

Project acronym: MULTIMAT
Project ID: 505226
Project Participant: Department of Earth Sciences, University of Cambridge

Personal Information

Name: Huali Zhang
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Network Information

Starting data: 14 January 2006
Duration: 28 months
Category: ESR
Place: Cambridge
County: UK

I work on the Landau theory of the martensitic phase transformations. The Landau potentials were determined from high resolution diffraction data to determine the spontaneous strain as proxy for the order parameter Q and differential scanning calorimetric measurements for the calibration of the excess entropy of the martensitic phase transitions. For the cases of Ni-Al and Ni-Ti-Fe, our results show that the transformations can be described by the Landau potentials with quantum saturation very well.

I also work on the mechanical spectra to study the martensitic phase transition in Cu-Al-Be single crystal and relaxation process in KMnF_3 single crystal.

I appreciate the network very much as it gave me the opportunities to learn, participate and work in an internal research environment. I also benefit a lot from the collaboration opportunities with researchers at partner institutions.