

Curriculum Vitae

Personal information

Name: Hongmei Chen

Date of birth: Sept. 23, 1978

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Professional Experiences

2009.07~ present Professor

School of Materials Science and Engineering

Jiangsu University of Science and Technology, Zhenjiang, China

2016.02~ 2017.02 Honorary University Fellow

College of Engineering, Mathematics and Physical Sciences

University of Exeter, UK

2013.08~2019.06 Associate Professor

School of Materials Science and Engineering

Jiangsu University of Science and Technology, Zhenjiang, China

2000.07~ 2004.08 Assistant Engineer

China Great Wall Aluminium Corporation, Zhengzhou, China

Education

2016.11~ 2019.11 Postdoctoral Research

School of Materials Science and Engineering

Jiangsu University of Science and Technology, Zhenjiang, China

2013.06~2016.06 Postdoctoral Research

School of Materials and Metallurgy, Northeastern University, Shenyang, China

2004.08-2009.06 Ph.D

School of Material Science and Engineering, Shandong University, Ji'nan, China

2007.01-2008.07 Joint training doctoral students

Korea Institute of Materials Science, Changwon, Korea

1996.09-2000.06 Bachelor

Material Science and Engineering Department, Zhengzhou University, Zhengzhou, China

Research Experience

Rare Earth Magnesium Alloy with LPSO Structure Phase

3D metal carbide and composites based on the 3D graphene

Ultrafine-grained Mg/Al composite plate produced by ARB technology

Twin roll cast magnesium/aluminum alloy

LIST of PUBLISHED PAPERS

1. Hao Li, **Hong-mei Chen**, Xu Zhang, Qian-hao Zang, Jing Zhang, Di Feng, Yan-xin Qiao, Yu-hang Guo. Effect of solidification mode on microstructure evolution and properties of magnesium alloy with long-period stacking ordered phase. *Journal of Iron and Steel Research International*, 2023, <https://doi.org/10.1007/s42243-023-01071-8>.
2. Jun Zhou, Xiangfang Fan, **Hongmei Chen**, Di Feng. Effect of multi-arc current on the microstructure and properties of TiAlSiN coating on zircaloy-4 alloy, *Journal of Materials Research and Technology*, 2023, 25: 7101-7108
3. Si-shu Wang, Qian-hao Zang, **Hong-mei Chen**, Yu-hang Guo, Feng-jian Shi, Di Feng. Effect of extrusion temperature on microstructure and tensile properties of Mg – Gd – Er – Zn – Zr alloy containing LPSO phase, *Journal of Iron and Steel Research International*, 2023, <https://doi.org/10.1007/s42243-023-01030-3>
4. Jingrun Chen, Jing Zhang, Ke Li, Dongdong Zhuang, Qianhao Zang, **Hongmei Chen**, et al. Microstructure and Properties of Laser Surface Remelting AlCoCrFeNi_{2.1} High-Entropy Alloy. *Metals*, 2022,12:1590
5. Jing Zhang, Jingrun Chen, **Hongmei Chen**, Ling Wang, Yan Zhang, Rui Li, Bingbing Chen. Al-Si nano clusters and short-range orders induced fibrous modified eutectic Si. *Materials Characterization*. 194(2022) 112348
6. Rongxin Cheng, Jing Zhang, Qianhao Zang, Dong Hana, Di Feng, Hongwei Cui, and **Hongmei Chen**. Effects of rolling process on microstructure and properties of Mg-Gd-0.75Er-0.5Zn-0.18Zr alloy. *MATERIALS SCIENCE AND TECHNOLOGY*. 2022.
7. W.H. Zhou, F.H. Duan, Y.H. Meng, C.C. Zheng, **H.M. Chen**, A.G. Huang, Y.X. Wang, Y. Li. Effect of alloying oxygen on the microstructure and mechanical properties of Zr-based bulk metallic glass. *Acta Materialia* 220 (2021) 117345
8. Qianhao Zang, **Hongmei Chen**, Jing Zhang, Ling Wang, Shujin Chen, Yunxue Jin. Microstructure, mechanical properties and corrosion resistance of AZ31/GNPs composites

prepared by friction stir processing. *Journal of Materials Research and Technology*. 2021, 14, 195-201

9. Qianhao Zang, Xiaowen Li, **Hongmei Chen**, Jing Zhang, Ling Wang, Shujin Chen, Yunxue Jin and Sheng Lu. Microstructure and Mechanical Properties of AZ31/ZrO₂ Composites Prepared by Friction Stir Processing With High Rotation Speed. *Frontiers in Materials*, 2020, 7: 1-9-
10. Dong Han, **Hongmei Chen**, Qianhao Zang, Yuxiang Qian, Hongwei Cui, Ling Wang, Jing Zhang, Yunxue Jin. Effect of solution treatment on microstructure and properties of Mg-6Gd-3Y-1.5Zn-0.6Zr alloy. *Materials Characterization* 163 (2020) 110295-
11. Tiantian Zhang, Hongwei Cui, Xiaoli Cui, **Hongmei Chen**, et al. Effect of addition of small amounts of samarium on microstructural evolution and mechanical properties enhancement of an as-extruded ZK60 magnesium alloy sheet. *Journal of Materials Research and Technology*. 2020, 9(1), 133-141.
12. **Hongmei Chen**, Dong Han, Hongwei Cui, Liang Zhang, Ling Wang, Jing Zhang and Yunxue Jin. Microstructures and properties of as-cast rare Earth magnesium alloy with LPSO phase. *Materials Research Express* 6 (2019) 0965a5-
13. **Hongmei Chen**, Xiaowen Li, Sien Liao, Jing Zhang, Yunxue Jin, Hongwei Cui. Effect of ZrO₂ Additions on Fabrication of ZrO₂/Mg Composites Via Friction-stir Processing, *Materiali in Tehnologije / Materials and Technology*, 53 (2019) 2: 193-197
14. **Hongmei Chen** and Xiaowen Li, Microstructure and Damping Capacity of ZK60 Alloy Sheets Fabricated by Twin Roll Casting and Hot Rolling Process, *International Journal of Corrosion*, 2019, 2618737, 1-5, <https://doi.org/10.1155/2019/2618737>
15. **Hongmei Chen**, Sien Liao, Xuan Lu, Nannan Wang, Zhuxian Yang, Yu Chen, Yongde Xia, Yanqiu Zhu. The preparation of SiC nanowires reinforced porous carbon nanocomposites by simple method. *Materials Chemistry and Physics*. 2018, 219: 258-262. <https://doi.org/10.1016/j.matchemphys.2018.07.041> WOS:000450377800029
16. ZANG Qian-Hao, **CHEN Hong-Mei**, LAN Fang-Yuan, ZHANG Jing, JIN Yun-Xue. Effect of friction stir processing on microstructure and damping capacity of AZ31 alloy. *Journal of Central South University*, 2017, 24: 1034–1039 (**Corresponding Author**)
17. Zang Qianhao, Liu Zhongming, **Chen Hongmei**, Zhang Jing, Jin Yunxue. Effect of Heat Treatment on Microstructure and Damping Capacity of Twin Roll Cast ZK60 Alloy. *RARE METAL MATERIALS AND ENGINEERING*. 2016, 45(6): 1578-1582 (**Corresponding Author**)
18. **CHEN Hongmei**, ZANG Qianhao, LIU Zhongming, ZHANG Jing, JIN Yunxue. Effect of T6 treatment on microstructure and mechanical properties of twin roll cast ZK30-Y magnesium alloy. *Journal of Jiangsu University of Science and Technology (Natural Science Edition)*. 2016, 30(3): 227-231. (in Chinese) (**Prior publication**)
19. **Chen Hongmei**, Liu Zhongming, Zang Qianhao, Yu Xin, Zhang Jing and Jin Yunxue. Effect of Heat Treatment on High Temperature Damping Capacity of ZK60 Sheet Produced by Twin-roll Casting and

Hot-rolling. *Chiang Mai Journals of Science*, 2016, 43(2) : 351-357

20. Zhongming Liu, **Hongmei Chen**, Weipeng Guo, Jing Zhang and Yunxue Jin. Interface and Damping Capacity of Mg/Al Multilayered Composite Produced by Accumulative Roll Bonding. *Materials Science Forum*, 2016, 849: 838-843 (**Corresponding Author**)
21. **Chen Hongmei**, Zang Qianhao, Yu Hui, Zhang Jing, Jin Yunxue. Effect of Intermediate Annealing on the Microstructure and Mechanical Property of ZK60 Magnesium Alloy Produced by Twin Roll Casting and Hot Rolling. *Materials Characterization*, 2015, 106: 437-441
22. **Hongmei Chen**, Qianhao Zang, Jing Zhang, Jaehyung Cho, Yunxue Jin, and Yuke Shi. Effect of Heat Treatment on Microstructure and Damping Capacity of Twin Roll Cast ZK60 Strip. *Magnesium Technology 2015*, 2015: 267-271
23. **Chen Hongmei**, Zang Qianhao, Zhang Jing, Jin Yunxue, Xiang Hongfu. Texture of TC4 Titanium Alloy Tubes Processed by Cold Rolling. *Special Casting & Nonferrous Alloys*. 2015, 35(10): 1012-1015. (in Chinese)
24. Zang Qianhao, Shi Yuke, **Chen Hongmei**, Zhang Jing, and Jin Yunxue, Effect of Annealing Temperature on Microstructure and Damping Capacity of Twin Roll Cast ZK60 Alloy, *Advanced Materials Research*, **2015, 1095: 87-90 (Corresponding author)**
25. Q. H. Zang, **H. M. Chen**, J. Zhang, J. H. Cho, Y.X. Jin, Y.K. Shi Effect of hot rolling on microstructure and damping capacity of Twin Roll Cast ZK60 alloy, *Material Research Innovation*, 2015, 19(S4): S102-105. (**Corresponding author**)
26. Jing Zhang, **Hongmei Chen**, Hui Yu and Yunxue Jin. Study on Dual Modification of Al-17%Si Alloys by Structural Heredity. *Metals*, 2015, 5:1112-1126.
27. **Hongmei Chen**, Huashun Yu, Guanghui Min, Yunxue Jin, Study on the Microstructure and Texture of Warm Rolled ZK60 Magnesium Alloy Sheet, *Advanced Materials Research*, 2012,557-559: 1344-1348
28. **Chen Hongmei**, Yu Huashun, Kang Suk Bong, Min Guanghui, Jin Yunxue. Effect of forming process on microstructure and mechanical properties of ZK60 alloy sheet. *Rare Metal Materials and Engineering*, 2011, 40(10): 1708-1712.
29. **CHEN Hong-mei**, YU Hua-shun, KANG Suk-bong, Min Guang-hui, JIN Yun-xue. Effect of Rolling Temperature on Microstructure and Texture of Twin Roll Cast ZK60 Magnesium Alloy. *Transactions of Nonferrous Metals Society of China*, 2010, 20(11): 2086-2091.
30. **Hongmei Chen**, Huashun Yu, Suk Bong Kang, Guanghui Min. Texture development in a twin roll cast and warm rolled ZK60 magnesium alloy. In: S.R. Agnew, N.R. Neelameggham, E.A. Nyberg, and W.H. Sillekens, ed. *Magnesium Technology 2010*. Warrendale, Pennsylvania: TMS 2010:559-562
31. **Hongmei Chen**, Huashun Yu, Suk Bong Kang, Jae Hyoung Cho, Guanghui Min, Optimization of annealing treatment parameters in a twin roll cast and warm rolled ZK60 alloy sheet, *Materials Science and Engineering A*, 2010, 527(4-5):1236-1242.
32. **Hongmei Chen**, Huashun Yu, Suk Bong Kang, Guanghui Min, Optimization of annealing treatment parameters in a twin roll cast and warm rolled Mg-4.5Al-1.0Zn alloy, *Advanced Materials Research*, 79-82 (2009), 2139-2142.
33. **Hongmei Chen**, Suk Bong Kang, Huashun Yu, Jaehyung Cho, Hyoung Wook Kim, Guanghui Min. Effect of heat treatment on microstructure and mechanical properties of twin roll cast and sequential warm rolled

ZK60 alloy sheets, *Journal of Alloys and Compounds*, 2009, 476(1-2): 324-328.

34. **Hongmei Chen**, Suk Bong Kang, Huashun Yu, Hyoung Wook Kim, Guanghui Min. Microstructure and mechanical properties of Mg-4.5Al-1.0Zn alloy sheets produced by twin roll casting and sequential warm rolling. *Materials Science and Engineering A*, 2008, 492(1-2): 317–326.
35. **Chen Hongmei**, Suk-Bong Kang, Yu Huashun, Min Guanghui, Study on microstructure and mechanical properties of AZ451 magnesium alloy. *ACTA METALLURGICA SINICA*. 2008,44(4),397-402. (in Chinese)
36. **Chen Hongmei**, Suk-Bong Kang, Yu Huashun, Hyoung Wook Kim, Min Guanghui, Effects of Ca on Microstructure and Properties of AZ4151 Wrought Magnesium Alloy. *SPECIAL CASTING & NONFERROUS ALLOYS*. 2008, 28(3): 397-402. (in Chinese)
37. **Chen Hongmei**, Suk-Bong Kang, Yu Huashun, Min Guanghui, Effect of warm rolling on microstructure and mechanical properties of twin roll cast ZK60 Mg alloy. *MATERIALS SCIENCE & TECHNOLOGY*. 2008, S1:42-46. (in Chinese)
38. **Hongmei Chen**, Huashun Yu, Jing Zhang, Lin Zhang, and Guanghui Min. Microstructure and mechanical properties of Al₂O₃-TiC/Al *in situ* Composites. *Key Engineering Materials*, 2006, 326-328:1857-1860
39. **Hongmei Chen**, Huashun Yu, Jing Zhang, Guanghui Min. Fabrication of Al₂O₃-TiC/Al Composites by In-situ Reaction. *SPECIAL CASTING & NONFERROUS ALLOYS*. 2006, 26(10):674-675. (in Chinese)
40. Jae-Hyung Cho, **Hong-Mei Chen**, Shi-Hoon Choi, Hyoung-Wook Kim, Suk-Bong Kang, Aging Effect on Texture Evolution during Warm Rolling of ZK60 Alloys Fabricated by Twin-Roll Casting, *Metallurgical and Materials Transactions A*, 2010, 41(10): 2575-2583.
41. Suk Bong Kang, **Hongmei Chen**, Hyoung Wook Kim, Jae Hyoung Cho, Effect of Reheating and Warm Rolling on Microstructure and Mechanical Properties of Twin Roll Strip Cast Mg-4.5Al-1.0Zn-0.4Mn-0.3Ca Alloy Sheet, In: M.O. Pekguleryuz, N.R.Neelameggham, R.S.Beals, and E.A.Nyberg, ed., *Magnesium Technology 2008*, Warrendale, Pennsylvania: TMS, 2008:147-152
42. YU Huashun, **CHEN Hongmei**, MA Rendian, and MIN Guanghui. The fabrication of AlN-TiC/Al composites by gas injection processing. *RARE METALS*. 2006,25(6) :659-664.
43. YU Huashun, **CHEN Hongmei**, SUN Liming, and MIN Guanghui. Preparation of Al-Al₃Ti *in-situ* composites by direct reaction method. *RARE METALS*. 2006, 25(1):32~36.