlation of precipitates with the corrosion behaviour of Cu-4wt.%Ti alloys in 3.5wtsolution, *Corrosion Science*, 2016, 111: 382-390.

[20] Yong-gangLi, Ying-huiWei, Li-feng Hou, Atmospheric corrosion of AM 60 alloys in an industrial city environment, Corrosion Science, 2013, 69(4): 67-76

### 3、代表性发明专利

(1) 卫英慧；林万明；侯利锋；杜华云；杨海燕；许并社, 一种纯铜基板材表面合金化的工艺方法, 2009. 9. 30-2029. 9. 30, 中国, 200610048372. 7

(2) 卫英慧；杜华云；侯利锋；刘增庆；林万明, 一种纯铁基板材表面合金化的机械渗入法, 2010. 2. 3-2030. 2. 2, 中国, ZL200910074636. X

(3) 卫英慧；李永刚；侯利锋；杜华云, 一种镁铝合金板的涂层热压增强方法, 2013. 3. 20-2033. 3. 20, 中国, 201110350738. 7

(4) 卫英慧；李永刚；侯利锋；杜华云；郭春丽；韩鹏举, 一种镁铝金属间化合物增强泡沫铝的方法, 2014. 01. 29-2034. 01. 29, 其他国家, CN201310537987. 6

(5) 卫英慧；刘宝胜；任晓霞；陈维毅；侯利锋；杜华云；郭春丽, 一种镁合金表面快速形成冶金合金层的方法, 2014. 11. 19-2034. 11. 19, 中国, CN201410413548. 9

(6) 李永刚；侯利锋；杜华云；郭春丽；韩鹏举；杨子俊；杨小妮；卫英慧。一种镁铝金属间化合物的增强增韧方法, 2013. 07. 03-2033. 07. 03, 中国, CN2013 10114174. 6

(7) 侯利锋；王沛占；刘东风；丁肇夷；李栩；马丽丽；卫英慧。一种低温镍钢的热处理淬火深冷处理方法, 2015. 10. 28-2035. 10. 28, 中国, 201310291288. 8

#### 4、获奖

(1) 卫英慧 (1/4), 纳米晶块体材料的制备、结构表征及性能研究山西省科技厅, 自然科学, 省部二等奖, 2007.11.20

(2) 卫英慧 (8/15), LNG 储罐用超低温 06Ni9 钢的研发与生产技术创新, 中国冶金部, 科技进步, 省部一等奖, 2011.11.21

(3) 卫英慧 (1/6), 镁合金构件特殊环境下的腐蚀行为及耐腐蚀镁合金创新研究, 山西省科技厅, 自然科学, 省部二等奖, 2017.11.20