

Name: **Kaveh Alizadeh**

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### Education

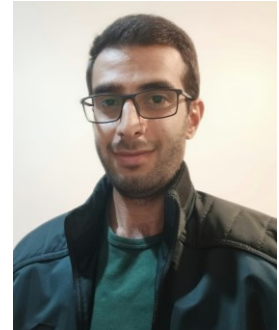
B.Sc.

University: **Tabriz University** (2013-2017)

Major: **Mechanical Engineering** (Specialization: Manufacturing Processes)

Thesis: Wire electrical discharge machining of magnesium alloys: the investigation of the effect of process input parameters on performance characteristics

Supervisor: Prof. Amir Mostafapour



M.Sc.

University: **Amirkabir University of Technology** (2017-2020)

Major: **Mechanical Engineering** (Specialization: Manufacturing Processes)

Thesis: Evaluation of formability and forming analysis of thick anisotropic Ti sheets at various temperatures

Supervisors: Prof. Bijan Mollaei-Dariani

Ph.D. (2021-Present)

University: **Sharif University of Technology**

Major: **Nanotechnology** (Specialization: Nanoelectronics and Nanomaterials)

### Research Interests

Flexible/Stretchable Electronics

Soft-matter Electronics

Human-Machine Interaction

Two-Dimensional Electronic Materials (Graphene, TMDs, Van der Waals Heterostructures)

Advanced Energy Storage Materials (Nanomaterials for Li-ion Batteries)

### English Proficiency Exams

**TOEFL (ibt): 96/120** (date: 28 October 2020)

### Achievements

Ranked 7th out of +19,000 participants in the National University Entrance Exam for M.Sc. degree in Mechanical Engineering (2017).

Ranked 3rd in the Department of Mechanical Engineering among entrants of 2013, Tabriz University.

### **Publications**

C. Majidi, **K. Alizadeh**, Y. Sik Ohm, A. Silva, M. Tavakoli, “**Liquid Metal Polymer Composites: form Printed Stretchable Circuits to Soft Actuators**” (In Progress) *Journal of Flexible and Printed Electronics* (2021)

**K. Alizadeh,**” **Robust and Multifunctional Liquid-Metal Embedded Elastomers for Ultrastretchable Electronics: a Short Review**” arxiv DOI: <https://arxiv.org/abs/2104.07327>

**K. Alizadeh**, B. Mollaei Dariani, M.R. Morovvati” **a Computational study of plastic deformation of nanoscale freestanding thin films using a hyperelastic-viscoplastic crystal plasticity constitutive model: Application to the characterization of NEMS materials and devices**” 3rd International Conference on Mechanical, Electrical, and Computer Engineering (2021).

**K. Alizadeh,**” **Localized strain prediction in thin films on soft substrates bilayer systems using the combination of a plastic instability criterion and the FEM method: Application to the necking strains prediction in metallic thin films in Stretchable electronics**” 3rd International Conference on Mechanical, Electrical, and Computer Engineering (2021).

**K. Alizadeh**, M R. Morovvati, B. Mollaei Dariani, “**Forming limit diagram prediction of thick anisotropic sheet metals at warm conditions using finite element modeling of hemispherical-punch stretch forming,**” 3rd international conference on Mechanical Engineering, Materials, and Metallurgy (2020).

**K. Alizadeh** “**A review on Constrained Groove Pressing-Severe Plastic Deformation (CPG-SPD) technique for producing ultrafine-grained sheet metals,**” 3rd National Conference on Computational and Experimental Mechanics, Tehran, Iran (2021).

### **Academic Experience**

**Graduate Research Assistant** (Advisor: Prof. Bijan Mollaei Dariani) (January 2018 – January 2020) New Materials Forming Research Center, Department of Mechanical Engineering, Amirkabir University of Technology.

**Teaching Assistant** for **computer programming principles** (in Fortran90) in the mechanical engineering department of Tabriz University (Fall 2016).

- Leading and supervising students in course materials, assignments, and exams.
- Instructor: Prof. Vahid Pouyafar.

### **Software Skills**

Abaqus, Ansys, FORTRAN, CATIA, SolidWorks, Powermill, Cura