Curriculum Vitae

Personal Data	Name	: **Gamal ElMasry**
	Nationality	: **Egyptian**
	Email	: **g.elmasry1@gmail.com** , **gamal.elmasry@agr.suez.edu.eg**

Education

- PhD. in Agricultural Engineering (**Hyperspectral Imaging**), McGill University (Canada) - Suez Canal University (Egypt) 2007.
- Master of Engineering (**Environmental Science and Technology**), International Institute for Infrastructural, Hydraulic and Environmental Engineering Institute (IHE) Delft, the Netherlands 2003.
- M.Sc. in Agricultural Engineering (**Farm Machinery**), Faculty of Agriculture, Suez Canal University, Ismailia, Egypt, 1999.
- B.Sc. in Agricultural Engineering (**Very Good with Honour**), Faculty of Agriculture, Suez Canal University, Ismailia, Egypt, 1992.

Employment

- Professor, Agricultural Engineering Dept., Faculty of Agriculture, Suez Canal University, Egypt (**11/2020 – Now**)
- Marie Curie Research Fellow, Institute of Agrifood Research and Technology (IRTA), Spain (**06/2019 – 11/2020**)
- Research Fellow, French National Institute for Agricultural Research (INRA), France (**05/2018 - 05/2019**)
- Assistant Professor, Agricultural Engineering Dept., Suez Canal University, Ismailia, Egypt (**1/12/2015- 04/2018**).
- Research Fellow, Toyohashi University of Technology, Toyohashi, Japan (**12/2013 – 11/2015**)
- Postdoctoral researcher, School of Biosystems Engineering, University College Dublin, Ireland (**5/2009-9/2012**).

Professional Membership

- Member of The European Federation of Food Science and Technology (EFFoST)
- Member of Japanese Society for the Promotion of Science Alumni Association (JSPSAAE)
- Member of American Society of Agricultural and Biological Engineering (ASABE).
- Member of American Association for the advancement of Science.
- Member of Asia-Pacific Chemical, Biological & Environmental Engineering Society (APCBEES).
- Member of the International Association of Engineers
- Editorial board Member of International Agrophysics.
- Editorial board Member of Fisheries Science.
- Member of Egyptian Society of Agricultural Engineering.

Language	• Arabic (native language).
	• English: TOEFL of 227 computer-based score (567 paper-based score).
	• Spanish (Intermediate level).
	• French (Intermediate level).
Awards/ Scholarships	• **State Award of Appreciation in Advanced Technological Sciences,** Egyptian Ministry of Higher Education, 2023
	• **Highly Cited Researcher of the world 2017-2023,** Clarivate analytics.
	• **State Award for Scientific Excellence in Advanced Technological Sciences,** Egyptian Ministry of Higher Education, 2017
	• **Japanese Society of the promotion of Science (JSPS) fellowship** to Toyohashi University of Technology, Japan, 3013-2015
	• *Developing Country Sponsorship Awards* offered by the International Union of Food Science and Technology and Canadian Institute of Food Science and Technology (Montreal, Canada), 2014
	• *Mastumae International Foundation Fellowship* to National Food Research Institute (Tsukuba, Japan), 2008
	• *The best paper award* from International Conference on Advanced Informatics: Concepts, Theory and Applications (ICAICTA), Bandung, Indonesia, 2008
	• *Kishida award.* The Distinguished Agricultural Engineering Researcher in Egypt 2008.
	• *Specialist-Exchange Program Fellowship* to Norwegian Food Research Institute, Matforsk (Ås, Norway), 2007
	• *Egyptian Scholarship (Channel program)* to McGill University for studying PhD (Canada), 2005
	• *World Laboratory Fellowship* to Valencian Institute of Agricultural Engineering (Valencia, Spain), 2004
	• *Netherlands Fellowship Programme (NFP)* for studying Master of Engineering in IHE (Infrastructural, Hydraulic and Environmental Engineering) Institute (Delft, The Netherlands), 2002
Experience & Knowledge:	• International License for Driving Computers (ICDL) certificate.
	• Strong knowledge in programming with C and Matlab.
	• Strong Experience in NIR spectroscopy, computer vision, imaging spectroscopy, hyperspectral imaging fluorescence spectroscopy, fluorescence imaging and image processing.
	• Practical experience in statistical data analysis, multivariate data analysis, chemometrics and artificial neural networks using various software packages such as Unscrambler, Environment for Visualizing Images (ENVI), and Matlab and PLS Toolbox.
	• Relevant experience in (such as ANOVA, MANOVA, linear and non-linear regression modeling).
	• Expert in technical writing and verbal communication skills
	• Patient, team-oriented with very good experience in project management skills, working collaboratively with team members

List of Publications

a. Journal articles

1. Albano-Gaglio, M., Esquerre, C. A., O'Donnell, C. P., Muñoz, I., **ElMasry, G.**, Font-i-Furnols, M., & Marcos, B. (2025). Calibration of visible and near-infrared spectral imaging technology to predict the quality evolution of retail fresh bellies with different fat content. Food Research International, 199, 115350.

2. Atwa, E. M., Xu, S., Rashwan, A. K., Abdelshafy, A. M., **ElMasry, G.**, Al-Rejaie, S., & Pan, J. (2024). Advances in Emerging Non-Destructive Technologies for Detecting Raw Egg Freshness: A Comprehensive Review. Foods, 13(22), 3563.

3. Taha, M. F., Mao, H., Mousa, S., Zhou, L., Wang, Y., **ElMasry, G.**, & Qiu, Z. (2024). Deep Learning-Enabled Dynamic Model for Nutrient Status Detection of Aquaponically Grown Plants. Agronomy 2024, 14, 2290.

4. Taha, M. F., Mao, H., Wang, Y., ElManawy, A. I., **ElMasry, G.**, Wu, L., & Qiu, Z. (2024). High-Throughput Analysis of Leaf Chlorophyll Content in Aquaponically Grown Lettuce Using Hyperspectral Reflectance and RGB Images. *Plants*, 13(3), 392.

5. Zidan, N. S., Abdulsalam, N. M., Khateeb, N. A., Hijazi, M. A., Alrasheedi, A. A., **ElMasry, G.**, & Alalawy, A. I. (2024). Microwave synthesis of Chitosan-stabilized selenium nanoparticles: Intrinsic oxidant scavenging capabilities, hemocompatibility, anticancer, and antibacterial potency. *Journal of Molecular Structure*, 1295, 136715.

6. Mandour, A. S., Farag, A., Helal, M. A., **ElMasry, G.**, Al-Rejaie, S., Takahashi, K., & Tanaka, R. (2023). Non-Invasive Assessment of the Intraventricular Pressure Using Novel Color M-Mode Echocardiography in Animal Studies: Current Status and Future Perspectives in Veterinary Medicine. *Animals*, 13(15), 2452.

7. ElGamal, R., Song, C., Rayan, A. M., Liu, C., Al-Rejaie, S., & **ElMasry, G.** (2023). Thermal Degradation of Bioactive Compounds during Drying Process of Horticultural and Agronomic Products: A Comprehensive Overview. *Agronomy*, 13(6), 1580.

8. Khafaga, R. A., **ElMasry, G.**, & El-Azeem, A. (2023). Influence of Binding Materials on the Main Quality Parameters of Biomass Pellets Produced from Corn Stover. *Journal of Soil Sciences and Agricultural Engineering*, 14(1), 27-33.

9. Khafaga, R. A., Abd El-Azeem, S. & **ElMasry, G.** (2022). Influence of Incorporating Shredded Corn Stover on some Physicochemical Properties of the Soil and Corn Crop Production. Journal of Soil and Water Sciences, 7(1), 1-12.

10. Kamruzzaman, M., Kalita, D., Ahmed, M. T., **ElMasry, G.**, & Makino, Y. (2022). Effect of variable selection algorithms on model performance for predicting moisture content in biological materials using spectral data. *Analytica Chimica Acta*, 339390.

11. Mandour, A. S., Samir, H., El-Beltagy, M. A., Hamabe, L., Abdelmageed, H. A., Watanabe, I., **ElMasry, G.**, Al-Rejaie, S., Tanaka, R. & Watanabe, G. (2022). Monthly Dynamics of Plasma Elements, Hematology, Oxidative Stress Markers,

and Hormonal Concentrations in Growing Male Shiba Goats (Capra hircus) Reared in Tokyo-Japan. *Animals*, 12(5), 645.

12. Taha, M. F., Abdalla, A., **ElMasry**, **G.**, Gouda, M., Zhou, L., Zhao, N., Al-Rejaie, S., He1, Y. & Qiu, Z. (2022). Using Deep Convolutional Neural Network for Image-Based Diagnosis of Nutrient Deficiencies in Plants Grown in Aquaponics. *Chemosensors*, 10(2), 45.

13. Taha, M. F., ElManawy, A. I., Alshallash, K. S., **ElMasry, G.**, Alharbi, K., Zhou, L., & Qiu, Z. (2022). Using Machine Learning for Nutrient Content Detection of Aquaponics-Grown Plants Based on Spectral Data. *Sustainability*, 14(19), 12318.

14. Taha, M. F., **ElMasry, G**., Gouda, M., Zhou, L., Liang, N., Abdalla, A., & Qiu, Z. (2022). Recent Advances of Smart Systems and Internet of Things (IoT) for Aquaponics Automation: A Comprehensive Overview. *Chemosensors*, 10(8), 303.

15. **ElMasry, G.,** Mandour, N., Ejeez, H., Demilly, D., Al-Rejaie, S., Verdier, J., Belin, E. & Rousseau, D. (2021). Multichannel imaging for monitoring chemical composition and germination capacity of cowpea (*Vigna unguiculata*) seeds during development and maturation. *The Crop Journal*, 10(5), 1399-1411.

16. **ElMasry, G. M.**, Fulladosa, E., Comaposada, J., Al-Rejaie, S. S., & Gou, P. (2021). Selection of representative hyperspectral data and image pretreatment for model development in heterogeneous samples: A case study in sliced dry-cured ham. *Biosystems Engineering*, 201, 67-82.

17. ElGamal, R., Kishk, S., Al-Rejaie, S., & **ElMasry, G.** (2021). Incorporation of a solar tracking system for enhancing the performance of solar air heaters in drying apple slices. *Renewable Energy*, 167, 676-684.

18. **ElMasry, G.**, Gou, P., & Al-Rejaie, S. (2021). Effectiveness of specularity removal from hyperspectral images on the quality of spectral signatures of food products. *Journal of Food Engineering*, 289, 110148.

19. **ElMasry, G.**, ElGamal, R., Mandour, N., Al-Rejaie, S., Belin, E., & Rousseau, D. (2020). Emerging Thermal Imaging Techniques for Seed Quality Evaluation: Principles and Applications. *Food Research International*, 131, 109025.

20. Abu-Zeid, M.A.E.R., & **ElMasry, G.** (2020). Experimental evaluation of two consecutive air-gap membrane distillation modules with heat recovery. *Water Supply*, 20(5), 1678-1691.

21. Kishk, S. M., Kishk, R. M., Yassen, A. S., Nafie, M. S., Nemr, N. A., **ElMasry, G.**, & Simons, C. (2020). Molecular insights into human transmembrane protease serine-2 (TMPS2) inhibitors against SARS-CoV2: homology modelling, molecular dynamics, and docking studies. *Molecules*, 25(21), 5007.

22. **ElMasry, G.**, Mandour, N., Wagner, M. H., Demilly, D., Verdier, J., Belin, E., & Rousseau, D. (2019). Utilization of computer vision and multispectral imaging techniques for classification of cowpea (*Vigna unguiculata*) seeds. *Plant methods*, 15(1), 24.

23. Rahman, M. M., Shibata, M., **ElMasry, G.**, Nakazawa, N., Nakauchi, S., Hagiwara, T., & Okazaki, E. (2019). Expeditious prediction of post-mortem changes in frozen fish meat using three-dimensional fluorescence fingerprints. *Bioscience, biotechnology, and biochemistry*, 83(5), 901-913.

24. Kishk, S. S., ElGamal, R. A., & **ElMasry, G. M.** (2019). Effectiveness of recyclable aluminum cans in fabricating an efficient solar collector for drying agricultural products. *Renewable energy*, 133, 307-316.

25. **ElMasry, G.**, Morsy, N., Al-Rejaie, S., Ayed, C., Linforth, R., & Fisk, I. (2019). Real-time quality authentication of honey using atmospheric pressure chemical ionisation mass spectrometry (APCI-MS). *International Journal of Food Science & Technology*, 54, 2983–2997.

26. **ElMasry, G.**, Mandour, N., Al-Rejaie, S., Belin, E., & Rousseau, D. (2019). Recent Applications of multispectral imaging in seed phenotyping and quality monitoring-An overview. *Sensors*, 19(5), 1090.

27. Shibata M., **ElMasry G.**, Moriya K., Rahman M. M., Miyamoto Y., Ito K., Nakazawa N., Nakauchi S. & Okazaki E. (2018). Smart technique for accurate monitoring of ATP content in frozen fish fillets using fluorescence fingerprint. *LWT-Food Science & Technology*, 92: 258-264.

28. ElGamal, R. A., Kishk, S. S., & **ElMasry, G.** (2017). Validation of CFD models for the deep-bed drying of rice using thermal imaging. *Biosystems Engineering*, 161, 135-144.

29. Ghazal, A. F., **ElMasry, G.**, El-Sheikh, I. H. & Radwan, S. M. (2017). Estimation of some postharvest losses in tomato during simulated transport operation. *Misr Journal of Agricultural Engineering*, 34(1), 291-316.

30. Higashi, H., **ElMasry G.** & Nakauchi, S. (2016). Sparse regression for selecting fluorescence wavelengths for accurate prediction of food properties. *Chemometrics and Intelligent Laboratory Systems* , 154 (1): 29-37.

31. **ElMasry G.**, Nakazawa N., Okazaki E. & Nakauchi S. (2016). Non-invasive sensing of freshness indices of frozen fish and fillets using pretreated excitation–emission matrices. *Sensors & Actuators*, 228, 237-250.

32. **ElMasry, G.** & Nakauchi, S. (2016). Image analysis operations applied to hyperspectral images for non-invasive sensing of food quality – a comprehensive review. *Biosystems Engineering*, 142, 53-82.

33. **ElMasry G.**, H Nagai H.; Moria K., Nakazawa N. Tsuta M., Sugiyama J., Okazaki E. & Nakauchi S.(2015). Freshness Estimation of Intact Frozen Fish Using Fluorescence Spectroscopy and Chemometrics of Excitation-Emission Matrix. *Talanta* 143, 145-156.

34. **ElMasry, G.** & Nakauchi, S. (2015). Non-Invasive Sensing of Thermal Treatment of Japanese Seafood by Using Imaging Spectroscopy and Multivariate Analysis. *International Journal of Food Science and Technology*, 50(9): 1960-1971.

35. **ElMasry, G.** & Nakauchi, S. (2015). Prediction of meat spectral patterns based on optical properties and concentration of the major constituents. Food Science & Nutrition, 4 (2):269-283.

36. ElGamal, R., Ronsse, F., **ElMasry, G.**, & Pieters, J. G. (2015). Development of a Multi-Scale Model for Deep-Bed Drying of Rice. *Transactions of the ASABE*, 58(3), 849-859.

37. Khedr, A. F., Rashad, M. A., **ElMasry, G.**, El-Sayed, A. S., & Hegazi, M. M. (2015). Development of a computer model to determine the optimum lateral

length of microirrigation systems. *Misr Journal of Agricultural Engineering*, 32(2), 643-660.

38. Khedr, A. F., Rashad, M. A., **ElMasry, G.**, El-Sayed, A. S., & Hegazi, M. M. (2015). Performance evaluation of low-head microirrigation systems in maize fields. *Misr Journal of Agricultural Engineering*, 32(3), 1041-1056.

39. **ElMasry, G.**, Sun, D.-W., Kamruzzaman, M., Barbin, D. & Allen, P. (2013). Hyperspectral imaging- A new era of applications in non-destructive sensing of meat quality. NIR News, 23 (6): 9-14.

40. Talens P., Mora L., Morsy N., Barbin D., **ElMasry G.** & Sun, D.-W. (2013). Prediction of water and protein contents and quality classification of Spanish cooked ham using NIR hyperspectral imaging. *Journal of Food Engineering*, 117 (3): 272-280.

41. Kamruzzaman M., Sun D-W, **ElMasry G.**, Allen P. (2013). Non-destructive assessment of instrumental and sensory tenderness of lamb meat using NIR hyperspectral imaging. *Food Chemistry* 141(1): 389-396.

42. **ElMasry G.**, Sun D.-W., Allen P. (2013). Chemical-Free Assessment and Mapping of Major Constituents in Beef Using Hyperspectral Imaging. *Journal of Food Engineering*, 117 (2): 235-246.

43. Barbin D., **ElMasry G.**, Sun D.-W. & Allen P. (2013). Non-destructive determination of chemical composition in intact and minced pork using near-infrared hyperspectral imaging. *Food Chemistry*, 138 (2-3): 1162-1171.

44. Feng Y.-Z., **ElMasry G.**, Sun D.-W., Walsh D. & Morsy N. (2013). Near-infrared hyperspectral imaging and partial least squares regression for rapid and reagentless determination of *Enterobacteriaceae* on chicken fillets. *Food Chemistry*, 138 (2-3): 1829-1836.

45. Barbin D., **ElMasry G.**, Sun D.-W., Allen P. & Morsy N. (2013). Non-destructive assessment of microbial contamination in porcine meat using NIR hyperspectral imaging. *Innovative Food Science and Emerging Technologies*, 17: 180-191.

46. Kamruzzaman, M., Sun, D-W, **ElMasry, G.**, Allen, P. (2013). Fast detection and visualization of minced lamb meat adulteration using NIR hyperspectral imaging and multivariate image analysis. *Talanta*, 103 (15): 130-136.

47. ElGamal, R., **ElMasry, G.**, Firtha, F. (2012). Physico-mechanical properties of rough rice grain under different moisture conditions. *Progress in Agricultural Engineering Sciences*, 8(1): 17-36

48. **ElMasry; G.**, Kamruzzaman, M.; Sun, D-W., Allen, P (2012). Principles and applications of hyperspectral imaging in quality evaluation of agro-food products: a review. *Critical Reviews in Food Science and Nutrition*, 52(11): 999-1023.

49. Rajkumar, P., Wang, N., **ElMasry, G.**, Raghavan, G.S.V. & Gariepy Y. (2012). Studies on banana fruit quality and maturity stages using hyperspectral imaging. *Journal of Food Engineering*, 108(1): 194-200.

50. Kamruzzaman, M., Barbin, D., **ElMasry, G.**, Sun, D-W, Allen, P. (2012). Non-destructive prediction and visualization of chemical composition in lamb meat

using NIR hyperspectral imaging and multivariate regression. *Innovative Food Sciences and Emerging Technologies,* 16: 218-226.

51. Kamruzzaman, M., Barbin, D., **ElMasry, G.**, Sun, D-W, Allen, P. (2012). Potential of hyperspectral imaging and pattern recognition for categorization and authentication of red meat. *Innovative Food Sciences and Emerging Technologies*, 16: 316-325.

52. Jackman, P., Sun, D.-W. & **ElMasry, G.** (2012). Robust colour calibration of an imaging system using a colourspace transform and advanced regression modelling. Meat Science, 91 (4): 402-407.

53. **ElMasry, G.**, Cubero, S., Moltó, E., Blasco, J. (2012). In-line sorting of irregular potatoes by using automated computer-based machine vision system. Journal of Food Engineering, 112 (1-2): 60-68.

54. **ElMasry, G.**, Sun, D.-W., Allen, P. (2012). Near-Infrared Hyperspectral Imaging for Predicting Colour, pH and Tenderness of Fresh Beef. Journal of Food Engineering, 110 (1): 127-140.

55. Kamruzzaman, M., **ElMasry, G.**, Sun, D-W, Allen, P. (2012). Prediction of some quality attributes of lamb meat using NIR hyperspectral imaging and multivariate analysis. Analytica Chimica Acta, 714 (10): 57-67.

56. Barbin D., **ElMasry G.**, Sun, D.-W. & Allen P. (2012). Predicting quality and sensory attributes using near-infrared hyperspectral imaging. Analytica Chimica Acta, 719 (10): 32-40.

57. Barbin D., **ElMasry G.**, Sun, D.-W. & Allen P. (2012). Near-infrared hyperspectral imaging for grading and classification. Meat Science, 90 (1): 259-268.

58. **ElMasry; G.**, D.F. Barbin; Sun, D-W., Allen, P (2012). Meat Quality Evaluation by Hyperspectral Imaging Technique: an overview. Critical Reviews in Food Science and Nutrition, 52 (8): 689–711.

59. Fathy; F., Ahmed, A. M., Ismail, S.A.S. & **ElMasry, G.** (2011): Bacteriological quality of chilled chicken marketed at Ismailia governorate. Suez Canal Veterinary Medicine Journal, 1:47-54.

60. **ElMasry, G.**, Sun, D.-W., Allen, P. (2011). Non-destructive determination of water-holding capacity in fresh beef by using NIR hyperspectral imaging. Food Research International, 44 (9): 2624-2633.

61. Kamruzzaman, M., **ElMasry, G.**, Sun, D-W, Allen, P. (2011). Application of NIR hyperspectral imaging for discrimination of lamb muscles. Journal of Food Engineering, 104 (3): 332-340.

62. **ElMasry, G.**, Iqbal, A., Sun, D-W, Allen, P., Ward, P. (2011). Quality classification of cooked, sliced turkey hams using NIR hyperspectral imaging system. Journal of Food Engineering, 103 (3): 333-344.

63. **ElMasry, G.**, Radwan, S. ElAmir, M. ElGamal, R. (2009). Investigating the effect of moisture content on some properties of peanut by aid of digital image analysis. Food and Bioproducts Processing, 87 (4): 273-281.

64. **ElMasry, G.**, El-Shiekh, I. and Morsy, N. (2009). Colour grading of strawberry using computer vision and backpropagation artificial neural network. J. Agric. Sci. Mansoura Univ., 34 (7): 3632-3639.

65. **ElMasry, G.**, Wang, N., Vigneault, C. (2009). Detecting Chilling Injury in Red Delicious Apple Using Hyperspectral Imaging and Neural Networks. Postharvest Biology and Technology, 52 (1): 1-8.

66. **ElMasry, G.**, Wold, J. P. (2008). High-Speed Assessment of Fat and Water Content Distribution in Fish Fillets Using Online Imaging Spectroscopy. *Journal of Agricultural and Food Chemistry*, 56(17): 7672-7677.

67. **ElMasry, G.**, Nassar, A., Wang, N., Vigneault, C. (2008). Spectral methods for measuring quality changes of fresh fruits and vegetables. Stewart Postharvest Review 4(4): 1-13.

68. **ElMasry, G.**, Wang, N., Qiao, J., Vigneault, C., ElSayed, A. (2008) Early Detection of Apple Bruises on Different Background Colors Using Hyperspectral Imaging. *LWT- Food Science and Technology*, 41(2):337-345.

69. **ElMasry, G.**, N. Wang, C. Vigneault, (2008). Hyperspectral imaging for chilling injury detection in Red Delicious apples Part 1: Establishment of a hyperspectral imaging system. Annals of Warsaw University of Life Sciences – SGGW, 52 (2008): 73–79.

70. **ElMasry, G.**, N. Wang, C. Vigneault, (2008). Hyperspectral imaging for chilling injury detection in Red Delicious apples Part 2: Selection of optimal wavelengths for chilling injury detection. Annals of Warsaw University of Life Sciences – SGGW, 52 (2008): 81–88.

71. **ElMasry, G.**, Wang, N., ElSayed, A., Ngadi, M. (2007). Hyperspectral Imaging for Nondestructive Determination of Some Quality Attributes for Strawberry. Journal of Food Engineering 81(1):98-107.

72. Wang, N., **ElMasry, G**., S Sevakarampalayam and Qiao, J. (2007). Spectral Imaging Techniques for Food Quality Evaluation. Stewart Postharvest Review 3(1): 1-8.

73. **ElMasry, G.**, Radwan, S., El-Amir, M., Wang, N. (2006). Detection of Apple Stem using Hyperspectral Imaging. Misr J. Agr. Eng. 23(1):1-17.

74. **ElMasry, G.**, Moltó, E., Blasco, J., ElSayed, A. (2006). Influence of Hot Water Treatment on Some Chemical and Mechanical Properties of Potato. Agricultural Engineering International: the CIGR Ejournal. Manuscript FP 05 013. Vol. VIII. November, 2006.

b. Book chapters

75. Caporaso, N., **ElMasry, G.** & Gou, P. (2020). Hyperspectral Imaging Techniques for Non-Contact Sensing of Food Quality. In: Innovative Food Analysis (Edited by Galanakis Charis). Academic Press, Elsevier Publishing Inc., The Netherlands.

76. Kamruzzaman, M., **ElMasry G.** & Nakauchi S. (2014). On-line screening of meat and poultry product quality and safety using hyperspectral imaging. In: High Throughput Screening for Food Safety Assessment, 1st Edition Biosensor Technologies, Hyperspectral Imaging and Practical Applications (Eds. A.K Bhunia, M.S. Kim & C.R. Taitt). Woodhead Publishing Series in Food Science, Technology and Nutrition.

77. **ElMasry, G.**, Sun, S-W (2010). Meat Quality Assessment Using a Hyperspectral Imaging System. In Hyperspectral Imaging for Food Quality Analysis and

Control, Edited by Da-Wen Sun, Academic Press/Elsevier, San Diego, California, USA.

78. **ElMasry, G.**, Sun, S-W (2010). Principles of Hyperspectral Imaging Technology. In Hyperspectral Imaging for Food Quality Analysis and Control, Edited by Da-Wen Sun, Academic Press/Elsevier, San Diego, California, USA.

79. Wang, W., **ElMasry, G.** (2010). Bruise Detection of Apples Using Hyperspectral Imaging. In Hyperspectral Imaging for Food Quality Analysis and Control, Edited by Da-Wen Sun, Academic Press/Elsevier, San Diego, California, USA.

c. Conference papers

80. **ElMasry, G.** (2023). Analysis and applications of Multispectral imaging systems. Workshop on near-infrared spectroscopy and hyperspectral imaging in the Agri-food sector: from the fundamentals to the AI data analysis, IRTA, Monels, Spain, January 30-31, 2023

81. **ElMasry, G.** (2023). Hyperspectral imaging a full story from acquisition to chemical images, KSU, The International Conference and Exhibition for Science (ICES2023), King Saud University, Riyadh, Saudi Arabia, February 6-8, 2023

82. Shehata, D.; **ElMasry, G.**, Mandour, N., Rouseau, D., Belin, É. (2022). Early Detection of fungal infection on cowpea seeds by NIR spectroscopy and thermal imaging. The 3rd International Symposium on Mechanization, Precision Horticulture, and Robotics: Precision and Digital Horticulture in Field Environments, 14-20 Agust 2022, Angers, France.

83. **ElMasry, G.** (2021). Innovations in hyperspectral imaging for food analysis. Symposium on Process analysis and control in food manufacturing, Advances In Process Analytics And Control Technologies (CPACT), - 26 October 2021, Glasgow, Scotland.

84. **ElMasry, G.**, ElGamal, R., Mandour, N., Al-Rejaie, S., Belin, É., Rouseau, D. (2021). Thermal imaging applications in seed quality evaluation. The 13th International Conference on Agrophysics: Agriculture in changing climate, 15-16 November 2021, Lublin, Poland.

85. **ElMasry, G.**, Mandour, N., Morsy, N., ElKhouly, D., Al-Rejaie, S., Rousau, D., Belin, É. (2021). High-throughput phenotyping of cowpea seeds during developmental stages using multichannel imaging. The 13th International Conference on Agrophysics: Agriculture in changing climate, 15-16 November 2021, Lublin, Poland.

86. **ElMasry, G.**, (2021). Innovations in hyperspectral imaging for food analysis. Process Analysis and Control in Food Manufacturing, 26th October, Glasgow, Scotland, UK.

87. **ElMasry G.**, Mandour N., Morsy N., Al-Rejaie S., Gou, P., Belin E. & Rousseau D. (2019). Potential applications of multispectral imaging for food quality assessment. The 33rd EFFoST International Conference, 12-14 November 2019, Rotterdam, The Netherlands.

88. **ElMasry G.**, Mandour N., Morsy N., Al-Rejaie S., Belin E. & Rousseau D. (2019). High-throughput phenotyping of Cowpea seeds using multispectral

imaging. The 33rd EFFoST International Conference, 12-14 November 2019, Rotterdam, The Netherlands.

89. **ElMasry G.**, Fulladosa E., Comaposada J. & Gou P. (2019). Characterization of salt, fat and water distribution in sliced dry-cured ham using hyperspectral imaging. The 10th Global Ham Congress, 17-19 September 2019, Madrid, Spain.

90. **ElMasry G.**, Mandour N., Morsy N., Al-Rejaie S., Belin E. & Rousseau D. (2019). Multispectral Imaging and Pattern Recognition Methods for Food Quality Assessment. The 3rd International Conference on Food and Nutritional Sciences, 15-16 April 2019, Paris, France.

91. **ElMasry, G.**, Ito, K., Nakauchi, S., Okazaki, E., Nakazawa, N., Shibata, M., Miyamoto, Y., Moriya, K. (2016). Detection of freshness in frozen fish using front-face fluorescence spectroscopy. The 11th International Conference on Agrophysics: Soil, Plant & Climate, 26-28 September 2016, Lublin, Poland.

92. Morsy, N, Rayan, A. & **ElMasry, G.**, (2016). Effect of different edible coatings on the quality and shelf life of apricot during cold storage. The 11th International Conference on Agrophysics: Soil, Plant & Climate, 26-28 September 2016, Lublin, Poland.

93. **ElMasry, G.** & Nakauchi, S. (2015). Prediction of meat spectral signatures in the near infrared region using optical properties of main chromophores. The American Society of Agricultural and Biological Engineering (ASABE) Annual Meeting 2015, New Orleans, Louisiana, USA, July 26-29, 2015.

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