Morteza Azarbarmas

Assistant Professor

College: Faculty of Material Engineering

Morteza Azarbarmas

Assistant professor of Materials Engineering

Sahand University of Technology, Tabriz, Iran

Contact Information

Faculty of Materials Engineering, Sahand University of Technology, Tabriz, Iran

Email: azarbarmas@sut.ac.ir

Tel: +984133459427

Background

Morteza Azarbarmas received the following degrees in Materials engineering:

- B.S. from Sahand University of Technology, Tabriz, Iran, 2007
- M.S. from University of Tehran, Tehran, Iran, 2010
- PH.D. from K.N. Toosi University of Technology Publication, Tehran, Iran, 2016,

and spended a

- - Ph.D. Sabbatical in Polytechnic University of Catalonia, Barcelona, Spain, 2014

He is currently an assistant professor in the faculty of Materials Engineering (Sahand University of Technology, Tabriz, Iran).

Research Interests

- Metal Forming
- Additive Manufacturing
- Microstructural Modeling
- Texture Analysis
- Metal Matrix Composites Casting

Publications:

Books:

Graphene in Nanotechnology World, M.S. Siadati, S.N. Hosseini, H. Aghamohammadi, M. Azarbarmas, A. Abdollahzade, K.N. Toosi University of Technology Publication, 2022, Tehran, Iran (In Persian).

Articles published in Journals:

- Babalou, Reza, Morteza Azarbarmas, and Konda Gokuldoss Prashanth. "Heat treatment and laser shock peening of AlSi10Mg alloy produced by selective laser melting: Microstructure, hardness and residual stress analysis." Materials Today Communications (2025): 112408.

2- Azarbarmas, Morteza, Meysam Nabizadeh Dizaj, and Ata Abdi. "**Wear Behavior of CoCrMo Alloy Produced by Laser Powder Bed Fusion (LPBF) Process**" Amirkabir Journal of Mechanical Engineering (2025)

3-Azarbarmas, Morteza. "**Evaluating Effects of the Gating Ratio on the Casting Quality of a Steel Pump Body Using the Simulation**." Journal of Metallurgical & Materials Engineering 35.1 (2024)

4- Meysam Nabizadeh Dizaj, Morteza Azarbarmas, Ata Abdi, **The influence of heat treatment on the microstructure, hardness, and wear properties of CoCrMo alloy produced by powder bed fusion of metals using a laser beam (PBF-LB/M) process**, Progress in Additive Manufacturing, 2024.

5- Morteza Azarbarmas, **Modeling the Dynamic Recrystallization by Using Cellular Automaton: The Current Status, Challenges and Future Prospects**, Iranian Journal of Materials Science & Engineering, 2020, 17.

6- M Azarbarmas, M Aghaie-Khafri, **Dynamic recrystallization and texture modeling of IN718 superalloy**, Modelling and Simulation in Materials Science and Engineering, 2017, 25.

7- M. Azarbarmas, M. Aghaie-Khafri, J.M. Cabrera, J. Calvo , **Microstructural evolution and constitutive equations of Inconel 718 alloy under quasi-static and quasi-dynamic conditions**, Journal of Materials and Design (ISI), 15 March 2016.

8- M. Azarbarmas, M. Aghaie-Khafri, J.M. Cabrera, J. Calvo, **Dynamic recrystallization mechanisms and twining evolution during hot deformation of Inconel 718,** Journal of Materials Science and Engineering A (ISI), 15 December 2016.

9- Sadegh Hoseinlaghab, Seyed Sajad Mirjavadi, Nasser Sadeghian , Iraj Jalili, M. Azarbarmas, Mohammad Kazem Besharati Givi , **Influences of welding parameters on the quality and creep properties of friction stir welded polyethylene plates**, Journal of Materials and Design (ISI), 15 February 2015.

10- Mostafa Karamouz, Mortaza Azarbarmas, Masoud Emamy, **On the conjoint influence of heat treatment and lithium content on microstructure and mechanical properties of A380 aluminum alloy**, Journal of Materials and Design (ISI), July 2014, 59.

11- Mostafa karamouz, Mortaza Azarbarmas*, Masoud Emamy, Mohammad Alipour, **Microstructure, hardness and tensile properties of A380 aluminum alloy with and without Li additions,** Journal of Materials Science and Engineering A (ISI), 10 October 2013 , 582, 409-414.

12- M. Alipour, M. Azarbarmas, F. Heydari, M. Hoghoughi, M. Alidoost, M. Emamy, **The effect of Al–8B grain refiner and heat treatment conditions on the microstructure, mechanical properties and dry sliding wear behavior of an Al–12Zn–3Mg–2.5Cu aluminum alloy**, Journal of Materials and Design (ISI), June 2012, , 38, 64-73.

13- Mortaza Azarbarmas, Masoud Emamy, Jafar Rassizadehghani, Mohammad Alipour, Mostafa karamouz, **The Influence of Beryllium Addition on the Microstructure and Mechanical Properties of Al–15%Mg_2Si In-situ Metal Matrix Composite**, Journal of Materials Science and Engineering A (ISI), 25 October 2011 , 528, (28), 8205-8211.

14- Mortaza Azarbarmas, Masoud Emamy, Mostafa karamouz, Mohammad Alipour Jafar Rassizadehghani, **The effects of boron additions on the microstructure, hardness and tensile properties of in situ Al–15%Mg_2Si composite**, Journal of Materials and Design (ISI), December 2011, 32, (10), (5049-5054).

15- Mortaza Azarbarmas, Masoud Emamy, Mohammad Alipour, **Study on fracture behaviour of Al–15%Mg_2Si metal matrix composite with and without beryllium additions**, Journal of Materials Science (ISI), November 2011, 46, (21), 6856–6862.

16- Alipour, M., Emamy, M., Ebrahimi, S. S., Azarbarmas, M., Karamouz, M., & Rassizadehghani, J. (2011). **Effects of pre-deformation and heat treatment conditions in the SIMA process on properties of an Al–Zn–Mg–Cu alloy modified by Al–8B grain refiner**, Journal of Materials Science and Engineering A (ISI), 2011, 528, (13–14), 4482-4490.

17- M. Karamouz, M. Emamy, M. Alipour, M. Azarbarmas, **The Effects of Li on the Tensile Properties of 380 Aluminum Alloys**, Journal of New Materials , 2011.

18- Mortaza Azarbarmas , Seyyed Mohammad Hossein Siadati, **A review: Graphene; A revolution in nanotechnology**, Journal of Nano World, 2012.

Articles published in Conferences/Book Chapters:

1- Mortaza Azarbarmas, Masoud Emamy, Jafar Rasizadeh, Mohammad Alipour, Mostafa karamouz, **The influence of Boron on Properties of Al–15%Mg_2Si in situ composite**, CCFA2010

2- M. Azarbarmas, M. Emamy, M. Alipour , M. karamouz, **Effects of Boron on Microstructure and Tensile Properties of Al–Mg_2Si Metal Matrix Composite**, NUMIFORM2010

3- M. Alipour, M. Emamy, M. Azarbarmas, M. karamouz, **Effects of Al–5Ti–1B master alloy on the microstructural evaluation of a highly alloyed aluminum alloy produced by SIMA process**, NUMIFORM2010.

4- Mortaza Azarbarmas, Masoud Emamy, Jafar Rasizadeh, Mohammad Alipour Mostafa karamouz, **The Influence of Boron on the Tensile Properties of Al–Mg2Si in Situ Composite**, Iccst2011.

5- Mortaza Azarbarmas, Masoud Emamy, , Jafar Rassizadehghani, Mohammad Alipour , Mostafa karamouz, **Modification of Al–Mg_2Si In-Situ Composite by Boron**, U.S.A., TMS2011; Book Chapter in Supplemental Proceedings: General Paper Selections.

6- Mortaza Azarbarmas, Masoud Emamy, Jafar Rassizadehghani, Mohammad Alipour and Mostafa karamouz, **Microstructural Development of Al–15%Mg2Si in Situ Composite with Be Addition**, U.S.A., TMS2011; Book Chapter in Supplemental Proceedings: General Paper Selections.

7- Mortaza Azarbarmas, Masoud Emamy, Jafar Rassizadehghani, Mohammad Alipour , Mostafa karamouz, **The Effects of Be on mechanical properties of Al–Mg2Si in Situ Composite**, U.S.A., TMS2011; Book Chapter in Supplemental Proceedings: General Paper Selections.

8- Mortaza Azarbarmas, Masoud Emamy, Jafar Rassizadehghani, Mostafa karamouz , Mohammad Alipour, **The effects of cooling rate on the microstructure and hardness of Al–15%Mg2Si in situ composite with Boron**, U.S.A., TMS2011; Book Chapter in Supplemental Proceedings: General Paper Selections.

9- Mohammad Alipour, Masoud Emamy, Jafar Rasizadeh, Mostafa karamouz , Mortaza Azarbarmas, **Effects of Al–ʌB grain refiner on the structure, hardness and tensile properties of a new developed super high strength aluminum alloy**, U.S.A., TMS2011; Book Chapter in Supplemental Proceedings: General Paper Selections.

10- Mohammad Alipour, Masoud Emamy, Jafar Rasizadeh, Mostafa karamouz , Mortaza Azarbarmas, **Effects of Al–5Ti–1B grain refiner on the structure, hardness and tensile properties of a new developed super high strength aluminum alloy**, U.S.A., TMS2011; Book Chapter in Supplemental Proceedings: General Paper Selections.

11- Mohammad Alipour, Masoud Emamy, Jafar Rasizadeh, Mostafa karamouz , Mortaza Azarbarmas, **The effects of Al–5Ti–1B grain refiner and heat treatment on the microstructure and dry sliding wear behavior of a new developed super high strength aluminum alloy**, U.S.A., TMS2011; Book Chapter in Supplemental Proceedings: General Paper Selections.

12- M. Alipour, M. Emamy, J. Rasizadeh, M. Azarbarmas, M. Karamouz, **Effect of predeformation and heat treatment conditions in the modified SIMA process on microstructural of a new developed super high-strength aluminum alloy modified by Al-8B grain refiner**, U.S.A., TMS2011; Book Chapter in Supplemental Proceedings: General Paper Selections.

13- Mostafa karamouz , Masoud Emamy, Jafar Rasizadeh , Mohammad Alipour , Mortaza Azarbarmas, **The Influence of Li on Properties of 380 Aluminum Casting Alloys**, U.S.A., TMS2011; Book Chapter in Supplemental Proceedings: General Paper Selections.

14- Mostafa karamouz, Masoud Emamy, Jafar Rasizadeh, Mortaza Azarbarmas , Mohammad Alipour, **The effects**

of Li additions on the microstructure and mechanical properties of 380 Aluminum casting alloys, U.S.A., TMS2011; Book Chapter in Supplemental Proceedings: General Paper Selections.