



Registration Form for WFC Youth Working Committee

Personal Info.

Name: Xin Tong

Title: Assistant research fellow

Affiliation: Shanghai Jiao Tong University



Research Interest

Development of high-performance Mg alloys

Melt treatment and casting of Mg alloys

Main Achievements (<200 words)

I have been engaged in research on the development and forming of Mg alloys, mainly focusing on the melt treatment and microstructure regulation of cast magnesium rare-earth alloys. A new pre-treatment method of Zr-containing grain refiner has been proposed, and a new approach to reduce the interface energy barrier of heterogeneous nucleation has been obtained. Based on the characteristics of magnesium rare-earth alloy melt, a composite flux for both grain refinement and purification has been developed, greatly improving the efficiency and quality of melt preparation. Based on the above research, I have published over 40 peer-reviewed papers in international journals including Scripta Materials, Additive Manufacturing, and Journal of Materials Science & Technology, etc. These publications have been cited for over 700 times with an h-index of 15. I have also obtained 15 authorized national invention patents.