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دکتری	(مهندسی برق) کنترل	انگلستان Surry	1379
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سوابق تدریس

Advanced Mathematical Eng., Digital Control, Linear Control systems, Multi variable Control systems, Robust control, Modern Control, Numerical methods, Process control

موضوعات تحقیقاتی مورد علاقه

PEM and DMFC Modeling and Control, Sensory network, Fractional and Chaotic systems, Induction Machine Control, Nonlinear systems, On-line Digital Control

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مقالات

1. **A.N. Ranjbar**, S.H. Hosein Nia, H. Soltani, J. Ghasemi, A Solution of Riccati Nonlinear Differential Equation Using Enhanced Homotopy Perturbation Method (EHPM), *International Journal of Engineering*, No. 21Apr. 2008.
2. S.H. Hosein Nia, **A.N. Ranjbar**, D.D. Ganji, H. Soltani, J. Ghasemi, Maintaining the stability of nonlinear differential equations by the enhancement of HPM, *Letters A* (2008), doi:10.1016/j.physleta. 2007.12.054, *Physics Letters A*.
3. **A. Ranjbar**, S.D. Hart, B.E. Mulhall DC Machine Characterization Using Genetic Algorithm, *Journal of Simulation in Engineering*, Noushirvani Univ. Of Technology, Vol. 1, 2008.
4. A.Ebrahimzadeh and **A. Ranjbar**, "An Intelligent Digital Signal Type Recognizer", *International Journal of Tomography & Statistics*, Vol. 8, No. W08, Winter 2008;
5. A.Ebrahimzadeh, and **A. Ranjbar**, Intelligent digital signal type identification, *Journal of Engineering Applications of Artificial Intelligence (EAAI)*, 2007.
6. **A.R. Noiey**, D.D. Ganji, M. Naghipour, A. Barari, Solution of nonlinear oscillator differential equations using a variational iteration method, *Journal of Physics*, doi:10.1088/1742-6596/96/1/012084, 2008.
7. **A.Ranjbar Noiey**, N. Haghparast, M. Miansari, D.D. Ganji, Application of homotopy perturbation method to the pipe flow of a fourth grade fluid, *Journal of Physics*, doi:10.1088/1742-6596/96/1/012079, 2008.
8. **A. Ranjbar**, S.H. Hossein-Nia, Neural Network Based Evaluation of Dawson Integral: An Engineering Approach, *International Journal Nonlinear Dynamics in Engineering and science*, 1(1) (2008) 67-78.
9. S.H. Hosseinnia, **A. Ranjbar**, D.D. Ganji, H. Soltani, J. Ghasemi, Selection of Stabilizable Linear Part of HPM Using a Linearization Based Technique, *Physica Scripta*, 78 (2008) 025002 (10pp).
10. S.H. Hosseinnia, **A. Ranjbar**, D.D. Ganji, H. Soltani, J. Ghasemi, Homotopy Perturbation based Linearization of nonlinear Heat Transfer Dynamic, *Journal of Applied Mathematics and Computing*, JAMC, Numbers 1-2, Volume 29, pp. 163-176, July 2008.
11. S.H. Hosseinnia, **A. Ranjbar**, S. Momani, Using Enhanced Homotopy Perturbation Method in Fractional Differential Equation via Deforming the Linear Part, *Computers and Mathematics with Applications*, 56 (2008) 3138-3149.
12. S.H. Hossein-Nia, **A. Ranjbar**, H. Soltani, J. Ghasemi, Effect of the Initial Approximation on Stability and Convergence in Homotopy Perturbation Method, *International Journal Nonlinear Dynamics in Engineering and science*, 1(1) (2008) 79-98.
13. S.H. Hosseinnia, R. Ghaderi, **A. Ranjbar N.**, M. Mahmoudian, S. Momani, Sliding Mode Synchronization of Uncertain Fractional-Order Chaotic System, *Computers and Mathematics with Applications*, *Accepted*.
14. F. Abdous, R. Ghaderi, **A. Ranjbar**, S.H. Hosseinnia, H. Soltani, J. Ghasemi, Asymptotical Time Response of Time Varying State Space Dynamic Using Homotopy Perturbation Method, *Journal of Applied Mathematics and Computing*, DOI 10.1007/s12190-008-0198-1, 2008.
15. M. Zolfaghari, R. Ghaderi, A. Sheikholeslami, **A. Ranjbar N.**, S.H. Hosseinnia, S. Momani, H. Delavari, J. Sadati, Application of Enhanced Homotopy Perturbation Method to solve Fractional Order Bagley - Torvik Differential Equation, *Physica Scripta*, No. T136, 12 Oct. 2009.
16. E. Naseri, R. Ghaderi, **A. Ranjbar N.**, J. Sadati, M. Mahmoudian, S.H. Hosseinnia, S. Momani, Solving Linear Fractional-Order Differential Equations via Enhanced Homotopy Perturbation Method, *Physica Scripta*, No. T136, 12 Oct. 2009.
17. M. Shahiri T., **A. Ranjbar N.**, R. Ghaderi, S. H. Hosseinnia, S. Momani, Adaptive Control of Chaotic Fractional-Order Couplet System; Synchronization and control approach, *Nonlinear Science and Numerical Simulation*, Volume 15, Issue 3, pp. 665-674, March 2010.

18. H. Delavari, **A. Ranjbar N.**, Robust Intelligent Control of Coupled Tanks, Proceedings of the 9th WSEAS International Conference on AUTOMATIC CONTROL, MODELLING & SIMULATION, May 27-29, 2007, Istanbul, Turkey.
19. H. Delavari, **A. Ranjbar N.**, Genetic-based Fuzzy Sliding Mode Control of an Interconnected Twin-Tanks, The International Conference on "Computer as a Tool", Sep. 9-12 2007, Warsaw, Poland.
20. A.Ebrahimzadeh and **A. Ranjbar**, "A Method for Identification of Communication Signals", The 2007 International Conference on Image Processing, Computer Vision, & Pattern Recognition (IPC'07), WORLDCOMP'07 June 25-28, 2007 Monte Carlo Resort Las Vegas Nevada, USA.
21. A.Ebrahimzadeh, **A. Ranjbar**, An Expert System for the Recognition of the Signal Type., IASTED International Conference on Circuits, Signals and Systems (CSS 2007), July 02-04, 2007, Banff, Canada.
22. F. Abdous, **A. Ranjbar**, S.H. Hossein-Nia, Chaos Control of Voltage Fluctuations in DC Arc Furnaces Using Feedback Linearization, Second International Conference on Electrical Engineering 25-26 March 2008 University of Engineering and Technology, Lahore (Pakistan).
23. F. Abdous, **A. Ranjbar**, S.H. Hossein-Nia, The Hopf Bifurcation Control in Internet Congestion Control System, Second International Conference on Electrical Engineering 25-26 March 2008 University of Engineering and Technology, Lahore (Pakistan).
24. F. Abdous, **A. Ranjbar**, S.H. Hossein-Nia, Stabilizing the Hopf Bifurcation Using Time-delay Feedback Control in the Network Congestion, International workshop on signal processing and its applications (WOSPA2008) 18 – 20 March 2008, University of Sharjah, Sharjah.
25. S.H. Hosseinnia, R. Ghaderi, **A. Ranjbar N.**, J. Sadati, S. Momani, Designation of an adaptive PID controller to synchronize fractional –order hard spring Φ^6 -van der pol oscillator, Third IFAC workshop on Fractional differentiation and its applications, 5-7 Nov. 2008.
26. S.H. Hosseinnia, R. Ghaderi, **A. Ranjbar N.**, M. Mahmoudian, S. Momani, Synchronization of uncertain fractional order Duffing-Holmes chaotic system via sliding mode control, Third IFAC workshop on Fractional differentiation and its applications, 5-7 Nov. 2008.
27. S.H. Hosseinnia, R. Ghaderi, **A. Ranjbar N.**, J. Sadati, S. Momani, Synchronization of fractional chaotic system via fractional-order adaptive controller, Third IFAC workshop on Fractional differentiation and its applications, 5-7 Nov. 2008.
28. S.H. Hosseinnia, R. Ghaderi, **A. Ranjbar N.**, F. Abdous, S. Momani, Fractional Order Controller in Combination with state feedback controller to stabilize chaotic systems, Third IFAC workshop on Fractional differentiation and its applications, 5-7 Nov. 2008.
29. E. Naseri, R. Ghaderi, **A. Ranjbar N.**, S.H. Hosseinnia, M. Mahmoudian, S. Momani, Bifurcation Analysis and Sliding Mode Control of Ziegler's Pendulum, International workshop on New Trends in science and Technology, Ankara, Turkey, 3-4 Nov. 2008.
30. S.J. Sadati, **A. Ranjbar N.**, S.H. Hosseinnia, R. Ghaderi, S. Momani, Bifurcation Analysis, Parameter Identification and Synchronization of Fractional-Order Newton-Leipnik System using Adaptive Control, International workshop on New Trends in science and Technology, Ankara, Turkey, 3-4 Nov. 2008.
31. F. Abdous, **A. Ranjbar N.**, S.H. Hosseinnia, Chaos Control of Voltage Fluctuation in DC Arc Furnaces Using Feedback Linearization, International workshop on New Trends in science and Technology, Ankara, Turkey, 3-4 Nov. 2008.
32. M. Shahiri T., **A. Ranjbar N.**, R. Ghaderi, S. H. Hosseinnia, S. Momani, Control and synchronization of chaotic fractional-order coulet system via active control, Third IFAC workshop on Fractional differentiation and its applications, 5-7 Nov. 2008.
33. M. Zolfaghari, R. Ghaderi, **A. Ranjbar N.**, S.H. Hosseinnia, S. Momani, Solution of fractional order Bagley-Torvik differential equation using enhanced homotopy perturbation method, Third IFAC workshop on Fractional differentiation and its applications, 5-7 Nov. 2008.
34. E. Naseri, R. Ghaderi, **A. Ranjbar N.**, M. Mahmoudian, S.H. Hosseinnia, S. Momani, Application of enhanced homotopy perturbation method for solving linear fractional differential equations, Third IFAC workshop on Fractional differentiation and its applications, 5-7 Nov. 2008.
35. M. Shahiri, T., **A. Ranjbar N.**, S.H. Hosseinnia, R. Ghaderi, S. Momani, Projective Synchronization of Oscillation and Chaos in Fractional-Order Anti-Controlled Rigid Body System, International workshop on New Trends in science and Technology, Ankara, Turkey, 3-4 Nov. 2008.
36. J. Ghasemi, **A. Ranjbar N.**, M. R. Karami mollaei, S.H. Hosseinnia, H. EsHaghtabar, Synchronization of Genesis-Tesi and Coulet Systems Using a Sliding Mode Control, International workshop on New Trends in science and Technology, Ankara, Turkey, 3-4 Nov. 2008.

37. F. Abdous, **A. Ranjbar N.**, R. Ghaderi, S.H. Hosseinnia, Takagi-Sugeno Fuzzy Control of Hopf Bifurcation in the Internet Congestion Control System, International workshop on New Trends in science and Technology, Ankara, Turkey, 3-4 Nov. 2008.
38. F. Abdous, **A. Ranjbar N.**, S.H. Hosein Nia, A. Sheikhol Eslami, B. Abdous, Chaos Control of Voltage Fluctuations in DC Arc Furnaces Using Time-Delay Feedback Control, 2nd International Conference on Electrical Engineering, ICEE2008, Lahore, Pakistan, 25-26 Mar. 2008.
39. F. Abdous, **A. Ranjbar N.**, S.H. Hosein Nia, A. Sheikhol Eslami, The Hopf Bifurcation Control in Internet Congestion Control System, 2nd. International Conference on Electrical Engineering, ICEE2008, Lahore, Pakistan, 25-26 Mar. 2008.
40. E Naseri, R Ghaderi, **A N Ranjbar**, J Sadati, M Mahmoudian, S H Hosseinnia and S Momani, Solving Linear Fractional-Order Differential Equations via Enhanced Homotopy Perturbation Method, Phys. Scr. T134 (2009), IOP PUBLISHING, doi:10.1088/0031-8949/2009/T134/000000, March 2009.
41. M. Shahiri, R. Ghaderi, **A.N. Ranjbar**, S.H. Hosseinnia, S. Momani, Chaotic fractional-order Coulet system: Synchronization and control approach, Communications in Nonlinear Science and Numerical Simulation, Volume 15, Issue 3, pp. 665-674, March 2010.
42. F. Abdous, R. Ghaderi, **A. Ranjbar**, S.H. Hosseinnia, H. Soltani, J. Ghasemi, Asymptotical time response of time varying state space dynamic using homotopy perturbation method, J Appl Math Comput, DOI 10.1007/s12190-008-0198-1.
43. **A. Ranjbar**, S. H. HoseinNia, Neural Network Based Evaluation of Dawson Integral: An Engineering Approach, International Journal of Nonlinear Dynamics in Engineering and Science, 1:1, 2009.
44. M Zolfaghari, R Ghaderi, A SheikholEslami, **A Ranjbar**, S H Hosseinnia, S Momani and J Sadati, Application of the enhanced homotopy perturbation method to solve the fractional-order Bagley–Torvik differential equation, Phys. Scr. T134 (2009), doi:10.1088/0031-8949/2009/T134/000000, IOP PUBLISHING, March 2009.
45. M. Shahiri, R. Ghaderi, **A. Ranjbar**, S.H. HoseinNia, S. Momani, Chaotic fractional-order Coulet system: synchronization and control approach, Communications in Nonlinear Science and Numerical Simulation, No. 15, (٦٧٤-٦٦٥), 2010.
46. S.H. Hosseinnia a, R. Ghaderi, **A. Ranjbar N.**, M. Mahmoudiana, S. Momanic, Sliding mode synchronization of an uncertain fractional order chaotic system, Computers and Mathematics with Applications, No. 59, (1643-1637), 2010.
47. H. Delavari, **A. N. Ranjbar**, R. Ghaderi, S. Momani, Fractional order control of a coupled tank, Nonlinear Dyn. DOI 10.1007/s11071.
48. H. Delavari, **A. N. Ranjbar**, R. Ghaderi, S. Momani, Fuzzy fractional order sliding mode controller for nonlinear systems, Commun Nonlinear Sci Numer Simulat., pages 963-978, 2010.
49. J. Ghasemi, **A. Ranjbar N.**, A. Afzalain, Synchronization in the Genesio-Tesi and Coulet Systems Using the Sliding Mode Control, International Journal of Engineering (IJE), Volume(4): Issue(1), 2010.
50. M. Shahiri, **A. Ranjbar N.**R. Ghaderi, M. Karami, S.H. Hosseinnia, S. Momani, AN OPTIMIZED PROJECTIVE SYNCHRONIZATION BASED ON ASMC FOR CHAOTIC FRACTIONAL-ORDER COULLET SYSTEM, Journal of Nonlinear Systems and Applications, Watam Press, p.p. 151-154, 2009.
51. M. Shahiri, **A. Ranjbar**, R. Ghaderi, S.H. Hoseinnia, S. Momani, Synchronization of chaotic fractional-order Coulet system via ASMC, ICCSA 2009.
52. Rakhtala, S.M.; Ghaderi, R.; **Ranjbar, A.**; Fadaeian, T.; Nabavi niaki, Ali; Current stabilization in fuel cell/battery hybrid system using fuzzy-based controller, Electrical Power & Energy Conference (EPEC), 2009 IEEE, Page(s): 1 – 6, 2009.

- [Chapter in Book](#)

53. S.H. Hosseinnia, R. Ghaderi, **A. Ranjbar N.**, F. Abdous, S. Momani, Control of Chaos via Fractional-Order State Feedback Controller, Chapter in Book *New Trends in Nanotechnology and Fractional Calculus Applications*, Springer, In Press.
54. S.H. Hosseinnia, R. Ghaderi, **A. Ranjbar N.**, J. Sadati, S. Momani, Fractional-Order Adaptive Synchronization of Chaos, *New Trends in Nanotechnology and Fractional Calculus Applications*, Springer, In Press.
55. M. Mahmoudian, R. Ghaderi, **A. Ranjbar N.**, J. Sadati, S.H. Hosseinnia and S. Momani;, Synchronization of fractional-order chaotic system via adaptive PID controller, chapter in book: Baleanu, Dumitru;

Guvenc, Ziya B.; Machado, J.A. Tenreiro (Eds.), *New Trends in Nanotechnology and Fractional Calculus Applications*, Springer, 1st Edition., XI, 531 p., Hardcover, ISBN: 978-90-481-3292-8, DOI 10.1007/978-90-481-3293-5 46, 2010.

1. Φ^6 - Van Der Pol Oscillator, *New Trends in Nanotechnology and Fractional Calculus Applications*, Springer, In Press.
57. H. Delavari, R. Ghaderi, **A. N. Ranjbar** and S. Momani, Synchronization of chaotic nonlinear Gyros using fractional order controller, chapter in book: Baleanu, Dumitru; Guvenc, Ziya B.; Machado, J.A. Tenreiro (Eds.), *New Trends in Nanotechnology and Fractional Calculus Applications*, Springer, 1st Edition., XI, 531 p., Hardcover, ISBN: 978-90-481-3292-8, DOI 10.1007/978-90-481-3293-5 46, 2010.
58. S.H. Hosseinnia, R. Ghaderi, **A. N. Ranjbar**, J. Sadati and S. Momani, Synchronization of Gyro systems via fractional-order adaptive controller, chapter in book: Baleanu, Dumitru; Guvenc, Ziya B.; Machado, J.A. Tenreiro (Eds.), *New Trends in Nanotechnology and Fractional Calculus Applications*, Springer, 1st Edition., XI, 531 p., Hardcover, ISBN: 978-90-481-3292-8, DOI 10.1007/978-90-481-3293-5 46, 2010.
59. S.H. Hosseinnia, R. Ghaderi, **A. N. Ranjbar**, F. Abdous and S. Momani, Control of chaos via fractional-order state feedback controller, chapter in book: Baleanu, Dumitru; Guvenc, Ziya B.; Machado, J.A. Tenreiro (Eds.), *New Trends in Nanotechnology and Fractional Calculus Applications*, Springer, 1st Edition., XI, 531 p., Hardcover, ISBN: 978-90-481-3292-8, DOI 10.1007/978-90-481-3293-5 46, 2010.