

Curriculum Vitae of Amir Mohammadi Nasab

CONTACT INFORMATION	Yale University Department of Mechanical Engineering and Materials Science New haven, CT 06511 Office Location: <i>The Laboratory</i>	Webpage: http://www.amnasab.com ✉: amir.nasab@yale.edu ✉: amir.mns2004@gmail.com
	Google Scholar: http://scholar.google.com/AmirMohammadiNasab	
RESEARCH INTERESTS	Solid Mechanics: Adhesion Mechanics, Fracture Mechanics, and Mechanical Instability of Thin Structures. Materials Engineering: Multifunctional Composite Materials, and Biomimetic Materials. Thermophysics: Thermal Analysis, Thermo-economic Optimization, and Materials for Energy Applications. Soft Robotics: Actuation, Mechanisms, and Materials, using fundamental insights from the above.	
EDUCATION	University of Nevada, Reno (UNR), NV, USA – Ph.D., Department of Mechanical Engineering Fall 2014 - Spring 2019 GPA: 4.0/4.0. – Research and Teaching Assistant Fall 2014 - Spring 2019 – Lab Manager at Shan Research Group (SRG) May 2018 - May 2019 Iran University of Science and Technology (IUST), Tehran, Tehran, Iran – M.S., Department of Mechanical Engineering 2007 - 2010 Amirkabir University of Technology (AUT), Tehran, Tehran, Iran – B.S., Department of Aerospace Engineering 2003 - 2007	
APPOINTMENT HELD	Postdoctoral Associate, Department of Mechanical Engineering and Material Science, Yale University, The Laboratory, New haven, CT, USA Sep. 2019 - Present Advisor: Prof. Rebecca Kramer-Bottiglio	
PEER REVIEWED PUBLICATIONS	Reverse Chronological Order; * Corresponding Author; ° Co-first Author. [13] A. Mohammadi Nasab [°] , A. Luo [°] , S. Sharifi, K.T. Turner*, and W.L. Shan*, <i>Switchable Adhesion via Subsurface Pressure Modulation</i> , ACS Applied Materials Interfaces (2020). Link [12] R. A. Bilodeau [°] , A. Mohammadi Nasab [°] , D. S. Shah, and R. Kramer-Bottiglio*, <i>Uniform Conductivity in Stretchable Silicones via Multiphase Inclusions</i> , Soft Matter (2020). Link [11] S. Kriegman, A. Mohammadi Nasab , D. Shah, H. Steele, G. Branin, M. Levin, J. Bongard, R. Kramer-Bottiglio, <i>Scalable sim-to-real transfer of soft robot designs</i> , IEEE RAS International Conference on Soft Robotics (RoboSoft) (2020). (Accepted) Link [10] A. Mohammadi Nasab , S. Sharifi, and W.L. Shan*, <i>An electrically conductive and stiffness tunable soft composite with shape memory effect</i> , Advanced Materials (2019). (In Submission) [9] A. Mohammadi Nasab , P. Stampfli, S. Sharifi, K.T. Turner*, and W.L. Shan*, <i>Tunable Dry Adhesion of Elastomeric Posts Enabled by Stiffness Tuning of Microfluidic Serpentine Channel of LMPA</i> , Advanced Materials Technologies (2019). (In Submission) [8] Aoyi Luo [°] , A. Mohammadi Nasab [°] , Milad Tatari, Shuai Chen, W.L. Shan*, and K.T. Turner*, <i>Enhanced Dry Adhesion of Soft Composite Elastomeric Structures with Different Cross-section Geometries</i> , ACS Applied Materials and Interfaces (2019). (In Submission) [7] X. Huang, K. Kumar, M. K. Jawed, A. Mohammadi Nasab , Z. Ye, W. Shan, and C. Majidi*, <i>Highly Dynamic Shape Memory Alloy Actuator for Fast Moving Soft Robots</i> , Advanced Materials Technologies	

(2019): 1800540. [Link](#)

[6] X. Huang, K. Kumar, M. K. Jawed, **A. Mohammadi Nasab**, Z. Ye, W. Shan, and C. Majidi*, *Chasing Biomimetic Locomotion Speeds: Creating Untethered Soft Robots with Shape Memory Alloy Actuators*, **Science Robotics**, 3.25 (2018): 7557. [Link](#)

[5] D. Wang, N. Hu, S. Huang, **A. Mohammadi Nasab**, K. Yang, M. C. Abate, X. Yu, L. Tan, W.L. Shan, and Z. Chen*, *Buckling and post-buckling of an elastic rod embedded in a bilayer matrix*, **Extreme Mechanics Letters**, 25 (2018): 1-6. [Link](#)

[4] M. Tatari, **A. Mohammadi Nasab**, K.T. Turner*, W.L. Shan*, *Dynamically Tunable Dry Adhesion via Subsurface Stiffness Modulation*, **Advanced Materials Interfaces**, 5.18 (2018): 1800321. [Link](#)

[3] **A. Mohammadi Nasab**^o, A. Sabzehzar^o, M. Tatari, C. Majidi, and W.L. Shan*, *A Soft Gripper with Rigidity Tunable Elastomer Strips as Ligaments*, **Soft Robotics**, 4.4 (2017): 411-420. [Link](#)

[2] **A. Mohammadi Nasab**, D. Wang, Z. Chen, and W.L. Shan*, *Buckling shape transition of an embedded thin elastic rod after failure of surrounding elastic medium*, **Extreme Mechanics Letters**, 15 (2017): 51-56. [Link](#)

[1] Sepehr Sanaye*, and **A. Mohammadi Nasab**, *Modeling and optimizing a CHP system for natural gas pressure reduction plant*, **Energy**, 40.1 (2012): 358-369. [Link](#)

PRESENTATIONS **Conference Talks:**

[5] 5th International Symposium on the Mechanics of Composite and Multifunctional Materials, Reno, Nevada, USA 2018.

[4] International Mechanical Engineering Congress and Exposition (IMECE), Pittsburgh, Pennsylvania, USA 2018.

[3] International Mechanical Engineering Congress and Exposition (IMECE), Tampa, Florida, USA 2017.

[2] International Mechanical Engineering Congress and Exposition (IMECE), Phoenix, Arizona, USA 2016.

[1] The 53rd Annual Technical Meeting of the Society of Engineering Science (SES), College Park, Maryland, USA 2016.

Poster Presentations:

[1] Gordon Research Conference on Adhesion Science of, South Hadley, Massachusetts, USA 2016.

TEACHING	Instructor for “ System Analysis and Design (ME310) ”, UNR.	Summer 2019
	Instructor for “ Introduction to Robotics (ME422/622) ”, UNR.	Spring 2018
	Assistant of Instruction for “ Introduction to Robotics (ME422/622) ”, UNR.	2014- 2016
	Assistant of Instruction for “ Introduction to Mechanical Engineering II (ME151) ”, UNR.	Fall 2016
	Guest Lecturer for “ Continuum Mechanics (ME720) ”, UNR.	Spring 2016
	Instructor for “ Thermodynamics ” and “ Heat transfer ” courses to applicants of University Entrance Exam for MSc degree in Iran.	2007-2014

HONORS AND AWARDS	Graduate Deans Merit Scholarship, UNR.	2017-2018
	Outstanding International Graduate Student Award, UNR.	2017-2018
	Outstanding International Graduate Student Award, UNR.	2016-2017
	International Graduate Student Scholarship, UNR.	2016-2017
	Douglas Bevans Mechanical Engineering Scholarship, UNR.	2015-2016

PROFESSIONAL
AFFILIATIONS
AND SERVICES

Reviewer:

Journal of Soft Robotics, IEEE International Conference on Soft Robotics (RoboSoft), International Conference on Intelligent Robots and Systems (IROS), and IEEE Transaction on Robotics (T-RO).

Memberships and Services:

American Society of Mechanical Engineers (ASME), Student Membership.	2016-2019
Society for the Advancement of Material and Process Engineering (SAMPE), Student Membership.	2017-2018
Materials Research Society (MRS), Student Membership.	2019-2020

RESIDENCY
STATUS

Permanent resident

REFERENCES

Available upon request.

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