

Journal Publications (English)

1987-2014

1. *Singular perturbation analysis of the step response matrices of a class of linear multivariable systems*, B. Porter, A. Khaki- Sedigh, International Journal of Systems Science, No. 2, pp 205- 211, 1987.
2. *Design of robust adaptive digital set point tracking PID controllers incorporating recursive step response matrix identifiers for gas turbines*, B. Porter, A. Khaki- Sedigh, Transactions of the Institute of the Measurement and Control, Vol. 10, pp 9-14, 1988.
3. *Robustness of tunable digital set point tracking PID controllers for linear multivariable plants*, B. Porter, A. Khaki- Sedigh, International Journal of Control, Vol. 49, No. 3, pp 777- 789, 1989.
4. *Design of tunable digital set point tracking controllers for linear multivariable type-one plants*, B. Porter, A. Khaki- Sedigh, International Journal of Systems Science, 1990, Vol. 21, No. 3, pp 447- 461.
5. *On-line identification of the first-Markov parameter of linear multivariable plants*, A. Khaki- Sedigh, J. Kamali, Journal of Engineering, Vol. 7, No. 4, pp 225- 227, 1994.
6. *Input-Output pairing using balanced realizations*, A. Khaki- Sedigh, M. Shahmansorian, Electronic Letters, Vol. 32, No. 21, pp 2027-2028, 1996.
7. *Controller design using mu-synthesis for static VAR compensator to enhance the voltage profile for remote induction motorloads*, M. Abedi, S. A. Taher, A. Khaki-Sedigh, H. Seifi, Electric Power Systems Research, 46, pp 35-43, 1998.
8. *Optimal design of robust QFT controllers using random optimization techniques*, A. Khaki- Sedigh, C. Lucas, International Journal of Systems Sciences, Vol. 31, NO. 8, pp 1043-1052, Aug 2000.
9. *Sufficient condition for the stability of decentarlised control*, B. Labibi, B. Lohmann, A. Khaki-Sedigh, P. J. Maralani, Electronic Letters, Vol. 36, No. 6, pp 588-589, March 2000.
10. *Leveling and Gyrocompassing of Stable platforms using Neural Networks*, A. Khaki- Sedigh, M. Nasiri Sarvi, Iranian Journal of Science and Technology, Transaction B, Vol. 25, No. B3, pp 475-482, 2001.
11. *Design of Decentralized High-Gain Error-Actuated Controllers for Large Scale Systems*, B. Labibi, B. Lohmann, A. Khaki-Sedigh, P. J. Maralani, International Journal of Modeling and Simulations, Vol. 21, No. 4, pp 282-287, 2001.
12. *Design of Static Linear Multivariable Output Feedback Controllers using Random Optimization Techniques*, A. Khaki-Sedigh, Y. Bavafa-Toosi, Journal of Intelligent and Fuzzy Systems, Vol. 10, pp185-195, 2001.
13. *Output Feedback Decentralized Control of Large Scale Systems using Weighted Sensitivity Functions Minimizations*, B. Labibi, B. Lohmann, A. Khaki-Sedigh, P. Jabedar Maralani, Systems and Control Letters, 47, pp 191-198, 2002.
14. *A Novel Method for the Decentralized Robust Stabilization of Large scale Systems*, B. Labibi, Y. Bavafa Toosi, A. Khaki-Sedigh, B. Lohmann, To be published by the Journal of Intelligent Automation and Soft Computing, Special Issue on Developments in Intelligent Adaptive and Robust Techniques for Automation and control Systems, 2003.
15. *Emotional Learning as a New Tool for Development of Agent-based Systems*, M. Fatourechi, C. Lucas, A. Khaki-Sedigh, Informatica, Vol. 27, No. 2, 2003.
16. *Robust decentralized stabilization of large scale systems via eigenstructure assignment*, B. Labibi, B. Lohmann, A. Khaki-Sedigh, P. Jabedar Maralani, International Journal of Systems Sciences, 2003.
17. *Robust decentralized control of large scale systems via H-infinity theory and using descriptor system representation*, B. Labibi, B. Lohmann, A. Khaki-Sedigh, P. Jabedar Maralani, International Journal of Systems Sciences, 2003.
18. *Decentralized Stabilization of Large Scale Systems via State-Feedback and using Descriptor Systems*, B. Labibi, B. Lohmann, A. Khaki-Sedigh, P. Jabedar Maralani, IEEE Transactions on Systems, Man, and Cybernetics- Part A: Systems and Humans, Vol. 33, No. 6, pp 771- 776, November 2003.
19. *Model based method for estimating an attractor dimension from uni/multivariate chaotic time series with application to Bremen climatic dynamics*, M. Ataei, , B. Lohmann, A. Khaki-Sedigh, C. Lucas, Chaos, Solitons and Fractals, Vol. 19:5, pp 1131-1139, 2004.

20. *Model Based Method for Determining the Minimum Embedding Dimension from Chaotic Time Series- Univariate and Multivariate Cases*, M. Ataei, , B. Lohmann, A. Khaki-Sedigh, C. Lucas, Nonlinear Phenomena in Complex Systems, Vol. 6:4, pp 842-851, 2004.
21. *Adaptive calculation of Lyapunov exponents from time series observations of chaotic time varying dynamical systems*, A. Khaki-Sedigh, M. Ataei, , B. Lohmann, C. Lucas, Nonlinear Dynamics and System Theory, An International Journal of Research and Surveys, Vol. 4, No.2 , pp145-159, 2004.
22. *Design of bearing only vision based tracking filters*, H. Ferdowsi, P. Jabbedar Maralani, A. Khaki Sedigh, Journal of Optical Engineering, Vol. 43, No. 2, Feb 2004.
23. *Reconfigurable control system design using eigenstructure assignment: static, dynamic and robust approaches*, A. Esna Ashari, A. Khaki-sedigh, M. J. Yazdanpanah, International Journal of Control, Vol. 78, No. 13/ 10, Sept 2005.
24. *Observer based design of set-point tracking Adaptive Controllers for Nonlinaer Chaotic Plants*, A. Khaki Sedigh, M. Yazdanpanah, Chaos solitons and Fractals, The Interdisciplinary Journal of Nonlinear Scienc Nano and Quantum Technology, 2005.
25. *Analysis of Gain Margin and Performance of Inverse Optimal Controllers*, A. Shahmansoorian, A. Khaki Sedigh, B. Moshiri, S. Mohammadi, Mediterranean Journal of Measurement and Control, Volume 1, No. 4, October 2005.
26. *Advanced HSVC tuning in muti-machine power systems for loadability improvements*, A. Akbari, H. Seifi, A. Khaki Sedigh, Electric Power Components and Systems, Vol. 34, No. 6, June 2006.
27. *Observer-based design of set-point tracking adaptive controllers for nonlinear chaotic systems*, A. Khaki Sedigh, Y. Yazdanpanah, Chaos, Solitons & Fractals, September 2006, Pages 1063-1072
28. *A Satellite Simulator for Photography and Characteristic Determination*, M. Nasirian, H. Bolandi, A. Khaki-Sedigh, A. R. Khogar, Asian Journal of Geoinformatics, Vol. 7, No. 1, January 2007.
29. *Reconfigurable Controller Design for Linear Multivariable Plants*, M. Moaveni, A. Khaki-Sedigh, International Journal of Modelling, Identification, and Control, Vol. 2, No. 2, pp 138-146, 2007.
30. *Improved Multivariable Quantitative Feedback Design for Tracking Error Specifications*, S. M. Mahdi Alavi, A. Khaki-Sedigh, B. Labibi, and M. J. Hayes, IET Control Theory Appl, Vol. 1, No. 4, pp 1046-1053, July 2007.
31. *Chaos Control in Delayed Chaotic Systems via Sliding Mode Based Delayed Feedback*, N. Vasegh, A. Khaki-Sedigh, Chaos, Solitons and Fractals, Vol. 40, Issue 1, pp 159-165, N. Vasegh, A. Khaki Sedigh, 15 April 2009 .
32. *A New Stabilizing Control Law with Respect to a Control Lyapunov Function and Construction of Control Lyapunov Function for Particular NonAffine Nonlinear Systems*, A. Shamansourian, B. Moshiri, A. Khaki-Sedigh, and S. Mohamadi, Journal of Dynamical and Control Systems, Vol. 13, No. 4, pp 563-576, October 2007.
33. *Further Theoretical Results on "Relative Gain Array for Norm-Bounded Uncertain Systems"*, B. Moaveni, A. Khaki-Sedigh, Ind. Eng. Chem. Research, Vol. 46, pp 8288-8289, 2007.
34. *Model Reference Adaptive Control for a Flexible Launch Vehicle*, A. Khoshnoosd, J. Roshanian, and A. Khaki-Sedigh, Proc. IMech E, Vol. 22, Part I: J. of Systems and Control Engineering, pp 49-55, 2008.
35. *Adaptive Control of Nonlinear in Parameters Chaotic Systems*, M. Ayati, A. Khaki-Sedigh, Nonlinear Dynamics and Systems Theory, Vol. 8, No. 2, pp123-135, 2008.
36. *Contractive Predictive Control of Mixed Logical Dynamical Hybrid Systems*, J. Habibi, B. Moshiri, A. Khaki Sedigh, Int. J. of innovative Computing, Information and Control, Vol. 4, No. 6, pp 1283-1297, June 2008.
37. *Delayed Feedback Control of Time Delayed: Analytic Approach at Hopf Bifurcation*, N. Vasegh, A. Khaki-Sedigh, Physic Letter A, 372, pp5110-5114, 2008.
38. *Input-Output Pairing Analysis for Uncertain Multivariable Processes*, B. Moaveni, A. Khaki-Sedigh, J. of Process Control, vol. 18, pp527-532, 2008.
39. *Short Term Prediction of Air Pollution using MLP, Gamma, ANFIS, and Mixed Training Based Methods*, M. Aliyari, M. Tehshnelab, A. Khaki Sedigh, Journal of Control, Vol. 2, no. 1, Fall 2008.
40. *Chaos Control via TDTC in Time-Delayed Systems: The Harmonic Balance Approach*, N. Vasegh, A. Khaki-Sedigh, Physic Letter A, 373, pp354-358, 2009.

41. *Training ANFIS as an Identifier with Intelligent Hybrid Stable Learning Based Algorithm Based on Particle Swarm Optimization and Extended Kalman Filter*, M. Aliyari, M. Teshnelab, and A. Khaki Sedigh, Fuzzy Sets and Systems, vol. 160, Issue 7, pp922-948, 2009.
42. *Identification using ANFIS with Intelligent Hybrid Stable Learning Approaches and Stability Analysis of Training Methods*, M. Aliyari, M. Teshnelab, and A. Khaki Sedigh, Applied Soft Computing, vol. 9, Issue 2, pp 833-850, 2009.
43. *Identification using ANFIS with Intelligent Hybrid Stable Learning Approaches*, M. Aliyari, M. Teshnelab, and A. Khaki Sedigh, Neural Computing and Applications, Vol 18, no. 2, pp 157-174 Feb 2009.
44. *Chaos Control in Delayed Chaotic Systems via Sliding Model Based Delayed Feedback*, N. Vasegh, A. Khaki-Sedigh, Chaos, Solitons and Fractals, 40, pp159-165, 2009.
45. *Optimal control of a nonlinear fed-batch fermentation process using model predictive approach*, A. Ashoori, B. Moshiri, A. Khaki-Sedigh, M. R. Bakhtiari Journal of Process Control, Vol. 19, Issue 7, pp 1162-1173, 2009.
46. *Adaptive Control of Nonlinear in Parameters chaotic Systems via Lyapunov Exponents Placement*, M. Ayati, A. Khaki-Sedigh, Chaos, Solitons and Fractals, 41, pp1980-1986, 2009.
47. *Observer-based adaptive control of chaos in nonlinear discrete-time systems using time-delayed state feedback*, A.Yazdanpanah Goharrizi a, A. Khaki-Sedigh b, N. Sepehri, Chaos, Solitons and Fractals, 41, pp2248-2455, 2009.
48. *Adaptive Vehicle Lateral-Plane Motion Control Using Optimal Tire Friction Forces With Saturation Limits Considerations*, J. Ahmadi, A. Khaki-Sedigh, M. Kabganiyan, IEEE Transaction on Vehicle Technology, Vol. 58, no. 8, pp 4098-4107, 10.1109/TVT.2009.2023660, 2009.
49. *PH Control of Penicillin fermentation Process Using Predictive Approach*, A. Ashoori, B. Moshiri, A. Ramezani. M R. Bakhtiari, A. Khaki Sedigh, System Sciences, Vol. 35, No. 1, 2009.
50. *Generalized Predictive control and tuning of Industrial Process with Second Order Plus Dead time models*, A. R Neshastehriz, A. Khaki-Sedigh, H. Sajadian, Journal of Process Control, Vol. 20, Issue 7, pp63-72, 2010.
51. *An ANOVA Based Analytical Dynamic Matrix Controller Tuning Procedure for FOPDT Models*, P. Bagheri, A. Khaki-Sedigh, Amirkabir, MICS, Vol. 42, No. 2, pp55-64, 2010.
52. *An Adjustable Model Reference Adaptive Control for a Flexible Launch Vehicle*, A. M. Khoshnood, J. Roshanian, A. A. Jafari, A. Khaki-Sedigh, Journal of Dynamic Systems, Measurement, and Control, Vol. 132, 2010.
53. *Variable structure control of linear time invariant fractional order systems using a finite number of state feedback law*, S. Baloochian, A. Khaki-Sedigh, A. Zare, Commun Nonlinear Sci Numer Simulat Vol. 16, pp 1433–1442, 2011.
54. *Descriptive vector, relative error matrix, and interaction analysis of multivariable plants*, N. Monshizadeh-Naini, A. Fatehi, A. Kahki-Sedigh, Automatica, Vol. 47, pp108–114, 2011.
55. *Stabilization of multi-input hybrid fractional-order systems with state delay*, S. Balochian, A. Khaki Sedigh, A. Zare, ISA Transactions, Vol. 50, pp 21–27, 2011.
56. *Identification and robust water level control of horizontal steam generators using quantitative feedback theory*, O. Safarzadeh, A. Khaki-Sedigh, A.S. Shirani, Energy Conversion and Management 52, 3103–3111, 2011.
57. *Improved dead zone modification for robust adaptive control of uncertain systems described by input-output models with actuator faults*, B. A. Charandabi, F. R. Salmasi, A. Khaki Sedigh, IEEE Transactions on Automatic Control, Vol. 56, No. 4, pp 863-867, April 2011.
58. *Adaptive neural network control of bilateral teleoperation with constant time delay*, A. Forouzantabar, H. A. Talebi, A.Khaki Sedigh, DOI 10.1007/s11071-011-0057-8, Nonliear Dynamics, 2011.
59. *Bilateral control of master-slave manipulators with constant time delay*, A. Forouzantabar a, H. A. Talebi, A. Khaki Sedigh, ISA Transactions 51, pp 74-80, 2012.
60. *Stabilization of fractional order systems using a finite number of state feedback laws*, S. Balochian, A. Khaki Sedigh, M. Haeri, Nonlinear Dynamics, Vol. 66, pp141–152, DOI 10.1007/s11071-010-9916-y, 2011.

61. *Sufficient condition for stabilization of linear time invariant fractional order switched systems and variable structure control stabilizers*, S. Balochian, A. Khaki Sedigh, ISA Transactions 51, pp 65–73, 2012.
62. *Stabilization of chaos systems described by nonlinear fractional-order polytopic differential inclusion*, S. Balochian, A. Khaki Sedigh, American Institute of Physics, Chaos 22, doi: 10.1063/1.3683487, 2012
63. *Decentralized supervisory based switching control for uncertain multivariable plants with variable input–output pairing*, O. Namaki-Shoushtari, A. Khaki-Sedigh, ISA Transactions 51, 132-140, 2012.
64. *Bilateral control of master–slave manipulators with constant time delay*, A. Forouzantabar, H.A. Talebi, A.Khaki Sedigh, ISA Transactions 51, 74-80.
65. *Multiple model bank selection based on nonlinearity measure and H-gap metric*, S M. Hosseini, A. Fatehi, T A Johansen, A. Khaki Sedigh, Journal of Process Control, 2012 (Article in press)
66. *Robustification of input redundant feedback systems using robust actuator weighting in the control allocation problem*, J. Ahmadi, A. Khaki-Sedigh, A. Ohadi, International Journal of Control, DOI:10.1080/00207179.2012.686632, 2012.
67. *Forecasting of short-term traffic-flow based on improved neurofuzzy models via emotional temporal difference learning algorithm*, J. Abdi, B. Moshiri, B. Abdulhai, A. Khaki-Sedigh, Engineering Applications of Artificial Intelligence, Volume 25, Issue 5, Pages 1022-1042, August 2012.
68. *Robustness analysis and tuning of generalized predictive control using frequency domain approaches*, P. Sarhadi, K. Salahshoor, A. Khaki-Sedigh, Applied Mathematical Modelling, Vol. 36, pp6167-6185, 2012.
69. *Robust tracking of a class of perturbed nonlinear systems via multivariable nested sliding mode control*, A. Mirhosseini, M. J. Yazdanpanah, A. Khaki-Sedigh, Transactions of the ASME, Journal of Dynamic Systems, Measurement and Control, Volume 134, Issue 3, 2012.
70. *Short-term traffic flow forecasting: parametric and nonparametric approaches via emotional temporal difference learning*, J. Abdi, B. Moshiri, B. Abdulhai, A. Khaki Sedigh, Neural Comput & Applic, DOI 10.1007/s00521-012-0977-3, 2012.
71. *Enhancement of Robust Tracking Performance via Switching Supervisory Adaptive Control*, O. Namaki-Shoushtari, A. Khaki Sedigh, Iranian Journal of Electrical and Electronic Engineering, Vol. 8, No.1, pp28-36, 2012.
72. *Predictive controlled GSP performance improvement with an integrated H_2/H_∞* , M. Rezaei Darestani, A. A. Nikkhah, A. Khaki Sedigh, International Journal of Engineering, Transactions B: Applications, 2013: <http://www.ije.ir/Vol26/No11/B/4.pdf>
73. *Robust water level control of the U-tube steam generator*, O. Safarzadeh, A. Khaki-Sedigh, A. S. Shirani, Journal of Energy Engineering, vol. 139, Issue 3, pp 161–168, 2013
74. *On the structural optimization of a neural network model predictive controller*, M. Sadeghassadi, A. Fatehi, A. Khaki Sedigh, S. Hosseini, Industrial and Engineering Chemistry Research, Ind. Eng. Chem. Res., Vol. 52, Issue 1, pp 394–407, DOI: 10.1021/ie201815r, 2013
75. *Two new methods for DNA splice site prediction based on neuro-fuzzy network and clustering*, Neural Computing and Applications, Volume 23, Issue 1 Supplement, pp 407-414, December 2013
76. *Analytical approach to tuning of model predictive control for first-order plus dead time models*, P. Bagheri, A. Khaki Sedigh, IET Control Theory and Applications, Vol. 7, No. 14, pp. 1806-1817, 2013
77. *New practical design of disturbance rejection control scheme for dfig with wind energy conversion systems*, A. Tohidi, A. Shamsaddinlou, O. Abedinia, A. Khaki Sedigh, K. Abbaszadeh, International Review of Electrical Engineering, Vol. 8, No. 3, 2013
78. *Short-term traffic flow forecasting: Parametric and nonparametric approaches via emotional temporal difference learning*, J. Abdi, B. Moshiri, B. Abdulhai, A. Khaki Sedigh, Neural Computing and Applications, 2013
79. *Automatic model bank selection in multiple model identification of gas turbine dynamics*, S. M. Hosseini, A. Fatehi, A. Khaki Sedigh, T. A. Johansen, Proceedings of the Institution of Mechanical Engineers. Part I: Journal of Systems and Control Engineering, 2013
80. *Selection of sensors for hydro-active suspension system of passenger car with input-output pairing considerations*, E. Sarshari, E., A. Khaki Sedigh, Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2013

81. *An analytical tuning approach to multivariable model predictive controllers*, P Bagheri, A Khaki-Sedigh, Journal of Process Control 24 (12), 41-54, 2014.
82. *Control of Cardiac Arrhythmia by Nonlinear Spatiotemporal Delayed Feedback*, FR Boroujeni, N Vasegh, A. Khaki Sedigh, International Journal of Bifurcation and Chaos, 24 (11), 1450140, 2014.
83. *Analysis of a Chaotic Memristor Based Oscillator*, F Setoudeh, A Khaki Sedigh, M Dousti, Abstract and Applied Analysis, Vol. 2014, Article ID 628169, <http://dx.doi.org/10.1155/2014/628169>, 2014.
84. *Switching-Tuning Adaptive Multiple Model Predictive Control*, A Shamsaddinlou, A Fatehi, A Khaki Sedigh, Journal of Control Engineering and Technology 4 (2), 2014.
85. *Application of augmented UD identification with selective forgetting in an adaptive control loop*, P. Sarhadi, P., K. Salahshoor, A. Khaki-Sedigh, International Journal of Modelling, Identification and Control, 2014
86. *Non-linear generalised minimum variance control state space design for a second-order Volterra series model*, M. Maboodi, E. F. Camacho, A. Khaki-Sedigh, International Journal of Systems Science, DOI:10.1080/00207721.2013.874509, 2014
87. *A comparison of alternative strategies for optimal utilization of tyrefriction forces aimed at vehicle lateral-plane motion control*, J. Ahmadi, A. Khaki Sedigh, Int. Journal of Vehicle Design, vol 66, no. 2, pp 166-192, 2014.

2015

88. *X-Y pedestal: partial quasi-linearization and cascade-based global output feedback tracking control*, Mehdi Tavan, Ali Khaki-Sedigh, Mohammad Reza Arvan, Ahmad Reza Vali, Nonlinear Dyn, DOI 10.1007/s11071-015-2081-6, 2015
89. *A Novel Alignment Repulsion Algorithm for Flocking of Multi-Agent Systems Based on the Number of Neighbours per Agent*, R. Kahani, A. Khaki Sedigh & M. Gh. Mahjani, International Journal of Control, DOI: 10.1080/00207179.2015.1052986, 2015
90. *An indirect adaptive predictive control for the pitch channel autopilot of a flight system*, Karim Salahshoor, Ali Khaki-Sedigh, Pouria Sarhadi, Aerospace Science and Technology, 45, 78-87, 2015
91. *Control of multi-chaotic systems using the extended OGY method*, E. Nobakhti, A. Khaki Sedigh, International Journal of Bifurcation and Chaos, Vol. 25, No. 8, DOI: 10.1142/S0218127415500960, 2015.
92. *Robust tuning of dynamic matrix controllers for first order plus dead time models*, P. Bagheri, A. Khaki Sedigh, Applied Mathematical Modelling, doi:10.1016/j.apm.2015.02.035, 2015.
93. *Closed form tuning equations for model predictive control of first-order plus fractional dead time models*, Peyman Bagheri, Ali Khaki-Sedigh, International Journal of Control, Automation and Systems, Vol. 13, Issue 1., pp 73-80, 2015.
94. *Latency Compensation in Multi Chaotic Systems Using the Extended OGY Control Method*, E. Nobakhti1 and A. Khaki Sedigh, Amirkabir International Journal of Science & Research (Modeling, Identification, Simulation & Control), Vol. 47, No. 2, pp 1-9, 2015.
95. *Decentralized MRAC for Large Scale Systems with Input and State Delay*, Hashemipour, N Vasegh, A Khaki Sedigh, The Modares Journal of Electrical Engineering 12 (3), 33-39
96. *Implementation of an Improved Performance Integral H_2/H_∞ Combined Predictive Control on a GSP*, MR Darestani, AA Nikkhah, A Khaki Sedigh, The Modares Journal of Electrical Engineering 12 (2), 23-35
97. *Non-linear generalised minimum variance control state space design for a second-order Volterra series model*, M Maboodi, EF Camacho, A Khaki-Sedigh, International Journal of Systems Science 46 (14), 2607-2616, 2015
98. *Control performance assessment for a class of nonlinear systems using second-order Volterra series models based on nonlinear generalized minimum variance control*, M Maboodi, A Khaki-Sedigh, EF Camacho, International Journal of Control 88 (8), 1565-1575, 2015

2016

99. *Control performance assessment based on sensor fusion techniques*, SA Khamseh, A Khaki Sedigh, B Moshiri, A Fatehi, Control Engineering Practice, Vol. 49, pp 14–28, 2016.
100. *Fault tolerant control design using adaptive control allocation based on the pseudo inverse along the null space*, SS Tohidi, A Sedigh, D Buzorgnia, International Journal of Robust and Nonlinear Control, DOI: 10.1002/rnc.3518, 2016.
101. *Low-complexity control of hybrid systems using approximate multi-parametric MILP*, J Habibi, B Moshiri, A. Khaki Sedigh, M Morari , Automatica, Vol. 63, pp 292-301, 2016.
102. *Immersion and invariance adaptive velocity observer for a class of Euler–Lagrange mechanical systems*, Mehdi Tavan, Ali Khaki-Sedigh, Mohammad-Reza Arvan, Ahmad-Reza Vali, Nonlinear Dynamics, pp 1-13, DOI 10.1007/s11071-016-2696-2, 2016.

2017

103. *Ethics: An Indispensable Dimension in the University Rankings*, A. Khaki Sedigh, Science and Engineering Ethics, DOI 10.1007/s11948-016-9758-1, Vol. 23, 1, pp 65-80, 2017
104. *New H₂ filtering for descriptor systems: Singular and normal filter*, Sahereh Beidaghi, Ali Akbar Jalali, Ali Khaki Sedigh, International Journal of Control, Automation and Systems, Vol. 15, 1, pp 60-168, 2017.
105. *Robust H ∞ filtering for uncertain discrete-time descriptor systems*, Sahereh Beidaghi, Ali Akbar Jalali, Ali Khaki Sedigh, Bijan Moaveni, International Journal of Control, Automation and Systems, pp 1-8, 2017.
106. *Input-constrained multi-model unfalsified switching control*, Mojtaba Nouri Manzar, Giorgio Battistelli, Ali Khaki Sedigh, Automatica, 2017.
107. *Decentralized model reference adaptive control for interconnected time delay systems with delay in state and compensation of long delay in input by nested prediction*, Seyed Hamid Hashemipour, Nastaran Vasegh, Ali Khaki Sedigh, International Journal of Control, Automation and Systems, pp 1-9, 2017.
108. *Decentralized Model Reference Adaptive Control of Large Scale Interconnected Systems with Time-Delays in States and Inputs*, SH Hashemipour, N Vasegh, A Khaki Sedigh, Journal of Modeling, Identification, Simulation & Control, 2017.
109. *Multi-linear model set design based on the nonlinearity measure and H-gap metric*, Davood Shaghaghi, Alireza Fatehi, Ali Khaki-Sedigh, ISA transactions Vol. 68, pp 1-13, 2017.
110. *Nonlinear Analysis of the Contour Boundary Irregularity of Skin Lesion Using Lyapunov Exponent and KS Entropy*, Hamed Khodadadi, Ali Khaki Sedigh, Mohammad Ataei, Mohammad Reza Jahed Motlagh, Ali Hekmatnia, Journal of Medical and Biological Engineering, Vol. 37, 3, pp 409-419, 2017.
111. *Adaptive Tuning of Model Predictive Control Parameters based on Analytical Results*, T Gholaminejad, A Khaki-Sedigh, P Bagheri, AUT Journal of Modeling and Simulation, 2017.
112. *Decentralized MRAC for Large-Scale Interconnected Systems With State and Input Delays by Integrators Inclusion*, Seyed Hamid Hashemipour, Nastaran Vasegh, Ali Khaki Sedigh, Journal of Dynamic Systems, Measurement, and Control, Vol. 139, 9, pp 091009, 2017.
113. *Adaptive recurrent neural network with Lyapunov stability learning rules for robot dynamic terms identification*, Pedram Agard, Mahdi Aliyari Shoorehdeli, Ali Khaki-Sedigh, Engineering Applications of Artificial Intelligence, Vol. 65, pp 1-11, 2017.
114. *Self-falsification in multimodel unfalsified adaptive switching control*, Mojtaba Nouri Manzar, Ali Khaki-Sedigh, International Journal of Adaptive Control and Signal Processing, Volume 31, Issue 11, Pages 1723-1739, 2017.

2018

115. *Adaptive fuzzy dynamic surface control of nonlinear systems with input saturation and time-varying output constraints*, L Edalati, A Khaki Sedigh, M Aliyari, A Moarefianpour, Mechanical Systems and Signal Processing, Vol. 100, pp 311-329, 2018.
116. *A dynamic independent component analysis approach to fault detection with new statistics*, M Teimoortashloo, A Khaki Sedigh, COMPUTER SYSTEMS SCIENCE AND ENGINEERING, Volume 33, Issue 1, Pages 5-20, 2018.
117. *Applying a modified version of Lyapunov exponent for cancer diagnosis in biomedical images: the case of breast mammograms*, Hamed Khodadadi, Ali Khaki-Sedigh, Mohammad Ataei, Mohammad Reza Jahed-Motlagh, Multidimensional Systems and Signal Processing, Volume 29, Issue 1, Pages 19-33, 2018.
118. *Asymptotic tracking control of strict-feedback non-linear systems with output constraints in the presence of input saturation*, Lida Edalati, Ali Khaki Sedigh, Mahdi Aliyari Shoorehdeli, Ali Moarefianpour, IET Control Theory & Applications, Volume 12, Issue 6, Pages 778-785, 2018.
119. *Decentralized Model Reference Adaptive Control of Large Scale Interconnected Systems with Both State and Input Delays*, SH Hashemipour, N Vasegh, A Khaki Sedigh, AUT Journal of Modeling and Simulation, Volume 50, Issue 1, Pages 3-12, 2018.
120. *Applying Multiple Model Adaptive Control to Adjustment of Satellite Antenna Position with time varying input delay*, Firouz Allahverdizadeh, Ali Khaki Sedigh, Jafar Rowshanian, Modares Mechanical Engineering, Volume 18, Issue 1, Pages 75-84, 2018.
121. *Robustness analysis and design of fractional order $I^{\alpha} D^{\beta}$ controllers using the small gain theorem*, Roohallah Azarmi, Mahsan Tavakoli-Kakhki, Alireza Fatehi, Ali Khaki Sedigh, International Journal of Control, Volume 93, Issue 3, Pages 1-13, 2018.
122. *Adaptive Tuning of Model Predictive Control Parameters Based on Analytical Results*, Tahereh Gholaminejad, Ali Khaki-Sedigh, Peyman Bagheri, AUT Journal of Modeling and Simulation, Volume 50, Issue 2, Pages 109-116, 2018.
123. *Infinite horizon linear quadratic tracking problem: A discounted cost function approach*, Soleiman Najafi Birgani, Bijan Moaveni, Ali Khaki-Sedigh Optimal Control Applications and Methods, Volume 39, Issue 4, Pages 1549-1572, 2018.

2019

124. *A Novel Method for Chaos Detection in Heavy Noisy Environments Based on Distribution of Energy*, Farbod Setoudeh, Ali Khaki Sedigh, Mohsen Najafi, International Journal of Bifurcation and Chaos, Volume 29, 2019.
125. *Performance enhancement of unfalsified adaptive control strategy using fuzzy logic*, SI Habibi, A Khaki-Sedigh, MN Manzar, International Journal of Systems Science, Volume 50, Issue 15, Pages 2752-2763, 2019.
126. *A Fault Tolerant Control Scheme Using the Feasible Constrained Control Allocation Strategy*, Mehdi Naderi, Tor Arne Johansen, Ali Khaki Sedigh, International Journal of Automation and Computing, Volume 16, Issue 5, Pages 628-643, Institute of Automation, Chinese Academy of Sciences, 2019.
127. *Guaranteed feasible control allocation using model predictive control*, Mehdi Naderi, Ali Khaki Sedigh, Tor Arne Johansen, Control Theory and Technology, Volume 17, Issue 3, Pages 252-264, 2019.
128. *H ∞ static output-feedback control design for discrete-time systems using reinforcement learning*, Amir Parviz Valadbeigi, Ali Khaki Sedigh, FL Lewis, IEEE transactions on neural networks and learning systems, 2019.
129. *On the Stability of Nonlinear Minimum Variance Control for a Second-Order Volterra Series Model*, L Mehri, MA Nekoui, A Khaki-Sedigh, CONTROL ENGINEERING AND APPLIED INFORMATICS, Volume 21, Issue 4, Pages 3-11, 2019.
130. *Control of large scale interconnected systems with input and state delays using decentralized adaptive state observers*, Seyed Hamid Hashemipour, Nastaran Vasegh, Ali Khaki Sedigh, Asian Journal of Control, Volume 22, Issue 4, Pages 1458-1470, 2019.

2020

131. *Actuator selection for over-actuated systems using the actuator effectiveness index*, M. Naderi, M. A. Khaki Sedigh, International Journal of Dynamics and Control, DOI:10.1007/s40435-020-00610-5, 2020.
132. *Control of large scale interconnected systems with input and state delays using decentralized adaptive state observers*, S. H. Hashemipour, N. Vasegh and A. Khaki Sedigh, Asian Journal of Control, Vol. 22, Issue 4, Pages 1458-1470, 2020
133. *Leading Higher Education in Iran during COVID-19 Pandemic: Reporting the Policies and Progresses*, A. Khaki Sedigh and M. R. Ahanchian, Studies in Development of Medical Education, Vol. 17, Issue Supplement, 2020
134. *Robustness analysis and design of fractional order $I_\lambda D^\mu$ controllers using the small gain theorem*, R. Azarmi, M. Tavakoli-Kakhki, A. Fatehi and A. K. Sedigh, International Journal of Control, Vol. 93, Issue 3, Pages 449-461, 2020
135. *Fast terminal sliding mode control for a nonlinear multi-agent robot system with disturbance*, M. Naserian, A. Ramazani, A. Khaki-Sedigh and A. Moarefianpour, Systems Science & Control Engineering, Vol. 8, Issue 1, Pages 328-338, 2020

2021

136. *Adaptive control of large-scale systems with long input and state delays and time-varying delays in the uncertain nonlinear interconnections*, S. Hashemipour, N. Vasegh and A. K. Sedigh, In: Control Strategy for Time-Delay Systems, Elsevier 2021
137. *Leader-follower consensus control for a nonlinear multi-agent robot system with input saturation and external disturbance*, M. Naserian, A. Ramazani, A. Khaki-Sedigh and A. Moarefianpour, Systems Science & Control Engineering, Vol. 9, Issue 1, Pages 260-271, 2021
138. *Multiple model unfalsified adaptive generalized predictive control based on the quadratic inverse optimal control concept*, B. Sadeghi Forouz, M. Nouri Manzar and A. Khaki-Sedigh, Optimal Control Applications and Methods, Vol. 42 Issue 3 Pages 769-785, 2021
139. *Predictive-based sliding mode control for mitigating torsional vibration of drill string in the presence of input delay and external disturbance*, R. Sadeghimehr, A. Nikoofard and A. Khaki Sedigh, Journal of Vibration and Control, Vol. 27 Issue 21-22 Pages 2432-2450, 2021
140. *Nonlinear analysis and minimum l_2 -norm control in memcapacitor-based hyperchaotic system via online particle swarm optimization*, F. Setoudeh and A. K. Sedigh, Chaos, Solitons & Fractals, Vol. 151, <https://doi.org/10.1016/j.chaos.2021.111214>, 2021
141. *Minimum variance control of chaos in a hyperchaotic memristor based oscillator using online particle swarm optimization*, F. Setoudeh and A. K. Sedigh, Physica Scripta, Vol. 96 Issue 3, DOI: 10.1088/1402-4896/abdaef, 2021
142. *Design of nonlinear predictive generalized minimum variance control for performance monitoring of nonlinear control systems*, M. A. Sheikhi, A. Khaki-Sedigh and A. Nikoofard, Journal of Process Control, Vol. 106, Pages 54-71, 2021
143. *Control of managed pressure drilling systems using nonlinear predictive generalized minimum variance approach based on a Volterra model*, M. A. Sheikhi, A. Nikoofard and A. Khaki-Sedigh, ISA transactions, DOI: 10.1016/j.isatra.2021.11.022, 2021
144. *Cooperative Robust Output Consensus in Continuous-Time Heterogeneous Multi-Agent Systems Using Integral Reinforcement Learning Method*, A. P. Valadbeigi, A. Khaki Sedigh, F. Lewis and A. Moarefian Poor, Journal of Control, 2021

2022

145. *Eigenvalue sensitivity-based analysis for evaluation of biological network stability versus disturbances*, M. Gholampour, A. K. Sedigh, M. G. Mahjani and A. Ghasemi, Journal of theoretical biology 2022 Vol. 533, DOI: 10.1016/j.jtbi.2021.110941, 2022
146. *Design and implementation of a fault-tolerant controller using control allocation techniques in the presence of actuators saturation for a VTOL octorotor*, Hamid Hafezi, Ali Bakhtiari and Ali Khaki-Sedigh, Robatica, <https://doi.org/10.1017/S0263574722000054>,

2022

147. *Stable deep Koopman model predictive control for solar parabolic-trough collector field*, T Gholaminejad, A Khaki-Sedigh - Renewable Energy, 2022
148. *Robust Decentralized Control System Design based on Nash Equilibrium Point using Linear Quadratic Regulators*, S Najafi Birgani, B Moaveni, A Khaki-Sedigh - Tabriz Journal of Electrical Engineering, 2022
149. *Control of managed pressure drilling systems using nonlinear predictive generalized minimum variance approach based on a Volterra model*, Mohammad Amin Sheikhi, Amirhossein Nikoofard, Ali Khaki-Sedigh, ISA Transactions, Volume 128, pp 380-390, 2022, Elsevier
150. *Online data-driven control of variable speed wind turbines using the simultaneous perturbation stochastic approximation approach*, Mojtaba Nouri Manzar, A Khaki-Sedigh, OPTIMAL CONTROL APPLICATIONS & METHODS, WILEY, 2022

2023

151. *Kalman Filter Fusion With Smoothing for a Process With Continuous-Time Integrated Sensor*, Shirin Movassagh, Alireza Fatehi, Ali Khaki Sedigh, Ala Shariati, IEEE Sensors Journal, Volume 23, Issue 7, Pages 7279-7287, IEEE
152. *An Analytical Solution to the Inverse Kinematic Problem, Dynamic Modeling, and Control of a 3 DOF Pedestal for Track Flying Targets*, Ali Akbar Sadeghi, Ahmad Reza Vali, Ali Khaki Sedigh, Aerospace Knowledge and Technology Journal, Volume 11, Issue 1, pp 7-24, Malek ashtar University of Technology, 2023
153. *Estimation and stochastic control of nonlinear dynamic systems over the AWGN channel: Application in tele-presence and tele-operation of autonomous vehicles*, Somayeh Dolatkhah Takloo, Alireza Farhadi, Ali Khaki-Sedigh, IET Control Theory & Applications, 2023
154. *Parameter and State Estimation of Managed Pressure Drilling System Using the Optimization-Based Supervisory Framework*, Amirmasoud Molaei, Amirhossein Nikoofard, Ali Khaki Sedigh, Lars Imsland, IEEE Transactions on Control Systems Technology, IEEE, 2023
155. *Adaptive multi-objective control allocation with online actuator selection for over-actuated systems*, Seyyed Reza Jafari, Ali Khaki-Sedigh, Wolfgang Birk, International Journal of Dynamics and Control, Volume 11, Issue 3, Pages 1220-1229, Springer Berlin Heidelberg, 2023
156. *Stable data-driven Koopman predictive control: Concentrated solar collector field case study*, Tahereh Gholaminejad, Ali Khaki-Sedigh, IET Control Theory & Applications, Volume 17, Issue 9, Pages 1116-1131, 2023
157. *Online data-driven control of variable speed wind turbines using the simultaneous perturbation stochastic approximation approach*, Mojtaba Nouri Manzar, A Khaki-Sedigh, Optimal Control Applications and Methods, Volume 44, Issue 4, Pages 2082-2092, John Wiley & Sons, 2023
158. *Robust H_∞ tracking of linear discrete-time systems using Q-learning*, Amir Parviz Valadbeigi, Zhan Shu, Ali Khaki Sedigh, International Journal of Robust and Nonlinear Control, Volume 33, Issue 10, Pages 5604-5623, John Wiley & Sons, Inc., 2023

2024

159. *Heave attenuation in offshore managed pressure drilling with an integral sliding mode controller*, Danial Pazoki, Amirhossein Nikoofard, Ali Khaki Sedigh, Applied Ocean Research, Vol. 145, 2024.