Research & Scholarship

CURRENT RESEARCH AND SCHOLARLY INTERESTS
Classification for the flow defects in metallic glass materials;
Molecular Dynamics Simulation for the Nano-indentation of Al-Mg alloy;
Spherical Harmonics Approach of the spherical elasticity problem;

PUBLICATIONS

- Phagocytic 'teeth' and myosin-II 'jaw' power target constriction during phagocytosis. *eLife*
  2021; 10

- Phagocytic 'teeth' and myosin-II 'jaw' power target constriction during phagocytosis *ELIFE*
  2021; 10

- Stress effects on the energy barrier and mechanisms of cross-slip in FCC nickel *JOURNAL OF THE MECHANICS AND PHYSICS OF SOLIDS*
  Kuykendall, W. P., Wang, Y., Cai, W.
  2020; 144

- Microparticle traction force microscopy reveals subcellular force exertion patterns in immune cell-target interactions. *Nature communications*
  2020; 11 (1): 20

- Spherical harmonics method for computing the image stress due to a spherical void *JOURNAL OF THE MECHANICS AND PHYSICS OF SOLIDS*
  Wang, Y., Zhang, X., Cai, W.
  2019; 126: 151–67

- Strengthening Mechanism of a Single Precipitate in a Metallic Nanocube *NANO LETTERS*
  Kiani, M. T., Wang, Y., Bertin, N., Cai, W., Gu, X.