赵明纯教 授的相关信息(已有14417人次阅读)

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基本资料

姓　　名：赵明纯　　性　　别：男

出　　生：1974-10　　职　　称：教 授

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详细介绍

赵明纯，男，汉，1974年10月生，教授、博士生导师、升华学者。1992年9月~1996年6月在中南大学材料系学习并获学士学位；1996年7月~1998年8月，在长沙矿山研究院从事钻具材料热处理的科研与生产工作；1998年9月~2004年3月在中国科学院金属研究所硕博连读并获工学博士学位；2004年4月~2006年6月在日本国立材料研究所（NIMS）从事博士后科研工作；2006年7月~2008年10月，在澳大利亚昆士兰大学作为高级研究员从事科研工作；2007年9月~2008年3月被瑞士联邦理工联邦材料测试与开发研究所（EMPA）作为特聘高级研究员从事科研工作；2006年11月被中南大学特聘为教授；2008年11月，被中南大学作为“升华学者特聘教授”高层次人才引进，辞去昆士兰大学工作岗位正式回中南大学从事科研教学工作。

长期从事金属材料的组织控制、力学性能和腐蚀开裂等方面的研究工作，取得了众多独创性成果。曾经作为研究骨干参加中国973项目“新一代钢铁材料重大基础研究”、中国自然基金项目“针状铁素体管线钢中的复相结构及其对强韧性能的影响”、日本“超级钢”、澳大利亚的“汽车用镁合金材料的环境腐蚀”、澳大利亚-瑞士联合项目“自然环境中汽车用镁合金的应用”等项目，取得了很好的科研成果。在国内外重要学术期刊上发表SCI/EI检索的科技论文百多篇，其中在国外权威和重要学术期刊上以第一作者发表SCI检索的英文论文30多篇，科研成果国内外科研工作者广泛关注，论文被SCI引用高达数百次，其中多篇论文进入近年来所在领域被SCI引用次数最多论文行列，申报和授权了4项发明专利，在多个国内外学术会议上做专门学术报告和特邀学术报告，负责执笔翁宇庆教授编《超细晶钢—钢的组织细化理论与控制技术》一书中第2.4章（p386-419）：针状铁素体管线钢的强韧性特征和抗硫化氢行为 （冶金工业出版社，2003年），部分研究成果已经应用于西气东输管线工程和上海宝钢、日本新日铁等钢铁生产企业。

现在正将多年在矿山机械用钻具材料领域进行的科研成果转化为实际产品，研制生产出具有优良性能的高、中、低风压系列潜孔冲击器及钻头和风动液压凿岩机配套用钻头、钎尾及套管系列等钻具产品，走产学研一体化良性发展道路。目前正和中国科学院金属研究所、日本国立材料研究所（NIMS）、澳大利亚昆士兰大学、美国通用汽车公司等国内外著名科研院所进行紧密的科研合作，并达成向其输送硕士生、博士生联合培养的意向。

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【研究方向】：

01新一代钢铁材料的制备工艺与强韧化机理

02钻具材料的热处理工艺与技术

03汽车用镁合金材料的腐蚀行为

04镁合金生物医用材料及器件

【学术兼职】：

Metall Mater Trans A、Mater Sci Eng A、J. Mater Sci、J. Alloys Compounds等国外著名材料期刊的特邀评审员。

中国科学院金属研究所合金钢课题组客座研究员；昆士兰大学客座教授。

日本铁钢学会、日本金属学会、澳大利亚轻合金研究中心、澳大利亚材料学会会员。

【主要奖励】：

多次获得过中国科学院金属研究所年度优秀科研奖

2001年度师昌绪奖

2001年度刘永龄奖

2001年度中信微合金化技术中心优秀论文奖

2003年度师昌绪一等奖

2003年度中国科学院院长优秀奖。

【部分近年以第一作者发表的SCI检索的国际权威期刊和重要期刊论文】：

1. **Ming-Chun Zhao**, Schmutz Patrik, Brunel Samuel, Ming Liu, Guang-Ling Song, Andrej Atrens, An exploratory study of the corrosion of Mg alloys during interrupted salt spray testing, ***Corrosion Science***, vol. 51, 1277-1292, 2009, indexed by Sci/Ei.

2. **Ming-Chun Zhao**, Yun-Lai Deng, Xing-Ming Zhang. Strengthening and Improvement of Ductility without Loss of Corrosion Performance in a Magnesium Alloy by Homogenizing Annealing, ***Scripta Mater.***, vol.58, 560-563, 2008, indexed by Sci/Ei.

3. **Ming-Chun Zhao**, Ming Liu, Guang-Ling Song, Andrej Atrens, Influence of Distribution of Second β phase on Corrosion Behavior of AZ91 Magnesium Alloy in Sodium Chloride, Corrosion Science, ***Corrosion Science***, vol.50, 1939-1953, 2008, indexed by Sci/Ei.

4. **Ming-Chun Zhao**, Toshihiro Hanamura, Fuxing Yin, Hai Qiu, Kotobu Nagai. Formation of Bimodal-Sized Structure and its Tensile Properties in a Warm-Rolled and Annealed Ultrafine-Grained Ferrite/Cementite Steel, ***Metall. Mater. Trans. A***, vol.39 (7), 1691-1701, 2008, indexed by Sci/Ei.

5. **Ming-Chun Zhao**, Fuxing Yin, Toshihiro Hanamura, Hai Qiu, Kotobu Nagai, Andrej Atrens. Relationship between yield strength and grain size for a bimodal structural ultrafine-grained ferrite/cementite steels, ***Scripta Mater.***, vol.57 (9), 857-860, 2007, indexed by Sci/Ei.

6. **Ming-Chun Zhao**, Ming-Liu, Guang-Ling Song, Andrej Atrens, Influence of pH and Chloride Ion Concentration on Corrosion of Magnesium Alloy ZE41, ***Corrosion Science***, vol.50, 3168-3178, 2008, indexed by Sci/Ei.

7. **Ming-Chun Zhao**, Toshihiro Hanamura, Hai Qiu, Ke Yang. Low absorbed energy ductile dimple fracture in lower shelf region in an ultrafine grained ferrite/cementite steel, ***Metall. Mater. Trans. A***, vol.37 (9), 2897-2990, 2006, indexed by Sci/Ei.

8. **Ming-Chun Zhao**, Toshihiro Hanamura, Hai Qiu, Kotobu Nagai, Ke Yang. Dependence of strength and stren gth-elongation balance on the volume fraction of cementite particles in ultrafine grained ferrite/cementite steels, ***S cripta Mater.***, vol.54 (7), 1385-1389, 2006, indexed by Sci/Ei.

9. **Ming-Chun Zhao**, Toshihiro Hanamura, Hai Qiu, Kotobu Nagai, Ke Yang. Grain growth and Hall-Petch relat ion in dual-sized ferrite/cementite steel with nano-sized cementite particles in a heterogeneous and dense distribu tion, ***Scripta Mater.***, vol.54 (6), 1193-1197, 2006, indexed by Sci/Ei.

10. **Ming-Chun Zhao**, Toshihiro Hanamura, Hai Qiu, Ke Yang. Microstructural Evolution of Submicron Sized Ferrite in Bimodal Structural Ultrafine Grained Ferrite/Cementite Steels by Annealing below Austenized Temper ature, ***Metall. Mater. Trans. A***, vol.37 (5), 1657-1664, 2006, indexed by Sci/Ei.

11. **Ming-Chun Zhao**, Ke Yang. Effects of Nano-sized Microalloyed Carbonitrides and High-density Pinned Di slocations on Sulfide Stress Cracking Resistance of Pipeline Steels, ***J. Mater. Res.***, Vol. 20 (9), 2248-2251, 200 5, indexed by Sci/Ei.

12. **Ming-Chun Zhao**, Bei Tang, Yi-Yin Shan, Ke Yang. Role of microstructure on sulfide stress cracking of oil and gas pipeline steels, ***Metall. Mater. Trans. A***, Vol. 34A (5), 1089-1096, 2003, indexed by Sci/Ei.

13. **Ming-Chun Zhao**, Ke Yang. Strengthening and improvement of sulfide stress cracking resistance in acicular ferrite pipeline steels by nano-sized carbonitrides, ***Scripta Mater.***, Vol.52 (9), 881-886, 2005, indexed by Sci/Ei.

14. **Ming-Chun Zhao**, Ming Liu, Andrej Atrens, Yi-Yin Shan, Ke Yang. Effect of Applied Stress and Microstr ucture on Sulfide Stress Cracking Resistance of Pipeline Steels Subject to Hydrogen Sulfide, ***Mater. Sci. Eng. A***, vol.478 (1-2), 43-47, 2008, indexed by Sci/Ei.

15. **Ming-Chun Zhao**, Toshihiro Hanamura, Hai Qiu, Ke Yang. Precipitation of Carbonitrides and Their Strengt hening upon Non-quench Aging for Micro-alloyed Acicular Ferrite Pipeline Steels, ***Mater. Trans.***, Vol.46 (4), 78 4-789, 2005, indexed by Sci/Ei.

16. **Ming-Chun Zhao**, Ming-Liu, Guang-Ling Song, Andrej Atrens. Influence of Homogenization Annealing of AZ91 on Mechanical Properties and Corrosion Behavior, ***Adv. Eng. Mater***, vol.10, 93-103, 2008, indexed by Sc i/Ei.

17. **Ming-Chun Zhao**, Ming-Liu, Guang-Ling Song, Andrej Atrens, Influence of Microstructure on Corrosion o f As-cast ZE41, ***Adv. Eng. Mater***, vol.10, 104-111, 2008, indexed by Sci/Ei.

18. **Ming-Chun Zhao**, PJ Uggowitzer, Ming Liu, P Schmutz, Guang-Ling Song, Andrej Atrens. Corrosion of A Z91 - Influence of the b-phase Morphology, ***Materials Science Forum*** Vols. 618-619, 473-478, 2009, indexed b y Sci/Ei.

19. **Ming-Chun Zhao**, Yi-Yin Shan, Ke Yang. Effect of aging treatment on mechanical property and H2S resista nt behavior of acicular ferrite pipeline steels, ***Acta Metall Sin***, Vol.40 (9), 948-954, 2004, indexed by Sci/Ei.

20. **Ming-Chun Zhao**, Fu Ren Xiao, Yi-Ying Shan, Yu Hai Li, Ke Yang. Microstructural characteristic and toughening of an ultralow carbon acicular ferrite pipeline steel, ***Acta Metall Sin***, Vol.38 (3), 283-287, 2002, indexed by Sci/Ei.

21. **Ming-Chun Zhao**, Toshihiro Hanamura, Hai Qiu, Ke Yang. Lath boundary thin-film martensite in acicular ferrite ultralow carbon pipeline steels, ***Mater. Sci. Eng. A***, Vol. 395A (1-2), 327-332, 2005, indexed by Sci/Ei.

22. **Ming-Chun Zhao**, Yi-Ying Shan, Yu Hai Li, Ke Yang. Effect of microstructure on sulfide stress corrosion cracking of pipeline steels, ***Acta Metall Sin***, Vol.37 (10), 1087-1092, 2001, indexed by Sci/Ei.

23. **Ming-Chun Zhao**, Toshihiro Hanamura, Hai Qiu, Kotobu Nagai, Yi-Yin Shan and Ke Yang. Difference in the role of non-quench aging on mechanical properties between acicular ferrite and ferrite-pearlite pipeline steels, ***ISIJ Int.***, Vol.45 (1), 116-120, 2005, indexed by Sci/Ei.

24. **Ming-Chun Zhao**, Ke Yang, Fu-Ren Xiao, Yi-Yin Shan. Continuous cooling transformation of undeformed and deformed low carbon pipeline steels, ***Mater. Sci. Eng. A***, Vol. 355A (1-2), 126-136, 2003, indexed by Sci/Ei.

25. **Ming-Chun Zhao**, Yi-Ying Shan, Jin-bo Qu, Fu-Ren Xiao, Yong Zhong, Ke Yang. Acicular ferrite formation in a pipeline steel with thermo-mechanical control process, ***Acta Metall Sin***, Vol.37 (8), 820-824, 2001, indexed by Sci/Ei.

26. **Ming-Chun Zhao**, Yi-Yin Shan, Fu-Ren Xiao, Ke Yang. Acicular ferrite formation during hot plate rolling for pipeline steels, ***Mater. Sci. Technol.***, Vol. 19 (3), 355-359, 2003, indexed by Sci/Ei.

27. **Ming-Chun Zhao**, Yi-Ying Shan, Fu Ren Xiao, Ke Yang, Yu Hai Li. Investigation on the H2S-resistant behaviors of acicular ferrite and ultrafine ferrite, ***Mater. Letter***, Vol. 57 (1), 141-145, 2002, indexed by Sci/Ei.

28. **Ming-Chun Zhao**, Yi-Ying Shan, Jin-bo Qu, Ke Yang, Shan Gao, Lei Zhen. Effect of thermo-mechanical control process on microstructures and mechanical properties of X60 pipeline steel, ***Acta Metall Sin***, Vol.37 (2), 179-183, 2001, indexed by Sci/Ei.

29. **Ming-Chun Zhao**, Ke Yang, Yiying Shan. The effects of thermo-mechanical control process on microstructures and mechanical properties of a commercial pipeline steel, ***Mater. Sci. Eng. A***, Vol. 335 (1-2), 14-20, 2002, indexed by Sci/Ei.

30. **Ming-Chun Zhao**, Ke Yang, Yi-Yin Shan. Comparison on strength and toughness behaviors of microalloyed pipeline steels with acicular ferrite and ultrafine ferrite, ***Mater. Letter***, Vol.57 (9-10), 1496-1500, 2003, indexed by Sci/Ei.

【国家发明专利】：

一种提高现有针状铁素体管线钢强度的方法，专利号02130812.8, 2002.9.30.

一种提高现有针状铁素体管线钢抗硫化氢性能的方法，专利号200310119050.3, 2003.12.12.

一种高纯净度高强韧性输气输气管线钢的制备方法，专利号00123128.6, 2000.10.26.

一种超低碳高韧性抗硫化氢用输气管线钢，专利号00123185.5, 2000.11.01.