Personal Information

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Scholar page: https://scholar.google.com/citations?user=neaLrWAAAAAJ&hl=en **H_index**:**48** (05/13/2025)
Personal Site: https://sites.google.com/view/amzadeh/

Research interests

Intelligent control, Artificial intelligence, Adaptive control, Robust control, Fuzzy neural networks, Optimization and Machine learning.

Level	Field of study	Duration		Name of the school/university/institute	City/Country
		from	to		
Doctorate	Electrical engineering-Control	2013 September	2016 November	University of Tabriz	Tabriz/Iran
MSc	Electrical engineering	2011 September	2013 September	K. N. Toosi University of Technology	Tehran/Iran
BSc	Electrical engineering	2007 September	2011 July	Sahand University of Technology	Tabriz/Iran

Work Experience

University	Cooperation	Start	End
Sakarya University	Professor	2024 October	-
Shenyang University of Technology, Shenyang, China	Professor (Supervision of graduate students + online education)	2022 September	-

Shenyang University of Technology, Shenyang, China	Professor	2022 September	2024 September
University of Bonab, Bonab, Iran	Assistant /Associate Professor	2018 Jan	2022 September

Books

Ardashir Mohammadzaeh et al. Practical Neural Networks in Python and MATLAB, Springer **2026,** https://link.springer.com/book/10.1007/978-3-032-14746-2

Ardashir Mohammadzaeh et al. Neural Networks and Learning Algorithms in MATLAB, Springer **2022,** https://link.springer.com/book/10.1007/978-3-031-14571-1

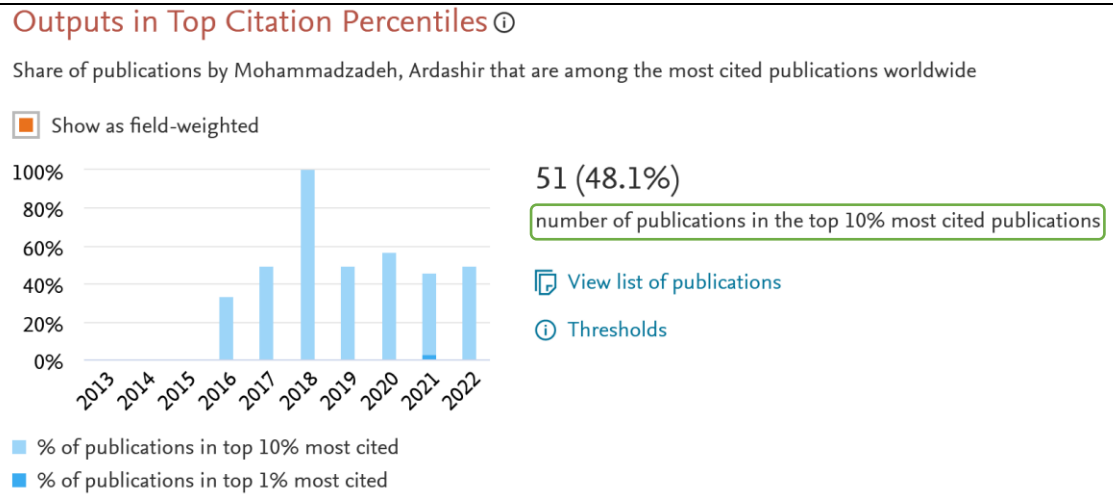
Ardashir Mohammadzaeh et al., Modern Adaptive Fuzzy Control Systems, Springer **2022,** https://link.springer.com/book/9783031173929

Ardashir Mohammadzaeh et al.,Renewable and Clean Energy Systems Based on Advanced Nanomaterials, **2024** https://shop.elsevier.com/books/renewable-and-clean-energy-systems-based-on-advanced-nanomaterials/zinatloo-ajabshir/978-0-443-13950-5

Ardashir Mohammadzaeh et al., Applied Type-3 Fuzzy Logic Systems and Controllers; **2025** https://link.springer.com/book/10.1007/978-3-031-75988-8

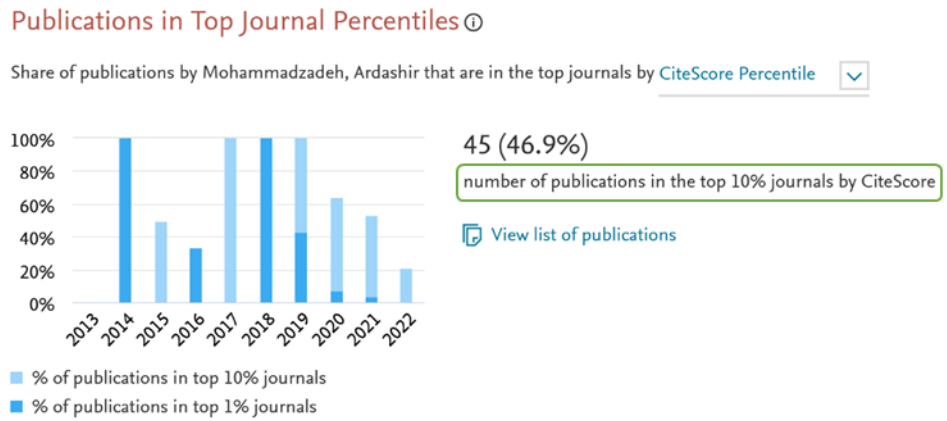
A view on research achievements

Dr. Mohammadzadeh has thus authored 4 books, and more than 200 papers, 20 papers that rank among the top 1%, 100 papers that rank among the top 10%, top most-cited articles across the entire field of Engineering for their respective years of publication (See following figure as a summary).



*Citation performance; more than **50%** of papers are among top **10%** mostly cited, extracted from SciVal, 2023*

Many of Dr. Mohammadzadeh's papers have been among the most highly cited in the field, indicating both the originality and significance of his methods and results. Most of Dr. Mohammadzadeh's publications have been published in top-reputed international journals such as IEEE Transactions on Fuzzy Systems, IEEE Transactions on Industrial Electronics, Applied Soft Computing, Nonlinear Dynamics, Neurocomputing, ISA Transactions, Franklin Journal of Institute, Applied Mathematics and Computation, Information Science (see the following figure as a summary).



Publications in top journals, extracted from SciVal, 2023

Some selected papers, Citation record in 2024-2-1

- **Mohammadzadeh, Ardashir**, Mohammad Hosein Sabzalian, and Weidong Zhang. "An interval type-3 fuzzy system and a new online fractional-order learning algorithm: theory and practice." IEEE Transactions on Fuzzy Systems (2019). Impact factor: **12.029**, **Q1,** Cited by 131

- **Mohammadzadeh, Ardashir**, Okyay Kaynak, and Mohammad Teshnehlab. "Two-mode indirect adaptive control approach for the synchronization of uncertain chaotic systems by the use of a hierarchical interval type-2 fuzzy neural network." IEEE Transactions on Fuzzy Systems 22.5 (2013): 1301-1312. Impact factor: **12.029**, **Q1**, Cited by 43

- **Mohammadzadeh, Ardashir**, et al. "Robust H_\infty-Based Synchronization of the Fractional-Order Chaotic Systems by Using New Self-Evolving Nonsingleton Type-2 Fuzzy Neural Networks." IEEE Transactions on Fuzzy Systems 24.6 (2016): 1544-1554. Impact factor: **12.029**, **Q1**, Cited by 50

- Sakthivel, Rathinasamy, Ramasamy Kavikumar, **Ardashir Mohammadzadeh**, Oh-Min Kwon, and Boomipalagan Kaviarasan. "Fault Estimation for Mode-Dependent IT2 Fuzzy Systems With Quantized Output Signals." IEEE Transactions on Fuzzy Systems 29, no. 2 (2020): 298-309. Impact factor: **12.029** (2020), **Q1,** Cited by 46

- Gheisarnejad, Meysam, **Ardashir Mohammadzadeh**, and Mohammad-Hassan Khooban. "Model Predictive Control Based Type-3 Fuzzy Estimator for Voltage Stabilization of DC Power Converters." IEEE Transactions on Industrial Electronics 69, no. 12 (2021): 13849-13858. Impact factor: **7.7** (2020), **Q1,** Cited by 23

- **Mohammadzadeh, Ardashir**, and Reza Hadjiaghaie Vafaie. "A deep learned fuzzy control for inertial sensing: Micro electro mechanical systems." Applied Soft Computing (2021): 107597. Impact factor: **8.7** (2023), **Q1,** Cited by 13

- **Mohammadzadeh, Ardashir**, et al. "Observer-based method for synchronization of uncertain fractional order chaotic systems by the use of a general type-2 fuzzy system." Applied Soft Computing 49 (2016): 544-560. Impact factor: **8.7** (2023), **Q1,** Cited by 41

- **Mohammadzadeh, Ardashir**, and Farzad Hashemzadeh. "A new robust observer-based adaptive type-2 fuzzy control for a class of nonlinear systems." Applied Soft Computing 37 (2015): 204-216. Impact factor: **8.7** (2023), **Q1,** Cited by 36

- **Mohammadzadeh, Ardashir**, and Okyay Kaynak. "A novel fractional-order fuzzy control method based on immersion and invariance approach." Applied Soft Computing 88 (2020): 106043. Impact factor: **8.7** (2023), **Q1,** Cited by 17

- **Mohammadzadeh, Ardashir**, and Tufan Kumbasar. "A new fractional-order general type-2 fuzzy predictive control system and its application for glucose level regulation." Applied Soft Computing (2020): 106241. Impact factor: ***8.7*** (2023), **Q1,** Cited by 62

- Qasem, Sultan Noman, Ali Ahmadian, **Ardashir Mohammadzadeh**, Sakthivel Rathinasamy, and Bahareh Pahlevanzadeh. "A type-3 logic fuzzy system: Optimized by a correntropy based Kalman filter with adaptive fuzzy kernel size." Information sciences 572 (2021): 424-443. **Corresponding author**, Impact factor: ***8.1*** (2023), **Q1,** Cited by 74

- **Mohammadzadeh, Ardashir**, and Erkan Kayacan. "A novel fractional-order type-2 fuzzy control method for online frequency regulation in ac microgrid." Engineering Applications of Artificial Intelligence 90 (2020): 103483. Impact factor: **8** (2023), **Q1,** Cited by 62

- **Mohammadzadeh, Ardashir**, Chunwei Zhang, Khalid A. Alattas, Fayez FM El-Sousy, and Mai The Vu. "Fourier-based type-2 fuzzy neural network: Simple and effective for high dimensional problems." Neurocomputing (2023): 126316. Impact factor: 6.0 (2022), **Q2,** Cited by 12

- **Mohammadzadeh, Ardashir**, and Behnam Firouzi. "A new path following scheme: safe distance from obstacles, smooth path, multi-robots." Journal of Ambient Intelligence and Humanized Computing 14, no. 4 (2023): 4621-4633. Impact factor: **5.12** (2022) **Q1,** Cited by 1

- **Mohammadzadeh, Ardashir**, and Sehraneh Ghaemi. "Robust synchronization of uncertain fractional-order chaotic systems with time-varying delay." Nonlinear Dynamics 93.4 (2018): 1809-18. Impact factor: **5.741** (2021), **Q1,** Cited by 43

- **Mohammadzadeh, Ardashir**, and Sehraneh Ghaemi. "Synchronization of uncertain fractional-order hyperchaotic systems by using a new self-evolving non-singleton type-2 fuzzy neural network and its application to secure communication." Nonlinear Dynamics 88.1 (2017): 1-19. Impact factor: **5.741** (2021), **Q1,** Cited by 43

- **Mohammadzadeh, Ardashir**, and Sehraneh Ghaemi. "Synchronization of chaotic systems and identification of nonlinear systems by using recurrent hierarchical type-2 fuzzy neural networks." *ISA transactions* 58 (2015): 318-329. Impact factor: **7.3** (2023), **Q1,** Cited by 34

- **Mohammadzadeh, Ardashir**, and Sakthivel Rathinasamy. "Energy management in photovoltaic battery hybrid systems: A novel type-2 fuzzy control." International Journal of Hydrogen Energy 45.41 (2020): 20970-20982. Impact factor: **7.139** (2021), **Q1,** Cited by 45

- **Mohammadzadeh, Ardashir,** and Erkan Kayacan. "A non-singleton type-2 fuzzy neural network with adaptive secondary membership for high dimensional applications." Neurocomputing 338 (2019): 63-71. Impact factor: **6.0** (2022), **Q2,** Cited by 40

- **Mohammadzadeh, Ardashir**, and Sehraneh Ghaemi. "Optimal synchronization of fractional-order chaotic systems subject to unknown fractional order, input nonlinearities and uncertain dynamic using type-2 fuzzy CMAC." Nonlinear Dynamics 88.4 (2017): 2993-3002. Impact factor: **5.741** (2021), **Q1,** Cited by 35

- **Mohammadzadeh, Ardashir,** and Weidong Zhang. "Dynamic programming strategy based on a type-2 fuzzy wavelet neural network." Nonlinear Dynamics 95.2 (2019): 1661-1672. Impact factor: **5.741** (2021), **Q1,** Cited by 37

Contribution to scientific community

Journals	**Contribution**
Applied Soft Computing	Editorial member
Plos one	Editorial member
Mathematical problems in engineering	Editorial member
Computational methods in engineering science https://cmes.ilam.ac.ir/journal/editorial.board	Editorial member
Scientific Journal of Astana IT University https://journal.astanait.edu.kz/index.php/ojs/about/editorialTeam	Editorial member

https://iccia2020.tabrizu.ac.ir/en/page/9069/technical-program-committee	Member of Technical Committee for 7th International Conference on Control, Instrumentation and Automation
IEEE Transactions of fuzzy systems	Reviewer
IEEE Transactions of systems	Reviewer
IEEE Transactions of cybernetics	Reviewer
IEEE ACCESS	Reviewer
Applied soft computing	Reviewer
Nonlinear dynamics	Reviewer
Engineering application of artificial intelligence	Reviewer
ISA Transactions	Reviewer
Soft competing	Reviewer
Neural computing and applications	Reviewer

International Academic Lecturing	
Keynote speaker at 17th International Conference on Theory and Application of Fuzzy Systems, Soft Computing and AI tools - ICAFS	https://icafs2025.az/keynotes
Plenary session speaker at the 2024 IEEE 4th International Conference on Smart Information Systems and Technologies (SIST)	https://sist.astanait.edu.kz/?page_id=1961
Keynote speaker for academic international workshop; Topic: Predictive control for diabetic patients	https://sites.google.com/view/amzadeh/
Key-note speaker for academic international workshop; Topic: Type-3 fuzzy logic systems	https://sites.google.com/view/amzadeh/
Lecturing at the international campus of South China University of Technology; Topic: Wind Turbine control systems	https://www.scut.edu.cn/en/2023/1229/c379a24036/page.htm
Plenary session speaker at 2025 IEEE 4th International Conference on Smart Information Systems and Technologies (SIST)	https://sist.astanait.edu.kz/?page_id=1961

Keynote Speaker at The International Conference on Artificial Intelligence and Materials (ICAIM), 2025, jointly organized by China University of PetroChina, Elvis Press (ELSP), and AI and Materials	https://www.ic-aim.net/?page_id=9354

Teaching

As an assistant/associate professor at University of Bonab, Iran, and professor at Shenyang University of Technology, I have had the privilege of teaching some *undergraduate* courses including **Nonlinear control systems, Modern control systems, Introduction to Neural Networks, Introduction to fuzzy logic systems, Introduction to Heuristic Algorithms, Machine Learning, basic mathematic courses like linear algebra and numerical methods, and basic course of electrical engineering like digital programming and basic electrical circuits**. Additionally, I presented some courses for *graduate* students such **as Intelligent control systems, Robotic systems, Advanced Neural networks, Fuzzy logic systems and learning algorithms, Machine learning and deep learning algorithms, and Adaptive control systems**.

Supervision of graduate students

Dr. Mohammadzadeh has a strong record of supervising and mentoring graduate students. He has successfully supervised and graduated **3 master's students and 2 Ph.D. students**.

Currently, he is actively supervising **one Ph.D. student and two master's students** who are completing their theses. Additionally, he has been involved with **over 10 joint graduate students** who are currently conducting research for their theses under his guidance.