

Curriculum Vitae: Zesheng You

CONTACT INFORMATION

- Affiliation: Herbert Gleiter Institute of Nanoscience, Nanjing University of Science & Technology
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EDUCATION

2006.9 – 2012.6

Doctor of Philosophy, Materials Science June 2012

Thesis: Plastic deformation and fracture mechanism of copper with preferentially oriented nanoscale twins

Supervisors: Profs. K. Lu and L. Lu

Institute of Metal Research, Shenyang, P. R. China

2002.9 – 2006.7

Bachelor of Engineering, Materials Science and Engineering July 2006

Bachelor of Engineering (2nd Degree), Computer and Application July 2006

Shanghai Jiao Tong University, P. R. China

RESEARCH EXPERIENCE

Shenyang National Laboratory for Materials Science | Institute of Metal Research

Graduate Student Researcher (September 2007 – June 2012)

- Perform tensile tests and TEM/SEM/EBSD microstructural characterization on the nano-twinned Cu;
- Investigate the mechanical anisotropy of nano-twinned metals;
- Investigate the grain boundary fracture processes of nano-twinned Cu;
- Perform cold-rolling at liquid nitrogen temperature and study the effect of applied strain on microstructure evolution;
- Perform tensile testing at liquid nitrogen temperature.

Shenyang National Laboratory for Materials Science | Institute of Metal Research

Assistant Researcher (June 2012 – August 2014)

- Perform tensile tests and TEM/SEM/EBSD microstructural characterization on the nano-twinned Cu;
- Fracture behavior of nanotwinned Cu during uniaxial tension;
- Fracture toughness of 316L stainless steel treated by dynamic plastic deformation;
- Method and instrument design for fracture toughness determination of small-sized samples;
- Electro-deposition instrument design: low-temperature and multi-bath composite deposition;

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Permanent Scientist (September 2014 – Present)

- Fracture micromechanism of nanostructured metals;
- X-Ray nano-tomography;
- Mesoscopic mechanical tests;

AWARDS AND HONORS

- Pacemaker to Excellent Students, Graduate University of Chinese Academy of Sciences, May 2011
- Honor of Excellent Students, Graduate University of Chinese Academy of Sciences, May 2010.
- Honor of Excellent Students, Graduate University of Chinese Academy of Sciences, May 2009
- Honor of Excellent Students, Graduate University of Chinese Academy of Sciences, May 2007
- The Second Prize Scholarship, Shanghai Jiao Tong University, Oct. 2005
- Guanghai Educational Scholarship, Shanghai Jiao Tong University, Oct. 2005
- The First Prize Scholarship, Shanghai Jiao Tong University, Oct. 2004
- Samsung Scholarship, Shanghai Jiao Tong University, Oct. 2004, (top 1)
- The Third Prize Scholarship, Shanghai Jiao Tong University, Oct. 2003
- Boai Scholarship, Shanghai Jiao Tong University, Oct. 2003

PUBLICATIONS

- Lei Lu, **Zesheng You**. Plastic deformation mechanisms in nanotwinned metals. *Acta Metallurgica Sinica* **50** (2014) 129-136;
- **Z.S. You**, X. Li, L. Gui, Q. Lu, T. Zhu, H. Gao, L. Lei. Switchable deformation mechanisms in nanotwinned metals. *Acta Materialia* **61** (2013) 217-227;
- L. Lu , **Z.S. You** and K. Lu. Work hardening of polycrystalline Cu with nanoscale twins. *Scripta Materialia* **66** (2012) 837-842;
- **Z.S. You**, L. Lu and K. Lu. Tensile behavior of columnar grained Cu with preferentially orientated nanoscale twins. *Acta Materialia* **59** (2011) 6927-6937;
- **Z.S. You**, L. Lu and K. Lu. Temperature effect on rolling behavior of nano-twinned copper. *Scripta Materialia* **62** (2010) 415-418.
- L. Lu, **Z.S. You**, Q.S. Pan and K. Lu. Mechanical properties of Cu with preferentially oriented nanoscale twins. In S. Faster, N. Hansen, X. Huang, D. Juul Jensen & B. Ralph (Eds.) *Nanometals – status and perspective: Proceedings of the 33rd riso International symposium on materials science*. DTU Wind Energy, Roskilde. 2012, p.79-91.
- Qihong Lu, **Zesheng You** and Lei Lu. Dislocation structures in compressed copper with highly oriented nanoscale twins. In S. Faster, N. Hansen, X. Huang, D. Juul Jensen & B. Ralph (Eds.) *Nanometals – status and perspective: Proceedings of the 33rd riso International symposium on materials science*. DTU Wind Energy, Roskilde. 2012, p.311-316.

PRESENTATIONS

- **Talk**, Ultrafine Grained Materials VIII Symposium, 2014 TMS Annual Meeting & Exhibition. San Diego, California. February 16-20, 2014
- **Talk**, 2nd Summer School and Symposium on Nanometals. Weihai, China. August 19-23, 2013.
- **Talk**, The 5th International Conference on Nanomaterials by Severe Plastic Deformation. Nanjing, China. March 2011.

- **Poster**, Summer School and Symposium on Nanometals for Energy. Beidaihe, China. August 2011.

Updated: Nov 27, 2014