Xiaoya Tang

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EDUCATION

PhD student (Computer Science) University of Utah Aug 2022-

Master in Mechanics Zhejiang University Sept 2016-Mar2019

- Advisor: Prof. Linli Zhu

Bachelor in Mechanics Zhejiang University Sept 2012-Jun 2016

- Selected Coursework: Data Structures, Computational Method, Optimization, etc.

RESEARCH EXPERIENCE

Institute of Applied Mechanics, Zhejiang University

M.S. Research Assistant Sept 2016- Jun 2019

- **Analysis on physical properties of semiconductors under multi-physical fields**
  a) Conducted theoretical models of physical properties in heterogeneous semiconductor nanofilm with multi-fields coupling effect
  b) Programmed to solve relevant PDEs and obtain numerical solutions
  c) Programmed using finite element method to obtain the temperature diffusion results of nanofilms and analyzed influences of multi-fields coupling
- **Design of a 3D movable heating manipulator in nanoscale**
  a) Proposed a prototype of a manipulator capable of three-dimensional locomotion and heating in Transmission Electron Microscopy
  b) Conducted a fitting algorithm to fit the in-situ temperature data in heating

MAJOR AWARD

- Best Paper Award in the 1st Postgraduate Forum on Mechanics of Zhejiang University - Ningbo University
- National Postgraduate Scholarship
- Excellent student Prize of Zhejiang University

PUBLICATION

1. **Tang, X.Y.** et al., Modeling phonon thermal conductivity in spatially confined GaN nanofilms under stress fields and phonon surface scattering. AIP Advances, 9(1),015024(2019). (1st)
2. **Tang, X.Y.** et al., Simulating stress-tunable phonon and thermal properties in heterostructured AlN/GaN/AlN-nanofilms. *Materials Research Express*, 6(1), 015018(2018). (Co-1st)
3. **Tang, X.Y.** et al., Effect of Stress-Dependent Thermal Conductivity on Thermo-Mechanical Coupling Behavior in GaN-Based Nanofilm Under Pulse Heat Source. *Acta Mech*. *Solida Sin.,* 1-13(2020). (Co-1st)
4. **Tang, X.Y.** et al., Effects of surface/interface stress on phonon properties and thermal conductivity in AlN/GaN/AlN heterostructural nanofilms. *Applied Physics A,* 125(10), 732(2019). (Co-1st)

OTHER INFORMATION

❖ **Programming Language**: C, Python