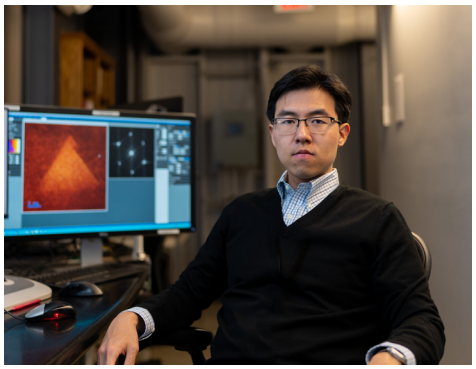
UCDAVIS
MATERIALS SCIENCE AND ENGINEERING

ZHANG RESEARCH GROUP

Ph.D. and Master's Student Hire - Metallic Structural Materials

Department of Material Science and Engineering
University of California, Davis



Prof. Mingwei Zhang mwwzhang@ucdavis.edu Google Scholar

2023.7-	**Assistant Professor**, University of California, Davis
2021.8-2023.7	**Postdoctoral researcher**, Lawrence Berkeley National Laboratory **Advisor**: Andrew Minor
2017.9-2021.8	**Ph.D.**, University of California, Davis **Advisor**: Jeffery Gibeling **Dissertation:** Creep Properties and Dislocation Kinetics of Dispersion-Strengthened Alloys and Multi-Principal Element Alloys
2013.9-2017.6	**B.E.**, Shanghai Jiaotong University

Research Interests

Zhang Research Group combines cutting-edge metal manufacturing and processing, multiscale mechanical testing, and advanced electron microscopy techniques (including *in-situ* characterization) to investigate the structure-property relationship and deformation mechanisms in structural materials operating under extreme conditions. The primary research interests include:

• Investigate, design, and process ultrahigh-temperature multiple principle element alloys for space and aeronautical applications
• Investigate elevated -temperature deformation, oxidation, and radiation mechanisms in additively manufactured refractory alloys for nuclear fusion applications
• Investigate, design, and manufacture alloys with hierarchical structures to simultaneously increase their strength and ductility

Main Collaborators

- Lawrence Berkeley National Laboratory
- Lawrence Livermore National Laboratory
- Pacific Northwest National Laboratory
- NASA Glenn Research Center

Minimum Qualifications

1. Bachelor's or Master's degree in Materials Science and Engineering, Metallurgical Engineering, Mechanical Engineering, or Applied Physics
2. Proven ability to work productively both independently and as part of an interdisciplinary team with strong communication and interpersonal skills

Preferred Qualifications

1. Research experience in metal manufacturing and processing, mechanical testing, and/or transmission electron microscopy
2. Have published peer-reviewed journals andattended international conferences
3. Fluent in programming languages (e.g., Python, MATLAB) and main experimental, simulation and plotting software (e.g., CALPHAD, SolidWorks, LabVIEW, Origin)

Please send your CV to Prof. Zhang mwwzhang@ucdavis.edu
For other information related to application, please visit the department website: mse.engineering.ucdavis.edu