

Position:

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Professor of Control Engineering

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**Research Interests:**

- Nonlinear Control
- Fuzzy Control
- Robotics
- Intelligent Systems

Teaching Experiences:

1. Nonlinear Control
2. Fuzzy Control
3. Robot Control
4. Electric Motor Control
5. Linear Control
6. Robotics
7. Advanced Robotics
8. Robot Kinematics and Dynamics
9. Actuators
10. Robot Sensors
11. Robot Sensors and Calibration
12. Advanced Instrumentation
13. Power Electronics & Drives
14. Electrical Circuits

Awards:

Superior Researcher in Shahrood University of Technology for

2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017

Superior academic member in University of Shahrood in 2009, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018.

Contribution Award from International Journal of Control, Automation, and Systems

Professional & Scientific Membership:

Member of Center of Excellence in Robust and Intelligent Systems

Member of Editorial Board: Journal of Intelligent Systems in Electrical Engineering

Education

Ph.D.: Control Engineering (Robotics), 2001,

Department of Electronics and Computer Science,
University of Southampton, Southampton, U.K.

Supervisors: Prof. R.M. Crowder and Prof. P.H. Chappell
Thesis Title: End Effector Design and Control

M.Sc.: Electrical Engineering (Power System), 1991,

Department of Electrical Engineering,
Tarbiat Modarres University, Tehran, Iran.
Supervisor: Prof. Hosein Saifi
Project: Design of a Power System by Computer.

B.Sc.: Electrical Engineering, 1988,

Department of Electrical Engineering,
Isfahan University of Technology, Isfahan, Iran.
Supervisor: Dr. Akbar Ebrahimi
Project: Transient Analysis and Simulation of a Multi-Machine System.

Supervised Ph.D. Students

- [1] Dr. Hamid Hooshmand, Ph.D. in Control Engineering, Thesis: Voltage control of a robot manipulator based on model order reduction, Shahrood University of Technology, 2023.
- [2] Dr. Hamed Chenarni, Ph.D. in Control Engineering, Thesis: Voltage control of robot manipulators based on passivity theorem, Shahrood University of Technology, 2021.
- [3] Dr. Javad Keighobadi, Ph.D. in Control Engineering, Adaptive fuzzy control based on back stepping method, Shahrood University of Technology, 2020.
- [4] Dr. Mohammad Reza Shokohi, Ph.D. in Control Engineering, Dynamic sliding mode control of robot manipulators using voltage control strategy and Fourier expansion, Shahrood University of Technology, 2020.
- [5] Dr. Amir Saleki, Model free control of a robot manipulator using voltage control strategy, Shahrood University of Technology, 2020.
- [6] Dr. Reza Qholipour, Ph.D. in Control Engineering, Thesis: Robust adaptive control of robotic manipulators in the task space using an observer and voltage control strategy, Shahrood University of Technology, 2019.
- [7] Dr. Seyed Mohammad Ahmadi, Ph.D. in Control Engineering, Thesis: Taylor series based control of robot manipulators, Shahrood University of Technology, 2018.
- [8] Dr. Saeed Khorashadizadeh, Ph.D. in Control Engineering, Thesis: Uncertainty estimation in robust control of robot manipulators, Shahrood University of Technology, 2015.
- [9] Dr. Siamak Azargoshasb, Ph.D. in Control Engineering, Thesis: Discrete adaptive fuzzy control of a robot manipulator, Shahrood University of Technology, 2014.
- [10] Dr. Majid Moradi Zirkohi, Ph.D. in Control Engineering, Thesis: Designing an intelligent type 2 fuzzy controller for flexible-joint robots, Shahrood University of Technology, 2013.

- [11] Dr. Alireza Izadbakhsh, Ph.D. in Control Engineering, Thesis: Robust control of flexible-joints robots in the task-space, Shahrood University of Technology, 2013.
- [12] Dr. Mohammad Reza Soltanpour, Ph.D. in Control Engineering, Thesis: Robust nonlinear control of robot manipulators in the task-space, Shahrood University of Technology, 2009.

Supervised M.Sc. Students

- [1] Amir Hossein Saadat, Adaptive fuzzy torque control of a passive torque simulator, Shahrood University of Technology, 2021.
- [2] Mahyar Dehghan, Supervisory impedance control for an active suspension system, Shahrood University of Technology, 2020.
- [3] Saeid Zare, Impedance fuzzy sliding mode control of an active suspension system, Shahrood University of Technology, 2020.
- [4] Mojgan Kafili, Impedance backstepping control of rehabilitation robot using voltage strategy, Shahrood University of Technology, 2019.
- [5] Amirreza Haghshenas Mojavery, Designing a Roust Adaptive Controller for a mobile robot, Shahrood University of Technology, 2018.
- [6] Yaser Zamandari, Optimization of robot control using intelligent algorithms based on voltage control strategy, Shahrood University of Technology, 2018.
- [7] Aliasghar Rezaei, Adaptive control of a flexible-joints robotic manipulator using voltage control strategy, Shahrood University of Technology, 2018.
- [8] Maryam Rasooli, Back-stepping control of a robotic manipulator using voltage control strategy, Shahrood University of Technology, 2018.
- [9] Amir Kardgar, Supervisory fuzzy control of a robot manipulator using voltage control strategy, Shahrood University of Technology, 2017.
- [10] Bahram Rahmati, Designing a sliding-mode adaptive fuzzy control of a robot manipulator based on the voltage control strategy, Shahrood University of Technology, 2017.
- [11] Maral Goodarzi, Designing fuzzy control of a robotic manipulator based on guaranteed stability, Shahrood University of Technology, 2017.
- [12] Alireza Banifatemi, Adaptive fuzzy terminal sliding mode discrete control of a robot manipulator, Shahrood University of Technology, 2016.
- [13] Qholamreza Nazmara, Model reference adaptive impedance control of robot manipulators using voltage control strategy, Shahrood University of Technology, 2016.
- [14] Hossain Hagiani, Intelligent adaptive impedance control of a robotic hand therapy, Shahrood University of Technology, 2016.

- [15] Sareh Ahmadi, M.Sc. in Control Engineering, Thesis: Controlling a flexible-joint robot by compensating the flexibility effect, Shahrood University of Technology, 2016.
- [16] Samane Adel, M.Sc. in Control Engineering, Thesis: Adaptive fuzzy control of a semi-active suspension system equipped by a magnetorheological damper, Shahrood University of Technology, 2016.
- [17] Mohammad Ali Daneshpajouh, M.Sc. in Control Engineering, Thesis: Control of nonlinear dynamic interaction of robot manipulators, Shahrood University of Technology, 2015.
- [18] Majid Moghtadaei, M.Sc. in Control Engineering, Thesis: Robust adaptive control of robotic manipulators using gradient descent method, Shahrood University of Technology, 2015.
- [19] Hosein Asrari, M.Sc. in Control Engineering, Thesis: Adaptive fuzzy sliding mode control of a robotic manipulator in task-space using voltage control strategy, Shahrood University of Technology, 2014.
- [20] Majid Abedinzadeh-Shahri, M.Sc. in Robotic Engineering, Thesis: Adaptive fuzzy tracking control of a wheeled mobile manipulator using voltage control strategy, Shahrood University of Technology, 2014.
- [21] Seyyed-Reza Mohammadi, M.Sc. in Mechatronic Engineering, Impedance fuzzy control of a rehabilitation robot using voltage control strategy, Shahrood University of Technology, 2014.
- [22] Mohammad Baradranfard, M.Sc. in Control Engineering, Thesis: Hybrid impedance control of robot manipulators using voltage control strategy, Shahrood University of Technology, 2014.
- [23] Mostafa Akhiani, M.Sc. in Control Engineering, Thesis: Impedance adaptive fuzzy control of robot manipulator using voltage control strategy, Shahrood University of Technology, 2014.
- [24] Javad Keighobadi, M.Sc. in Control Engineering, Thesis: Robust fuzzy control of an electrically driven single-wheel robot, Shahrood University of Technology, 2014.
- [25] Ehsan Hoseini, M.Sc. in Control Engineering, Thesis: Impedance adaptive fuzzy control of an active suspension system, Shahrood University of Technology, 2014.
- [26] Vahab Khoshdel, M.Sc. in Mechatronic Engineering, Thesis: Impedance control of a lower-limb rehabilitation robot, Shahrood University of Technology, 2013.
- [27] Seyed Mohammad Ahmadi, M.Sc. in Mechatronic Engineering, Thesis: Robust position control of electrically driven robot manipulators using estimation and compensation of uncertainty, Shahrood University of Technology, 2013.

- [28] Zohre Safarcharati, M.Sc. in Control Engineering, Thesis: Designing a fuzzy controller for a flexible-joint robot manipulator using a PSO algorithm, Shahrood University of Technology, 2013.
- [29] Mahdi Souzanchikashani, M.Sc. in Control Engineering, Thesis: Adaptive fuzzy control of flexible-joint robot manipulators, Shahrood University of Technology, 2013.
- [30] Ali Asghar Arab, M.Sc. in Control Engineering, Thesis: Robust tracking control of a mobile robot using voltage control strategy, Shahrood University of Technology, 2013.
- [31] Atefe Sakaki, M.Sc. in Control Engineering, Thesis: Discrete nonlinear control of a hydraulic suspension system, Shahrood University of Technology, 2013.
- [32] Hamidreza Parsinejad, M.Sc. in Mechatronic Engineering, Thesis: Fuzzy position control of robot manipulator driven by electric motors using voltage control strategy, Shahrood University of Technology, 2013.
- [33] Mahdi Sadeghijaleh, M.Sc. in Control Engineering, Thesis: Position control of robot manipulators driven by permanent magnet synchronous motors, Shahrood University of Technology, 2012.
- [34] Maryam Baluchzadeh, M.Sc. in Control Engineering, Thesis: Optimal repetitive control of robot manipulators using voltage control strategy, Shahrood University of Technology, 2012.
- [35] Sara Fateh, M.Sc. in Control Engineering, Thesis: Adaptive fuzzy control of robot manipulators using voltage control strategy, Shahrood University of Technology, 2012.
- [36] Mohammad Mohsen Neishabouri, M.Sc. in Control Engineering, Thesis: Fuzzy impedance control of a magnetic levitation system, Shahrood University of Technology, 2012.
- [37] Mohaddeseh Amerian, M.Sc. in Control Engineering, Thesis: Fuzzy impedance control of elevator suspension system, Shahrood University of Technology, 2012.
- [38] Saeed Khorashadizadeh, M.Sc. in Control Engineering, Thesis: Optimal nonlinear control of the spherical robot manipulator, Shahrood University of Technology, 2011.
- [39] Fatemeh Afsharnia, M.Sc. in Control Engineering, Thesis: Chattering reduction in sliding mode control of robot manipulators using filters, Shahrood University of Technology, 2011.
- [40] Amir Alizadeh, M.Sc. in Control Engineering, Thesis: Design and nonlinear control of the spherical robot manipulator, Shahrood University of Technology, 2011.
- [41] Hamid Esfidani, M.Sc. in Control Engineering, Thesis: PWM fuzzy control of robot manipulators, Shahrood University of Technology, 2011.
- [42] Mansoore Qhooshe, M.Sc. in Control Engineering, Thesis: Adaptive fuzzy control of robot manipulators using gradient descent training, Shahrood University of Technology, 2010.

- [43] Mehdi ZiaEIFar, M.Sc. in Control Engineering, Thesis: Fuzzy control of the gas metal arc welding system, Shahrood University of Technology, 2009.
- [44] Azita Azarfar, M.Sc. in Control Engineering, Thesis: Adaptive fuzzy control of a Puma 560 Robot, Shahrood University of Technology, 2009.
- [45] Arash Khatamianfar, M.Sc. in Control Engineering, Thesis: Sliding mode control of the gas metal arc welding system, Shahrood University of Technology, 2008.
- [46] Shahab Shahrabi Farahani, M.Sc. in Control Engineering, Thesis: Nonlinear control of robotic gas metal arc welding system, Shahrood University of Technology, 2008.
- [47] Majid Moradi Zirkuhi, M.Sc. in Control Engineering, Thesis: Adaptive impedance control of an active suspension system, Shahrood University of Technology, 2008.
- [48] Mohammad Reza Hosaini Masoom, M.Sc. in Control Engineering, Thesis: Consideration of singularities in robot control, Shahrood University of Technology, 2008.
- [49] Alireza Izadbakhsh, M.Sc. in Control Engineering, Thesis: Feedback linearization control of the Puma560 robot for transferring objects, Shahrood University of Technology, 2007.
- [50] Majid Sehhati Yazdi, M.Sc. in Control Engineering, Thesis: Design, constructing and computed torque control of a laboratory SCARA robot, Shahrood University of Technology, 2007.
- [51] Hasan Farhangfard, M.Sc. in Control Engineering, Thesis: Reducing the effect of Jacobian error in the robot control, Shahrood University of Technology, 2006.
- [52] Seyyed Sina Alavi, M.Sc. in Control Engineering, Thesis: Fuzzy impedance control of an active suspension system, Shahrood University of Technology, 2006.
- [53] Leila Fallah Iraqi, M.Sc. in Control Engineering, Thesis: Fuzzy control of a two-link robot, Shahrood University of Technology, 2005.
- [54] Mazdak Teimoortashloo, M.Sc. in Control Engineering, Thesis: Fuzzy impedance control of a two-fingered robot hand, Shahrood University of Technology, 2005.
- [55] Fateme Tahmasebi, M.Sc. in Control Engineering, Thesis: Modeling of inverse 2D Magneto telluric using artificial neural networks, Shahrood University of Technology, 2004.
- [56] Alireza Maghsoodlo, M.Sc. in Control Engineering, Thesis: Design and simulation of the predictive control for antilock brake system, Shahrood University of Technology, 2004.
- [57] Farnaz Sabahi, M.Sc. in Control Engineering, Thesis: Robot force control using neural networks, Shahrood University of Technology, 2004.

Journal Papers

- [1] S. Fateh, **M.M. Fateh**, Superior Adaptive Fuzzy Sliding Mode Control of Electrically Driven Robot Manipulators, Iranian Journal of Science and Technology, Transactions of Electrical Engineering, 1-12, 2023/1/12. [Impact Factor: 1.89](#).
- [2] J. Keighobadi, **M.M. Fateh**, B. Xu, G. Nazmara, Composite Fuzzy Voltage-based Command-filtered Learning Control of Electrically-driven Robots with Input Delay Using Disturbance Observer, Journal of the Franklin Institute, 360 (2), 813-840, 2022/11/30. [ISI](#), [Impact Factor: 4.246](#).
- [3] M. Dehghan, **M.M. Fateh**, M. Ghalehnoie, A Fuzzy-Supervised Impedance Control for an Active Suspension System, Journal of Vibration Engineering & Technologies, 1-10, 2022/10/28. [ISI](#), [Impact Factor: 1.677](#).
- [4] H. Hooshmand, **M.M. Fateh**, Reduced Voltage Control of Electrically Driven Flexible-Joint Robot Manipulator Based on Model Predictive Method, Journal of Iranian Association of Electrical and Electronics Engineers 2022, 19(3): 175-189, 2022/7/10.
- [5] A.R. Haqshenas M, **M.M. Fateh**, S.M. Ahmadi, A finite-time adaptive Taylor series tracking control of electrically-driven wheeled mobile robots, IET Control Theory & Applications, 18(10),1042-1061, 2022/7. [ISI](#), [Impact Factor: 2.844](#).
- [6] H. Hooshmand, **M.M. Fateh**, Voltage Control of Flexible-Joint Robot Manipulators using Singular Perturbation Technique for Model Order Reduction, Journal of Electrical and Computer Engineering Innovations (JECEI), 10 (1) 123-142, 2022/1/1
- [7] H. Chenarani, **M.M. Fateh**, Robust Passivity-based Sliding Mode Control of a Large Class of Nonlinear Systems Subject to Unmatched Uncertainties: A Robot Manipulator Case Study, IETE Journal of Research, 1-10, **14 Sep 2021**. . [ISI](#), [Impact Factor: 1.495](#).
- [8] S.A. Saadat, **M.M. Fateh**, J. Keighobadi, Adaptive state augmented clustering-based fuzzy learning control of a passive torque simulator, International Journal of Dynamics and Control, 1-13, 2021/7/27. [ISI](#), [Impact Factor: 0.408](#).
- [9] H. Chenarani, **M.M. Fateh**, Robust Passivity-Based Voltage Control of Robot Manipulators, Journal of Electrical and Computer Engineering Innovations, 7(2) 2019, 145-154
- [10] M. Jalaeian-F, **M.M. Fateh**, M. Rahimiyan, Optimal Predictive Impedance Control in the Presence of Uncertainty for a Lower Limb Rehabilitation Robot, Journal of Systems Science and Complexity 33, 1310-1329, 2020. [ISI](#), [Impact Factor: 0.926](#).
- [11] A. Saleki, **M.M. Fateh**, Model-free control of electrically driven robot manipulators using an extended state observer, Computers & Electrical Engineering 87, 106768, 2020. [ISI](#), [Impact Factor: 2.663](#).
- [12] R. Gholipour, **M.M. Fateh**, Robust Control of Robotic Manipulators in the Task-Space Using an Adaptive Observer Based on Chebyshev Polynomials, Journal of Systems Science and Complexity 33 (5), 1360-1382,2020. [ISI](#), [Impact Factor: 0.926](#).

- [13] G. Nazmara, **M.M. Fateh**, S.M. Ahmadi, Exponentially convergence for the regressor-free adaptive fuzzy impedance control of robots by gradient descent algorithm, *International Journal of Systems Science* 51 (11), 1883-1904, 2020.
- [14] M.R. Shokoohinia, **M.M. Fateh**, Model-free tracking control via adaptive dynamic sliding mode control with application to robotic systems, *International Journal of Industrial Electronics, Control and Optimization*, Vol. 3, No. 4, pp. 431-438, 2020.
- [15] M. Jalaeian-F, **M.M. Fateh**, M. Rahimiyan Optimal Impedance Voltage-Controller for Electrically Driven Robots, *International Journal of Industrial Electronics, Control and Optimization*, Vol. 3, No. 4, pp. 483-490, 2020.
- [16] M. Jalaeian-F, **M.M. Fateh**, M. Rahimiyan, Bi-Level Adaptive Computed-Current Impedance Controller for Electrically Driven Robots, *Robotica*, Published online, 1-17.
- [17] J. Keighobadi, **M.M. Fateh**, Adaptive Robust Tracking Control Based on Backstepping Method for Uncertain Robotic Manipulators Including Motor Dynamics, *International Journal of Industrial Electronics, Control and Optimization*, Vol. 4, No. 1, pp. 13-22, 2021.
- [18] J. Keighobadi, **M.M. Fateh**, B. Xu, Adaptive fuzzy voltage-based backstepping tracking control for uncertain robotic manipulators subject to partial state constraints and input delay, *Nonlinear Dynamics* 100, 2609-2634, 2020.
- [19] A.R. Haqshenas M, **M.M. Fateh**, S.M. Ahmadi, Adaptive control of electrically-driven nonholonomic wheeled mobile robots: Taylor series-based approach with guaranteed asymptotic stability, *International Journal of Adaptive Control and Signal Processing* 34 (5), 638-661, 2020.
- [20] M.R. Shokoohinia, **M.M. Fateh**, R. Gholipour, Design of an adaptive dynamic sliding mode control approach for robotic systems via uncertainty estimators with exponential convergence rate, *SN Applied Sciences* 2 (2), 1-11, 2020, [ISI](#), [Impact Factor](#):
- [21] S. Fateh, **M.M. Fateh**, Adaptive Fuzzy Control of Robot Manipulators with Asymptotic Tracking Performance, *Journal of Control, Automation and Electrical Systems* 31 (1), 52-61, 2020.
- [22] M. Pirooz, **M.M. Fateh**, Impedance fuzzy control of an active aircraft landing gear system, *International Journal of Dynamics and Control* 7 (4), 1392-1403, 2019
- [23] S.M. Ahmadi, **M.M. Fateh**, Composite direct adaptive Taylor series–fuzzy controller for the robust asymptotic tracking control of flexible-joint robots, *Transactions of the Institute of Measurement and Control* 41 (14), 4023-4034, 2019.
- [24] S.M. Ahmadi, **M.M. Fateh**, Task-space control of robots using an adaptive Taylor series uncertainty estimator, *International Journal of Control* 92 (9), 2159-2169, 2019.
- [25] R. Gholipour, **M.M. Fateh**, Designing a Robust Control Scheme for Robotic Systems with an Adaptive Observer, *International Journal of Engineering*, 32 (2), 273-278, 2019, [ISI](#)

- [26] S.M. Ahmadi, **M.M. Fateh**, On the Taylor series asymptotic tracking control of robots, *Robotica*, 37 (3), 405-427, 2019. [ISI](#), [Impact Factor: 1.554](#).
- [27] M.R. Shokoohinia, **M.M. Fateh**, Robust dynamic sliding mode control of robot manipulators using the Fourier series expansion, *Transactions of the Institute of Measurement and Control*, 41 (9), 2488-2495, 2019. [ISI](#), [Impact Factor: 1.579](#).
- [28] G. Nazmara, **M.M. Fateh**, S.M. Ahmadi, A model-reference impedance control of robot manipulators using an adaptive fuzzy uncertainty estimator, *Int. J. Comput. Intell. Syst.* 11, 979-990, 2019. [ISI](#), [Impact Factor: 1.89](#).
- [29] R. Gholipour, M.M. Fateh, Adaptive task-space control of robot manipulators using the Fourier series expansion without task-space velocity measurements, *Measurement*, 123, 285-292, 2018. [ISI](#), [Impact Factor: 2.218](#).
- [30] S. Ahmadi, M.M. Fateh, Control of flexible joint robot manipulators by compensating flexibility, *Iranian Journal of Fuzzy Systems*, 15 (4), 57-71, 2018. [ISI](#), [Impact Factor: 1.27](#).
- [31] S. M. Ahmadi, **M.M. Fateh**, Task-space asymptotic tracking control of robots using a direct adaptive Taylor series controller, *Journal of Vibration and Control*, Published online: 23 Feb 2018. [ISI](#), [Impact Factor: 2.101](#).
- [32] S. M. Ahmadi, **M.M. Fateh**, Task-space control of robots using an adaptive Taylor series uncertainty estimator, *International Journal of Control*, Published online: 31 Jan 2018. [ISI](#), [Impact Factor: 2.208](#).
- [33] M. Moradi Zirkohi, **M.M. Fateh**, Adaptive type-2 fuzzy estimation of uncertainties in the control of electrically driven flexible-joint robots, *Journal of Vibration and Control*, 23 (9), 1535-1547, 2017. [ISI](#), [Impact Factor: 2.101](#).
- [34] M. Sadeghijaleh, M.M. Fateh, Adaptive voltage-based control of direct-drive robots driven by permanent magnet synchronous motors, *International Journal of Engineering, Transactions A: Basics*, 30 (4), 507-515, 2017. [SCOPUS](#).
- [35] M. Souzanchi-K, A. Arab, M. Akbarzadeh-T., **M.M. Fateh**, Robust Impedance Control of Uncertain Mobile Manipulators Using Time-Delay Compensation, *IEEE Transactions on Control Systems Technology*, Published online: 30 August 2017. [ISI](#), [Impact Factor: 3.882](#).
- [36] S. Khorashadizadeh, **M.M. Fateh**, Uncertainty estimation in robust tracking control of robot manipulators using Fourier series expansion, *Robotica*, 35(2) 310-336, 2017, [ISI](#), [Impact Factor: 1.554](#).
- [37] Z. Ghassemi Zahan, A. AkbarZadeh Kalat, **M.M. Fateh**, Robust Adaptive Impedance Control in Scara Robot Manipulator for Robotic Cell Injection, *Journal of Modares Mechanical Engineering*, 16(12) 637-647, 2017 (in Persian), [ISC](#).

زینب قاسمی زهان، علی اکبرزاده کلات، محمدمهدی فاتح، کنترل امیدانس تطبیقی مقاوم بازوی ربات اسکارا با رویکرد مکانیک مدرس، دوره ۱۶، شماره ۱۲، اسفند ۱۳۹۵، صفحه ۶۳۷-۶۴۷ تزریق سلولی رباتیکی، مجله مهندسی

- [38] J. Esmaeili, H.A. Tehrani, **M.M. Fateh**, Control of fractional periodic discrete-time linear systems by parametric state feedback matrices, *Nonlinear Dynamics*, 87 (2), 1413-1425, 2017, [ISI](#), [Impact Factor: 2.489](#).
- [39] S.M. Ahmadi, **M.M. Fateh**, Robust control of electrically driven robots using adaptive uncertainty estimation, *Computers & Electrical Engineering*, 56, 674-687, 2016, [ISI](#), [Impact Factor: 1.084](#).
- [40] S.M.H. Zadeh, S. Khorashadizadeh, **M.M. Fateh**, M. Hadadzarif, Optimal sliding mode control of a robot manipulator under uncertainty using PSO, *Nonlinear Dynamics*, 84 (4), 2227-2239, 2016. [ISI](#), [Impact Factor: 2.489](#)
- [41] J. Esmaeili, H. A. Tehrani, **M.M. Fateh**, Control of fractional periodic discrete-time linear systems by partial eigenvalue assignment of state feedback matrices, *International Journal of Applied and Computational Mathematics*, pp 1-13, First online: 18 April 2016.
- [42] **M.M. Fateh**, M. Baluchzadeh, Discrete-time repetitive optimal control: Robotic manipulators, *Journal of AI and Data Mining*, 4(1) 117-124, 2016, [ISC](#).
- [43] V. Khoshdel, **M.M. Fateh**, Robust impedance control of a lower limb rehabilitation robot using fuzzy parameters, *Journal of Solid and Fluid Mechanics*, 4(5) 83-95, 2016.
 وهاب خوشدل، محمد مهدی فاتح، کنترل امپدانس مقاوم ربات توانبخش زانو با ضرایب فازی، مجله علمی پژوهشی مکانیک سازه ها و شاره ها، دوره ۵، شماره ۴، زمستان ۱۳۹۴، صفحه ۸۳-۹۵
- [44] **M.M. Fateh**, H. Asrari, S. Khorashadizadeh, Adaptive fuzzy sliding mode control of a robotic manipulator in task-space using voltage control strategy, *Journal of Solid and Fluid Mechanics*, 5(3) 17-26, 2015 (In Persian), [ISC](#)
 محمد مهدی فاتح، حسین اسراری، سعید خراشادی زاده، کنترل حالت لغزشی فازی تطبیقی بازوی رباتیک در فضای کار با راهبرد کنترل ولتاژ، مجله علمی پژوهشی مکانیک سازه ها و شاره ها، دوره ۵، شماره ۳، پاییز ۱۳۹۴، صفحه ۱۷-۲۶
- [45] A. Arab, **M.M. Fateh**, An uncertainty compensator for robust control of wheeled mobile robots, *Advanced Robotics*, 29(20), 1303-1313, 2015. [ISI](#), [Impact Factor: 0.572](#).
- [46] **M.M. Fateh**, M. Sadeghijaleh, Voltage control strategy for direct-drive robots driven by permanent magnet synchronous motors, *IJE TRANSACTIONS B: Applications* 28(5), 709-716, (May 2015). [SCOPUS](#).
- [47] **M.M. Fateh**, S. Azargoshasb, Discrete time robust control of robot manipulators in the task space using adaptive fuzzy estimator, *Journal of AI and Data Mining*, 3(1), 113-120, 2015. [ISC](#).
- [48] **M.M. Fateh**, M. Abedinzadeh Shahri, Adaptive fuzzy control of a mobile manipulator, *Journal of Solid and Fluid Mechanics*, 5(2) 17-27, 2015 (In Persian), [ISC](#).
 محمد مهدی فاتح، مجید عابدین زاده شهری، کنترل فازی تطبیقی بازوی رباتیک سیار، مجله علمی پژوهشی مکانیک سازه ها و شاره ها، دوره ۵، شماره ۲، تابستان ۱۳۹۴، صفحه ۱۷-۲۷

- [49] **M.M. Fateh**, V. Khoshdel, Voltage-based adaptive impedance force control for a lower-limb rehabilitation robot, *Advanced Robotics*, 29(15) 961-971, 2015. [ISI](#), [Impact Factor: 0.572](#).
- [50] **M.M. Fateh**, J. Keighobadi, R. Rezvanian Noqondar, Adaptive fuzzy control of an electrical single-wheel robot, *Journal of Solid and Fluid Mechanics*, 5(1) 61-75, 2015 (In Persian), [ISC](#).
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