# **Publications and presentations**

## i. Book and Book Chapters:

- Demirci, A. and M. Ngadi. 2012. Food Decontamination: Novel Methods and Applications. Woodhead Publishing Ltd., Cambridge, UK.
- Keklik, N.M., A. Demirci, and K. Krishnamurthy. 2012. Food decontamination by UV and pulsed UV light. In Food Decontamination: Novel Methods and Applications. A. Demirci and M. Ngadi, Eds. Woodhead Publishing Ltd., Cambridge, UK.
- Kuan-Chen Cheng, Satyanarayan R. S. D., A. Demirci, and K. L. Bialka. 2012. Electrolyzed oxidizing water for food decontamination. In Food Decontamination: Novel Methods and Applications. A. Demirci and M. Ngadi, Eds. Woodhead Publishing Ltd., Cambridge, UK.
- Demirci, A. and N.M. Keklik. 2012. Process design involving pulsed UV-light. In Handbook of Food Process Design. M. S. Rahman and J. Ahmed, Eds. Blackwell Publishing Limited, Oxford, UK.
- Satyanarayan R. S. D., N. M. Keklik, A. Demirci, and G. S. V. Raghavan. 2012. Microbiological safety and sanitation of Eggs. Nova Science Publishers, Inc. Hauppauge, NY.
- Zhou B, Lee H, Feng H. 2012. Food decontamination by power ultrasound. In Food decontamination novel methods and applications, (eds.) Demirci A, Ngadi M, Woodhead Publishing Ltd, Cambridge, UK.
- Soo HS, Brehm-Stecher B, Jaykus LA. 2012. Advances in separation and concentration of microorganisms from food samples, In Advances in Microbial Food Safety, J. Sofos (ed), Woodhead Publishing, Cambridge, UK "Forthcoming".
- Brehm-Stecher BF. 2012. Advances in single-cell approaches for the study of foodborne pathogens, In Advances in Microbial Food Safety, J. Sofos (ed), Woodhead Publishing, Cambridge, UK "Forthcoming".
- Rockendra Gupta and V.M. Balasubramaniam. 2012. High-Pressure Processing of Fluid Foods. In Novel Thermal and Non-Thermal Technologies for Fluid Foods. Edited by: P.J. Cullen, Brijesh K. Tiwari and Vasilis Valdramidis. Elsevier Inc. London, UK. Pages 109–133
- Daryaei, H., and V.M. Balasubramaniam. 2012. Microbial decontamination of food by high hydrostatic pressure. In Microbial decontamination in the food industry: Novel methods and applications. Edited by Ali Demirci and Michael O. Ngadi. Woodhead Publishing Series in Food Science, Technology and Nutrition 234. Cambridge, UK. Pages 370-406.
- Birla, S., Dev, S. R. S, Subbiah, S. Raghavan, G. S. 2012. Food decontamination by microwave and radio frequency, In: Food decontamination: novel methods and applications, Woodhead Publishing

## ii. Journal papers (follow style guide for JFS, copied below)

- Lubguban, A., Lozada, Z., Tu, Y., Fan, H., Hsieh, F. and Suppes, G.J. 2011. Isocyanate reduction by epoxide-substitution of alcohols for polyurethane bioelastomer synthesis. Intern. J. Polym. Sci. Vol. 2011, Article ID 936973, 8 pages, doi:10.1155/2011/936973.
- Tammineni, NR, Ünlü, G, Rasco, B, Powers, JR, Sablani, SS, Nindo, CI. 2012. Effect of trout skin gelatin-based edible films containing antioxidants on the oxidative stability of cod liver oil. J. Food Sci. (Forthcoming).

- Puerta-Gomez, A.F, Moreira, R.G., Kim J., and Castell-Perez, M.E. 2012. Comparison of growth rates of Escherichia Coli spp. and Salmonella Typhimurium LT2 in baby spinach leaves under slow cooling. Food Control, 29(1), 11-17.
- Moreira, R.G., A. F. Puerta-Gomez, J. Kim, and E. Castell-Perez. 2012. Factors affecting radiation D-values (D10) of an Escherichia coli cocktail and Salmonella typhimurium LT2 inoculated in fresh produce. Journal of Food Science, 77(4), E104-11. doi: 10.1111/j.1750-3841.2011.02603
- Caparino, OA, Tang, J, Nindo, CI, Sablani, SS, Powers, JR, Fellman, JK. 2012. Effect of drying methods on the physical properties and microstructures of mango (Philippines "Carabao" var.) powder. J. Food Eng. 111(1):135-148.
- Fan, H., Tekeei, A., Suppes, G.J., and Hsieh, F. 2012. Properties of bio-based rigid polyurethane foams reinforced with fillers: microspheres and nanoclay. Intern. J. Polym. Sci. Vol. 2012, Article ID 474803, 8 pages, doi: 10.1155/2012/474803.
- Fan, H., Tekeei, A., Suppes, G.J., and Hsieh, F. 2012. Physical properties of soyphosphate polyol-based rigid polyurethane foams. Intern. J. Polym. Sci. Volume 2012, Article ID 907049, 8 pages, doi:10.1155/2012/907049.
- Laughter, J.A., Brown, B.D. & Anantheswaran, R. C. 2012. Manufacturing Chocolate for Entrepreneurial Endeavors. In: Production of Specialty Foods for Entrepreneurs: Processing Technology, Quality and Food Safety (Ed. Y. Zhao). CRC Press /Taylor & Francis (in press).
- Motwani, T., Hanselmann, W. & Anantheswaran, R.C. 2011. Diffusion, counter-diffusion and lipid phase changes occurring during oil migration in model confectionery systems. J. Food Engineering 104:186-195.
- Motwani, T., Lanagan, M. & Anantheswaran, R.C. 2012. State of water in starch-water systems in the gelatinization temperature range as investigated using dielectric relaxation spectroscopy. Carbohydrate Polymers 87(1):24-31.
- Yuan, Q., Hanselmann, W.H. & Anantheswaran, R.C. 2011. Moisture and sucrose transfer in fractionated palm kernel (PKO) based films immersed in liquid solutions. J. Food Eng. 108(1):13-21.
- Wen, J., Deng, X., Li, Z., Dudley, E.G, Anantheswaran, R.C., Knabel, S.J., Zhang, W. 2011. Transcriptomic response of Listeria monocytogenes during transition to the long-term-survival phase. Applied & Env. Micro. 77(17):5966-5972.
- Lalpuria, M., Anantheswaran, R. C. & Floros, J.D. 2012. Food Packaging Technologies for Food Safety. In: Food Decontamination: Novel Methods and Applications (Ed. A. DeMirci, & M. Ngadi). Woodhead Publishing (in press).
- Satyanarayan R. S. D., K. C. Cheng, and A. Demirci. 2011. Electrolyzed oxidizing water technology. Resource Magazine of American Society of Agricultural Engineers. September/October:12-13.
- Keklik N.M, A., Demirci, V.M. Puri, P.H. Heinemann. 2012. Modeling the inactivation of Salmonella Typhimurium, Listeria monocytogenes, and Salmonella Enteritidis on poultry products exposed to pulsed UV-light. Journal of Food Protection. 75:-281-288.
- Yang, W., Shriver, S.K., Chung, S.Y., Percival, S., Correll, M.J., Rababah, T.M. 2012. In vitro gastric and intestinal digestions of pulsed light-treated shrimp extracts. Applied Biochemistry and Biotechnology, 166(6): 1409-1422.

- Janve, B., Yang, W., Kozman, A., Sims, C., Teixeira, A., Gunderson, M.A., Rababah, T.M. 2012. Enhancement of corn nixtamalization by power ultrasound. Food and Bioprocess Technology 2012, DOI: 10.1007/s11947-012-0816-7.
- Yang, W., Guner, S., Rock, C., Anugu, A., Sims, C., Gu, L. 2012. Prospecting Antioxidant Capacities and Health-Enhancing Phytonutrient Contents of Southern Highbush Blueberry Wine Compared to Grape Wines and Fruit Liquors. Sustainable Agriculture Research, 1(1):26-35.
- Rock, C., Yang, W., Goodrich-Schneider, R., Feng, H. 2012. Conventional and Alternative Methods for Tomato Peeling. Food Engineering Reviews, 4(1): 1-15. DOI: 10.1007/s12393-011-9047-3.
- Williams, L.L., Yang, W., English, T., English, N., Johnson, J.U., Rababah, T.M., Khatiwada, J. 2012. Disinfection of Salmonella spp. on tomato surface by pulsed ultraviolet light and selected sanitizers. International Journal of Food Engineering, 8(1). DOI: 10.1515/1556-3758.2063.
- Liu, J., Yang, W, Wang, Y., Rababah, T.M., Walker, L.T. (2011). Optimizing machine vision based applications in agricultural products by artificial neural network, International Journal of Food Engineering, 7(3), Article 11. DOI: 10.2202/1556-3758.1745.
- Rababah, T.M., Ereifej, K.I., Esoh, R.B., Al-u'datt, M.H., Yang, W. (2011). Antioxidant activities, total phenolics, and HPLC analysis of the phenolic compounds of extracts from common Mediterranean plants, Natural Product Research, 25(6): 596 605.
- CHENG X, ZHANG J, QIAN F, LIU Y, PENG H, RUAN R, ZHAO Q & WANG Z. 2011. Effect of Maize Resistant Starch and Normal Corn Starch on Water-holding Properties of Minced Pork. Food Science 7:006.
- Peng H, Zhang J, Liu Y, Liu D, Yu Z, Wan Y & Ruan R. 2012. Structural Characterization of Hemicellulosic Polysaccharides Isolated from Bamboo (Phyllostachys pubescens Mazel). Current Organic Chemistry 16(16):1855-1862.
- SUN X, ZHANG J, ZHAO Q, LIU Y, PENG H, RUAN R, WANG Z & CHENG X. 2012. Optimal formula design of quick-frozen steamed bread with resistant starch by NMR technique. Science and Technology of Food Industry 6:068.
- Zhang J, Liu Y, Wang N & Ruan R. 2012a. NMR Technique Application in Evaluating the Quality of Navel Orange During Storage. Procedia Engineering 37:234-239.
- Zhang JS, Liu YH, Jin ZQ & Ruan R. 2012b. Studies on Wheat Resistant Starch by NMR Technique. Advanced Materials Research 550:1357-1363.
- Lin X, Wu J, Zhu R, Chen P, Huang G, Li Y, Ye N, Huang B, Lai Y & Zhang H. 2012. California Almond Shelf Life: Lipid Deterioration During Storage. Journal of Food Science.
- Catauro, P.M. and Perchonok, M.H. 2012. Assessment of the Long-Term Stability of Retort Pouch Foods to Support Extended Duration Spaceflight. J Food Sci 71(1):S29-39.
- Perchonok, M.H., Cooper, M.R., and Catauro, P.M. 2012. Mission to Mars: Food Production and Processing for the Final Frontier. Annu. Rev. Food Sci. Technol. 2012. 3:9.1–9.20.
- Cooper, M.R., Catauro, P.M., and Perchonok, M.H. Development and Evaluation of Bioregenerative Menus for Mars Habitat Missions. Acta Astronautica. Recommended for publication.

- Bornhorst, G.M. and R. P. Singh. 2011. Food bolus formation and disintegration for starch-based foods. *Comprehensive Reviews of Food Science and Food Safety*. 11(2):101-118
- Ferrua, M., F. Kong and R. P. Singh. 2011. Computational modeling of gastric digestion and the role of food material properties. Trends in Food Science and Technolgy. doi:10.1016/j.fifs.2011.04.
- Kong, F., Oztop, M.H., Singh, R.P. and M.J. McCarthy. 2011. Physical changes in white and brown rice during simulated gastric digestion. Journal of Food Science 76(6) ppE450-E457.
- Singh, R.P. and S. Debnath. 2011. Heat and Mass Transfer in Foods during Deep-Fat Frying. In Chapter 11 in Frozen and Refrigerated Doughs and Batters, Edited by K. Kulp, K. Lorenz, and J. Brummer, 2nd edition. American Association of Cereal Chemists, Inc.
- Singh, R.P. and S.E. Zorrilla. 2011. Process and Plant Design. In Encyclopedia of Dairy Sciences. Ed. Fuquay, J.H., Fox, P.F. and P. L.H. McSweeney. 2nd Ed. Volume 4. p 124-133. Academic Press, London, UK.
- Singh, S.K. and R. P. Singh. 2011. Gastric digestion of foods; Mathematical modeling of flow filed in a human stomach. <u>In Food Engineering Interfaces</u>. Ed. Aguilera, J.M. Barbosa-Canovas, G.V., Simpson, R. Welti-Chenas, J. and Bermudez-Aguirre, D. p 99-117. Springer, New York.
- Taitona, L. and R. P. Singh. 2011. Predictive modeling of texture of almonds during storage and shipment. Manuscript submitted to *Advances in Food Process Engineering Research and Applications*. Springer Books. New York.
- Thompson, J.F., Mejia, D. and R.P. Singh 2011. Energy use of commercial forced-air coolers for fruit. Applied Engineering in Agriculture. 26(5): 919-924
- Fransisca L, Park H, Feng H. 2012. Escherichia coli O157:H7 population reduction from alfalfa seeds with malic acid and thiamine dilauryl sulfate and quality evaluation of the resulting sprouts. Journal of Food Science, 77:M121-M126.
- Fransisca L, Feng H. 2012. The effect of surface roughness on inactivation of Escherichia coli O157:H7 by a novel sanitizer on surfaces of alfalfa, broccoli, and radish seeds. Journal of Food Protection, 75:261–269.
- Zhou B, Luo Y, Millner P, Feng H. 2012. Sanitation and design of lettuce coring knives for minimizing Escherichia coli O157:H7 contamination. Journal of Food Protection, 75: 563-566.
- Yang Y, Luo Y, Millner P, Turner E, Feng H. 2011. Assessment of Escherichia coli O157:H7 Transference from Soil to Iceberg Lettuce via a Contaminated Harvesting Knife. International Journal of Food microbiology doi:10.1016/j.ijfoodmicro.2012.07.008.
- Luo Y, Lu S, Zhou B, Feng H. 2011. Dual effectiveness of sodium chlorite for enzymatic browning inhibition and microbial inactivation on fresh-cut apples. LWT Food Science and Technology, 44 (7): 1621-1625.
- Nou X, Luo Y, LV, Yang Y, Feng H, Millner P, Shelton D. 2011. Chlorine stabilizer T-128 enhances efficacy of chlorine against cross-contamination by E. coli O157:H7 and Salmonella in fresh-cut lettuce processing. Journal of Food Science, 76: M218-M224.

- Luo Y, Yang Y, Abadias I, Feng H, Turner E. 2011. Determination of free chlorine levels needed to prevent Escherichia coli O157:H7 cross-contamination during fresh-cut produce wash. Journal of Food Protection, 74: 352-358.
- Acero-Lopez A, Ullah A, Jung S, Wu J. 2012. Effect of high pressure treatment on ovotransferrin, Food Chemistry, 135 : 2245-2252.
- Brehm-Stecher BF and Johnson EA. 2012. Isolation of carotenoid hyperproducing mutants of Xanthophyllomyces dendrorhous (Phaffiarhodozyma) by flow cytometry and cell sorting. Methods Mol. Biol. 898:207-217.
- Karki B, Maurer D, Kim H, Jung S. 2012. Ethanol production from soybean fiber, a co-product of soybean oil extraction, using aqueous ammonia soaking, Journal of American Oil Chemists Society, DOI 10.1007/s11746-012-2016-z.
- Volk SP, Ahn DU, Zeece M, Jung S. 2012. Structure, ACE inhibition and antioxidant activity of dephosphorylated and pressurized eggphosvitin Journal of Science of Food and Agriculture, DOI 10.1002/jsfa.5778.
- Xia Y, Zhang Z, Kessler MR, Brehm-Stecher B, and Larock RC. 2012. Antibacterial soybean-oil-based cationic polyurethane coatings prepared from different amino polyols. ChemSusChem doi: 10.1002/cssc.201200352.
- Escobedo-Avellaneda Z, Velazquez G, Torres JA & Welti Chanes J. 2012. Inclusion of the variability of model parameters on shelf-life estimations for low and intermediate moisture vegetables. Lebensmittel Wissenschaft und Technologie. In press.
- Escobedo-Avellaneda Z, Pateiro Moure M, Chotyakul N, Torres JA, Welti-Chanes J & Pérez Lamela C. 2011. Benefits and limitations of food processing by high pressure technologies: Effects on functional compounds and abiotic contaminants. Journal of Food 9(4): 352-365.
- Segovia Bravo K, Ramírez R, Durst R, Escobedo-Avellaneda ZJ, Welti-Chanes J, Sanz PD & Torres JA. 2011. Formation risk of toxic compounds in pressure-assisted thermally processed foods. Formation risk of toxic compounds in pressure-assisted thermally processed foods. Journal of Food Science, 71(1), R1-R10.
- Buchholz AL, Davidson GR, Marks BP, Todd ECD, Ryser ET. 2012. Quantitative Transfer of Escherichia coli O157:H7 to Equipment during Small-Scale Production of Fresh-Cut Leafy Greens. Journal of Food Protection 75(7):1184-97.
- Jeong S, Marks BP, Ryser ET, Harte JB. 2012. The effect of X-ray irradiation on Salmonella inactivation and sensory quality of almonds and walnuts as a function of water activity. International Journal of Food Microbiology 153(3):365-71.
- Kelkar S, Siddiq M, Harte JB, Dolan KD, Nyombaire G, Suniaga H. 2012. Use of low temperature extrusion for reducing phytohemagglutinin activity (PHA) and oligosaccharides in beans (Phaseolus vulgaris) cv. Navy and Pinto. Food Chem 133: 1636-39.
- Kelkar, S., Dolan, K.D. Modeling the effects of initial nitrogen content and temperature on fermentation kinetics of hard cider. 2012. J. Food Engineering. 109(3):588-596.
- Moosekian SR, Jeong S, Marks BP, Ryser ET. 2012. X-Ray Irradiation as a Microbial Intervention Strategy for Food. In: Doyle MP, Klaenhammer TR, editors. Annual Review of Food Science and Technology, Vol 3. p. 493-510.
- Siddiq M, Harte1 JB, Beaudry RM, Singh SP, Dolan KD, Saha K. 2012. Physicochemical properties of whole fruit and Sensory quality of fresh-cut apples pre-treated with 1-methylcyclopropene (1-MCP). Intl J Food Properties (accepted, in press)

- Sulaiman, R., Dolan, K.D., and Steffe, J.F. 2012. Effect of fill level in mixer viscometry. J. Text Studies 43(4): 319-325.
- Ringus D.L. and Moraru C.I. 2012. Pulsed Light inactivation of L. innocua on food packaging materials: inactivation kinetics and effect of substrate properties. In press. Journal of Food Engineering
- Miller B. M., Sauer A., and Moraru, C. I. 2012. Inactivation of Escherichia coli in milk and concentrated milk using Pulsed Light treatment. Journal of Dairy Science 95(10):5597-5603
- Hsu L. and Moraru C.I. 2011. A numerical approach for predicting volumetric inactivation of food borne microorganisms in liquid substrates by Pulsed Light treatment. Journal of Food Engineering 105 (3): 569–576
- Hsu L. and Moraru C.I. 2011. Quantifying and mapping the spatial distribution of fluence inside a Pulsed Light treatment chamber and various liquid substrates. Journal of Food Engineering 103:84–91
- Dhall, A. and A. K. Datta. 2012. Multiphase and multicomponent transport with phase change during meat cooking. Accepted in the Journal of Food Engineering.
- Warning, A., A. Dhall, D. Mitrea and A. K. Datta. 2011. Porous media based model for deep-fat vacuum frying potato chips. Journal of Food Engineering, 110(3):428-440.
- Rakesh, V., Datta, A. K., Walton, J. H., McCarthy, K. L. and McCarthy, M. J. 2012. Microwave combination heating: Coupled electromagnetics- multiphase porous media modeling and MRI experimentation. AIChE Journal 58(4): 1262-1278.
- Halder, A. and A.K. Datta. 2011. Surface heat and mass transfer coefficients for multiphase porous media transport models with rapid evaporation. Accepted in the Institution of Chemical Engineers Journal.
- A.K. Datta, V. Rakesh and D. Way. 2012. Simulation as an integrator in an undergraduate biological engineering curriculum. Accepted in the Computer Applications in Engineering Education.
- A.Rakesh, V. and A. K. Datta. 2012. Transport in deformable hygroscopic porous media during microwave puffing. Accepted the American Institute of Chemical Engineers Journal.
- Kusnadi, C., and Sastry, S.K. 2012. Effect of Temperature on Salt Diffusion into Vegetable Tissue. Int. J. Food Properties 15(5):1148-1160.
- Somavat, R., Mohamed, H., Chung, Y-K; Yousef, A.E., and Sastry, S.K. 2012 Acceleration of inactivation of Geobacillus stearothermophilus spores by ohmic heating. J. Food Engineering 108:69-76.
- Nguyen, L-T., Balasubramaniam, V.M., and Sastry, S.K. 2012. Determination of in-situ thermal conductivity, thermal diffusivity, volumetric specific heat and isobaric specific heat of selected foods under pressure. Int. J. Food Properties 15:169-187.
- J. Moreno, J., Simpson, R., Baeza, A., Morales, J., Muñoz, C., Sastry, S., and Almo, S. 2012. Effect of ohmic heating and vacuum impregnation on the osmodehydration kinetics and microstructure of strawberries (cv. Camarosa). LWT-Food Science and Technology 45:148-154.
- Shynkaryk, M., and Sastry, S.K. 2012. Simulation and optimization of the ohmic processing of highly viscous food product in chambers with sideways parallel electrodes. J. Food Engineering 110(3):448-456.

- Kusnadi, C., and Sastry, S.K. 2012. Effect of moderate electric fields on salt diffusion into vegetable tissue. J. Food Engineering 110(3):329-336.
- Somavat, R., Kamonpatana, P., Mohamed, H., and Sastry, S.K. 2012. Ohmic sterilization inside a multi-layered laminate pouch for long-duration space missions. J. Food Engineering 112:134-143
- Peng, J., Mah, J-H., Somavat, R., Mohamed, H., Sastry, S.K. and Tang, J. 2012. Thermal inactivation kinetics of Bacillus coagulans spores in tomato juice. J. Food Protection 75(7): 1236-1242.
- Salengke, S., Sastry, S.K. and Zhang, Q.H. 2012. Pulsed electric field technology: modeling of electric field and temperature distributions within continuous flow PEF treatment chamber. International Food Research Journal. (accepted for publication).
- Park, S.H., Balasubramaniam, V.M. and Sastry, S.K. 2012. Estimating pressure induced changes in vegetable tissue using in situ electrical conductivity measurement and instrumental analysis. J. Food Engineering (accepted for publication).
- Chawla, A.S, Kasler, D.R., Sastry, S.K. and Yousef, A. E. 2012. Food decontamination using ozone, in Food decontamination: novel methods and applications, p. 495-532, A Demirci and M Ngadi (eds.), Woodhead Publishing, Cambridge, UK.
- Bowman T, S Barringer. 2012. Analysis of factors affecting volatile compound formation in roasted pumpkin seeds with selected ion flow tube mass spectrometry (SIFT-MS). J Food Sci 71(1):C51-C60.
- Marthina K, S Barringer. 2012. Confectionery Coating with an Electrohydrodynamic (EHD) System. J Food Sci 71(1):E26-E31.
- Huang Y, Barringer SA. 2012. Adhesion of Food Powders with Nonelectrostatic and Electrostatic Coating. J Food Proc Eng 35:264-277.
- Agila A, S Barringer. 2012. Effect of Roasting Conditions on Color and Volatile Profile Including HMF Level in Sweet Almonds (Prunus dulcis). J Food Sci 77(4):C461-C468.
- Wampler B, S Barringer. 2012. Volatile generation in bell peppers during frozen storage and thawing using selected ion flow tube mass spectrometry (SIFT-MS). J Food Sci 77(6):C677-C683.
- Ties P, S Barringer. 2012. Influence of Lipid Content and Lipoxygenase on Flavor Volatiles in the Tomato Peel and Flesh. J Food Sci. 27(7):C830-C837.
- Agila A, S Barringer. Application of Selected Ion Flow Tube Mass Spectrometry Coupled with Chemometrics to Study the Effect of Location and Botanical Origin on Volatile Profile of Unifloral American Honeys. J Food Sci Accepted
- Mosneaguta R, Alvarez V, S Barringer. The effect of antibrowning agents oninhibition of potato browning, volatile organic compound profile, and microbial inhibition J Food Sci Accepted
- Sumonsiri N, S Barringer. Comparison of Solid-liquid Separation (SLS) and Vacuum Concentration of Tomato Juice. J Food Proces Preserv accepted
- Ayvaz, Huseyin, Schirmer, Sarah, Parulekar, Yash, V.M. Balasubramaniam, Somerville, Jeremy A., Daryaei, Hossein. 2012. Influence of selected packaging materials on some quality aspects of pressure-assisted thermally processed carrots during storage. LWT Food Science and Technology 46 (2) 437-447
- Balasubramaniam, V.M. Sastry, S.K. Heldman, D.R. 2012. Food Engineering: Key Component of Food Quality & Safety. Food Technology. 66 (2): 96-96

- Daryaei, H., and Balasubramaniam, V. M. 2012. Kinetics of Bacillus coagulans spore inactivation in tomato juice by combined pressure heat treatment. Food Control (in press)
- Juliano, P., Bilbao-Sainz, C., Koutchma, T., V.M. Balasubramaniam, Clark, S., Stewart, C.M., Dunne, C.P., Barbosa-Canovas, G.V. 2012. Shelf-Stable Egg-Based Products Processed by High Pressure Thermal Sterilization. Food Engineering Reviews 4 (1): 55-67
- Ram M. Uckoo, Guddadarangavvanahally K. Jayaprakasha, V. M. Balasubramaniam, and Bhimanagouda S. Patil. 2012. Grapefruit (Citrus paradise Macfad) Phytochemicals Composition Is Modulated by Household Processing Techniques. Journal of Food Science. 77(9) C921-C926.
- Sung Hee Park, V.M. Balasubramaniam, and Sudhir K. Sastry. 2013. Estimating Pressure Induced Changes in Vegetable Tissue Using In Situ Electrical Conductivity Measurement and Instrumental Analysis. Journal of Food Engineering 114(1) 47-56
- S. De Lamo-Castellvía, W. Ratphtagsanti and V.M. Balasubramaniam. 2012. Combined Effects of Nisin, Sucrose Laurate Ester and Pressure-Assisted Thermal Processing to Inactivate Bacillus Amyloliquefaciens Spores. Acta Alimentaria (in press)
- Lu, L., Chee, G., Yamada, K., and Jun, S. 2012. Electrochemical impedance spectroscopic technique with a functionalized microwire sensor for rapid detection of foodborne pathogens. Biosensors and Bioelectronics (Accepted)
- Choi, W., Jun, S., Nguyen, L.T., Rungraeng, N., Yi, H., Balasubramanian, S., Puri, V.M., and Lee, J. 2012. 3D Milk Fouling Modeling of Plate Heat Exchangers with Different Surface Finishes using Computational Fluid Dynamics Codes. Journal of Food Process Engineering (Available online)
- Rungraeng, N., Cho, Y., Yoon, S., and Jun, S. 2011.Polytetrafluoroethylene-based Carbon Nanotube Coating for Milk Fouling Reduction in Plate Heat Exchanger. Journal of Food Engineering 111(2): 218-224
- Lu, L. and Jun, S. 2012. Evaluation of a microwire sensor functionalized to detect Escherichia coli bacterial cells. Biosensors and Bioelectronics 36(1): 257-261
- Choi, W., Nguyen, L.T., Lee, S.H., and Jun, S. 2011.A Microwave and Ohmic Combination Heater for Uniform Heating of Liquid-Particle Food Mixture. Journal of Food Science 76(9): E576-E585
- Liu G, Zhong Q. 2012. Glycation of whey protein to provide steric hindrance against thermal aggregation. J Agric Food Chem. DOI: 10.1021/jf302883b.
- Zhang Y, Zhong Q. 2012. Effects of thermal denaturation on binding between bixin and whey protein. J Agric Food Chem. 60(30): 7526–7531.
- Shah B, Davidson PM, Zhong Q. 2012. Encapsulation of eugenol using Maillard-type conjugates to form transparent and heat stable nanoscale dispersions. LWT Food Sci Technol. 49(1): 139-148.
- Shah B, Ikeda S, Davidson PM, Zhong Q. 2012. Nanodispersing thymol in whey protein isolate-maltodextrin conjugate capsules produced using the emulsion—evaporation technique. J Food Eng. 113(1): 79–86.
- Zhang Y, Zhong Q. 2012. Binding between bixin and whey protein at pH 7.4 studied by spectroscopy and isothermal titration calorimetry. J Agric Food Chem 60(7): 1880–1886.

- Zhong Q, Ikeda S. 2012. Viscoelastic properties of concentrated aqueous ethanol suspensions of α-zein. Food Hydrocolloid. 28(1): 46-52.
- Ikeda S, Zhong Q. 2012. Polymer and colloidal models describing structure-function relationships. Ann Rev Food Sci Technol 3:405-424.
- M. Moncada and K. J. Aryana, 2012. "Influence of "Mild" Sonication Conditions on the Characteristics of *Streptococcus thermophilus* ST-M5," Advances in Microbiology, 2: 8-16.
- M. Moncada and K. J. Aryana, 2012. Effect of mild sonication conditions on the attributes of *Lactobacillus delbrueckii* ssp. *bulgaricus* LB-12. Advances in Microbiology. 2: 104-111.
- Olga Cueva and K J. Aryana 2012. Bile tolerance of *Lactobacillus acidophilus* LA-K as influenced by various pulsed electric field conditions. Advances in Bioscience and Biotechnology. Accepted. M. Moncada and K. Aryana. 2012. Bile tolerance of *Lactobacillus delbrueckii* ssp. *bulgaricus* LB-12 subjected to mild sonication intensities at different temperatures. J. Dairy Sci. Vol. 95, E Suppl. 2 p 529-530.
- M. Moncada and K. Aryana. 2012. Protease activity of *Streptococcus thermophilus* ST-M5 subjected to mild sonication intensities at different temperatures. J. Dairy Sci. Vol. 95, E Suppl. 2 p 530-531.
- Tahergorabi R, Sivanandan L, Beamer SK, Matak KE, Jaczynski J. 2012. A three-prong strategy to develop functional food using proteins from chicken processing byproducts recovered with isoelectric solubilization/precipitation. Journal of the Science of Food and Agriculture 92(12):2534-2542.
- Tahergorabi R, Sivanandan L, Jaczynski J. 2012. Dynamic rheology and endothermic transitions of proteins recovered from chicken-meat processing by-products using isoelectric solubilization/precipitation and addition of TiO2. LWT Food Science and Technology 46(1):148–155.
- Pitchai, K., Birla, S., Subbiah J. 2012. Coupled Electromagnetic and heat transfer model for microwave heating in domestic ovens. J. of Food Engineering, 112: 110-111.
- Kumar V., Subbiah J., Birla S.L. 2011. A 3-D Computational fluid dynamics modeling and simulation studies of eggs placed on an egg tray under forced air convection, J. of Food Engineering, 108(3): 480-492.

### iii. Abstracts, proceedings

- James MK, Marks BP, Ryser ET, Jeong S. 2011. Evaluation of critical process parameters for Salmonella inactivation on almonds subjected to thermal pasteurization. IAFP Abstract, P3-11. Presented at the Annual Meeting of the International Association for Food Protection. Milwaukee, WI. August, 2011.
- Fan, H., Suppes, G.J. and Hsieh, F. 2011. Physical properties of soy-polyol based polyurethane foams reinforced with microspheres and nanoclay. American Society of Agricultural and Biological Engineers Annual Meeting, Lexington, KY, Aug 7-10.
- Suppes, G.J., Hsieh, F., Tekeei, A. and Fan, H. 2011. Soy-based rigid foams with reduced urethane loadings. Polyurethanes Technical Conference, Nashville, TN, Sep 26-28.
- Payne, E., Munoz, J.F., Reyes-De-Corcuera, J.I. (2012) Rheological and engineering properties of orange pulp. Presented at the International Citrus and Beverage Conference, Clearwater, FL, September 20, 2012. Abstract published in the proceedings of the meeting

- Huang, Y., Ye, M. and Chen. H. 2012. Effect of high hydrostatic pressure on the inactivation of Escherichia coli O157:H7 and Salmonella spp. in strawberry puree. Institute of Food Technologists Annual Meeting. Las Vegas, NV.
- Munoz, J.F., Payne, E., Reyes-De-Corcuera, J.I. (2012) Thermal Properties and Heat Transfer Characteristics of High-Concentration Orange Pulp. Presented at IFT Annual meeting, Las Vegas, NV, June 27, 2012. Abstract published in the meeting program
- Payne E., and Reyes-De-Corcuera J.I. (2012). Rheological properties of orange pulp. Presented at the 52nd Citrus Engineering Conference, Lake Alfred, FL. March 15, 2012. Abstract published in the proceedings of the meeting.
- Reyes-De-Corcuera, J.I., Jones, S.E., Danyluk, M.D. Simultaneous enzymatic clarification and pasteurization of apple juice at high hydrostatic pressure. Presented at the 2012 IFT Annual Meeting, Las Vegas, June 26, 2012
- Bornhorst, G., Heldman, D.R. and R. P. Singh. 2011. Rate kinetics of bread bolus disintegration during in vitro digestión Proceedings of the 11th International Congress on Engineering and Food, May 23-27. Athens, Greece.
- Bornhorst, G., Roman, M. and R. P. Singh. 2012. Mixing of Gastric Secretions in the Stomach During Digestion of Raw and Roasted Almonds. Poster (#077-136) presented at the meeting of 2012 Institute of Food Technologists(IFT) Annual Meeting & Food Expo. Las Vegas, Nevada, U.S.A.
- Bornhorst, G., Rutherford, S., Ferrua, M., Singh, R. P. and P. Maughan. 2012. Properties of Gastric Digesta of Brown and White Rice From In Vivo Trials with Pigs. Poster (#077-93) presented at the meeting of 2012 Institute of Food Technologists(IFT) Annual Meeting & Food Expo. Las Vegas, Nevada, U.S.A.
- Dai, A., and R. P. Singh. 2012. Predicting the Moisture Content and Texture of Raw Kerman Pistachio Kernels During Storage Poster (#077-88) presented at the meeting of 2012 Institute of Food Technologists(IFT) Annual Meeting & Food Expo. Las Vegas, Nevada, U.S.A.
- Ferrua, M. and R. P. Singh. 2012. Numerical Analysis of Fluid Mixing and Discrete Food Particles Distribution During Gastric Digestion. Poster (#077-141) presented at the meeting of 2012 Institute of Food Technologists(IFT) Annual Meeting & Food Expo. Las Vegas, Nevada, U.S.A.
- Oztop MH, Bansal H, McCarthy MJ, McCarthy KL, Takhar P. 2012. Water and fat distributions in methyl cellulose coated chicken nuggets. 2012 IFT Annual Meeting, Institute of Food Technologists, Las Vegas, NV. Abstract No. 077-157.
- Oztop MH, Wichchukit S, McCarthy MJ, McCarthy KL. 2012. Whey protein/alginate combination beads as bioactive carriers in a food sustained release system. 2012 IFT Annual Meeting, Institute of Food Technologists, Las Vegas, NV. Abstract No. 238-01.
- Roman, M., Bornhorst, G., Burri, B., Singh, R. 2012 Bioavailability of Vitamin E from Raw and Roasted Almonds: An In Vivo Assessment. Poster (#295-01) presented at the meeting of 2012 Institute of Food Technologists(IFT) Annual Meeting & Food Expo. Las Vegas, Nevada, U.S.A.
- Zhengjug, X, Ferrua, M., and R.P. Singh. 2012. Computational Fluid Dynamics Modeling of Granular Flow in Human Stomach. Poster (#077-14) presented at the meeting of 2012 Institute of Food Technologists(IFT) Annual Meeting & Food Expo. Las Vegas, Nevada, U.S.

- Banach J, Clark, S, Lamsal B. 2012. Modification of Milk Protein Concentrate for Potential High-Protein Nutrition Bar Applications, 2012 IFT Annual Meeting, June 25 -28, Las Vegas, NV
- Drury J, Wilson LA, Mendonca AF, Brehm-Stecher BF. 2012, Inactivation of Salmomella enterica on romaine lettuce following spraying with PRO-SAN<sup>TM</sup>- a biodegradable foodgrade sanitizer. 2012 IFT Annual Meeting, June 25 28, Las Vegas, NV.
- Dutilly DK, Brehm-Stecher BF, Dickson JS, and Mendonca AF. 2012. Response of Listeria monocytogenes to high hydrostatic pressure or freeze-thaw cycles following exposurew to selected environmental stresses. American Society for Microbiology Annual Meeting, San Francisco, CA, June 16-19.
- Kim HJ, Brehm-Stecher BF. 2012. Foam/vacuum extraction, hollow fiber concentration and quantitative PCR for detection of Salmonella on model food processing surfaces. NanoSAFE National Science Foundation site visit meeting, Iowa State University, March 4-5.
- Kim H, Mitra, D., Kim S.R., Jin, YS. Brehm-Stecher BF. 2012. Combinatorial discovery of genes in E. coli conferring resistance to ethylhexylglycerin, and antimicrobial sensitizing agent. American Societyfor Microbiology Annual Meeting, San Francisco, CA, June 16-19.
- Kim HJ, Brehm-Stecher BF. 2012. Foam/vacuum extraction, hollow fiber concentration and quantitative PCR for detection of Salmonella on model food processing surfaces. International Association for Food Protection Annual Meeting, Providence, RI, July 28-31.
- Liu, R., Cai, Y., Kim, H.J. Brehm-Stecher, B.F., Shinar, J., and R. Shinar. 2012. OLED-based bacteria respiration monitoring. SPIE Optics and Photonics, San Diego, CA, August 14-16.
- Lin, Z., Banach, J., Cerbelaud, O., and Lamsal, B.\*. 2012. Enzymatic Modification of Milk Protein Concentrate and Resulting Functionality, 2012 IFT Annual Meeting, June 25 28, Las Vegas NV.
- Khanal, S., S. Anand and K. Muthukumarappan. 2012. Effectiveness of ultrasonication in inactivating spores of Bacillus spp. in skim milk. 2012 ADSA Annual International Meeting Abstracts No: 52346.
- Muthukumarappan, K. S. Anand and S. Khanal. 2012. Inactivation of aerobic spore formers in non-fat milk using ultrasound. International Nonthermal Food Processing Workshop. Abstract No. 6.
- Benoit A, Marks B, Ryser E. 2012. A quantitative meta-analysis of existing foodborne pathogen transfer data. IAFP Abstract P1-174. Presented at the International Association for Food Protection Annual Meeting. Providence, RI. July 22-25, 2012.
- Benoit AN, Marks BP, Ryser ET, Jeong S. 2012. GloGerm™ powder as a surrogate to assess Listeria monocytogenes transfer between delicatessen turkey and a stainless steel surface. IFT Abstract 043-14. Presented at the Institute of Food Technologists Annual Meeting. Las Vegas, NV. June 25-28, 2012.
- Dolan, K. D. (Presenter & Author), Mishra, D. K. (Author Only). 2011. "Estimation of Salmonella inactivation nonisothermal kinetic parameters". International Conference Inverse Problems in Engineering, U. Central FL, Orlando, FL, May 5.

- Dolan, K. D. (Presenter & Author), Valdramidis, V. (Author Only), Mishra, D. K. (Author Only). 2011. "Parameter estimation for dynamic microbial inactivation; which model, which precision?". 7th International Conference on Predictive Modelling of Food Quality and Safety, September 15.
- Greiby, I. (Author Only), Dolan, K. D. (Presenter & Author). 2011. "Sequential estimation of temperature-dependent thermal diffusivity in cherry pomace during nonisothermal heating". International Conference Inverse Problems in Engineering, U. Central FL, Orlando, FL, May 5
- Henriques J, Suehr Q, Marks B, Jeong S, Limcharoenchat P. 2012. Statistical distribution human error in positioning temperature probes in meat patties for thermal process validation. IAFP Abstract P3-11. Presented at the International Association for Food Protection Annual Meeting. Providence, RI. July 22-25, 2012.
- Hildebrandt I, Marks B, Juneja V, Osoria A, Hall N. 2012. Cross-laboratory comparative study on the impact of experimental and regression methodologies on Salmonella thermal inactivation parameters. IAFT Abstract P3-29. Presented at the International Association for Food Protection Annual Meeting. Providence, RI. July 22-25, 2012.
- Ibrahim Greiby, Dharmendra Mishra, and Kirk Dolan. Estimation of Thermal Properties and anthocyanin retention in cherry pomace at different moisture contents during non-isothermal heating. Inverse Problems Symposium, Michigan State University, June 10-12, 2012.
- James M, Jeong S, Marks B, Ryser E. 2012. Impact of product water activity on the validity of thermal inactivation models for Salmonella on almonds. IAFP Abstract P1-170. Presented at the International Association for Food Protection Annual Meeting. Providence, RI. July 22-25, 2012.
- Jeong S, Aleid S, Siddiq M, Marks B, Dolan K. 2012. Low-energy x-ray irradiation for inactivating Escherichia coli O157:H7 in date paste. IAFP Abstract P3-55. Presented at the International Association for Food Protection Annual Meeting. Providence, RI. July 22-25, 2012.
- K.D. Dolan, V.P. Valdramidis, and D.K. Mishra Parameter estimation for dynamic microbial inactivation: which model, which precision? Inverse Problems Symposium, Michigan State University, June 10-12, 2012.
- M.I. Tenorio-Bernal, B.P. Marks, and K.D. Dolan. Uncertainty Estimations and Validation of a Universal Salmonella Thermal Inactivation Model for Ground- and Whole-Muscle Meat and Poultry Products. Inverse Problems Symposium, Michigan State University, June 10-12, 2012.
- Marks B. 2012. Improved process validation strategies for Salmonella inactivation on low-moisture food products subjected to thermal pasteurization processes. IAFP Symposium S11. Presented at the International Association for Food Protection Annual Meeting. Providence, RI. July 22-25, 2012.
- Tenorio-Bernal M, Marks B, Dolan K. 2012. Uncertainty estimations and validation of a universal Salmonella thermal inactivation model for ground- and whole-muscle meat and poultry product. 2012. IFT Abstract 043-11. Presented at the Institute of Food Technologists Annual Meeting. Las Vegas, NV. June 25-28, 2012.
- Zeng W, Vorst K, Brown W, Marks B, Perez-Rodriguez F, Ryser E. 2012. Monte Carlo simulation of Escherichia coli O157:H7 and Listeria monocytogenes growth in bagged salad greens during commercial transport, retail storage and display. IAFP

- Abstract T4-12. Presented at the International Association for Food Protection Annual Meeting. Providence, RI. July 22-25, 2012.
- Sastry, S.K. 2012. Challenges of Temperature Measurement for Continuous Ohmic Processing Systems. Abstract 101-04, presented at the 2012 IFT Annual Meeting, June 25 28, Las Vegas NV.
- Sastry, S.K. 2012. Effect of Alternative Processing Technologies on Quality: Kinetics and Pilot-Scale Processing Considerations. Abstract 111.01, presented at the 2012 IFT Annual Meeting, June 25 28, Las Vegas NV.
- Park, SH, , Balasubramaniam, V.M., Sastry, S.K., and Lee, J. 2012. Inactivation of Bacillus amyloliquefaciens and Bacillus stearothermophilus Spores Using Combined Pressure, Electric Field, and Heat Treatment. Abstract No. 293.05, presented at the 2012 IFT Annual Meeting, June 25 28, Las Vegas NV
- Shynkaryk, M., and Sastry, S.K. 2012. Effects of Combined Pulsed Electric Field (PEF) and High Hydrostatic Pressure (HPP) Treatment on Inactivation of Listeria innocua. Abstract No. 293.10, presented at the 2012 IFT Annual Meeting, June 25 28, Las Vegas NV
- Kamonpatana, P., Mohamed, H.M.H., Shynkaryk, M., Heskitt, B., Yousef, A.E. and Sastry, S.K. 2012. Mathematical Modeling and Microbiological Verification of Ohmic Heating of Solid-Liquid Mixtures in a Continuous Flow Ohmic Heater System. Abstract No. 077-57, presented at the 2012 IFT Annual Meeting, June 25 28, Las Vegas NV.
- Aykas DP, S Barringer. 2012. The Effect of Temperature, Lecithin Content, Voltage, Resistivity, Viscosity, and Surface Tension on the Number of Droplets/cm2 during Electrostatic Atomization of Soybean Oil. Electrostatic Society of America Annual Meeting
- Agila A, S Barringer. 2012. Color and Aroma-Related Volatiles Including HMF As Affected by Roasting Conditions in Sweet Almonds (Prunus dulcis). IFT Annual Meeting 193-24
- Abdullah, S., Choi, W., and Jun, S. 2012. Simulation of Antioxidants Activity of Grape Juice with Continuous Flow Ohmic Heating, The 2012 IFT Annual Meeting, June 26-28, Las Vegas, NV (077-01)
- Lee, S.H., Choi, W., Nguyen, L., and Jun, S. 2012. Continuous Flow, Simultaneous Microwave, and Ohmic Combination Heating Technology for Thermal Uniformity of Multiphase Foods, The 2012 IFT Annual Meeting, June 26-28, Las Vegas, NV (077-16)
- Lu, L. and Jun, S. 2012. Electrochemical Impedance Spectroscopic Technique with a Functionalized Microwire Sensor for Rapid Detection of Foodborne Pathogens, The 2012 IFT Annual Meeting, June 26-28, Las Vegas, NV (077-73)
- Rungraeng, N. and Jun, S. 2012. Superhydrophobic and Superhydrophilic Nanocomposite Coatings for Preventing Microbial Adhesion in Liquid Food Flow Channel, The 2012 IFT Annual Meeting, June 26-28, Las Vegas, NV (077-109)
- Choi, W., Lee, S.H., and Jun, S. 2012. Understanding of Crack Propagation of a Potato Slice during Freeze Drying using the Continuum Truss Structure Model, The 2012 IFT Annual Meeting, June 26-28, Las Vegas, NV (077-159)

- Chee, G. and Jun, S. 2012. Pulsed CO2 Laser Beam Technology for the Selective Elimination of Surface and Sub-Layer E. coli K12 from Fresh Fruits, The 2012 IFT Annual Meeting, June 26-28, Las Vegas, NV (077-160)
- Zhong, Q. 2012. Challenges and solutions of applying whey proteins to manufacture transparent beverages. The 2012 IFT Annual Meeting, June 25-28, Las Vegas, NV.
- Zhong, Q. and M. Jin. 2012. Cross-linking soy protein dispersions with montmorillonite fillers by transglutaminase. The 2012 IFT Annual Meeting, June 25-28, Las Vegas, NV.
- Zhong, Q. and M. Jin. 2012. Enhancing elasticity of soy protein dispersions with protein-coated montmorillonite by cross-linking using glutaraldehyde. The 2012 IFT Annual Meeting, June 25-28, Las Vegas, NV.
- Zhong, Q. and M. Jin. 2012. Surface-coating of montmorillonite nanoclays by water soluble proteins extracted from hominy feed. The 2012 IFT Annual Meeting, June 25-28, Las Vegas, NV.
- Zhong, Q. and M. Jin. 2012. Structure modification of montmorillonite nanoclays by surface-coating with soy protein. The 2012 IFT Annual Meeting, June 25-28, Las Vegas, NV.
- Ma, Q., P.M. Davidson and Q. Zhong. 2012. Antilisterial properties of lauric arginate alone and in combination with essential oils. The 2012 IFT Annual Meeting, June 25-28, Las Vegas, NV.
- Liu, G. and Q. Zhong. 2012. Glycation of whey protein by reducing sugars with varying chain lengths to improve heat stability at universal solvent conditions. The 2012 IFT Annual Meeting, June 25-28, Las Vegas, NV.
- Liu, G. and Q. Zhong. 2012 Universal heat stable whey protein ingredients. The 2012 IFT Annual Meeting, June 25-28, Las Vegas, NV.
- Wang, W. and Q. Zhong. 2012. AFM study of thermally-formed whey protein aggregates with prior preheating and/or transglutaminase pretreatment. The 2012 IFT Annual Meeting, June 25-28, Las Vegas, NV.
- Zhang, L. and Q. Zhong. 2012. Milk-fat based solid lipid nanoparticles for transparent beverages applications. The 2012 IFT Annual Meeting, June 25-28, Las Vegas, NV.
- Xue, J., P.M. Davidson and Q. Zhong. 2012. Enhancing antilisterial property of thymol in milk by nanoencapsulation. The 2012 IFT Annual Meeting, June25-28, Las Vegas, NV.
- Rodríguez-Marín, M.L., Q. Zhong, R.A. González-Soto, and L.A. Bello-Pérez. 2012. Nanocomposite films prepared from rice and banana flour. The 2012 IFT Annual Meeting, June25-28, Las Vegas, NV.
- Wang, W. and Q. Zhong. 2012. Heat stability of dry-heated mixtures of maltodextrin and whey protein isolate at pH 7.0. The 2012 IFT Annual Meeting, June 25-28, Las Vegas, NV.
- Zhang, Y. and Q. Zhong. 2012. Effect of pH on the interaction between beta-lactoglobulin and bixin. The 2012 IFT Annual Meeting, June 25-28, Las Vegas, NV.
- Zhang, Y. and Q. Zhong. 2012. Binding between bixin and whey protein at pH 7.4 studied by spectroscopy and isothermal titration calorimetry. The 2012 IFT Annual Meeting, June 25-28, Las Vegas, NV.
- Pan, K. and Q. Zhong. 2012. Hydrocolloid-mediated turbidity changes of skim milk powder suspensions. The 2012 IFT Annual Meeting, June 25-28, Las Vegas, NV.

- Reichert, C., J. Weiss, Q. Zhong and P.M. Davidson. 2012. Biopolymer nanocapsules with co-encapsulated nisin and thymol for dispersibility and antimicrobial efficacy in milk with different fat levels during long-term storage. The 2012 IFT Annual Meeting, June 25-28, Las Vegas, NV.
- Shah, B., and Q. Zhong. 2012. Preparation and characterization of nanoscale dispersions of eugenol for enhanced dispersibility. The 2012 IFT Annual Meeting, June 25-28, Las Vegas, NV.
- Chen, H., P.M. Davidson and Q. Zhong. 2012. Processes improving dispersibility of zein nanoparticles using sodium caseinate. The 2012 IFT Annual Meeting, June 25-28, Las Vegas, NV.
- Shah, B., P. M. Davidson and Q. Zhong. 2012. Nanoencapsulation improves antibacterial properties of eugenol against Escherichia coli O157:H7 ATCC 43889 and Listeria monocytogenes Scott A in milk. The 2012 IFT Annual Meeting, June 25-28, Las Vegas, NV.
- Ikeda, S., M. Miyanoshita, C. Hashida, S. Gohtani and Q. Zhong. 2012. Food nanoemulsions prepared using low-energy emulsification methods at a constant temperature: effects of sugars. The 2012 IFT Annual Meeting, June 25-28, Las Vegas, NV.
- Wang, W. and Q. Zhong. 2012. Optimization of preheating conditions to improve heat stability of WPI-maltodextrin conjugate cross-linked by transglutaminase at pH 7.0. The 11th International Hydrocolloids Conference, West Lafayette, IN, May 14-18.
- Liu, G., Q. Zhong and E. Wright. Impact of dry heating conditions on heat stability of whey protein isolate and maltodextrin mixtures. The 11th International Hydrocolloids Conference, West Lafayette, IN, May 14-18.
- Ikeda, S., S. Gohtani, K. Nishinari, and Q. Zhong. 2012. High acyl gellan networks probed by atomic force microscopy and rheology as compared with deacylated gellan and xanthan. The 11<sup>th</sup> International Hydrocolloids Conference, West Lafayette, IN, May 14-18.
- Wang, W., G. Liu, and Q. Zhong. 2012. Conjugation of whey protein with maltodextrin reduces the amount of sodium lauryl sulfate required for thermal stability. The 11th International Hydrocolloids Conference, West Lafayette, IN, May 14-18.
- Pan, K. and Q. Zhong. 2012. Skim milk structures impacted by various alkalinization and acidification processes. The 11th International Hydrocolloids Conference, West Lafayette, IN, May 14-18.
- Zhong, Q. 2012. Nisin-containing capsules with engineered release rate and improved antilisterial properties. The 243rd ACS National Meeting, San Diego, CA, March 25-29.
- Zhong, Q. 2011. Engineering heat stability of whey proteins for beverage applications. The 6<sup>th</sup> International Whey Conference, September 18-21, Chicago, IL.
- M. Moncada and K. Aryana. 2012. Bile tolerance of *Lactobacillus delbrueckii* ssp. *bulgaricus* LB-12 subjected to mild sonication intensities at different temperatures.. Abstract # W 84 American Dairy Science Association annual meeting, Phoenix, AZ. July 15-19.
- M. Moncada and K. Aryana. 2012. Protease activity of *Streptococcus thermophilus* ST-M5 subjected to mild sonication intensities at different temperatures. Abstract # W 87. American Dairy Science Association annual meeting, Phoenix, AZ. July 15-19.

- Chen, J., Pitchai, K., Raj, J., Birla, S., Gonzalez, R., Subbiah, J. 2012. Temperature dependent dielectric and thermal properties of whey protein gel, 46th Symposium of International Microwave Power Institute, Las Vegas, 20-22 June.
- Pitchai, K., Raj, J., Chen, J., Birla, S., Gonzalez, R., Wiemann, D., Subbiah, J. 2012. Microwave heat transfer model for frozen food in a rotating turntable, Poster presented at Annual IFT meeting and EXPO at Las Vegas, 25-28 June.
- Pitchai, K., Raj, J. D., Birla, S., Subbiah, J., Jones, D. 2012. Evaluation of different methods of coupling rotation with microwave heating modeling using Comsol Multiphysics, 46th Symposium of International Microwave Power Institute, Las Vegas, 20-22 June.
- Birla, S. L., Raj, J. D., Subbiah, J. 2011. Modeling of microwave heating of a rotating object in domestic oven, COMSOL conference proceeding, Oct 12-15, Boston. MA.
- Pitchai, K. Birla, S. L., Raj, J. D., Subbiah, J. 2011. Modeling of Susceptor assisted microwave heating of food package in domestic oven, COMSOL conference proceeding, Oct 12-15, Boston. MA

#### iv. Presentations

- S.C. Nimitz, Jr., P.K. Mallikarjunan, M. Ponder, G.E. Welbaum & R.C. Williams, 2012. Application of Far Infrared Radiation for Reduction of Pathogens in Spices, Book of Abstracts, Eleventh Conference of Food Engineering, April 1-4, Leesburg, VA.
- S.C. Nimitz, Jr., P.K. Mallikarjunan, M. Ponder, G.E. Welbaum & R.C. Williams, 2012. Application of Ethanol Vapor for Reduction of Pathogens in Spices. Paper No. 121337649. Annual International Meeting of American Society of Agricultural and Biological Engineers, July 29-Aug 1, Dallas TX.
- Laughter, J. A. & Anantheswaran, R. C. 2011. Characterizing Food Structure for Product Development Applications. Paper presented at the International Seminar on "Cutting Edge Technologies for Food Processing Industries in India", New Delhi, India, December 8.
- Wang, X., S.R.S. Dev, A. Demirci, R.E. Graves, and V.M. Puri. 2012. Electrolyzed oxidizing water for cleaning-in-place of milking systems on dairy farms performance evaluation and assessment, an update. Conference of Food Engineering, Leesburg, VA. pp. 146.
- Puerta-Gomez, A., R.G. Moreira, and E. Castell-Perez. 2012. Physical Characterization of Octenyl Succinate-Modified Biopolymers for Encapsulation Purposes. IFT International Annual Meeting, Las Vegas, June 2012.
- Hill, Laura. 2012. Development of Beta-cyclodextrin Inclusion Complexes Containing Essential Oils (trans-Cinnamaldehyde, Eugenol, Cinnamon Bark and Clove Bud Extracts) Singly and in Combination for Antimicrobial Delivery Applications. 1st place Boyd-Scott Graduate Research Award. ASABE Annual Meeting, Dallas, TX, July 2012.
- Gomes, C. 2012. Nanotechnology Applications for Delivery of Natural Antimicrobials. 2012 CoFE (Conference of Food Engineering), Leesburg, VA, April 2-4, 2012.
- Mantilla, N, Castell-Perez ME, Moreira RG, and Gomes, C. 2012. Development of an Alginate-based edible coating to extend the shelf life of fresh-cut pineapple (Ananas comosus). IFT International Annual Meeting, Las Vegas, June 2012.

- Sipahi, R., Castell-Perez, ME, Moreira, R.G and Gomes, C. 2012. Alginate-based Edible Coating to Enhance Quality and Extend Shelf life of Fresh-Cut Watermelon (Citrus lanatus). IFT International Annual Meeting, Las Vegas, June 2012.
- Demirci, A. 2012. Decontamination by electrolyzed oxidizing water. Conference of Food Engineering, Leesburg, VA. pp. 43.
- Demirci, A. 2012. Decontamination of foods by pulsed ultraviolet light. Conference of Food Engineering, Leesburg, VA. pp. 45.
- Xinmiao Wang, Satyanarayan R.S. Dev, Ali Demirci, Robert E. Graves, and Virendra M. Puri. Electrolyzed Oxidizing Water for Cleaning-In-Place of Milking Systems on Dairy Farms –Performance Evaluation and Assessment, An Update. ASABE Paper No. NABEC 12-022. American Society of Agricultural Engineers. St. Joseph, MI.
- Satyanarayan R.S. Dev, Ali Demirci, Robert E. Graves, and Virendra M. Puri. Computational Fluid Dynamics Simulation of a Turbulent Multiphase Flow System for Optimization of Clean- In-Place (CIP) Technique for Pipelines Using Farm Milking System as a model. ASABE Paper No. NABEC 12-063. American Society of Agricultural Engineers. St. Joseph, MI.
- NASA Food System Challenges: They Are Out of This World Institute of Food Technology Symposium; June 2012
- Palma Salgado S, Lee H, Pearlsten A, Lou Y, Feng H. 2012. Reduction of Escherichia coli population on Iceberg and Romaine lettuce with ultrasound, sanitizer, and surfactant. Institute of Food Technologists annual meeting, Las Vegas, NV.
- Feng H, Zhou B, Fransisca L, Palma Salgado S, Park HK. 2012. New physical and chemical treatments to enhance fresh produce safety. 2012 Conference of Food Engineering (CoFE 2012), Leesburg, VA.
- Feng H, Zhou B, Li Y, Lee H, Lee J-W, Raviyan P, Zhang Z. 2011. High intensity ultrasound as a new food processing and preservation modality. 11th International Congress on Engineering and Food, Athens, Greece.
- Park HK, Feng H. 2012. Inactivation of Salmonella inoculated on almonds by power ultrasound. Institute of Food Technologists annual meeting, Las Vegas, NV.
- Li Y, Lee H, Feng H. 2012. Investigation of ultrasonic pressure distribution in a sonoreactor by finite element simulation. Institute of Food Technologists annual meeting, Las Vegas, NV.
- Swetha Mahadevan and Mukund V. Karwe. "Pressure Enhanced Infusion Beyond Cell Permeabilization Based Mechanisms," IFT AMFE, Las Vegas, NV, June 2012.
- Swetha Mahadevan and Mukund V. Karwe. "Enhanced Infusion Under Pressure With and Without Induced Cell-Membrane Permeabilization" Conference of Food Engineers (CoFE), Leesburg, VA, (April 2012).
- K. Desai, J.S. Karthikeyan, R. Bruins, and M.V. Karwe, "Effect of temperature fluctuations on microbial quality of frozen army rations," IFT AMFE, Las Vegas, NV, June 2012.
- Zhao D., Usaga Barrientos J., Padilla-Zakour O.I., Worobo R.W., and Moraru C. I. 2012. Efficient reduction of E. coli from apple cider by combining microfiltration with ultraviolet treatment. Annual Meeting of IAFP, Providence, RI, July 2012
- Zhao D., Lau E. and Moraru C. I. 2012. The effect of turbidity and membrane pore size on permeate flux in cold microfiltration of apple cider. Annual Meeting of IFT, Las Vegas, NV, June 2012

- Karagoz I, Moreira RG, Castell-Perez ME. 2012. Effect of modified atmosphere packaging conditions on pathogen radiosensitization to assure the safety and quality of irradiated pecans. IFT International Annual Meeting, Las Vegas, June 2012.
- Usaga Barrientos J., Moraru C. I. Worobo R.W., and Padilla-Zakour O.I. 2012. Efficiency of Ultraviolet Treatment of Apple Cider: Effects of Concentration of Suspended Insoluble Solids, and Enzymatic Browning. Annual Meeting of IFT, Las Vegas, NV, June 2012
- Moraru C.I. 2011. Pulsed Light inactivation of foodborne pathogens: fundamentals, applications and potential for the future. 2nd North American IOA-IUVA Congress, Toronto, September 21, 2011
- Gulati, T. and A. K. Datta 2012. Mechanistic understanding of case-hardening and texture during drying processes. Presented at the IFT annual meeting, Las Vegas, NV, June 25.
- Warning, A., J. Chiang, and A.K. Datta. 2012. Fresh produce safety during hydrocooling: an engineering model. Presented at the CoFE 2012, Leesburg, VA, April 4.
- Gulati, T. and A. K. Datta 2012. Fundamentals-based prediction of Case-Hardening during drying processes. Presented at the Conference of Food Engineering (CoFE) 2012, Leesburg, VA, April 2.
- Datta, A. K. 2012. Soft matter approaches as enablers for food macroscale simulation. Faraday Discussion 158 of the Royal Society of Chemistry on Soft Matter Approaches to Structured Foods, Wageningen, The Netherlands, July 2–4.
- Taherkhani, P., A. K. Datta and R. Robinson. 2012. Multiscale Modeling of Flow and Transport in Oral Cavity to Understand Taste Dynamics. Presented at the 2nd International Conference on Food Oral Processing—Physics, Physiology, and Psychology of Eating, Beaune, France, July 1-5.
- Datta, A. K. and V. Rakesh. 2012. Microwave combination heating for product and process development. Presented at the IFT Annual Meeting, Las Vegas, Nevada, June 25-28.
- Datta, A. K. 2012. Multiphase, multiscale, deformable porous media as a general framework for modeling of food processes. Interpore (International Society for Porous Media) Meeting at Purdue University, Lafayette, Indiana. May 14-16.
- Datta, A. K. 2012. Modeling food process, quality and safety: A workshop presented at the Conference on Food Engineering (CoFE), Leesburg, Virginia, April 2-4.
- Datta, A. K. 2012. Engineering models for understanding, visualization and optimization. Presentation to admitted women and multicultural students to the College of Engineering at Cornell University, April 13.
- Warning, A., A. Dhall, D. Mitrea, A. K. Datta. 2011. Porous media based model for deep-fat vacuum frying potato chips. COMSOL conference, Boston, MA, October 13-15.
- Datta, A. K. 2011. Modeling of food processes: Evaporation and transport in deformable porous media. Cornell Fluid Mechanics Seminars, School of Mechanical and Aerospace Engineering, Cornell University, Ithaca, New York, March 1.
- Sastry, S.K. 2012. Ohmic and Moderate Electric Field Processing. Invited presentation at the 7th. International Biochemical Engineering Congress, Ixtapa, Mexico, March 29, 2012.

- Sastry, S.K. 2012. Challenges Facing Food Engineering: An Alternative View. Plenary Speaker, Conference of Food Engineering 2012, Leesburg, VA, April 2, 2012.
- Mohamed, H., Shynkaryk, M., Vurma, M., Pandit, R., Chawla, A., Yesil, M., Yousef, A., and Sastry, S.K. 2012. The Physics of Fresh Produce Safety. Keynote Speaker, Conference of Food Engineering 2012, Leesburg, VA, April 4, 2012.
- Barringer SA. 2012. The Chemistry of Chocolate Flavor. American Chemical Society meeting.
- Kaletunc, G. and Relkin, P. 2012. "Comparison of thermal stability and activity of glucoamylase for starch saccharification process optimization." NATAS Proceedings. Vol. 41. Orlando: NATAS. (Aug 2012)
- Barry, A M; Kaletunc, G; Giusti, M M. 2012. "Encapsulation of Purple Corn (PC) Anthocyanins by Cold Setting Alginate and HighMethoxy Pectin Gel." IFT Technical Abstracts 2012. Chicago: IFT. (Jun 2012)
- Barrett, A.H.; Kaletunc, G.; Hughey, C.A.; Straut, C.; Howell, A. and Ndou, T. 2012. "Dietary incorporation of proanthocyanidins/tannins that inhibit digestive enzymes offers an approach to engineering foods for blood sugar control." Conference of Food Engineering 2012. Leesburg: Conference of Food Engineering. (Apr 2012)
- Gehringer, R and Kaletunc, G. 2012. "Monitoring Chlorine Dioxide Concentration During Treatment of Fresh Produce." Conference of Food Engineering 2012. Leesburg: Conference of Food Engineering. (Apr 2012)
- Kaletunc, G. 2012. "Application of Chlorine Dioxide for Sanitizing Fresh Produce." [Abstract]. Conference of Food Engineering 2012. Leesburg: Conference of Food Engineering. (Apr 2012)
- Balasubramaniam, V.M. 2012. High Pressure Processing of Meat Products. Thermal Processing of Ready-to-Eat (RTE) Meat Products short course The Ohio State University, Columbus, OH April 17-19
- Balasubramaniam, V.M. 2012. Effects of high pressure processing on quality kinetics. In Quality Changes in Foods Processed Using Alternative Processing Technologies Pre-Annual Meeting Short Course, Annual Meeting of Institute of Food Technologists, LVH-Las Vegas Hotel and Casino, Las Vegas, NV. June 25.
- Balasubramaniam, V.M. 2012. Influence of Selected Packaging Materials on Quality Aspects of Pressure Assisted Thermally Processed Food. Abstract 240-01. Annual Meeting of Institute of Food Technologists, Las Vegas, NV. June 25-28.
- Daryaei, H. and V.M. Balasubramaniam. Efficacy of Pressure-Assisted Thermal Processing Against Bacillus amyloliquefaciens Spores in a Pork-Vegetable Product. Abstract no. 137-06 Annual Meeting of Institute of Food Technologists, Las Vegas, NV. June 25-28. Sastry, S.K. V.M. Balasubramaniam, J. Tang, J. Simunovic. 2012. Operation of pilot facilities and costs (video + discussion). In Quality Changes in Foods Processed Using Alternative Processing Technologies. Pre-Annual Meeting Short Course, Annual Meeting of Institute of Food Technologists LVH-Las Vegas Hotel and Casino, Las Vegas, NV. June 25-28.
- Balasubramaniam, V.M. 2012. Frontiers in Food Preservation Research. College of Agricultural Engineering, Tamil Nadu Agricultural University, Coimbatore, India. July 8
- Natalia Szerman, Jeremy Somerville, Hossein Daryaei, Ana Sancho, V.M. Balasubramaniam. 2012. Evaluation of High Pressure Processing for the

- Pasteurization or Sterilization of Cubed Beef Meat with Broth. 16th World Congress of Food Science and Technology Foz do Iguaçu, Parana, Brazil, August 5-9
- Balasubramaniam, V.M. 2012. Use and Application of High Pressure Processing. 1st Annual Food Safety Midwest Workshop, Fort Wyne, IN. September 13.
- Balasubramaniam, V.M. 2012. Food Preservation Methods for Preserving Health-Promoting Food Quality Attributes. Department of Human Nutrition Seminar, The Ohio State University, Columbus, OH. September 21.
- Jun, S. 2012. Exploring the Heating Patterns of Multiphase Foods in a Continuous Flow, Simultaneous Microwave and Ohmic Combination Heater. FOOMA JAPAN International Food Machinery & Technology Exhibition, June 5-8, Tokyo, Japan
- M. Moncada and K. Aryana. 2012. Bile tolerance of *Lactobacillus delbrueckii* ssp. *bulgaricus* LB-12 subjected to mild sonication intensities at different temperatures.. Abstract # W 84 American Dairy Science Association annual meeting, Phoenix, AZ. July 15-19.
- M. Moncada and K. Aryana. 2012. Protease activity of *Streptococcus thermophilus* ST-M5 subjected to mild sonication intensities at different temperatures. Abstract # W
  87. American Dairy Science Association annual meeting, Phoenix, AZ. July 15-19.
- Caparino, OA, Sablani, SS, Tang, J, Syamaladevi, RM, Nindo, CI. 2012. Water sorption characteristics, glass transition temperatures and microstructures of mango (Philippine 'Carabao' var.) powder. Institute of Food Technologists (IFT) Annual Meeting and Expo, Las Vegas, NV.
- Golmohamadi, A, Moller, G, Powers, JR, Nindo, CI. 2012. Effect of ultrasound treatment on antioxidant activity, total phenolics, and anthocyanin content of red raspberry puree. Institute of Food Technologists (IFT) Annual Meeting and Expo, Las Vegas, NV.
- Tammineni, NR, Ünlü, G, Powers, JR, Sablani, SS, Rasco, B., Nindo, CI. 2012. Effect of trout skin gelatin-based edible films containing antioxidants on the oxidative stability of cod liver oil. Institute of Food Technologists (IFT) Annual Meeting and Expo, Las Vegas, NV.
- Han, YT, Nindo, CI, Rasco, B. 2012. Edible fish gelatin films with nisin: Extending shelf life and maintaining quality of trout. Institute of Food Technologists (IFT) Annual Meeting and Expo, Las Vegas, NV.
- Dubie, JS, Morra, MJ, Nindo, CI. 2012. Extraction of antioxidants from mustard (Brassica juncea) seed meal using high-intensity ultrasound. ASABE Annual International Meeting, Dallas, TX.
- Ravli, Y. Da Silva, P. and Moreira, R.G. 2012. Improving the vacuum frying process for high quality sweet potato chips. IFT International Annual Meeting, Las Vegas, June 2012.
- Puerta-Gomez, A.F, Moreira, R.G., Kim J., and Castell-Perez, M.E. 2012. Comparison of growth rates of Escherichia Coli spp. and Salmonella Typhimurium LT2 in baby spinach leaves under slow cooling. IFT International Annual Meeting, Las Vegas, June 2012.
- Kim, J., A.F. Puerta-Gomez, R.G. Moreira, E. Castell-Perez, and G. Klutke. 2012. Development of a quantitative risk assessment model for Salmonella Typhimurium in fresh baby spinach. IFT International Annual Meeting, Las Vegas, June 2012.

- Sivanandan L, Jaczynski J, Singh K, Taylor G, Cook A, Donato L. 2012. Opportunities and Challenges in Lab-to-Community Technology Transfer Outreach Training Programs. Conference of Food Engineering, Leesburg, VA, April 1-4, 2012.
- Sivanandan L, Jaczynski J, Singh K, Burnett W, Lies G, Mishra HN, Matak KE, Ronaghi M. 2012. Global Food Security and Sustainability through Agricultural Education and Training. American Society of Agricultural and Biological Engineers' 2012 Annual International Meeting, Dallas, TX, July 28-August 1, 2012.
- Birla, S., Koral, T. 2012, Design consideration of radio frequency heating system, 46<sup>th</sup> Symposium of International Microwave Power Institute, Las Vegas, 20-22 June.

## v. Theses, dissertations

- Hongyu Fan, 2011. Properties of polyurethane foams from soy-based polyols. Ph.D. Dissertation, University of Missouri, Columbia, MO.
- Luttman, A. 2011. Optimization of an alginate based edible coating with beeswax, nisin and EDTA to maximize the shelf life of fresh mushroom (Agaricus bisporus). M.S. thesis, The Pennsylvania State University, University Park, PA 184pp.
- Wen, J. 2012. Factors affecting biofilm formation and transition of Listeria monocytogenes to the long-term survivial phase and their possible role in persistence in food processing plants. Ph.D. thesis, The Pennsylvania State University, University Park, PA, 212pp.
- Yi Gong, 2011. Puffing of quinoa cakes using a rice cake machine. M.S. Thesis, University of Missouri, Columbia, MO.
- Payne Elyse, (2011). Rheological properties of high and low concentration orange pulp. M.S. Thesis, Food Science and Human Nutrition, University of Florida.
- Munoz Juan Fernando, (2012), Determination of the thermal properties and heat transfer characteristics of high concentration orange pulp.
- Tomlin, B.D. (2011) Kinetic behavior of a pectinase cocktail at high hydrostatic pressure conditions. M.S. Thesis, Agricultural and Biological Engineering, University of Florida.
- LI, Y. 2012. Ph.D. Dissertation: Adaptation of advanced MRI and NMR technique for low magnetic field MRI system. University of Minnesota, St. Paul, Minnesota.
- PETROFSKY, K. E. 2012. Ph.D. Dissertation: Improving the functionality and bioactivity of wheat bran. University of Minnesota, St. Paul, Minnesota.
- HOHN, A. 2012. MS Thesis: Enzyme Treatment of Wheat Bran to Release Antioxidants. University of Minnesota, St. Paul, Minnesota.
- GUO, M. 2012. Effects of chemical, enzymatic and mechanical treatments on the phenolics and water holding capacity in wheat bran. University of Minnesota, St. Paul, Minnesota.
- Dai, A. 2012. Predicting the Moisture Content and Texture of Raw Pistachio Kernels During Storage, MS Thesis. *Department of Biological and Agricultural Engineering, University of California, Davis.*
- Bornhorst, G. 2012. Breakdown and Mixing of Brown and White Rice during Gastric Digestion in Vivo. PhD Thesis. Department of Biological and Agricultural Engineering, University of California, Davis.
- Roman, M. 2012. Release and Bioaccessibility of Lipophilic Nutrients During Digestion, MS Thesis. Department of Food Science and Technology, University of California, Davis

- Lilia Fransisca, 2012 Inactivation of Escherichia coli O157LH7 on raw vegetable sprouts, MS Thesis, University of Illinois at Urbana-Champaign
- Lee EU, 2012. Effect of microencapsulation on viability of probiotics M.S. Thesis.
- Yanfang Li, 2012 Investigation of ultrasonic pressure distribution in a sonoreactor and a washing tank by FEM simulation, MS Thesis, University of Illinois at Urbana-Champaign
- Rabiha Sulaiman, Ph.D. (BE/FS). Thesis: Estimation of kinetic parameters in a corn starch viscosity model at different amylose contents. 2011. Instructor at Universiti Putra, Malaysia.
- Tenorio-Bernal I. M.S. Thesis: A multi-product, multi-factor thermal inactivation model for Salmonella in meat and poultry products. 2012.
- Kamonpatana, P. 2012. Mathematical modeling and microbiological verification of ohmic heating of solid-liquid mixtures in continuous flow ohmic heater systems. Ph.D. dissertation, The Ohio State University.
- Sumonsiri N. 2012. Effect of powder and target properties on food powder coating and comparison of solid-liquid separation (sls) and vacuum concentration of tomato juice
- Agila A. 2012. Volatile profile of cashews (anacardium occidentale l.), honeys, and almonds from different origins by selected ion flow tube mass spectrometry
- Wampler B. 2011. Volatile generation in bell peppers during frozen storage using selected ion flow tube mass spectrometry (SIFT-MS).
- Ties P. 2012. The influence of lipid content and lipoxygenase on flavor volatiles in the tomato peel and flesh
- Aykas DP. 2012. The Effect of Temperature, Lecithin Content, Voltage, Resistivity, Viscosity, and Surface Tension on Droplets/cm<sup>2</sup> During Electrostatic Spraying of Oil
- Mosneaguta R. 2012. The effect of chemical preservatives on inhibition of potato browning, volatile organic compounds profile, and microbial inhibition
- Lu, L. 2011. Evaluation of A Microwire Sensor Functionalized for Rapid detection of Escherichia Coli Cells from Liquid Foods, MS dissertation, Molecular Biosciences and Bioengineering, University of Hawaii
- Jin, M. 2012. Plant Protein-Based Nanocomposite Materials: Exfoliation of Layered Nanoclay by Surface Coating and Enhanced Interactions by Enzymatic and Chemical Cross-linking. Department of Food Science and Technology, the University of Tennessee.
- Maria Carolina Vives "Yogurt cultures survive upon exposure to two antimicrobials and *streptococcus thermophilus* st-m5 acquired resistance to both antimicrobials" M.S. thesis. May 2012.
- Katrina Finley. 2012. Effect of Ultrasound Extraction on Anthocyanin Content and Antioxidant Activity in Red Raspberries. M.S. thesis
- Mantilla, N. 2012. Development of an alginate-based antimicrobial edible coating to extend the shelf-life of fresh-cut pineapple (Ananas comosus). M.S. Thesis, Nutrition and Food Science, Texas A&M University, College Station, TX, 77843-2117
- Sipahi, R.E. 2012. Alginate-based edible coating to enhance quality and extend shelf-life of fresh-cut watermelon (Citrilus lanatus). M.S. Thesis, Biological and Agricultural Engineering, Texas A&M University, College Station, TX, 77843-2117

- Karagoz, I. 2012. Safety Assurance of Pecans by Irradiation without a Detrimental Effect on Quality. PhD Dissertation. Biological and Agricultural Engineering Department, Texas A&M University, College Station, TX 77843-2117.
- Ravli, Y. 2012. Improving the vacuum frying process to produce high quality sweet potato chips. M.S. Thesis, Biological and Agricultural Engineering, Texas A&M University, College Station, TX, 77843-2117