

### Research Interests:

Sina has performed several studies in the field of thermal spray processes and the impact and solidification of molten and semi-molten metal particles onto cold substrates. Also he is interested in electrowetting phenomenon and its applications in various state-of-the-art technologies. His research in this field is particularly devoted to employ this phenomenon in hot-spot cooling of electronic devices in which microliter liquid droplets are manipulated to transfer heat from hot-spots to avoid heat concentration. In this survey, he employs both experimental and numerical procedures. Other research interests are:

- On-Chip Hot-Spot Cooling of Electronic Devices
- Microfluidics and Electrowetting
- Thermal Spray and Metal Coating Processes
- Heat Transfer & Solidification
- Computational Fluid Dynamics (CFD) & Volume-of-Fluid (VOF) Method

**Non-Academic Interests:** Since 2009, Sina has been in the Engineering Faculty's volleyball team and has won two cups. He also plays the piano as a hobby and is interested in Chopin's compositions.