CURRICULUM VITAE

Mohammad Loghavi, Ph.D.
Professor Emeritus, Dept. of Biosystems Engineering (Formerly known as: Mechanics of Agricultural Machinery)
College of Agriculture
Shiraz University
Shiraz, Iran

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ACADEMIC CREDENTIALS

Professor Emeritus, Dept. of Biosystems Engineering. Shiraz University
2011-present

Professor, Dept. of Mechanics of Agricultural Machinery. Shiraz University
2008-2011

Assistant Dean for Graduate Study, College of Agriculture, Shiraz University
2006-2010

Associate Professor, Dept. of Mechanics of Agricultural Machinery. Shiraz University
1998-2008

Visiting Associate Professor, Dept. of Food, Agricultural and Biological Engineering, The Ohio State University
Feb.-Sep. 2003

Assistant Professor and Chairman, Dept. of Mechanics of Agricultural Machinery. Shiraz University
1983-1998

Assistant Professor, Dept. of Mechanics of Agricultural Machinery. Shiraz University
1979-1983

Ph.D., Agricultural Engineering (Power and Machinery), University of California, Davis, USA
1975-79

M.Sc., Agricultural Engineering (Power and Machinery), Michigan State University, USA
1973-75

B.Sc., Agricultural Engineering (Power and Machinery), Shiraz University, Shiraz, Iran
1967-71

Professional Affiliations

Member, American Society of Agricultural & Biological Engineers, 1980-present

Member, Board of directors, Iranian Society of Agricultural Machinery and Mechanization Engineering

Professional Appointments

- Member, Education Committee, College of Agriculture, Shiraz, Univ. (1984-1990)
- Member, Research Committee, College of Agriculture, Shiraz, Univ. (1990-1993)
- Member, Publications Committee, College of Agriculture, Shiraz Univ. (1996-1998) and (2001-2002)
- Member, Graduate Study Committee, College of Agriculture, Shiraz Univ. (1991-2002)
- Member, Educational Planning Committee, Machinery Division, Ministry of Higher Education (1986-1988)
- Member, Research Committee, Machinery Division, Ministry of Higher Education (1988-1991)
- Member, Scientific Research Council, Ag. Machinery Division, National Scientific Research Supreme Council (1996-1998)
- Member, Technical Committee, Eng. Research Institute, Ag. Research Organization, Ministry of Agriculture (1992-2002)
- Member, Publications Council, Ag. Research Organization, Ministry of Agriculture (1994-2002)
- Member, Editorial Board, Journal of Science and Technology of Agricultural and Natural Resources (2005-2009).
- Member, Editorial Board, Agricultural Machinery Journal (2010-present).

List of Honors and Awards

- First-rank among Agricultural Engineering (Power and Machinery) graduates at B.Sc. level**,** 1971
- Scholarship award from the Iranian Ministry of Sciences and Higher Education for graduate study at the Michigan State University (M.Sc. degree) and University of California, Davis (Ph. D. degree)
- Member of the Honor Society of *Phi Kappa Phi*, 1975
- Prize and certificate for distinguished article from Iranian National Council of Scientific Research, 1995
- Prize and certificate of Outstanding Academic Faculty member of the Dept. of Mechanics of Agricultural Machinery, 1999

- Prize and certificate of Outstanding Researcher of the Dept. of Mechanics of Agricultural Machinery, 2003
- Prize and certificate of Distinguished Inventor of the Dept. of Mechanics of Agricultural Machinery, 2007
- Prize and certificate of Outstanding Researcher of the Dept. of Mechanics of Agricultural Machinery, 2008

TEACHING EXPERIENCE

1. Undergraduate Courses**:**
   Statics, Dynamics, Solid Mechanics, Mechanics of Tractors and Ag. Machinery, Fluid Power, Design of Machine Elements1 & 2.

2. Postgraduate Courses:
   Machine Dynamics, Adv. Solid Mechanics, Soil-Machine Relation,
   Design of Ag. Machinery, Advanced Precision Agriculture, Research Methodology.

RESEARCH EXPERIENCE

A. Major Research Projects:

1981-1982 Shiraz University. Sponsor: Research Council, Role: Principal Investigator
Title: Design and development of a date palm pollinator.

1984-1986 Shiraz University. Sponsor: Research Council, Role: Principal Investigator
Title: Comparison between mechanical and hand pollination of Shahani dates.

1987-1989 Shiraz University. Sponsor: Research Council, Role: Joint Principal Investigator
Title: Tractive performance of two common tractors in Iran

1991-1993 Ag. Eng. Res. Inst., Sponsor: Ag. Res. Organization, Role: Joint Principal Investigator, Title: Tractive performance of 2WD tractors in Zarghan district.

1993-1996 Shiraz University. Sponsor: Research Council, Role: Principal Investigator
Title: Evaluation of draft requirement of tillage implement at different levels of soil M.C. and tillage depths.

1995-1996 Dry land Farming Research Inst., Sponsor: Ag. Res. Organization
Role: Consulting Research Associate.
Title: Evaluation of drawbar power requirement of moldboard plows in dry land farming.

1996-1997 Ag. Eng. Res. Inst., Sponsor: Ag. Res. Organization, Role: Consulting Research Associate, Title: Effects of tillage depth and soil M.C. on pulverization of soil and reduction of secondary tillage operations

1998-1999 Eshtad Motors Co., Sponsor: Eshtadiran Co. Role: Principal Investigator
Title: Longitudinal and transverse stability of a prototype mini-tractor

1998-2001 Shiraz University. Sponsor: National Research Council, Role: Principal Investigator
Title: Investigating the feasibility of shake harvesting of orchard fruits and nuts

1998-2001 Shiraz University. Sponsor: National Research Council, Role: Principal Investigator
Title: Computerized sensing and monitoring of mechanical properties of agricultural soils

B. Higher Degree by Research Supervision

PhD Supervision

1998- 2000	Khadem, M.R.	Sensing and Computerized Monitoring of Soil Hard Pans during Soil Cutting by Subsoilers.
2011- 2014	Maharloee, M. M.	The Feasibility Study of Using Real-time Measuring Techniques of Forces Applied on Alfalfa During Baling Operation for Generation of Nutritional Quality Variation Map.
2015- 2017	Shafaee, S. M.	Development of a Fuzzy Draft Control System Based on Changing Tractor Performance Parameters
2016-2018	Faal S.	Design, Development and Evaluation of an Electronic Nose for Honey Authentication Based on Artificial Intelligence

MSc. by Research Supervision

1994-95	Moradi, A.	Evaluation of draft requirement of moldboard plow at different levels of soil moisture content and plowing depth.
1994-95	Nassiri, M.	Design, development and evaluation of a new air reel for combine harvesting.
1994-95	Shaaker, M.	Field tractive performance of tractors in Zarghan area
1994-96	Ashrafizadeh, S.R.	Evaluation of draft requirement of chisel plows at different levels of soil moisture content and plowing depth.
1995-96	Behnam, S.	Evaluation of draft requirement of disk plows at different levels of soil moisture content and plowing depth.
1995-96	Bakhtiyari, M. R.	Selection of the most suitable combination of common tractors and moldboard plows.
1996-97	Taki, O.	Evaluation and comparison of two seed distribution patterns in irrigated wheat farming using seeder-rotivator.
1996-97	Gazor, H.R.	Influence of shallow tines on draft requirement of subsoiler and soil physical conditions.
1996-97	Reshadsedghi, A.	Evaluation of draft requirement and soil pulverization of offset disk harrow.
1997-98	Khosravani, A.	Study of performance parameters of tandem disk harrow.
1997-98	Golpira, H.	Design, development and evaluation of a tree shaker for investigating the effects of shaking amplitude and frequency on fruit detachment

1998-99	Sadeghi, A.	Evaluation and comparison of tractive performance of two medium power tractors in Iran.
1998-99	Hoseinpoor, A.	Investigating the attachment of a V-wheel packer to moldboard plow.
1999-2000	Abounajmi, M.	Design and development of an experimental shaker for investigating the effects of shaking mode, frequency and amplitude on date fruit detachment.
2000-2001	Mohseni, S.	Investigating the effects of shaking frequency and amplitude on lime fruit detachment.
2000-2002	Rahimi, H.	Investigating the effects of shaking frequency and amplitude on pistachio nut detachment.
2001-2002	Maleki, A.	The effects of engine speed, gear ratio and axle load on tractive performance and fuel consumption of MF 28 tractor.
2001-2002	Jafari, R.	The effects of narrow tillage tool rake angle on draft force and soil disturbance efficiency.
2003-2004	Azizi, H.	The effect of narrow tillage tool aspect ratio (d/w) on draft force and soil disturbance efficiency.
2003-2004	Soltani, A. R.	The investigation of tractive efficiencies of two high performance tractors for axle load and drawbar pull.
2004-2006	Bahri, B.	Development and evaluation of a single wheel tester.
2004-2006	Almaee M.	Design and development of a laboratory test stand for grain combine yield monitor.
2005-2006	Hoseini S. M.	Design, development and evaluation of a pot transplanter.
2005-2006	Behzadi, B.	Development of a new approach for weed control on the basis of site-specific management.
2007-2008	Ghaisari, M. H.	Evaluation of wheel traction models by single wheel tester.
2007-2008	Nazemsadat, A.	Design, development and evaluation of a mass flow sensor for laboratory test stand of grain combine yield monitors.
2008-2009	Froozanmehr, E.	Design, Development and Evaluation of a VRT Granular Fertilizer Applicator.
2008-2009	Nikian, A.	Development and Evaluation of an appropriate Algorithm for Recognition of Crop Row Using Machine Vision.
2008-2009	Maharloee M. M.	Design and Fabrication of a Displacement Plate Sensor for Silage Corn Yield Monitoring.
2008-2009	Shirzadifar, A.	Design, Fabrication and Evaluation of a Herbicide VRA System using Machine Vision Technology.
2009-2010	Souri, S.	Sorting of Estahban dried figs on the basis of moisture content with regards to its physical and mechanical properties.
2009-2010	Khorsandi, F.	Investigating the feasibility of vibratory harvesting of Estahban dried figs.
2010-2011	Lesani, M.	Design, Development and performance comparison of an impact-plate sensor and a pivoted-plate sensor for measurement of grain mass flow in Combine
2010-2011	Kebriaee Zadeh	Design, development and evaluation of a variable rate fertilizer application system based on crop canopy using machine vision

technology

2011-2012 Loni, R. Design, development and evaluation of a variable rate flame weeder for intra-row weed eradication.

2011-2012 Jalili M. Design and Development of a Differential Lock Control System and Evaluation of its Effects on Wheel Slippage and Fuel Consumption of a MF-399 Tractor.

2011-2012 Hemmat, Y. Effect of Iranian Bitter Almond Biodiesel and Diesel Fuel Blends on the Performance and Exhaust Emissions of a Diesel Engine.

2012-2013 Hooshmand, H .Manufacturing and Evaluation of a System for Assessing Energy Requirement of a Rectangular Forage Baler.

2012- 2013 Dehghan, H. Design, Fabrication and Evaluation of a Real Time Grain Moisture Sensor for Yield Monitoring Test Stand.

2012-2014 Asaei, H. Design, Development and Evaluation of a Canopy Based Orchard Sprayer using Machine Vision Technology.

2012- 2014 Jelve, B. Design, Fabrication and Evaluation of an Infrared-Assisted Vibratory Bed Grain Dryer. A Case Study: Paddy Drying.

2012-2014 Delavarpour, N. Development and evaluation of a capacitive type moisture content sensor for baled forage

2013-2015 Moazeni, M. H. Effect of Frequency and Duration of Shaking on Mechanized Harvesting of Three Orange and Two Tangerine Cultivars

2013-2015 Bahmanpour, N. The effect of wing angle and depth of blade on performance of winged chisel plow and feasibility of estimating the draft force by fuzzy logic

2013-2015 Rezaee, A. Design, Development and Evaluation of a Portable Pneumatic Branch Shaker for Olive Harvesting

2014-2016 Basisri, J. Design, Fabrication and Evaluation of Circular Sprinklers Convertor for Spray Pattern Conversion

2014-2016 Beigani, A. Mechanized Harvesting of Sour Orange Blooms by a Portable Pneumatic Branch Shaker and Determination of Shaking Frequency and Duration Model Using Artificial Neural Network

2014-1017 Zahedi, S. E. The Effect of a Nano-Lubricant on a Tractor Diesel Engine Performance and Sound Level of Tractor U-650

2015-2017 Akbarzadeh, S. Simulation of Green Peas Drying Process in a Hot Air- Infrared Dryer Using Finite Element Method

2015-2017 Abdolrahimi, H. Design, Fabrication and Evaluation of a Hay Baler Energy Consumption Meter During Baler Compression According to Real-time Crop Conditions

PUBLICATIONS:

Refereed Journals:

1. **Loghavi, M.** and R. Wilkinson. 1997. The eight-cyl. Engine, a respite for four? Agricultural Engineering, 58(6)

2. **Loghavi, M.** and H.E. Studer. 1981. Elastic modulus, damping and specific mass of grapevine wood. Trans. of the ASAE, 24(5) – (ISI)

3. **Loghavi, M.** 1992. Development and testing of a mechanical date pollinator. Agricultural Mechanization in Asia, Africa and Latin America, 24(4)

4. **Loghavi, M.** 1993. A comparison between mechanical and hand pollination of Shahani dates. Iran Agr. Research, 12(1) – (ISC)

5. Masumi, A. and **M. Loghavi**. 1994. Evaluation and comparison of traction performance of two common tractors in Iran. Iran Agr. Research, 13(2) – (ISC)

6. **Loghavi, M.** and A. Moradi. 1996. Draft and drawbar power requirement of moldboard plow in a clay loam soil. Iran Agr. Research, 15(2) – (ISC)

7. **Loghavi, M**. and S.R. Ashrafizadeh. 1998. Draft, specific draft and drawbar power requirement of chisel plow at different levels of soil moisture content and plowing depth. J. of Agr. Sci. and Nat. Resources, 1(2) – (ISC)

8. **Loghavi, M.** and S. Behnam. 1999. Effects of soil moisture content and plowing depth on performance of disk plow in a clay loam soil. J. of Agr. Sci. and Nat. Resources, 2(4) – (ISC)

9. **Loghavi. M**. and M. Shaaker. 1999. Field tractive performance of three popular two-wheel drive tractors in Iran. Iran Agricultural Research, 18(1) – (ISC)

10. Solhjoo, A. A. and **M. Loghavi**. 2000. Determination of appropriate soil moisture content for measurement of soil cone index. Iranian J. of Agr. Eng. Research, 5 (17) – (ISC)

11. Nassiri, M., **M. Loghavi** and J. Jafarifar . 2001. Design, development and evaluation of a new air reel for combine harvesting. J. Sci. & Tech. Agric. & Nat. Resource., 5(2) – (ISC)

12. Khosravani, A., **M. Loghavi** and A.A. Solhjoo . 2000. Comparison of performance of three common tractors in Iran. Agricultural Research, 2(2) – (ISC)

13**. Loghavi, M**. and M. Abounajmi .2001. Effects of shaking mode, frequency and amplitude on date fruit detachment. Part I: Design and development of an experimental shaker. Iran Agricultural Res. 20(2) – (ISC)

14**. Loghavi, M**. and M. Abounajmi. 2001. Effects of shaking mode, frequency and amplitude on date fruit detachment. Part II: Field experiment. Iran Agricultural Res. 21(1) – (ISC)

15. Solhjoo, A. A. and **M. Loghavi**, H. Ahmadi and M. Roozbeh. 2001. The Effect of moisture content and plowing depth on soil pulverization and reduction of secondary tillage. Iranian J. Agr. Eng. Res. 2(6) – (ISC)

16. Khadem, M. R**., M. Loghavi**, Sh. G. Haghighi and A. M. Borghaie. 2001. A software of soil compaction map with application in precision farming. J. Agr. Sci. Islamic Azad Univ. 7(2):91- 105.

17. Khosravani, A., I. Rangbar, and **M. Loghavi**. 2001. Study of yield parameters of tandem disk. Agricultural Science, 2(11)

18. **Loghavi, M**. and A. Mollasadeghi. 2002. Evaluation and comparison of tractive efficiencies of MF285 and U650 tractors during moldboard plowing. J. Sci. & Tech. Agric. & Nat. Resource, 6(2) – (ISC)

19. Shaker, M and **M. Loghavi**. 2002. Field tractive performance of common tractors in Iran. Iranian Journal of Ag. Eng. Research, 2(9) – (ISC)

20. Solhjou, A. A., **M. Loghavi** and A. Joukar. 2004. Effect of soil moisture content, forward speed and rotary speed of rototiller on soil pulverization. Journal of Research in Agricultural Science, 3(1).

21. **Loghavi, M**. and A. Hoseinpour. 2004. Attachment of a v-wheel packer to moldboard plow for combining primary and secondary tillage operations. Iranian J. Agric. Sci. Vol. 35(4) – (ISC)

22. Rouzbeh, M., S. E. Dehghanian and **M. Loghavi.** 2005. The effects of subsoiling and irrigation frequency with constant crop water requirement on cotton yield in Darab. Agricultural Science, Vol. 15(2).

23. **Loghavi, M**., and Sh. Mohseni. 2005. The effects of shaking frequency and amplitude on the detachment of lime fruit. Iran Agricultural Research. Vol. 24, No.2. – (ISC)

24. Rebati, J. and **M. Loghavi**. 2005. Investigation and evaluation of rolling resistance prediction models for pneumatic tires of agricultural vehicles. Iran Agricultural Research. Vol. 25, No.1. – (ISC)

25. **Loghavi, M.** and M. R. Khadem. 2006. Development of a soil bin compaction profile sensor. J. Agric. Sci. Technol. Vol. 8: 1-13. – (ISI)

26. **Loghavi, M.** and H. Rahimi. 2007. Effects of shaking amplitude and frequency on two varieties of pistachio nut and cluster detachment. Journal of Science and Tech. of Agr. and Nat. Resource. Vol. 11, No. 2. – (ISC)

27. Soltani Ghalehjoghi and **M. Loghavi**. 2007. The effects of axle load and draft force on tractive efficiency and fuel consumption of two high performance tractors during plowing with a semi-mounted 4-bottom moldboard plow. Journal of Science and Tech. of Agr. and Nat. Resource. Vol. 11, No. 2. (ISC)

28. Roozbeh, M. and **M. Loghavi**. 2007. Comparison of different methods of seedbed preparation under dry soil condition on crop yield in rotation with wheat. Journal of Agricultural Engineering Research. Vol.7, No.29. – (ISC)

29. Gazor, H. R. and **M. Loghavi**. 2007. Influence of shallow tines on draft requirement of subsoiler and soil physical conditions. Pajouhesh & Sazandegi, No. 73.

30. Soltani Ghalehjoghi and **M. Loghavi**. 2007. The effects of axle load and 4WD mode on field capacity and fuel consumption of Massey Ferguson 399 tractors during moldboard plowing. Iranian J. Agric. Sci., Vol. 38, No.4:641-649. – (ISC)

31. Jafari, R. and **M. Loghavi.** 2007. A laboratory investigation of the effect of narrow tillage tool rake angle on soil disturbance efficiency. Journal of Research in Agricultural Sciences.Vol.6, No.1: 35-43.

32. Bakhtiari, M. R., **M. Loghavi** and A. Jahedi. 2008. Evaluation of a combination cultivator in mechanized cropping. Journal of Science and Tech. of Agr. and Nat. Resource. Vol.12, No.45. – (ISC)

33. **Loghavi, M**., M.R. Ehsani and R. Reeder. 2008. Development of a portable grain mass flow sensor test rig. Computers and Electronics in Agriculture, 61(2):161-168. – (ISI)

34. **Loghavi, M**. and B. Behzadi. 2008. Development of a target oriented weed control system. Computers and Electronics in Agriculture, 63(1):112-118. – (ISI)

35. **Loghavi, M.** and B. Bahri. 2008. Design, development and evaluation of a single wheel tester. Iranian J. Agr. Eng. Res. 9(2):1-22. – (ISC)

36 **Loghavi, M**. and H. Azizi Aliabadi. 2008. The effect of aspect ratio (d/w) of narrow tillage tools on draft, soil disturbed area and soil loosening efficiency. Journal of Water and Soil, Vol.22, No. 2:36-47.

37. Bakhtiari, M. R., **M. Loghavi**. 2009. Development and evaluation of innovative garlic clove precision planter. Journal of Agricultural Science and Technology, Vol. 11:125-136. – (ISI)

38. **Loghavi, M.** and S. M. Hosseini. 2009. Design, development and evaluation of a paper-pot transplanter. *Iranian Biosystems Engineering*, 40(1):1-8.- (ISC)

39. Reshadsedghi, A. and **M. Loghavi**. 2009. The effect of soil Moisture content in primary tillage and travel speed on performance of disk harrow as a secondary tillage tool. *Iranian Biosystems Engineering,* 40(2):131-138. – (ISC)

40. **Loghavi M.** and M. Almaee. 2009. Development of a Laboratory Test Stand for Grain Combine Yield Monitoring. *Agricultural Engineering International: The CIGR EJournal*, Manuscript No. 1170. (ISI)

41. Souri, S., D. Zare and **M. Loghavi**. 2011. Design, fabrication and evaluation of a moisture-based fig sorter, Electronic Journal of Polish Agricultural Universities, 14(4), #13.

42. Forouzanmehr, E. and **M. Loghavi**. 2012. Design, development and field evaluation of a granular fertilizer application control system, Agric Eng Int: CIGR Journal, 14(4): 255-261.

43. Khorsandi, F., **M. Loghavi** and S. Kamgar. 2012. The effects of shaking frequency and amplitude on the detachment of Estahban dried fig. Iran Agricultural Research, 31(1): 49-62. – (ISC)

44. Maharlouie, M. M., **M. Loghavi**, S. Kamgar and V. Asadi. 2012. Design, development and evaluation of a strain gauge type brushless torque meter for silage corn yield monitoring. Journal of Applied Biological Sciences, 6(1): 71-75.

45. Maharlouie, M. M., **M. Loghavi**, S. Kamgar. 2012. Feasibility study of a pivoted-plate sensor for silage corn yield monitoring. International Journal of Agriculture Sciences, 4(2): 190-195.

46. Shamsi, M., M. Mohamadi and **M. Loghavi**. 2012. Design and development of a mechatronic intelligent pistachio splitter. Computers and Electronics in Agriculture, 85:8-12. – (ISI)

47. Nazemsadat, S. M. R. and **M. Loghavi**. 2013. Design, development and evaluation of a mass flow sensor for grain combine, Journal of Agricultural Machinery, 3(2):71-84 – (ISC)

48. Maharlouie, M. M., S. Kamgar and **M. Loghavi. 2013.** Field evaluation and comparison of two silage corn mass flow rate sensors developed for yield monitoring. International Journal of Agriculture Research and Review, 3(4): 370-376.

49. Alipour, M. and **M. Loghavi**. 2013. Development and evaluation of a comprehensive greenhouse climate control system using artificial neural network. Universal Journal of Control and Automation, 1(1): 10-14.

50. Shirzadifar, A. M., **M. Loghavi** and M. H. Raoufat. 2013. Development and Evaluation of a Real Time Site-Specific Inter-Row Weed Management System. Iran Agricultural Research, 32(2): 39-54. – (ISC)

51. Hemmat, Y., B. Ghobadian, **M. Loghavi**, S. Kamgar and E. Fayyazi. 2013. Biodiesel Fuel Production from Residual Animal Fat as an Inedible and Inexpensive Feedstock. International Research Journal of Applied and Basic Sciences. 5(1): 84-91.

52. Rostami.M. A., M. H. Raoufat, A. Jafari, **M. Loghavi**, M. Kasraei, and M. J. Nazemsadat.2014. Monitoring of conservation tillage and tillage intensity by ground and satellite imagery. Journal of Agricultural Machinery, 4(2): 255-265. (In Farsi). – (ISC)

53. Delavarpour, N., **M. Loghavi** and M. Barati. 2014. Evaluation of Forage Moisture Content Measurement using Capacitance Sensor. Journal of Middle East Applied Science and Technology, 15(3): 437-440.

54. Loni, R. and **M. Loghavi**. 2014. Comparison of Yield and Yield components of Maize in Uniform and Targeted-discrete Flame Weeding Methods. International Journal of Agriculture and Crop Sciences, 7(6): 334-340.

55. Maharlouie, M. M., **M. Loghavi**. M. H. Raoufat and M. Nasiri.2014. Feasibility Study of Estimating Nutritional Quality Properties of Alfalfa Crop using on-the-go Measurement of Shear Energy during Baling Operation. World Research Journal of Agricultural & Biosystems Engineering, 3(1): 39-43.

56. Loni, R. and **M. Loghavi**. 2014. Fabrication and Evaluation of a Gas Burning Flame Weeder with Capability of Targeted- Discrete Flaming in Locating and Eradication of Weeds. Journal of Agricultural Machinery, 4(1):88-97. - (ISC)

57. Maharlouie, M. M., **M. Loghavi** and M. Nasiri. 2014. Developing an in-field Yield Monitoring System and predicting Some Nutritional Quality Properties of Alfalfa using Shear and Compressive Energy. Journal of Agricultural Machinery, 4(2):184-193. - (ISC)

58. Rezaei, A., **Loghavi, M**., Kamgar, S. and Zare, D. 2015. Design, fabrication and evaluation of a hand-held pneumatic branch shaker equipped with a programmable logical controller. Iranian Journal of Biosystems Engineering, 46(1):19-29- (ISC)

59. Houshmad, H. and **M. Loghavi**. 2015. Development of yield map using baling energy metering system of a forage rectangular baler. Journal of Agricultural Machinery, 5(1): 199-205- (ISC)

60. Rezaei, A., **M. Loghavi** and S. Kamgar. 2016. Mechanical harvesting of wild almond (*Amygdales Scoparia*) by a pneumatic branch shaker. International Journal of Advances in Agricultural Science and Technology, 3(2):1-15.

61. Asaee, H., A. Jafari, and **M. Loghavi**. 2016. Development and Evaluation of a Targeted Orchard Sprayer by using Image Processing. Journal of Agricultural Machinery, 6(2): 362-375.

62. Rezaei, A., **M. Loghavi**, Kamgar, S. and Mahdipour, Y. 2016. Determination of most suitable shaking frequency and duration of olive pneumatic branch shaker. Journal of Agricultural Machinery, 6(2): 417-428.

63. Kamgar, S., **M. Loghavi**, A. Rezaei, and M. Jalili. 2016. Development and Evaluation of Differential Lock Automatic Control System for MF-399 Tractor. Iran Biosystems Engineering, 47(3): 451-459.

64. Nassiri, S. M., S. Samsami and **M. Loghavi**. 2017. Development and evaluation of a vibratory-pneumatic pomegranate arils extractor. Journal of Agricultural Machinery, 7(1): 1-12.

65. Maharlooei, M., **M. Loghavi**, S. G. Bajwa and M. Berti. 2018. Laboratory study of standardized shear energy of alfalfa stem to estimate some nutritional quality indices. Journal of Agricultural Machinery, 8(1):1-13.

66. Shafaei, S. M., **M. Loghavi**, S. Kamgar and M.H. Raoufat. 2018. Potential assessment of neuro-fuzzy strategy in prognostication of draft parameters of primary tillage implement. Annals of Agrarian Science, 16: 257–266.

67. Shafaei, S. M., **M. Loghavi**, S. Kamgar. 2018. On the neurocomputing based intelligent simulation of tractor fuel efficiency parameters. Information Processing in Agriculture, 5: 205–223.

68. Shafaei, S. M., **M. Loghavi** and S. Kamgar. 2018. A comparative study between mathematical models and the ANN data mining technique in draft force prediction of disk plow implement in clay loam soil. AgricEngInt: CIGR Journal, 20(2): 71-79.

69. Shafaei, S. M., **M. Loghavi** and S. Kamgar. 2019. An extensive validation of computer simulation frameworks for neural prognostication of tractor tractive e□ciency. Computers and Electronics in Agriculture, 155: 283-297.

70. Shafaei, S. M., **M. Loghavi** and S. Kamgar. 2019. A practical e□ort to equip tractor-implement with fuzzy depth and draft control system. Engineering in Agriculture, Environment and Food, 12 (2): 191–203.

71. Shafaei, S. M., **M. Loghavi** and S. Kamgar. 2019. Feasibility of implementation of intelligent simulation configurations based on data mining methodologies for prediction of tractor wheel slip, Information Processing in Agriculture, 6(2): 183-199

72. Shafaei, S. M., **M. Loghavi** and S. Kamgar. 2019. Development and implementation of a human machine interface-assisted digital instrumentation system for high precision measurement of tractor performance parameters. Engineering in Agriculture, Environment and Food, 12(2): 11-23.

73. Shafaei, S. M., **M. Loghavi** and S. Kamgar. 2019. Prognostication of energy indices of tractor-implement utilizing soft computing techniques. Information Processing in Agriculture, 6: 132-149.

74. Faal. S., **M. Loghavi**, S. Kamgar, M. H. Raufat, M. T. Golmakani. 2019. Utilizing Pattern Recognition Methods for Detecting the Adulteration of Glucose and Fructose in Honey. Journal of Research and Innovation in Food Science and Technology, 7 (4): 419-430.

Conference Papers:

1. **Loghavi, M.** and H.E. Studer. 1979. Vibrational response of cordon- trained vines: An experimental study. ASAE Paper 79-1057, ASAE-CSAE Summer Meeting, Winnipeg, June 1979.

2**. Loghavi, M.** 1989. Introducing a plan for mechanizing the pollination of date palms. Proceeding of the Second Conference on Role of Research in Post- War Reconstruction. Shiraz University.

3. **Loghavi, M**. 1992. Comparison between mechanical and hand pollination of Shahani dates. Proceedings of the First Dates Conference. Kerman, Feb. 1992.

4**. Loghavi, M**. and M. Shaaker. 1996.Field tractive performance of 2WD tractors at Zarghan district of Fars province in Iran. Paper 96A-49, Ag. Eng. 96 Conference, Madrid.

5. **Loghavi, M**. 1998. Precision farming: space age technology. 1st. Nat. Agr. Mach. and Mech. Conference. Karag, Iran, August, 1998.

6. Taki, O. and **M. Loghavi**. 1998. Comparison of two seed distribution pattern in irrigated wheat farming using seeder-rotivator. 1st. Nat. Agr. Mach. and Mech. Conference. Karag, Iran, August, 1998.

7. Khosravani, A. and **M. Loghavi**. 1998. Tractive performance of common mid-power tractors in Iran. 1st. Nat. Agr. Mach. and Mech. Conference. Karag, Iran, August, 1998.

8. Gazor, H.R. and **M. Loghavi**. 1998. Influence of shallow tines on draft requirement of subsoiler. 1st. Nat. Agr. Mach. and Mech. Conference. Karag, Iran, August, 1998.

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