

Curriculum Vitae

Saman Abdanan Mehdizadeh

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Faculty of Agricultural Engineering
Department of Mechanics of Biosystems Engineering
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Personal Information

Nationality: Iran

Date of birth: 18th May 1984 Place of Birth: Ahvaz-Iran Marital status: Single

Gender: Male

Address: Department of Mechanics of Biosystems Engineering, College of Agricultural Engineering, Agricultural Sciences and Natural Resources University of Khuzestan,

Mollasani, Ahvaz, Khuzestan, Iran

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Educational Background

• 2008-2013: Tarbiat Modares University, Tehran, Iran [1], University of Queensland, Brisbane, Australia

PhD, Mechatronics and intelligent systems in agriculture, G.P.A: 18.36

Thesis title: Development of an expert system for egg classification based on its internal quality using transmittance spectroscopy and increasing shelf-life of liquid egg using UV radiation

• 2006-2008: Tarbiat Modares University, Tehran, Iran [1] **M.Sc.**, Mechanics of Biosystems Engineering, **G.P.A: 17.38.** ranked 1nd among Mechanical Engineering Students

Thesis title: "Effect of static and dynamic loading on losing viability of two varieties of safflower seed".

Seminar title: "Design and analysis of a device for measuring static and dynamic coefficients of friction"

• 2002-2006: Shahid Chamran University, Khouzestan, Iran [2]

B.Sc., Mechanics of Biosystems Engineering. **G.P.A: 15.5 Project title**: "Design of three points hitch dynamometer"

Seminar title: "Analysis of hydrostatic gearbox

• 1998-2002: High school in Mathematics sciences, **G.P.A: 19.06**

Background Courses Include:

Linear control, Advance Control I, Advance Control II, Instrumentation and measurements, Introduction to Mechatronics, Digital Signal processing, Vibrational mechanics, Postharvest Technology, Digital Image Processing, Artificial neural network, Finite Element I and Finite Element II

Interesting field base on priority

- Digital image and signal processing
- Vibration and Control
- Mechatronics and Intelligent Systems in Agriculture
- Application of Non-Destructive Methods for Testing Materials, Quality Evaluation and Reducing Losses
- Physical and Mechanical Properties of Agricultural Product
- Design and Improve of Agricultural Machinery

Work and Teaching experience

- 2013-Present: Teaching: Control engineering, Engineering statistic, Machine vision, Instruments and control systems and Vibrational mechanics at Ramin University.
- 2009-2013: Teaching: Static, Control engineering, Vibrational mechanics, Instruments and control systems, Internal combustion engine at Dezful branch, Azad University
- 2009: Teaching: Technology of Engine at Sharhr Ray branch, Azad University
- 2007:Teaching: Finite Element and ANSYS (Petroleum University)
- 2008:Teaching:Technology of Engine, Transmission, Wheeling and Break System (Rena Factory)
- 2007: Teaching: Industrial Drawing (Khouzestan Oxin Steal Co.)

Other Professional Responsibilities

• 2014-present: Editorial Board Member, Journal of Engineering and Technology Research

Referee in Journal of food science and technology, International journal of biological and agricultural engineering, IEEE Sensors Journal, Computers and Electronics in Agriculture, International Food Research Journal, International Journal of Food Properties

Membership in Scientific and Honorary Societies

IEEE RAS TC on Agricultural Robotics and Automation

Journal Publication

- 1. **Abdanan Mehdizadeh S. (2022).** Machine vision based intelligent oven for baking inspection of cupcake: Design and implementation. Mechatronics, 83, 102717.
- 2. **Abdanan Mehdizadeh S.,** Taki, M., Salary S., Amraei, S., & Ahmadi Z. (2020). Mapping and controlling poultry environment parameters to improve birds' condition. Journal of Researches in Mechanics of Agricultural Machinery, 9(1), 13-29. (In Farsi).
- 3. **Abdanan Mehdizadeh S. (2015).** Eggshell crack detection using PCA and SVM. Journal of food science and technology, 13(56), 143-153. (In Farsi).
- 4. **Abdanan Mehdizadeh S. (2015).** Optimization of passive tractor cabin suspension parameters using particle swarm optimization algorithm, Iranian Journal of Biosystems Engineering, 46(1), 9-17. (In Farsi).
- 5. **Abdanan Mehdizadeh S.,** Minaei, S., Hancock, N. H. & Karimi Torshizi M. A. (2014). An intelligent system for egg quality classification based on visible-infrared transmittance spectroscopy. Information Processing in Agriculture, 1, 105–114.
- 6. **Abdanan Mehdizadeh S.,** Minaei, S., Karimi Torshizi M. A. & Mohajerani, E. **(2014).** Effect of UV irradiation, sample thickness and storage temperature on storability, bacterial activity and functional properties of liquid egg. International Journal of Food Technology, 1-9.
- 7. **Abdanan Mehdizadeh S.,** Minaei, S., Karimi Torshizi M. A., & Mohajerani, E. **(2015).** Extraction of most effective wavelength of egg spectra using genetic algorithm and classifying using regression equations, Iranian Journal of Biosystems Engineering, 46(2), 157-168 (In Farsi).
- 8. **Abdanan Mehdizadeh S.,** Minaei, S., Mohajerani, E. & Karimi Torshizi M. A. **(2014).** Non-destructive assessment of egg freshness using UV-IR spectroscopy and determination of the effective wavelength domain, Iranian Journal of Biosystems Engineering, 44(2), 101-112 (In Farsi).
- 9. **Abdanan Mehdizadeh S.,** Sandell, G., Golpour, A. & Karimi Torshizi M. A. **(2014).** Early determination of Pharaoh Quail sex after hatching using machine vision. Bulletin of Environment, Pharmacology and Life Sciences, 1, 105–114.
- 10. **Abdanan Mehdizadeh, S.** & Amraee, S. **(2015).** Computational estimation of L*a*b* units from RGB using digital image processing, Iranian Food Science and Technology Research Journal, (accepted for publication) (In Farsi).
- 11. **Abdanan Mehdizadeh, S.** & Nadi, F. **(2016).** Experimental and Numerical Analysis for Prediction of Mechanical Properties of Eggshell. International of Food Engineering, 12(2), 1-7.

- 12. **Abdanan Mehdizadeh**, S. & Nematinia, E. (2016). Enzymatic browning quantification using the fractal texture Fourier of the image of apple and banana slices, Innovative Food Technologies (JIFT), 4(14), 43-54 (In Farsi).
- 13. **Abdanan Mehdizadeh, S.** Nouri, M., Soltanikazemi, M., & Amraee, S. (2015). None-destructive investigation of the quality factors in citrus juice during storage using digital image processing, Iranian Food Science and Technology Research Journal, (accepted for publication) (In Farsi).
- 14. **Abdanan Mehdizadeh, S.,** & Banhazi, T. M. **(2015).** Evaluating droplet distribution of spray-nozzles for dust reduction in livestock buildings using machine vision, International Journal of Agricultural and Biological Engineering, 8(5), 58-64.
- 15. **Abdanan Mehdizadeh, S.,** & Soltanikazemi, M. **(2016).** Manufacturing and testing of a system to detect bee colony density inside the hive using machine vision, Iranian Journal of Biosystems Engineering, (accepted for publication) (In Farsi).
- 16. **Abdanan Mehdizadeh, S.,** & Soltanikazemi, M. (**2016**). Manufacturing and testing of a system to detect bee colony density inside the hive using machine vision, Iranian Journal of Biosystems Engineering, 47(1), 21-29 (In Farsi).
- 17. **Abdanan Mehdizadeh, S., (2015).** Optimization of passive tractor cabin suspension system using ES, PSO and BA. Journal of Agricultural Technology, 11(3), 595-607.
- 18. **Abdanan Mehdizadeh, S.**, Amraei, S. (2018). Segmentation of Broiler Chickens to Predict Their Weight Using Active Shape Model, Journal of Rsearches in Mechanics of Agricultural Machinary, 7(12), 37-47 (In Farsi).
- 19. **Abdanan Mehdizadeh, S.,** Nadafzadeh, M. (2017). Determination of the most suitable color space for intelligent water stress discrimination for plants inside the greenhouse (Case Study: Coleus). Iranian Journal of Biosystems Engineering, 48(4), 407-418 (In Farsi).
- 20. **Abdanan Mehdizadeh, S.,** Neves, D. P., Tscharke, M., Nääs, I. A. & Banhazi, T. M. **(2015).** Image analysis method to evaluate beak and head motion of broiler chickens during feeding. Computers and Electronics in Agriculture, 114, 85-95.
- 21. **Abdanan Mehdizadeh**, S. & Abdolahzare, Z. (2015). Investigation of vacuum planter performance based on video processing and Kalman filter, Iranian Journal of Biosystems Engineering, 47(2), 363-373 (In Farsi).
- 22. Abdolahzare, Z. & **Abdanan Mehdizadeh**, S. (2016). Nonlinear Mathematical Modelling of Seed Spacing Uniformity of a Pneumatic Planter using Genetic Programming and Image processing, Neural Computing and its Application, 27(6), 1-13.
- 23. Abdolahzare, Z. & **Abdanan Mehdizadeh**, S. (2018). Real time laboratory and field monitoring of the effect of the operational parameters on seed falling speed and trajectory of pneumatic planter, Computers and Electronics in Agriculture, 114, 85-95
- 24. Abdolahzare, Z., & **Abdanan Mehdizadeh**, S. (2014). Study Spacing Uniformity and Seed Falling Dynamics of a Pneumatic Planter under Laboratory Conditions using machine vision. Journal of Researches in Mechanics of Agricultural Machinery, 5 (2), 19-28. (In Farsi).
- 25. Abdolahzare, Z., Kazemi, N., & Abdanan Mehdizadeh, S. (2020). Investigation the effect of chemical pollution caused by field spraying on honeybee behavior using

- data mining techniques, Journal of Agricultural Engineering Soil Science and Agricultural Mechanization, 43(2), 55-68 (In Farsi).
- 26. Abdolahzare, Z., Asoodar, M.A., Kazemi, N., Rahnama, M. & **Abdanan Mehdizadeh**, S. (2014). Optimization of the most important operational parameters of a pneumatic seeder using real-time monitoring for cucumber and watermelon seeds, Journal of Agricultural Machinery, 6(1), 35-48 (In Farsi).
- 27. Abdolahzare, Z., Asoodar, M.A., Kazemi, N., Rahnama, M. & Abdanan Mehdizadeh, S. (2017). Monitoring of Operational Parameters of Unisem Pneumatic Planter and Modeling of Planting Uniformity by Image Processing, Agricultural Mechanization and systems research, 18(69), 31-46 (In Farsi).
- 28. Afsharnia, F., **Abdanan Mehdizadeh**, S., Ghaseminejad, M., & Heidari, M. (2017). The effect of dynamic loading on abrasion of mulberry fruit using digital image analysis, Information Processing in Agriculture, 4, 291-299.
- 29. Amraei, S., **Abdanan Mehdizadeh S.,** & Salari, S. **(2017).** Application of computer vision and support vector regression for weight prediction of live broiler chicken. Engineering in Agriculture, Environment and Food, 10(4), 266-271.
- 30. Amraei, S., **Abdanan Mehdizadeh S.,** & Salari, S. (2017). Broiler weight estimation based on machine vision and artificial neural network. British Poultry Science, 58(2), 200-205.
- 31. Amraei, S., **Abdanan Mehdizadeh, S.** & Salari, S. (2017). Weight estimation system of individual broiler chickens using digital image processing and multi-regression analysis, Iranian Journal of Biosystems Engineering, 47(4), 623-615 (In Farsi).
- 32. Amraei, S., **Mehdizadeh, S. A.,** & de Alencar Naas, I. **(2018).** Development of a transfer function for weight prediction of life broiler chicken using machine vision. Engenharia Agrícola, 38(5), 8-17.
- 33. Behzadeepour, F. Ghasemi nezhad raeeni, M. Asoodar, M.A., Marzban, A. & **Abdanan Mehdizadeh, S. (2015).** Study the Effect of Operational Parameters of Crops Turbine Sprayer (Turbo Liner) On Spray Drift and Uniformity Using Spectrophotometer. European Journal of Academic Essays, 2(5), 35-38.
- 34. Behzadeepour, F. Ghasemi nezhad raeeni, M. Asoodar, M.A., Marzban, A. & **Abdanan Mehdizadeh, S.** (2015). Study of the operational parameters of crops turbine sprayer (turbo liner) on spray quality and diameter of droplets, using image processing. Journal of Agricultural Machinery, 7(1), 61-72 (In Farsi).
- 35. Behzadeepour, F. Ghasemi nezhad raeeni, M. Asoodar, M.A., Marzban, A. & **Abdanan Mehdizadeh, S.** (2017). The regression analysis of technical factors on the drift and droplets size at the spraying by using from Laboratory and software. Iranian Journal of Biosystems Engineering, 48, 1, 2017, 109-101 (In Farsi).
- 36. Biabani, H, GhasemiNejadraeini, M., Asoodar M. A., Salvati, A., & Abdanan Mehdizadeh, S. (2014). Investigate the effect tillage methods and chemical weed control on the yield of forage corn. International journal of agriculture and crop sciences, 7(14), 1385-1391.
- 37. Biabi, H., **Abdanan Mehdizadeh**, S., & Salmi, M. S. (2020). Design and construction of an automatic detection system for orange defects using an attunable lightness algorithm, Innovative Food Technologies, 11(1), 13-28. (In Farsi).

- 38. Biabi, H., & **Abdanan Mehdizadeh**, S. (2021). Feasibility of Online Diagnosis of Botrytis elliptica Disease in the Lilium Plant using the Machine Vision System and K-means, Journal of Agricultural Machinery, 11(2), 277-291. (In Farsi).
- 39. Biabi, H., **Abdanan Mehdizadeh**, S., & Salmi, M. S. (2019). Design and implementation of a smart system for water management of lilium flower using image processing. Computers and Electronics in Agriculture, 160, 131-143.
- 40. Biabi, H., **Abdanan Mehdizadeh**, S., Nadafzadeh, M. & Salmi, M. S. (2019). Designing and Developing a Machine Vision System to Predict the Chlorophyll and Carotenoid Content of Plant Leaves. Journal of Agricultural Machinery, 9(2), 279-293 (In Farsi).
- 41. Elahifard, E., **Abdanan Mehdizadeh S.**, Aminirad, M. & Sajedi, S. **(2018)**. Select the most appropriate morphologic characteristic to distinguish weeds in wheat fields by image processing technique, Journals Management system, 13(2), 125-133 (In Farsi).
- 42. Etaati, A., **Abdanan Mehdizadeh, S.,** Wang, H., & Pather, S. (2013). Vibration damping characteristics of short hemp fibre thermoplastic composites. Journal of Reinforced Plastics and Composites, 33(4), 330-341.
- 43. Etaati, A., Wang, H., Pather, S., Yan, Z., & **Abdanan Mehdizadeh**, **S. (2013).** 3D X-ray microtomography study on fibre breakage in noil hemp fibre reinforced polypropylene composites. Composites Part B: Engineering, 50, 239-246.
- 44. Farhadi, R., Taki, M., & **Abdanan Mehdizadeh**, **S. (2020)**. An algorithm and a flexible Fortran code for the computation of solar energy reception on a curved surface. Sustainable Energy Technologies and Assessments, 42, 100883.
- 45. Hatamian, M., Noshad, M., **Abdanan Mehdizadeh, S.**, & Barzegar, H. **(2020)**. Effect of roasting treatment on functional and antioxidant properties of chia seed flours. NFS Journal, 21, 1-8.
- 46. Janati, S., **Abdanan Mehdizadeh**, S., & Heydari, M. **(2022)**. Designing, manufacturing, and evaluating the diagnostic system of carob moth in pomegranate fruit using digital signal processing. Computers and Electronics in Agriculture, 106564.
- 47. Janati, S., **Abdanan Mehdizadeh**, S. & Heidari, M. (2018). Analysis of the the impact response of pomegranate fruit to determine its maturity stage. Innovative Food Technologies (Accepted for publication) (In Farsi).
- 48. Janati, S., **Abdanan Mehdizadeh**, S. & Orak, H. (2018). Design and development of a machine vision system to determine the apparent apple imperfections. Innovative Food Technologies, 6(3), 351-360 (In Farsi).
- 49. Jayaselan, H. A. J., Nawi, N. M., Ismail, W. I. W., & **Abdanan Mehdizadeh**, S. Shariff, A. R. M. (2018). Application of Artificial Neural Network Classification to Determine Nutrient Content in Oil Palm Leaves. ASABE, 34(3), 1-8.
- 50. Karampour F, Salehi Salmi M, **Abdanan Mehdizadeh S.,** & Mehdi Khanlou K. (2019). Investigation of Physiological and Enzymatic Events During Senescence of Polianthes tuberosa L. Flower under Salicylic Acid and Sodium Nitroprusside Treatments. j.plant proc. func. 7 (27), 31-44 (In Farsi).
- 51. Kazemi Karaji, F., **Abdanan Mehdizadeh, S.** & Orak, H. **(2019).** Determine the freshness of carp meat using image processing, Innovative Food Technologies, (Accepted for publication) (In Farsi).

- 52. Mat Nawi, N., Chen, G., Jensen, T., & **Abdanan Mehdizadeh**, S. (2013). Prediction and classification of sugar content of sugarcane based on skin scanning using visible and shortwave near infrared. Biosystems Engineering, 115(2), 154-161.
- 53. Mirhaji, H., Soleymani, M., Asakereh, A., & **Mehdizadeh**, S. A. (2021). Fruit detection and load estimation of an orange orchard using the YOLO models through simple approaches in different imaging and illumination conditions. Computers and Electronics in Agriculture, 191, 106533.
- 54. Nääs, I. A., Lozano, L. C. M., **Abdanan Mehdizadeh**, S., Garcia, R. G., & Abe, J. M. (2018). Paraconsistent logic used for estimating the gait score of broiler chickens, Biosystems Engineering, 173,115-123.
- 55. Nadafzadeh, M. **Abdanan Mehdizadeh, S.,** & Soltanikazemi, M. **(2018).** Development of computer vision system to predict peroxidase and polyphenol oxidase enzymes to evaluate the process of banana peel browning using genetic programming modeling. Scientia Horticulturae, 231, 201-209.
- 56. Nadafzadeh, M., & **Abdanan Mehdizadeh**, S. (2018). Design and Fabrication of an Intelligent Control System for Determination of Watering time for Turfgrass Plant Using Computer Vision System and Artificial Neural Network, Precision Agriculture, 1-23.
- 57. Nadafzadeh, M., **Abdanan Mehdizadeh**, S. (2016). Determination of the Optimal Cooking Time of Vegetables using Digital Image Processing and Color Coordinate Measurement, New Technologies in Food Industry, 11(2), 49-57 (in Farsi).
- 58. Nadafzadeh, M., **Abdanan Mehdizadeh**, S., Asoodar, M.A. & Salehi, M. R. (2017). Design and Development of an Intelligent Control System for Determination of Required Water needed by Plant in Greenhouse Using Machine Vision (Case Study: coleus). Iranian Journal of Biosystems Engineering, 48, 2, 2017, 285-297 (In Farsi).
- 59. Nadi, F., **Abdanan Mehdizadeh**, S. & Nourani Zonouz, O. (2017). Comparing between predicted output temperature of flat-plate solar collector and experimental results: computational fluid dynamics and artificial neural network. Journal of Agricultural Machinery, 7(1), 298-311 (In Farsi).
- 60. Nadi, F., **Abdanan Mehdizadeh**, S. (2017). An investigation into the effect of drying conditions on of kinetic drying of medicinal plant of Echium amoenum. International Medical Journal, 24(1), 1-6
- 61. Nematinia, E., **Abdanan Mehdizadeh**, S. & Nasehi, B. (2018). Meaurment Spaghetti colors parameters using machine vision system, Food Science and Technology, 14(73), 71-81 (In Farsi).
- 62. Nematinia, E., & **Abdanan Mehdizadeh**, S. (2018). Assessment of egg freshness by prediction of Haugh unit and albumen pH using an artificial neural network. Journal of Food Measurement and Characterization, 1-11.
- 63. Nematinia, E., **Abdanan Mehdizadeh, S.** & Ghorbani, M. R. (2017). Classification of Eggs Based on the Internal Quality Using of Computer Vision. Innovative Food Technologies, 4, 4, 109-122 (In Farsi).
- 64. Neves, D. P., **Abdanan Mehdizadeh**, S., Santana, M. R., Amadori, M. S., Banhazi, T.M., Nääs, I. A. **(2019).** Young Broiler Feeding Kinematic Analysis as A Function of the Feed Type, Animal, 9(12),1149.

- 65. Neves, D. P., **Abdanan Mehdizadeh**, S., Tscharke, M., Nääs, I. A., & Banhazi, T. M. (2015). Detection of flock movement and behaviour of broiler chickens at different feeders using image analysis, Information Processing in Agriculture, 2(3), 177-182.
- 66. Nouri, M., Nasehi, B. & **Abdanan Mehdizadeh**, S. (2017). Effect of microwave pre-treatment on physico-chemical properties of donut containing Persian gum and carrot pomace powder sources of dietary fiber, Food Science and Technology, 13(2), 227-239 (In Farsi).
- 67. Nouri, M., Nasehi, B., **Abdanan Mehdizadeh, S.,** & Goudarzi, M. **(2017).** A novel application of vibration technique for non-destructive evaluation of bread staling, Journal of Food Engineering, 197, 44-47.
- 68. Nouri, M., Nasehi, B., Goudarzi, M., & **Abdanan Mehdizadeh, S. (2018).** Non-destructive Evaluation of Bread Staling Using Gray Level Co-occurrence Matrices. Food Analytical Methods, 1-5.
- 69. Nouri, M., Nasehi, B., Samavati, V., & **Abdanan Mehdizadeh**, S. (2017). Optimizing the effects of Persian gum and carrot pomace powder for development of low-fat donut with high fibre content, Bioactive Carbohydrates and Dietary Fibre, 9, 39-45.
- 70. Nouri, M., Nasehi, B., Samavati, V., & **Abdanan Mehdizadeh**, S. (2015). Modeling the effects of addition of Persian gum and carrot pomace powder in donut formulation on its visual features using response surface methodology. Journal of food science and technology, 65(14), 285-299.
- 71. Nouri, M., Nasehi, B., Samavati, V., & **Abdanan Mehdizadeh**, S. (2015). Effect of Persian gum and carrot pomace powder as dietary fiber sources addition on sataling rate of microwave pretreated donut, Iranian Food Science and Technology Research Journal, 5(2), 171-182 (In Farsi).
- 72. Nouri. M., Nasehi, B., Samavati, V. & **Abdanan Mehdizadeh**, S. (2017). Application of machine vision technology for visual assessment of microwave pretreated donut. Iranian Food Science and Technology Research Journal, 13(5), 867-879 (In Farsi).
- 73. Orak, H., **Abdanan Mehdizadeh**, S., Kazemi Karaji, F. (2021). Development of computer vision algorithm towards assessment of uniformity of corn seedling planting in transplanter. Iranian Journal of Biosystems Engineering, 52(4), 633-645 (In Farsi).
- 74. Orak, H. & Abdanan Mehdizadeh, S. (2017). Online detection and separation of nodes and internodes of sugarcane stalks using machine vision. Iranian Journal of Biosystems Engineering, 48, 2, 2017, 263-272 (In Farsi).
- 75. Orak, H. & Abdanan Mehdizadeh, S. (2018). Development of a Precision Weed Control System for Lawns using Machine Vision. Engineering Research in Agricultural Mechanization and Systems, 19, 70, 2018, 55-68 (In Farsi).
- 76. Orak, H. & **Abdanan Mehdizadeh**, S. (2018). Development of a Precision Weed Control System for Lawns using Machine Vision. Engineering Research in Agricultural Mechanization and Systems, 19, 70, 2018, 55-68 (In Farsi).
- 77. Orak, H., **Abdanan Mehdizadeh**, S. & Sadi, M. (2019). Online Prediction of Sugarbeet Yield using Image Processing. Journal of Sugar Beet, 34(2), 98-108 (In Farsi).

- 78. Orak, H., **Abdanan Mehdizadeh**, S. & Soltanikazemi, M. (2018). Determination of the Vibration Response of Sugarcane Stalk to Predict Fiber and Brix Using Image Processing, Journal of Rsearches in Mechanics of Agricultural Machinary, (Accepted for publication) (In Farsi).
- 79. Shafieipour fard, D., Salari, S., Sari, S., **Abdanan Mehdizadeh**, S. & Zarei, M. (2016). Effect of lipid sources and organic zinc supplementation on performance, egg bacterial activity and reproductive parameters of laying hens. Animal Production, 18, 3, 2016, 539-552 (In Farsi).
- 80. Shafieipour fard, D., Salari, S., Sari, S., **Abdanan Mehdizadeh**, **S.** & Zarei, M. **(2018)**. Effects of lipid sources and different levels of zinc on fatty acid profile and cholesterol egg yolk, antioxidant status and some blood parameters of laying hens, Journal of Veterinary Research, 73(1), 119-128 (In Farsi).
- 81. Soltanikazemi, M., **Abdanan Mehdizadeh**, S. & Gharineh, M.H. (2017). Dynamic force effects on germination characteristics and weight vigour index of three chickpea cultivars (Cicer ariegtinum L.) seed by using image processing, Iranian Journal of Seed Science and Technology, 6(1), 177-192 (In Farsi).
- 82. Soltanikazemi, M., & Abdanan Mehdizadeh, S. (2017). Classification of Bitter and Sweet Olives Using Image Processing and Artificial Neural Networks during Curing Process in Brine and Water Environments, International Journal of Food Properties, 20(2), 1954-1964.
- 83. Soltanikazemi, M., **Abdanan Mehdizadeh, S.,** Heydari, M. **(2016).** Non-destructive evaluation of the internal fruit quality of black mulberry (Morus nigra L.) using visible- infrared spectroscopy and genetic algorithm, International Journal of Food Properties, 19(1), 1-11.
- 84. Soltanikazemi, M., **Abdanan Mehdizadeh**, S., Heydari, M. & Faregh, S. M. (2017). Extraction of most effective wavelength of mulberry juice (Morus Alba Var. nigra L.) spectra using different PLSR models, Food Science and Technology, 14(69), 229-241 (In Farsi).
- 85. Soltanikazemi, M., **Abdanan Mehdizadeh, S.,** Heydari, M. & Faregh, S. M. **(2017)**. Predict changes of some quality parameters of black mulberry juice (Morusnigra L.) during ripening using machine vision and fractal analysis. Iranian Food Science and Technology Research Journal, 13(5), 730-743 (In Farsi).
- 86. Soltanikazemi, S., Abdanan Mehdizadeh, S. & Nadafzadeh, M. (2018). Estimation of the enzyme levels of PPO and POD bananas using digital image processing and regression analysis during the storage period. Innovative Food Technologies, 5, 4, 2018, 597-612 (In Farsi).
- 87. Taki, M., **Abdanan Mehdizadeh**, S., Rohani, A., Rahnama, M., & Rahmati-Joneidabad, M. (2018). Applied machine learning in greenhouse simulation; new application and analysis. Information processing in agriculture, 5(2), 253-268.

- Abdanan Mehdizadeh, S., Minaei, S., Mohajerani, E., Karimi, M. A. Khoramabadi, N., and Mobarez, A. (2011). Investigation of the effect of thickness and irradiation time on storability and bacterial activity in liquid egg. XXXIV CIOSTA, CIGR V international conference on efficient and safe production processes in sustainable agriculture and foresty, Vienna, Austria.
- **Abdanan Mehdizadeh, S.,** Minaei, S., Khoshtaghaza, M. H., Modares, S. M. (2009). Effect of Static loading on Germination Loss of Safflower Seed. 4th national conference on research of strategic agricultural losses, Tehran.
- **Abdanan Mehdizadeh, S.,** Minaei, S., Khoshtaghaza, M. H., and Rokhgire, H. (2007). Experimental and Numerical Analysis for Prediction of Mechanical Properties of Eggshell, 17th national congress of food industry, Urmia.
- **Abdanan Mehdizadeh, S.,** Tavakoli, T. Naderi boldaji, M. (2006). Design of hydrostatic wheeling for tractors. 3rd student conference on agricultural machinery engineering, Shiraz.
- **Abdanan Mehdizadeh, S.,** Khademolhoseni, G. H., and Naderi boldaji, M. (2006). Evaluation of hydrostatic gearbox for tractors. 3rd student conference on agricultural machinery engineering, Shiraz.
- Naderi boldaji, M., **Abdanan Mehdizadeh**, S., Asoudar, M. A. (2006). Effect of air flow in twin stream air assistance hydraulic boom. 3rd student conference on agricultural machinery engineering, Shiraz.
- Naderi boldaji, M., **Abdanan Mehdizadeh**, S., Jazayari, K. (2006). Design hydraulic break for class baler. 3rd student conference on agricultural machinery engineering, Shiraz.
- Neves, D. P., **Abdanan Mehdizadeh**, S., Tscharke, M., Nääs, I. A., & Banhazi, T. M. (2013). The feeding behaviour of broiler chickens at different feeders: preliminary studies, 2013 Society for Engineering in Agriculture (SEAg) Conference: Innovative Agricultural Technologies for a Sustainable Future, The Atrium Resort, Mandurah, Australia
- Neves D. P., **Abdanan Mehdizadeh, S.,** Tscharke, M., Nääs, I.A., & Banhazi, T. (2013). Beak motion analysis of broiler chicks: preliminary studies. In the proceedings of the '6th European Conference on Precision Livestock Farming'. Leuven, Belgium. (Ed. D. Berckmans and J. Vandermeulen) pp 607-744. (Precision Livestock Farming 13)
- Neves D. P., **Abdanan Mehdizadeh**, S., Hutchinson, J. R., Nääs, I.A., & Banhazi, T. (2015). The effects of feed particle size on feeding kinematics in young broiler chickens. In: 7th European Conference on Precision Livestock Farming, 2015, Milan. Proceedings. Precision Livestock farming '15. Milan: Guarino, M.; Berckmans., 801-810.
- Neves D. P, Nääs, I. A. **Abdanan Mehdizadeh**, **S.**, Tscharke, M., Banhazi, & T.M. (2013). Biomechanical differences of techniques adopted by broiler chickens for handling feed: preliminary study. In the proceedings of 'FACTA Conference 2013 of Poultry Science and Technology'. Campinas/SP, Brazil.(Ed.M. Macari; IA Nääs) CD-ROM. (FACTA APINCO Foundation for Poultry Science and Technology).
- Qi, H., Zhou, H., Low, T., **Abdanan Mehdizadeh, S.**, Tscharke, M., Banhazi, T. M. (2013). A hybrid WSN system for environment monitoring at poultry buildings. In 'The Bi-annual Conference of the Australian Society of Engineering in Agriculture (SEAg

- 2013) Pert, Australia. (Ed. C. Saunders and T Banhazi) (Australian Society of Engineering in Agriculture). p: CD 1-6.
- Satari, M., Minaei, S., Hasani, D., **Abdanan Mehdizadeh**, **S.** (2009). Mechanical properties of three major Persian walnut varieties under compression loading. 4th national conference on research of strategic agricultural losses, Tehran.

Research project

- Machinery-related wheat losses and engineering methods for dealing with it. Final report, Tootak research project.
- Study vibrational characteristic of eggshell to detect cracked one.
- Optimization of tractor cabin's passive suspension parameters using genetic algorithms

Computer skills

• Programming languages: MATLAB and C++.

• Mechanical software: ANSYS and Solid work

• Math. Software: MATLAB.

Foreign Languages

• English

Conversation: Good Reading: Good Writing: Good

Hobbies

Swimming; Mountaineering; Soccer; Traditional Music; theater, Reading poem, Camping.