**Publications**

**California**

Journal papers

1. **G. M. Bornhorst, O. Gouseti, M.S.J. Wickham, S. Bakalis. 2016. *Engineering digestion: multiscale aspects of food digestion.* Journal of Food Science. 81(3): R534-543.**
2. **Y.A. Mennah-Govela, G.M. Bornhorst. 2016.** [***Acid and moisture uptake in steamed and boiled sweet potatoes and associated structural changes during in vitro gastric digestion***](https://scholar.google.com/citations?view_op=view_citation&hl=en&user=IGjGZ5YAAAAJ&sortby=pubdate&citation_for_view=IGjGZ5YAAAAJ:roLk4NBRz8UC)**. Food Research International. 88B: 247-255.**
3. **G.M. Bornhorst, K.C. Drechsler, C.A. Montoya, S.M. Rutherfurd, P.J. Moughan, R.P. Singh. 2016. *Gastric protein hydrolysis of raw and roasted almonds in the growing pig.* Food Chemistry. 211: 502-508.**
4. **Y.A. Mennah-Govela, G.M. Bornhorst. 2016. *Mass transport processes in orange-fleshed sweet potatoes leading to structural changes during in vitro gastric digestion.* Journal of Food Engineering. 191: 48-57.**
5. **M.E. Dalmau, G.M. Bornhorst, V. Eim, C. Rosselló, S.Simal. 2017. *Effects of freezing, freeze drying and convective drying on in vitro gastric digestion of apples*. Food Chemistry. 215: 7-16.**
6. **De Moura Bell J.M.LN.M, Aquino L.F.M.C, Cohen J., Silva V.L.M, Rodrigues M.I., Barile D., (2016). Modeling lactose hydrolysis for efficiency and selectivity: Toward the preservation of sialyloligosaccharides in bovine colostrum whey permeate. Journal of Dairy Science. In press. http://dx.doi.org/10.3168/jds.2016-11065.**
7. **Karav S., Le Parc A., de Moura Bell J.M.L.N., Frese S. A., Kirmiz N., Block D.E., Barile D., Mills D. A (2016). Oligosaccharides Released from Milk Glycoproteins Are Selective Growth Substrates for Infant-Associated Bifidobacteria. Appl. Environ. Microbiol. vol. 82(12) 3622-3630.**
8. **Le Parc A., Karav S., de Moura Bell J.M.L.N., Frese S. A., Liu Y., Mills D. A., Block D.E., Barile D., (2015). A novel Endo-β-N-acetylglucosaminidase releases specific N-Glycans depending on different reaction conditions. Biotechnol. Prog. DOI 10.1002/btpr.2133.**

Abstracts, proceedings

1. **O. Gouseti, G.M. Bornhorst, T. Moxon, C. Latty, P. Fryer, S. Bakalis. *A Multidisciplinary Approach to Food Digestion Studies*. Abstract ID 001. ePoster Session E08. IFT Annual Meeting. July 17-19, 2016. Chicago, IL.**
2. **Y.A. Mennah-Govela, K. Vilpont, G.M. Bornhorst. *Reed Beet Structural Changes during in Vitro Gastric Digestion as Influenced by Processing Method and Sample Size.* Abstract ID 004. ePoster Session E08. IFT Annual Meeting. July 17-19, 2016. Chicago, IL.**
3. **G. M. Bornhorst. *Use of Microteaching Principles to Improve Graduate Student Presentation Skills in Teaching and Research.* Abstract ID 020. Poster session P03. IFT Annual Meeting. July 17-19, 2016. Chicago, IL.**
4. **K. Drechsler, G.M. Bornhorst. *Modeling the Softening of Carbohydrate-Based Food during in Vitro Gastric Digestion.* Abstract ID 035. Poster Session P06. IFT Annual Meeting. July 17-19, 2016. Chicago, IL.**
5. **J. Chu, S. O’Meara, Y.A. Mennah-Govela, G.M. Bornhorst. *Investigating the Relationship between Food Properties and Buffering Capacity using a Standardized Method*. Abstract ID 037. Poster Session P05. IFT Annual Meeting. July 17-19, 2016. Chicago, IL.**
6. **Y.A. Mennah-Govela, F. Jannuzzi Guerreiro, C.F. Lemos, G.M. Bornhorst. *Acid and Moisture Uptake in Red Beets during Simulated Gastric Digestion with Varying pH in the Gastric Environment.* Abstract ID 046. Poster Session P01. IFT Annual Meeting. July 17-19, 2016. Chicago, IL.**
7. **O. Gouseti, C. Latty, S. Bakalis, G. Bornhorst. *Bread digestion using dynamic in vitro gastric and intestinal models.* Abstract 1177. 18th World Congress of Food Science and Technology. August 22-25, 2016. Dublin, Ireland.**
8. **Y.A. Mennah-Govela, C. Floyd, G.M. Bornhorst. *Antioxidant Bioaccessibility of Fresh-Squeezed Orange Juice and Orange Juice from Concentrate after Thermal and Non-Thermal Processing.* Abstract 1013. 18th World Congress of Food Science and Technology. August 22-25, 2016. Dublin, Ireland.**
9. **S. Mutlu, Y.A. Mennah-Govela, F. Marra, G. M. Bornhorst. *Acid Diffusion and Texture Changes in Raw, Steamed, and Pickled Beets during in Vitro Gastric Digestion.* Abstract Number 1492. 18th World Congress of Food Science and Technology. August 22-25, 2016. Dublin, Ireland.**
10. **J. L. Cohen, J. M. L. N. de Moura Bell, D. Barile. *Pilot scale isolation of bioactive oligosaccharides from whey permeate.* Department of Food Science and Technology; Foods for Health Institute; University of California, Davis, CA.**

Presentations

1. **G.M. Bornhorst. *Empowering Women to Excel in Careers in Food Science and Engineering.* Invited Presentation; Session 82. 18th World Congress of Food Science and Technology. August 22-25, 2016. Dublin, Ireland.**
2. **G.M. Bornhorst. *Biodisponibilidad y su Importancia en la Industria de los Alimentos Saludables* (presentation in Spanish; Bioaccessibility and its Importance in the Healthy Food Industry). III Foro Innovagro. Fundación de Innovación Agraria. August 30, 2016. Santiago, Chile.**
3. **G.M. Bornhorst. *Biodisponibilidad y su Importancia en la Industria de los Alimentos Saludables* (presentation in Spanish; Bioaccessibility and its Importance in the Healthy Food Industry). III Foro Innovagro. Fundación de Innovación Agraria August 31, 2016. Temuco, Chile.**
4. **G.M. Bornhorst. *Biodisponibilidad y su Importancia en la Industria de los Alimentos Saludables* (presentation in Spanish; Bioaccessibility and its Importance in the Healthy Food Industry). III Foro Innovagro. Fundación de Innovación Agraria. September 2, 2016. La Serena, Chile.**
5. **G.M. Bornhorst, K.C. Drechsler, Y.A. Mennah-Govela. *Development of a Classification System for Predicting Food Behavior during Gastric Digestion*. Conference of Food Engineering. September 12-14, 2016. Columbus, Ohio.**
6. **G.M. Bornhorst. *Enhancing Communication Skills using Microteaching Techniques*. Conference of Food Engineering. September 12-14, 2016. Columbus, Ohio.**
7. **D. Barile, J. Salcedo, A. Le Parc, A. Sun, S. Karav, J. Cohen, J. M. L. N. de Moura Bell. *Milk glycoproteomics: preserving, enhancing, and delivering bioactivity*. International Milk Genomics Consortium Symposium, Davis, September 27-29, 2016.**
8. **J. Cohen, J. M. L. N. de Moura Bell, D. Barile. *Using enzymes to improve nutrition and sustainability in food processing*. UC Berkeley Enzyme Workshop, Berkeley, April 25th, 2016.**
9. **J.M.L.N. de Moura Bell. *Developing Sustainable Processes to Address Sustainability in the Food Industry*. FST/VEN Research Symposium. Davis, CA. Dec 10th, 2015.**

Theses, dissertations

1. Yamile A. Mennah-Govela. M.S. 2015. Mass transport and structural changes of sweet potatoes during in vitro gastric digestion as influenced by cooking method.

**Georgia**

Journal papers

1. Do DHT, Kong F, Penet C, Winetzky D, Gregory K. 2016. Using a dynamic stomach model to study efficacy of supplemental enzymes during simulated digestion. LWT - Food Sci Technol 65: 580-8.
2. Flores FP, Singh RK, Kong F. 2016. Anthocyanin extraction, microencapsulation, and release properties during in vitro digestion, Food Rev Int 32 (1):46-67.
3. Kirmaci B, Singh RK. 2016. Quality of the pre-cooked potato strips processed by radiant wall oven. LWT- Food Sci Technol 66: 565-571.
4. Nagaraj G, Purohit A, [Harrison MA](https://uga.elements.symplectic.org/userprofile.html?uid=394), [Singh, RK](https://uga.elements.symplectic.org/userprofile.html?uid=355), [Hung YC](https://uga.elements.symplectic.org/userprofile.html?uid=827), [Mohan A](https://uga.elements.symplectic.org/userprofile.html?uid=3258). 2016. Radiofrequency pasteurization of inoculated ground beef homogenate. Food Control 59: 59-67.
5. Ozturk S, Kong F, Trabelsi S, Singh R. 2016. Dielectric properties of broccoli powder and its temperature profile during radio frequency heating. J Food Eng 169: 91-100.
6. Rincon A, Singh RK, Stelzleni AM. 2015. Effects of endpoint temperature and thickness on quality of whole muscle non-intact steaks cooked in a radio frequency oven. LWT – Food Sci Technol 64(2): 1323 – 8.
7. Rincon A, Singh RK. 2016. Inactivation of Shigatoxin-producing and nonpathogenic *Escherichiacoli* in non-intact steaks cooked in a radiofrequency oven. Food Control 62: 390-396.
8. Wright ND, Kong F, BS Williams, L Fortner. 2016. A human duodenum model (HDM) to study transport and digestion of intestinal contents. J Food Eng 171: 129-36.
9. Yang X, Kong F. 2016. Effects of tea polyphenols and different teas on pancreatic α-amylase activity in vitro. LWT-Food Sci Technol 66: 232-8.

Abstracts, proceedings

1. Liu L, Kong F. 2016. Microscopic observation of nanocellulose in simulated digestion tract as affected by food matrix. USDA NIFA Project Director (PD) Meeting. State College, PA. June 5-7, 2016.
2. Ozturk S, Kong F, Singh R. 2016. Heating uniformity in corn flour exposed to radio frequency treatment. 18th World Congress on Food Science and Technology (IUFoST). August 21 – 25, 2016. Dublin, Ireland.
3. Ozturk S, Kong, Singh R. 2016. Dielectric properties of seasoning spices and their heating rates during radio frequency. IFT meeting, July 17-19. Chicago.
4. Lin Y, Kong F.  2016. Impact of resistant starch on microencapsulation of iron by spray drying and its release *in vitro.* IFT meeting. July 17-19. Chicago.
5. Do D., Kong F, Penet C, Best C, Gregory K. 2016. Using a dynamic gastric simulation model to study effect of supplementary proteases in improving proteins bio accessibility and reducing food allergens. IFT meeting. July 17-19. Chicago.
6. Kong F. 2015. Dielectric properties of dried vegetable powders and their temperature profile during radio frequency heating. *MINI-SUMMIT in Food Safety, Policy and Sustainability*. Oct 23-26. Keelung, Taiwan.

Presentations

1. Kong F. 2016. Development of artificial models stimulating human digestive systems. Asian Pacific American Network in Agriculture (APANA) meeting. August 16. Athens, GA.

Theses, dissertations

1. Kirmaci B. 2015. Characterization of baked potato strips processed in a radiant wall oven. PhD dissertation, The University of Georgia.
2. Kettler K. 2016. Peanut blanching with infrared radiation in a radiant wall oven. MS thesis, The University of Georgia.

**Hawaii**

Journal papers

1. Mok, J.H., Her J., Kang T., Hoptowit, R., and Jun, S. 2016. Effects of pulsed electric field (PEF) and oscillating magnetic field (OMF) combination technology on the extension of supercooling for chicken breasts. *Journal of Food Engineering* 196: 27-35
2. Lee, I. and Jun, S. 2016. Simultaneous detection of E. coli K12 and S. aureus using a Continuous Flow Multijunction Biosensor. *Journal of Food Science* 81(6): N1530-6
3. Choi, W., Abdullah, S., Lee, S.H., and Jun, S. 2016. Mathematical Modeling and Numerical Simulation for Predictive Retention of Antioxidant Activity of Grape Juice Pasteurized with Continuous Flow Ohmic Heating. *Transaction of the ASABE* 59(3): 1049-1059.
4. Yamada, K., Choi W., Lee, I., Cho, B., and Jun, S. 2016. Rapid detection of multiple foodborne pathogens using a nanoparticle-functionalized multi-junction biosensor. *Biosensors and Bioelectronics* 77:137 – 143.
5. Mok, J.H., Choi, W., Park, S.H., Lee, S.H., and Jun, S. 2015. Emerging pulsed electric field (PEF) and static magnetic field (SMF) combination technology for food freezing. *International Journal of Refrigeration* 50: 137-145.
6. Choi, W., Lee, S.H., Kim, C., and Jun, S. 2015. A finite element method based flow and heat transfer model of continuous flow microwave and ohmic combination heating for particulate foods. *Journal of Food Engineering* 149: 159-170.
7. Lee, S.H., Choi, W., Kim, J., and Jun, S. 2015. Development of a dual cylindrical microwave and ohmic combination heater for minimization of thermal lags in the processing of particulate foods. *LWT- Food Science and Technology* 63(2): 1220-1228.
8. Shafel, T., Lee, S.H., and Jun, S. 2015. Food preservation technology at subzero temperatures: A review. *Journal of Biosystems Engineering* 40(3): 261-270.
9. Lee, S.H., Choi, W., Park, S.H., and Jun, S. 2015. Design and Fabrication of a Dual Cylindrical Microwave and Ohmic Combination Heater for Processing of Particulate Foods. *Journal of Biosystems Engineering* 40(3): 250-260.

Abstracts, proceedings

1. Jun, S. 2016. Nano-engineered surfaces for prevention of biofilm and bacterial adhesion. Conference of Food Engineering (CoFE), September 12-14, Columbus, OH.
2. Jun, S. 2016. Computational Modeling for Thermal Pattern and Lethality of Multiphase Foods in a Dual Cylindrical Microwave and Ohmic Combination Heater. Conference of Food Engineering (CoFE), September 12-14, Columbus, OH.
3. Jun, S., Li, Y., Choi, C., and Her, J. 2016. Nano-engineered Sanitation Surfaces for Prevention of Bacterial Adhesion (ID# 12084) at IAFP 2016, July 31-August 3, 2016 in St. Louis, Missouri.
4. Her, J., Hoptowit, R., Kang, T., and Jun, S. 2016. Supercooling of perishable foods for extended freshness and shelf life in the cold chain. FOOMA JAPAN International Food Machinery & Technology Exhibition, June 7-10, Tokyo, Japan.

Presentations

1. Jun, S. 2015. Food nanotechnology for biosensing and biofilm prevention. 2015 International Symposium and Annual Meeting at Alpensia Resort Convention Center, Pyeongchang, South Korea, August 24 -26.
2. Jun, S. 2015. Food nanotechnology for biosensing and biofilm prevention. Rural Development Administration, Jeonju-si, South Korea, August 4.
3. Jun, S. 2015. Nano-engineered surfaces for prevention of biofilm and bacterial adhesion. Korea Food Research Institute (KFRI), Seongnam-si, South Korea, June 30.
4. Jun, S. 2015. Food preservation and beyond. Samsung Electronics Co, Suwon-si, South Korea, June 19.
5. Jun, S. 2015. Nano-engineered surfaces for prevention of biofilm and bacterial adhesion. The 82nd Annual Meeting of Korean Society of Food Science and Technology (KoSFoST) at Bexco Convention Center, Busan, Republic of Korea, June 3-5.

Theses, dissertations

1. Timothy Shafel 2015. Combination pulsed electric field and oscillating magnetic field assisted supercooling of beef and fish: a novel preservation technique. MS dissertation, Human Nutrition, Food and Animal Sciences, University of Hawaii.

**Idaho**

Journal papers

1. Joyner (Melito) HS, Rasco B, Jones, KE. Accepted. Optimization of a microwave pasteurization process for ready-to-eat pasta. Journal of Food Science. (1, 4, 5, 6).

Presentations

1. Damiano HL, Joyner (Melito) HS. 2016. Influence of Sodium Reduction on the Rheological Properties of Cottage Cheese Cream Dressing. E-poster presentation. ASAS-ADSA-CSAS-WSASAS Joint Annual Meeting; Salt Lake, UT. July 19-23.
2. Joyner (Melito) HS, Li Y, Lee A, Drake MA. 2016. Rheology, Tribology, and Sensory Properties of UHT Processed Milk. Poster presentation. Institute of Food Technologists Annual Meeting; Chicago, IL, July 17-19.
3. Joyner (Melito) HS. 2016. Using Curriculum Mapping and Assessment Techniques to Evaluate a Food Science Curriculum. Oral presentation. North American Colleges & Teachers of Agriculture Annual Conference; Honolulu, HI, June 21-24.
4. Joyner (Melito) HS, Stevenson CD. 2016. Ask the (Industry) Expert: Using Modified Delphi Survey Techniques as Part of Course and Curriculum Development. Poster presentation. North American Colleges & Teachers of Agriculture Annual Conference; Honolulu, HI, June 21-24.
5. Luzzi BG, Joyner (Melito) HS. 2016. Comparing the Mechanical Properties of Blue Cheese During Aging at Different Storage Temperatures. Poster presentation. IFT Intermountain 47th Annual Symposium; Sun Valley, ID. May 19-20.
6. Meldrum AD, Joyner (Melito) HS. 2016. Experimental Design for Reducing Zygosaccharomyces parabailii Growth in Low Calorie Salad Dressings Utilizing Different Acid Combinations. Poster presentation. IFT Intermountain 47th Annual Symposium; Sun Valley, ID. May 19-20.
7. Baniasadidehkordi M, Joyner (Melito) HS. 2016. Development of Different Yogurt Textures Used in Hedonic Preference Testing with Young Children. Poster presentation. IFT Intermountain 47th Annual Symposium; Sun Valley, ID. May 19-20.
8. Damiano HL, Joyner (Melito) HS. 2016. The Impact of Sodium Reduction and Replacement on Cottage Cheese Dressing Rheology. Poster presentation. IFT Intermountain 47th Annual Symposium; Sun Valley, ID. May 19-20.
9. Joyner (Melito) HS, Li Y, Lee A, Drake MA. 2016. Rheology, Tribology, and Sensory Properties of UHT Processed Milk. Poster presentation. IFT Intermountain 47th Annual Symposium; Sun Valley, ID. May 19-20.
10. Anvari M, Joyner (Melito) HS. 2016. Rheological and Microstructural Characterization of Concentrated Emulsions Prepared by Fish Gelatin. E-poster presentation. International Conference on Food Technology and Biotechnology; Boston, MA, April 25-26.
11. Anvari M, Joyner (Melito) HS. 2016. Rheological Characterization of Polysaccharide Extracted from Camelina Meal as a New Source of Thickening Agent. Oral presentation. International Conference on Food Technology and Biotechnology; Boston, MA, April 25-26.
12. Vanderyacht B, Joyner (Melito) HS. 2016. Evaluation of Wear Behaviors in Ideal Gel Systems. Showcase for Undergraduate Research & Creative Activities; Washington State University, Pullman, WA, March 28.

**Illinois**

1. Ditudompo S, P S Takhar, G Ganjyal and M Hanna (2016). Effect of extrusion conditions on expansion behavior and selected physical characteristics of cornstarch extrudates. Transac. ASABE 59(4): 969-983.
2. Ditudompo S, P S Takhar, G Ganjyal and M Hanna (2016). Effect of extrusion conditions on expansion behavior and selected physical characteristics of cornstarch extrudates. Transac. ASABE 59(4): 969-983.
3. Bansal H S, P S Takhar, C Alvarado and L D Thompson (2015). Transport mechanisms and quality changes during frying of chicken nuggets–hybrid mixture theory based modeling and experimental verification. J. Food Sci. (special invitation from the scientific editor) 80(12): E2759-E2773.

**Indiana**

Journal papers

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| 1. Cattani, F., Dolan, K. D., Oliveira, S.D., Mishra D.K., Ferreira, C.A.S., Periago, P.M., Aznar, A., Fernandez, P.S., Valdramidis, V.P. 2016. One-step global parameter estimation of kinetic inactivation parameters for Bacillus sporothermodurans spores under static and dynamic thermal processes. *Food Res. Intl.* (*accepted, in press*). |
| 1. Mishra, D.K., Dolan, K.D., Beck, J.V., Ozadali, F. 2016. A novel instrument for rapid measurement of temperature-dependent thermal properties of conduction-heated food up to 140° C. *J. Food Eng. 191*, 19-27. |

1. Lu, J., Yu, J. and Corvalan, C.M., 2016. Universal Scaling Law for the Collapse of Viscous Nanopores. Langmuir, 31(31), 8618-8622.
2. Lu, J., and Corvalan, C.M., 2016. Soft matter food microrheology. Current Opinion in Food Science.  accepted.
3. Lu, J., Fang, S. and Corvalan, C.M., 2016. Coalescence dynamics of viscous conical drops. Physical Review E,  93, 023111-023117
4. Spotti, M., Tarhan, O., Schaffter, S., Corvalan, C. and Campanella, O. 2016, Whey Protein Gelation Induced by Enzymatic Hydrolysis and Heat Treatment: Comparison of Creep and Recovery Behavior. Food Hydrocolloids. Submitted.
5. Tarhan, O., Spotti, M.J., Schaffter, S., Corvalan, C.M. and Campanella, O.H., 2016. Rheological and structural characterization of whey protein gelation induced by enzymatic hydrolysis. Food Hydrocolloids. 61, 211-220.

Posters

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| 1. Samsudin, H., Auras, R., Dolan, K.D., Mishra, D. 2015. Assessing the kinetics of a migration study by estimating a two or three-parameter models. *Inverse Problems Symposium, East Lansing.* |

Oral

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| 1. \*Samsudin, H., Auras, R., Dolan, K. D., Mishra, D. 2015. Assessing the kinetics of a migration study by estimating a two or three-parameter models. *Inverse Problems Symposium, East Lansing, MI*. |

Invited talks

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| 1. Dolan\*, K.D., Mishra, D.K., Valdramidis, V. 2016. Predictive modeling under dynamic conditions in food processing environments. *European Society for Modelling and Simulation, Ghent, Belgium*. |

Other (i.e., media)

1. Dolan, K.D., Habtegebriel, H., Valdramidis, V., Mishra, D.K. 2015. Thermal processing and kinetic modeling of inactivation. In: *Modeling Food Processing Operations* (eds: S. Bakalis, K. Knoerzer, P. J. Fryer), pp. 37-66. Woodhead Publishing Series in Food Science, Cambridge, UK.

**Iowa**

Journal papers

1. Ramel P, Co E, Acevedo NC, Marangoni, AA. 2016. Structure and Functionality of Nanostructured Triacylglycerol Crystal Networks. Progress in Lipids Research. *Submitted.*
2. Yoshikawa HY, Pink D, Acevedo NC, Peyronel F, Marangoni AG, Tanaka M. 2016. Mechanical response of single triacylglycerol spherulites by using microcolloidal probes. Physical Chemistry Chemical Physics. *Submitted.*
3. Marangoni AG. 2014, Acevedo, NC. 2016. Surface energy modulated epitaxial growth of molecular lamellae in two-dimensional van der Waals nanocrystals. Crystal Growth and Design. *Submitted.*
4. Acevedo NC, Franchetty D. 2016. Analysis of co-crystallized free phytosterols with triacylglycerols as a functional food ingredient. Food Research International 85:104-112.
5. Agudelo-Laverde LM, Acevedo NC, Schebor C, Buera MP. 2016. Opacity studies in dehydrated fruits in relation to proton mobility and supramolecular aspects. Food Bioprocess Technology 9(10): 1674-1680.
6. Au C, Wang T, Acevedo NC. 2016. Development of a low resolution 1H NMR spectroscopic technique for the study of hen egg yolk gelation. Food Chemistry 204:159-166.
7. Banach, J.C., Clark, S., and Lamsal, B.P.\* 2016. Textural performance of crosslinked or reduced-calcium milk protein ingredients in model high-protein nutrition bars, Journal of Dairy Science, 99:6061–6070.
8. Banach, J.C., Clark, S., and Lamsal, B.P.\* 2016. Instrumental and Sensory Texture Attributes of High-protein Nutrition Bars Formulated with Extruded Milk Protein Concentrate, Journal of Food Science, 81(5): S1254-S1262.
9. Banach, J.C., Clark, S., and Lamsal, B.P.\* 2016. Microstructural Changes in Model High-protein Nutrition Bars Formulated with Modified Milk Protein Concentrates, Journal of Food Science, 81 (2): C332-C340.
10. Ramírez-Gómez NO, Acevedo NC, Toro-Vazquez JF, Ornelas-Paz JJ, Dibildox-Alvarado E. 2016. Phase behavior, structure and rheology of candelilla wax/fully hydrogenated soybean oil mixtures with and without vegetable oil. Food Research International. (*Forthcoming).*
11. Yakubu A, Wilson LA, Bern CJ, Brumm TJ. 2016. Use of recycled containers for hermetic maize storage in East Africa. Journal of Stored Products and Postharvest Research. (*Forthcoming).*
12. Acevedo NC, Marangoni AG. 2015. Nanostructured fat crystal systems. Annual Review of Food Science and Technology 6:3.1-3.26.
13. Au C, Acevedo NC, Wang T. 2015. Determination of the gelation mechanism of freeze-thawed hen egg yolk. Journal of Agricultural and Food Chemistry 63(46):10170-10180.
14. Shaw A, Strohbehn C, Naeve L, Domoto P, Wilson, L. 2015. Current trends in food safety practices for small growers in the Midwest. Food Protection Trends 35(6):461-469.
15. Shaw A, Strohbehn C, Naeve L, Domoto P, Wilson, L. 2015. Knowledge gained from good agricultural practices courses for Iowa growers. Journal of Extension 53(5).
16. Shaw A, Strohbehn C, Naeve L, Domoto P, Wilson, L. 2015. Systematic Approach to Food Safety Education on the Farm. Journal of Extension 53(6).

Abstracts, proceedings

1. Nguyen Z, Acevedo N C. 2015.Effect of cooling rate on the properties of phytosterol enriched edible oleogels. World Congress on Oils and Fats & 31st ISF Lectureship Series. Rosario, Argentina. October 31- November 4.

Presentations

1. Eckert CK, Wilson L, Barnum G, Beekman TL, Calvert V, Montalban A, Schaumburg J, Perchonok M. 2016. Time and Radiation Effects on Cheese Production during Long-Term NASA Space Missions. National IFT meeting.Chicago Ill. July 16-18.

Book Chapters

1. Peyronel F, Acevedo NC, Pink DA, Marangoni AG. 2016. Supramolecular assembly of fat crystal networks from the nanoscale to the mesoscale. In: Sato K, editor. Crystallization of Lipids. Wiley-Blackwell. (*Forthcoming*).
2. Agudelo M L, Acevedo NC, Schebor C, Buera MP. 2015. Effect of Relative Humidity on Shrinkage and Color Changes in Dehydrated Strawberry. In: Water Stress in Biological, Chemical, Pharmaceutical and Food Systems. Part of the series Food Engineering Series. Springer. p 469-476.
3. Sullivan C, Acevedo NC, Peyronel F, Marangoni, AG. 2015. Fat Nanostructure. In: Marangoni AG, Pink D, editors. Edible Nanostructures: A Bottom-up Approach. The Royal Society of Chemistry. UK: Cambridge. p 6-37.

**Kentucky**

Journal papers

1. Adedeji, A. A., Joseph, M.V., Plattner, B and Alavi, S. (2016). Physicochemical and functional properties of extruded sorghum based bean analog. *Journal of Food Process Engineering*. (From Post-doctoral work).
2. Ekramirad, N., Adedeji, A.A. and Alimardradni, R. (2016). Non-destructive methods for assessing insect infested fruits and vegetables – A Review. *Innovation in Food Science and Nutrition* 2(1), 6 – 12.
3. Adedeji, A.A., Suhr, E., Bhadriraju, S. and Alavi, S. (2016). Drying characteristics of bean analog - a sorghum based extruded product. *Journal of Food Processing and Preservation.* doi:10.1111/are.12932.

Abstracts, proceedings

1. Ayinde, F. A., Henshaw, F.O., Eromosele, C.O., Alavi, S. and Adedeji, A. A. Effects of Extrusion Variables on Some Chemical and Functional Properties of Thermo-extrudates from Selected Varieties of Sesame (Sesamum indicum L). A paper in the proceeding of ExtruAfrica 2016. Holding from August 4 – 5 at North-West University, Potchefstroom, South Africa.
2. Singh, M. and Adedeji, A.A. (2016). Physicochemical and functional properties of Proso millet starch. A paper published in the proceeding of American Society of Agricultural and Biological Engineers (ASABE) annual conference. Held at Orlando, Florida, July 17-20, 2016. Oral presentation. Paper #: 162460194.
3. Rady, A, and Adedeji A. A. (2016). Application of Hyperspectral Imaging Technique to Detect Adulteration in Processed Meats. A paper presented and published in the proceeding of American Society of Agricultural and Biological Engineers (ASABE) annual conference held at Orlando, Florida, USA from July 17 – 20, 2016. Poster presentation. Paper No.: 162460193.
4. Rady, A., Giarreta, A., Adedeji, A.A. and Ruwaya, M. (2016). Optimizing deep-fat frying of sweet potato (Ipomoea batatas): effect of pretreatment and freezing rate. Institute of Food Technology (IFT) Annual International Meeting, Food Engineering Division Poster Session. Held at Chicago, IL USA July 16 – 19, 2016.
5. Li, M., Ekramirad, N., Rady, A., Adedeji, A.A., Alimardani, R., & Solmon, H. (2016). Detection of Codling moth infested apples using multivariate analysis of acoustic emissions. Institute of Food Technology (IFT) Annual International Meeting, Food Engineering Division Poster Session. Held at Chicago, IL USA July 16 – 19, 2016.
6. Ekramirad, N., Rady, A., Li, M., Adedeji, A.A., Alimardani, R., & Patwardham A. (2016). Acoustic emission technique for detection of Codling moth infested apples. A paper presented at American Society of Agricultural and Biological Engineers (ASABE) annual conference Held at Orlando, Florida, USA from July 17 – 20, 2016. Poster presentation. Paper No.: 162460815.
7. Ekramirad, N., Rady, A., Adedeji A. A., Alimardani, R., Bessin, R., & Strang, J. (2016). Hyperspectral Imaging for Detection of Codling Moth Infestation and Prediction of Quality in Gold-Rush Apples. A paper presented at American Society of Agricultural and Biological Engineers (ASABE) annual conference Held at Orlando, Florida, USA from July 17 – 20, 2016. Poster presentation. Paper No.: 162461836.

Presentations

1. Adedeji A. A. (2016). Approach to writing a winning research grant proposal. Faculty of Engineering and Technology, Ladoke Akintola University of Technology, Ogbomoso Nigeria. May 31, 2016.
2. Adedeji A. A. (2016). What is Food Engineering? Introduction to Food Processing Class (FSC 102). April 13, 2016.
3. Adedeji A. A. (2016). Food Engineering Program in Biosystems and Agricultural Engineering department at University of Kentucky. A seminar given on January 29, 2016 during BAE department Graduate Recruitment Weekend.
4. Adedeji A. A. and others (2015). Feedback on Implementation and Observations from Skills gained in the Training. eLII – Panel Discussion held at David Marksbury Building University of Kentucky on November 19, 2015. 4 – 6 PM.

**Michigan**

Journal papers

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| 1. Cattani, F., Dolan, K. D., Oliveira, S.D., Mishra D.K., Ferreira, C.A.S., Periago, P.M., Aznar, A., Fernandez, P.S., Valdramidis, V.P. 2016. One-step global parameter estimation of kinetic inactivation parameters for Bacillus sporothermodurans spores under static and dynamic thermal processes. *Food Res. Intl.* (*accepted, in press*). |
| 1. Siddiq, M., Dolan, K.D. 2016. Characterization and heat inactivation kinetics of polyphenol oxidase from blueberry (*Vaccinium corymbosum* L.). *Food Chem.* 218, 216-220. |
| 1. Mishra, D.K., Dolan, K.D., Beck, J.V., Ozadali, F. 2016. A novel instrument for rapid measurement of temperature-dependent thermal properties of conduction-heated food up to 140° C. *J. Food Eng. 191*, 19-27. |
| 1. Roidoung, S., Dolan, K.D., Siddiq, M. 2016. Gallic acid as a protective antioxidant against anthocyanin degradation and color loss in vitamin-C fortified cranberry juice. *Food Chem.*, *210*, 422-427. |
| 1. Jeong S., Marks BP, James MK. 2016. Comparing thermal process validation methods for Salmonella inactivation on almond kernels. *Journal of Food Protection*. Accepted for publication. |
| 1. Smith DF, Hildebrandt IM, Casulli KE, Dolan KD, Marks BP. 2016. Modeling the effect of temperature and water activity on the thermal resistance of Salmonella Enteritidis PT30 in wheat flour. *Journal of Food Protection*. In press. |
| 1. Hildebrandt IM, Marks BP, Ryser ET, Villa-Rojas R, Tang J, Garces-Vega FJ, Buchholz SE. 2016. Effects of inoculation procedures on variability and repeatability of thermal resistance of Salmonella in wheat flour. *Journal of Food Protection*. In press. |
| 1. Carroll LM, Bergholz TM, Hildebrandt IM, Marks BP. 2016. Application of a nonlinear model to transcript levels of upregulated stress response gene ibpa in stationary-phase Salmonella enterica subjected to sublethal heat stress. *Journal of Food Protection*. 79:1089-1096. |
| 1. Syamaladevi RM, Tadapaneni RK, Xua J, Villa-Rojas R, Tang J, Carter B, Sablani S, Marks B. 2016. Water activity change at elevated temperatures and thermal resistance of Salmonella in all purpose wheat flour and peanut butter. *Food Research International*. 81:163-170. |
| 1. Zhong, X., Dolan, K.D., Almenar, E. 2015. Effect of steamable bag microwaving versus traditional cooking methods on nutritional preservation and physical properties of frozen vegetables: A case study on broccoli (*Brassica oleracea*). *Innov. Food Sci. & Emerg. Technol.*, *31*, 116-122. |
| 1. Sogi, D.S., Siddiq, M., Dolan, K.D. 2015. Total phenolics, carotenoids and antioxidant properties of Tommy Atkin mango cubes as affected by drying techniques. *LWT-Food Sci. & Technol.*, *62*, 564-568. |

Poster Presentation

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| 1. Roidoung, S. Dolan, K.D. 2016. Protective effect of gallic acid against degradation of anthocyanins and color in fortified vitamin C cranberry juice. *IFT Annual Meeting, Chicago.* |
| 1. Borbi, M.A., Dolan, K.D., Hooper, S. 2016. Development and evaluation of the physicochemical and sensory properties of a shelf stable protein-enriched ready-to-eat banana-bean infant food. *IFT Annual Meeting, Chicago.* |
| 1. Garces-Vega, F., Jeong, S., Dolan, K., Marks, B., 2016. Modeling Salmonella Inactivation in Low Moisture Foods: Using Parameter Estimation to Improve Model Performance. *Procedia Food Sci, 7*, 41-46. |
| 1. Buchholz S, Limcharoenchat P, Hall N, Jeong S, Ryser E, Marks B. 2016. Effects of temperature, water activity, and structure on thermal resistance of *Salmonella* in dates and date paste. Abstract P2-03. Presented at the Annual Meeting of the International Association for Food Protection. July 31 – Aug 3, 2016. St. Louis, MO. |
| 1. Limcharoenchat P, James M, Hall N, Marks B. 2016. Moisture equilibration and product fabrication methods affect measured thermal resistance of *Salmonella* Enteritidis PT30 on/in whole almonds, almond meal, and almond butter. Abstract P2-05. Presented at the Annual Meeting of the International Association for Food Protection. July 31 – Aug 3, 2016. St. Louis, MO. |
| 1. Steinbrunner P, Suehr Q, Jeong S, Marks B. 2016. Effect of product structure and water activity on x-ray inactivation of *Salmonella* in low-water activity foods. Abstract P2-13. Presented at the Annual Meeting of the International Association for Food Protection. July 31 – Aug 3, 2016. St. Louis, MO. |
| 1. Garces-Vega F, Marks B. 2016. Evaluation of water content as a convenient metric in thermal inactivation modeling for low-moisture foods. Abstract P2-17. Presented at the Annual Meeting of the International Association for Food Protection. July 31 – Aug 3, 2016. St. Louis, MO. |
| 1. Casulli, KE, Garces-Vega FJ, Dolan KD, Marks BP. 2016. Impact of temperature, moisture, and humidity on thermal inactivation of *Salmonella* in pistachios heated under dynamic processing conditions. Presented at the XIII Latin American Congress of Microbiology and Food Hygiene. September 27-30, 2016. Medellín, Colombia. |
| 1. Hildebrandt I, Anderson N, Limcharoenchat P, Hall N, Xu J, Zhu M, Marks B, Tang J, Grasso-Kelley E. 2016. Quantifying reproducibility of *Salmonella* thermal resistance through a multi-laboratory comparison. Abstract P2-06. Presented at the Annual Meeting of the International Association for Food Protection. July 31 – Aug 3, 2016. St. Louis, MO. |
| 1. Carroll J, Suehr Q, Steinbrunner P, Marks B, Ryser E. Jeong S. 2016. Factors affecting bacterial cross-contamination using *Salmonella* and a surrogate organism during almond processing. Abstract P2-20. Presented at the Annual Meeting of the International Association for Food Protection. July 31 – Aug 3, 2016. St. Louis, MO. |
| 1. Suehr Q, Marks B, Ryser E, Jeong S. 2016. Scalability of a discrete element model for Salmonella cross-contamination in granular low-water activity foods. Abstract P2-18. Presented at the Annual Meeting of the International Association for Food Protection. July 31 – Aug 3, 2016. St. Louis, MO. |
| 1. Casulli K, Garces-Vega F, Dolan K, Harris LJ, Marks B. 2016. Modeling the effect of product temperature, moisture, and process humidity on thermal inactivation of *Salmonella* in pistachios. Abstract P2-19. Presented at the Annual Meeting of the International Association for Food Protection. July 31 – Aug 3, 2016. St. Louis, MO. |
| 1. Casulli KE, Dolan KD, Marks BP. 2016. Performance of *Enterococcus faecium* as a nonpathogenic surrogate for *Salmonella* during pistachio roasting. Abstract 17. Presented at the Conference on Food Engineering. Columbus, OH. September 12-14, 2016. |
| 1. Dolan, K. D., Valdramidis, V. 2015. Estimation of microbial growth parameters for pseudomonas in ground pork under dynamic temperature conditions. *Intl. Conf. on Predictive Modeling, Rio de Janeiro, Brazil.* |
| 1. Roidoung, S., Dolan, K.D. 2015. Phenolic compounds as protective agents against anthocyanin degradation in cranberry juice fortified with vitamin C. *IFT Annual Meeting, Chicago.* |
| 1. Roidoung, S., Dolan, K.D. 2015. Kinetics of anthocyanin and color degradation in pasteurized cranberry juice fortified with vitamin C. *Great Lakes Fruit, Veg. & Farm Market Expo, Grand Rapids.* |
| 1. Ryser, E.T., Marks, B.P., Almenar, E., Dolan, K.D., Beaudry, R.M., Rubino, M., Jeong, S., Harte, J.B., Vorst, K.L., Schaffner, D.W., Wojtala, G., Scharff, R. 2015. An integrated approach to enhance the microbial safety of fresh-cut fruits and vegetables during processing, packaging and distribution. *USDA Project Director’s Meeting, Portland.* |
| 1. Castro-Aguirre, E., Auras, R., Dolan, K.D. 2015. Biodegradation kinetics during composting: Mass balance of total organic carbon. *Inverse Problems Symposium, East Lansing.* |
| 1. Iñiguez-Franco, F., Auras, R., Dolan, K. D. 2015. Release of surfactant from poly (lactic acid)-bionanocomposites. *Inverse Problems Symposium, East Lansing.* |
| 1. Samsudin, H., Auras, R., Dolan, K.D., Mishra, D. 2015. Assessing the kinetics of a migration study by estimating a two or three-parameter models. *Inverse Problems Symposium, East Lansing.* |

Oral presentation

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| 1. \*Dolan, K., Valdramidis, V. 2016. Microbial growth parameters estimation at continuously changing food storage temperature conditions. *Inverse Problems Symposium, Lexington, VA.* |
| 1. \*Roidoung, S., Dolan, K.D. 2016. Estimation of kinetic parameters of anthocyanins and color degradation in vitamin C fortified cranberry juice during storage. *Inverse Problems Symposium, Lexington, VA.* |
| 1. \*Casulli, K.E., Marks, B.P., Dolan, K.D. 2016. A method for determining parameter sensitivity under static environmental conditions using microbial inactivation as a case study. *Inverse Problems Symposium, Lexington, VA.* |
| 1. Marks BP. 2016. Validating legacy processing systems: application of thermal resistance data and models to predict log reductions in dynamic processes. Symposium 096. Presented at the Annual Meeting of the Institute of Food Technologists. July 19, 2016. Chicago, IL. |
| 1. Marks BP. 2016. Utilizing microbial inactivation models to validate pathogen-reduction processes for low-moisture foods: challenges, opportunities, and pitfalls. Presented at the Conference on Food Engineering. Columbus, OH. September 12-14, 2016. |
| 1. Harris LJ and Marks BP. 2016. The impact of water and product composition on pathogen survival and inactivation. Symposium S21. Presented at the IAFP’s European Symposium on Food Safety. 11-13 May 2016. Athens, Greece. |
| 1. \*Dolan, K.D. 2015. Nature of food hazards: Microbial, chemical, and physical. *Intl. Food Safety Course, East Lansing.* |
| 1. \*Samsudin, H., Auras, R., Dolan, K. D., Mishra, D. 2015. Assessing the kinetics of a migration study by estimating a two or three-parameter models. *Inverse Problems Symposium, East Lansing, MI*. |
| 1. \*Astro-Aguirre, E., Auras, R., Dolan, K.D. 2015. Biodegradation kinetics during composting: Mass balance of total organic carbon. *Inverse Problems Symposium, East Lansing, MI.* |
| 1. Dolan, K.D. 2016. [*Presentation*]. Hazard analysis critical control points (HACCP) and good manufacturing practices (GMPs). *Cochran Fellows Training Program, East Lansing, MI.* |
| 1. Dolan, K.D. 2016. [*Presentation*]. Innovative and emerging food processing technologies. *Cochran Fellows Training Program, East Lansing, MI.* |

Invited talks

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| 1. Dolan, K.D. 2016. Dynamic modeling of thermal processes for food quality and safety. *Dept. of Food Science, University of Illinois, Urbana-Champaign.* |
| 1. Dolan, K.D. 2016. Parameter estimation of microbial inactivation kinetic parameters under dynamic temperature conditions. *Conf. of Food Engineering, Ohio State University, Columbus, OH.* |
| 1. Dolan, K.D. 2016. Dynamic process modeling: Applications to food safety and quality. *Spring Seminar Series, FSHN, Michigan State University, East Lansing, MI.* |

Theses, dissertations

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| 1. Makafui Borbi (MS, 2016). Thesis: Development and Quality Evaluation of Ready-To-Eat Banana composite Food for Older Infants and Young Children. [Going back to Ghana to work in a government organization]. |
| 1. Sunisa Roidoung (PhD, 2016). Dissertation: Mitigating anthocyanins and color degradation in pasteurized cranberry juice fortified with vitamin C.[*Lecturer at Mahasarakham University, Thailand*]. |
| 1. Lordwige Atis (MS, 2016). Thesis: Assessment of apple packers on food safety practices and attitudes on and preparedness for the food safety modernization act (FSMA). [*PhD student at University of Georgia, Athens*]. |

1. Kaitlyn Casulli (MS, 2016). Thesis: Improving pathogen-reduction validation methods for pistachio processing. [*Continuing to PhD in Biosystems and Agri Engineering at MSU*].

Other (i.e., media)

1. Dolan, K.D., Habtegebriel, H., Valdramidis, V., Mishra, D.K. 2015. Thermal processing and kinetic modeling of inactivation. In: *Modeling Food Processing Operations* (eds: S. Bakalis, K. Knoerzer, P. J. Fryer), pp. 37-66. Woodhead Publishing Series in Food Science, Cambridge, UK.

**Maine**

1. Adeseye, L. O. and Nayak, B. 2016. Improving extraction of antigenic proteins from thermally processed black tiger shrimp (*Penaeus monodon*) and the immunoreactivity of its major allergens. *Food Chemistry,* 2016, 200, pp 146 – 153.
2. Ramesh, T., Nayak, B., Amirbahman, A., Tripp, C. and Mukhopadhyay, S. (2016). Application of Ultraviolet light assisted Titanium dioxide photocatalysis for food safety: A Review. *Innovative Food Science and Emerging Technologies*, 38, pp 105–115.
3. “Challenges in the detection of food allergens – effects of processing and food matrices” in the 2nd International conference on Food Safety and Regulatory Measures, June 6 – 8, 2016, London, UK.
4. “Understanding food allergens in food products”. At the 75th Annual Maine Agricultural Trades Show, January 12 – 14, 2016, Augusta, ME.
5. Lasekan A. Opeyemi, Hanjuan Cao and Balunkeswar Nayak. Effects of pH-induced denaturation on the IgE-binding capacity of shrimp (Penaus monodon) tropomyosin. At the IFT Annual Meeting and Food Expo 2016, Chicago, IL, July 16 – 19, 2016. (1st Place in the Best Paper in IFT Food and Toxicology Division).
6. Tamanna Ramesh, Sudheera Yaparatne, Aria Amirbahman, Carl Tripp and Balunkeswar Nayak. Titanium dioxide- UV based photocatalytic pasteurization of grape juice. At the IFT Annual Meeting and Food Expo 2016, Chicago, IL, July 16 – 19, 2016.
7. Tamanna Ramesh and Balunkeswar Nayak. Food surface effects and quality attributes by combined TiO2 and UV photo-catalysis treatments. At the 2015 International Nonthermal Processing Workshop, Athens, Greece, November 12 – 13, 2015.
8. Lasekan A. Opeyemi and Balunkeswar Nayak. Combined pressure and temperature reduces immunoreactivity of black tiger shrimp (*penaeus monodon*) major allergen. At the 2015 International Nonthermal Processing Workshop, Athens, Greece, November 12 – 13, 2015.
9. Amponsah, A. Improving extraction of allergenic soy proteins from soy products. Masters Thesis. School of Food and Agriculture. University of Maine, Orono, ME.

**Minnesota**

Journal papers

1. Shaobo Deng, Paul Chen, Yun Li, Xiaochen Ma, Yanling Cheng, Xiangyang Lin, Lloyd Metzger, and Roger Ruan. 2015. Non-thermal pasteurization of milk using CHIEF technology. In *Emerging Dairy Processing Technologies: Opportunities for the Dairy Industry*. Wiley-Blackwell and the Institute of Food Science and Technology, UK.
2. Hong Peng, Yang Liu, Wenyi Peng, Jinsheng Zhang, and Roger Ruan. 2016. Green Synthesis and Stability Evaluation of Ag Nanoparticles Using Bamboo Hemicellulose. *BioResources* 11(1):385-399.
3. Yunpu Wang, Leilei Dai, Shaoqi Shan, Qin Zeng, Liangliang Fan, Yuhuan Liu, Roger Ruan, Yunfeng Zhao, Yue Zhou. 2016. Effect of unsaturation degree on microwave-assisted pyrolysis of fatty acid salts. *Journal of Analytical and Applied Pyrolysis* doi:10.1016/j.jaap.2016.05.012.
4. Liu Junying, Song Yunmeng, Liu Yuhuan, and Ruan Roger. 2016. Yeast as a Bioremediation Nanoparticle Agent in Piggery-Digested Wastewater Treatment. *Environmental Engineering Science*. May 2016, 33(5): 317-323. doi:10.1089/ees.2015.0376.
5. Ma, H., M. Addy, E. Anderson, W. Liu, Y. Liu, Y. Nie, L. Chen, Y. Cheng, H. Lei, R. Ruan. 2016. A novel process for low-sulfur biodiesel production from scum waste. *Bioresource Technology*. DOI:10.1016/j.biortech.2016.05.029.
6. Jia Wang, Bo Zhang, Zhaoping Zhong, Kuan Ding, Qinglong Xie, Roger Ruan. 2016. Catalytic fast co-pyrolysis of mushroom waste and waste oil to promote the formation of aromatics. *Clean Techn Environ Policy*. DOI 10.1007/s10098-016-1162-7
7. Wu, X., J. Zhang, E. Xu, Y. Liu, Y. Cheng, M. Addy, W. Zhou, R. Griffins, P. Chen, and R. Ruan. 2016. Microbial hydrolysis and fermentation of rice straw for ethanol production. *Fuel*. doi:10.1016/j.fuel.2016.04.087.
8. Dongyan Mu; Min Addy; Erik Anderson; Paul Chen; Roger Ruan. 2016. A Life Cycle Assessment and Economic Analysis of the Scum-to-Biodiesel Technology in Wastewater Treatment Plants. *Bioresource Technology*. [Volume 204](http://www.sciencedirect.com/science/journal/09608524/204/supp/C), March 2016, Pages 89–97.
9. Jinghan Wang, Wenguang Zhou, Haizhen Yang, Roger Ruan. 2016. Application of nitrogen sufficiency conversion strategy for microalgae-based ammonium-rich wastewater treatment. *Environmental Technology*. DOI:10.1080/09593330.2016.1158744.
10. WANG Yunpua, DAI Leileia, FAN Lianglianga, SHAN Shaoqia, LIU Yuhuan, RUAN Roger. 2016. Review of microwave-assisted lignin conversion for renewable fuels and chemicals. *Journal of Analytical and Applied Pyrolysis*. Volume 119, May 2016, Pages 104–113. doi:10.1016/j.jaap.2016.03.011.
11. Anderson, E., M. Addy, Huan, M., P. Chen, R. Ruan. 2016. Glycerin esterification of scum derived free fatty acids to acyl-glycerols for biodiesel production. Bioresource Technology, Vol. 200, 01.01.2016, p. 153-160.
12. Yunpu Wang, Yuhuan Liu, Roger Ruan, Shi Tao Liu, Ping Wei Wen, Yi Qin Wan. 2016. Preparation and characterization of ZrO2 polycrystalline ceramic foam catalyst for biodiesel production. Synth React Inorg M, DOI: 10.1080/15533174.2015.1137014.
13. Qian Lu, Wenguang Zhou, Min Min, Xiaochen Ma, Yiwei Ma, Paul Chen, Hongli Zheng, Yen T.T. Doan, Hui Liu, Chi Chen, Pedro E. Urriola, Gerald C. Shurson, Roger Ruan. 2015. Mitigating ammonia nitrogen deficiency in dairy wastewaters for algae cultivation. 2015. Bioresource technology 201:33-40 2015-12-01.
14. Tushar Gulati, Ashim K. Datta, Christopher J. Doona, R. Roger Ruan, Florence E. Feeherry. 2015. Modeling moisture migration in a multi-domain food system: Application to storage of a sandwich system. Food Research International, http://dx.doi.org/10.1016/j.foodres.2015.06.022.
15. Junying Liu, Yunmeng Song, Roger Ruan, Yuhuan Liu. 2015. Removal of humic acid from composted hog waste by the white-rot fungus, Phanerochaete chrysosporium. Water Science & Technology 06/2015; 72(1):92. DOI:10.2166/wst.2015.166.
16. Qian Lu, Wenguang Zhou, Min Min, Xiaochen Ma, Ceria Chandra, Yen T T Doan, Yiwei Ma, Hongli Zheng, Sibo Cheng, Richard Griffith, Paul Chen, Chi Chen, Pedro E Urriola, Gerald C Shurson, Hans R Gislerød, Roger Ruan. 2015. Growing Chlorella sp. on meat processing wastewater for nutrient removal and biomass production. Bioresource Technology 09/2015; 198:189-197. DOI:10.1016/j.biortech.2015.08.133.
17. Wang JH., Zhou, W.G, Yang HZ., Wang F., Ruan R. 2015. Trophic mode conversion and nitrogen deprivation of microalgae for high ammonium removal from synthetic wastewater. Bioresource Technology 198:668-676.
18. Bi, C., Min M., Y. Nie, Q. Xie, Q. Lu, X. Deng, E. Anderson, D. Li, P. Chen, and R. Ruan. 2015. Process development for scum to biodiesel conversion. Bioresour Technol 185:185-193.
19. Yanling Cheng, Liang Li, Paul Chen, Roger Ruan. 2015. Synthesis and characterization of starch-based cationic flocculants for microalgae harvesting. International Journal of Agricultural and Biological Engineering. (accepted)
20. Hongli Zheng, Xiaochen Ma, Zhen Gao, Yiqing Wan, Min Min, Wenguang Zhou, Yun Li, Yuhuan Liu, He Huang, Paul Chen, Roger Ruan. 2015. Lipid Production of Heterotrophic Chlorella sp. from Hydrolysate Mixtures of Lipid-Extracted Microalgal Biomass Residues and Molasses. Applied Biochemistry and Biotechnology 177: 662-674.
21. Bo Zhang, Zhaoping Zhong, Min Min, Kuan Ding, Qinglong Xie, Roger Ruan. 2015. Catalytic fast co-pyrolysis of biomass and food waste to produce aromatics: Analytical Py–GC/MS study. Bioresource Technology 189 (2015) 30–35.
22. Liu Junying, Song Yunmeng, Liu Yuhuan, Ruan Roger. 2015. Fungal pretreatment of effluent from poultry anaerobic digestion by Phaerochate Chrysosporium. CLEAN – Soil, Air, Water DOI: 10.1002/clen.201400561.

Presentations

1. Ruan, R., M. Addy, R. Zhang, E. Anderson, Y. Ma, X. Ma, C. Xin, Q. Lu, S. Luo, H. Ren, H. Liu, W. Li, S. Liu, Y. Zhang, L. Fan, G. Tian, P. Peng, Y. Cheng, R. Griffins, R. Hatzenbeller, Y. Wan, Y. Wang, Y. Liu, X. Lin, P. Chen. 2016. Sustainable Bio-economy for Rural Social and Economic Development. International Conference on Biomass Energy and Sustainable Economy. Nanchang.
2. Ruan, R. 2016. Systematic waste utilization process and system. Bioenergy Seminar, China University of Mining and Technology, Beijing.
3. Ruan, R. X. Lin, J. Wu, P. Chen, and G. Huang. 2016. Quality Preservation of Nuts and Seeds – Shelf Life of Almond Products. China Nuts and Roasted Seeds Conference. Almond Board of California, Hefei.
4. Ruan, R. 2016. Sustainable Bio-economy for Rural Social and Economic Development. MOST Biomass Utilization Conference. Nankai University, Tianjin.
5. Ruan, R., P. Chen, M. Addy, Y. Cheng, X. Ma, Y. Ma, S. Liu, Y. Liu, Y. Wang, H. Zheng, X. We, X. Lin, R. Griffins. 2016. Systems approach to bio-economy and exo-economy. Frontier Biotechnology Forum, Beijing, China.
6. Roger Ruan, Xiangyang Lin, Jia Wu, Paul Chen, and Guangwei Huang. 2015. Shelf life study of raw and roasted almonds. The Almond Conference. Sacramento, CA.
7. Ruan, R. 2015. Innovative technologies for waste utilization and renewable energy and chemicals production. International Conference on New Horizons in Biotechnology (NHBT-2015). November 22-25, 2015, Trivandrum, India.
8. 11. Ruan, R. 2015. Innovative Algal Process and System for Sustainable Biofuels and Biochemicals Production. Advances in Algae Based Biorefineries - Algae Biomass Cultivation, Harvesting and Characterization. 2015 AIChE Annual Meeting, Salt Lake City, UT.
9. Ruan, R. 2015. Energy and Chemical Extraction from Various Solid Wastes. Waste Not TAG Meeting, St. Paul, MN.
10. Ruan, R. 2015. Innovative microwave-assisted fast gasification of biomass and solid wastes for biofuels and biochemicals production. 2015 International Conference for Bioeconomy - Green Biological Manufacturing. Tianjin, China.
11. Ruan, R. 2015. Innovative rural eco-township-a truly sustainable development model. TIB Distinguished Lecture Series. Chinese Academy of Sciences. Tianjin, China.
12. R. Ruan, Q. Xie, Y. Cheng, S. Liu, P. Peng, B. Zhang, P. Chen, L. Baker, P. Urriola, G. Shurson. 2015. Energy and chemical extraction from waste organics. The Future of Organic Wastes in Minnesota Conference. Continuing Education and Conference Center, Saint Paul, Minnesota.
13. Ruan, R., E. Anderson, M. Addy, Y. Nie, C. Bi, N. Onuma, X. Ma, H. Zheng, P. Chen, D. Li. 2015. Conversion of scum to biodiesel. LCCMR and MCES Demonstration and Site Visit. St. Paul, MN.
14. Ruan, R. 2015. Shelf life study of raw and roasted almonds for Chinese market - A report to the Almond Board of California, ABC Almond Quality & Food Safety Committee Meeting. Modesto, CA.
15. Ruan, R., M. Min, E. Anderson, P. Chen. 2015. Biorefining scum for energy, metals and nonmetals reduction, and algae growth. Metro Council Environmental Service St. Paul Wastewater Treatment Plant, St. Paul, MN.
16. Ruan, R. 2015. Development and application of concentrated electric field technology for non-thermal pasteurization of liquid foods. Emerging Food Technology Workshop, Seoul, South Korea.
17. Ruan, R. 2015. Innovative dynamic high pressure nonthermal extraction and pasteurization technology for bioavailability improvement and safety assurance. Emerging Food Technology Workshop, Seoul, South Korea.
18. Ruan, R., P. Chen, Y. Liu, M. Ruan, X. Ma, Y. Ma, P. Peng, Q. Xie, S. Cheng, Y. Cheng, X. Lin, W. Zhou, M. Min, Y. Li. 2015. Development of innovative distributed eco-townships. Tianjin Forum. Tianjin, China.

Theses, dissertations

1. Sibo Cheng, M.S. Bioproducts and Biosystems Engineering, June, 2015

Thesis: Techno-economic analysis of algae cultivation in wastewater.

1. Xiaochen Ma, Ph.D. Bioproducts and Biosystems Engineering, May, 2016

Thesis: Utilization of Waste Resources for Low-Cost Algae-based Biofuel Production and Wastewater Bioremediation.

1. Yiwei Ma, M.S. Food Science and Nutrition, Aug., 2016

Thesis: Effects of Algae Feeding on Mouse Metabolome.

1. Nonso A. Onuma, M.S. Food Science and Nutrition, May, 2015

Thesis: Investigation of treatment effects on biodiesel production from sludge from municipal wastewater treatment plants.

1. Peng Peng, MS BBESM, December, 2015

Thesis: Modeling of Concentrated High Intensity Electric Field (CHIEF) and Its Comparison with Other Non-thermal Liquid Food Pasteurization Technologies.

1. Guiwei Tan, M.S. Food Science and Nutrition, September, 2015

Thesis: Development of a thin-layer chromatography based method for structural analysis of phosphatidylcholine (PC).

Other (i.e., media)

1. Addis, P, R. Ruan, J. Keenan, and D. Geleva. 2015. Medical and nutritional applications of high refined cellulose. US Patent: 8,969,321 B2. Issue date: March 3, 2015.

**Nebraska**

Journal papers

1. Huang, Z., Marra, F., Subbiah, J., Wang, S. (2016). Computer simulation for improving radio frequency (RF) heating uniformity of food products: a review. *Critical reviews in food science and nutrition*, DOI:[10.1080/10408398.2016.1253000](https://dx.doi.org/10.1080/10408398.2016.1253000)
2. Kocher, M. F., J. Subbiah. 2016. Analytical solution for speed to achieve a desired operating point for a given fan or pump. Applied Engineering in Agriculture, *32*(6), 751-757.
3. Ziara, R., S. Li., B. Dvorak, and J. Subbiah. 2016. Water and energy use of antimicrobial interventions in a mid-size beef packing plant. Applied Engineering in Agriculture. *32*(6), 873-879.
4. Boreddy, S.R., H. Thippareddi, G. Froning, and J. Subbiah. 2016. Novel Radiofrequency-Assisted Thermal Processing Improves the Gelling Properties of Standard Egg White Powder. Journal of Food Science, 81 (3): E665-E671.
5. Konda Naganathan, G., K. Cluff, A. Samal, C.R. Calkins, D.D. Jones, R.L. Wehling, and J. Subbiah. 2016. Identification and Validation of Key Wavelengths for On-line Beef Tenderness Forecasting. Transactions of the ASABE. 59(3): 769-783.
6. Cluff, K., G. Konda Naganathan, D. Jonnalagada, I. Mortensen, R. Wehling, and J. Subbiah. 2016. Determination of yolk contamination in liquid egg white using Raman spectroscopy. Poultry Science, 95(7):1702-8. doi: 10.3382/ps/pew095.
7. Chen J., R. Lentz, P. Pesheck, A. Guru, D. Jones, Y. Li, and J. Subbiah. 2016. Determination of thickness of microwaveable multicompartment meals using dielectric, thermal, and physical properties. Journal of Food Engineering, 189: 17-28.
8. Chen, J., K. Pitchai, S. Birla, M. Negahban, D. Jones, and J. Subbiah. 2016. Modeling heat and mass transport during microwave heating of frozen food rotating on a turntable. Food and Bioproducts Processing, 99:116-127.
9. Lau, S.K., H. Thippareddi, D. Jones, M. Negahban, and J. Subbiah. 2016. Challenges in Radiofrequency Pasteurization of Shell Eggs - Coagulation Rings. Journal of Food Science. doi: 10.1111/1750-3841.13440. (accepted)
10. Pitchai, K., J. Chen, S. Birla, D. Jones, and J. Subbiah. 2016. Modeling Microwave Heating of Frozen Mashed Potato in a Domestic Oven Incorporating Electromagnetic Frequency Spectrum. Journal of Food Engineering, [173](http://www.sciencedirect.com/science/journal/02608774/173/supp/C): 124–131.
11. Boreddy, S.R. and J. Subbiah. 2016. Temperature and moisture dependent dielectric properties of egg white powder. [Journal of Food Engineering](http://www.sciencedirect.com/science/journal/02608774), 168: 60–67.
12. Konda Naganathan, G., K. Cluff, A. Samal, C.R. Calkins, D.D. Jones, G.E. Meyer, and J. Subbiah. 2016. Three Dimensional Chemometric Analyses of Hyperspectral Images for Beef Tenderness Forecasting. Journal of Food Engineering, [169](http://www.sciencedirect.com/science/journal/02608774/169/supp/C): 309–320.
13. Gulati P., S. Weir, D. Santra, J. Subbiah, and D. Rose. 2016. Effects of feed moisture and extruder screw speed and temperature on physical characteristics and antioxidant activity of extruded proso millet (Panicum miliaceum) flour. International Journal of Food Science and Technology. *51*(1), 114–122. doi: 10.1111/ijfs.12974.

Presentations

1. Lau S.K., Subbiah J. 2016. Design of a Dielectric Properties Test Cell. Presented at the IMPI 50th Annual Microwave Power Symposium – June 21-23, 2016 – Orlando, FL.
2. Lau S.K., Vasquez S., Wei X., Stratton J., Bianchini A., Thippareddi H., Subbiah J. 2016. Development of a new thermal death time method: TDT blocks. Presented at the CoFE 2016 Meeting – September 12-14, 2016 – Columbus, OH.
3. Lau S.K., Irmak S., Subbiah J. 2016. Radiofrequency Pasteurization of Peanut Butter: Quality Evaluation. Presented at the IAFP 2016 Annual Meeting – July 31-August 3, 2016 – St. Louis, MO.
4. Chen J., K. Pitchai, S. Birla, D. Jones, R. Gonzalez, J. Subbiah. 2016. Multiphysics Modeling of the Effect of Headspace Steam on Microwave Heating Performance of a Frozen Heterogeneous Meal. Presented at the 50th Annual Microwave Power Symposium (IMPI 50), June 21-23, Orlando, FL.

**New Jersey**

Journal papers

1. Joshi I.G., Bhide S., Schaffner D.W., Salvi D.A, Karwe M.V. (2016). “Effect of Surface Roughness on Microbial Inactivation Using Cold Atmospheric Pressure Plasma (CAPP) and Plasma Activated Water (PAW),” 1st International Workshop on Plasma Agriculture, Drexel Plasma Institute, Camden, NJ, May 2016.
2. Joshi I.G., Schaffner D.W., Salvi D.A, Karwe M.V. (2016). “Effect of Surface Roughness in Fruit Systems on Microbial Inactivation Using Plasma Activated Water and Buffer,” Conference of Food Engineering (CoFE) 2016, Columbus, OH, September 11-14, 2016.
3. Manivannan M., Schaffner D.W., Salvi D., Karwe M.V. (2016). “Sequential Treatment of Mild Heat Followed by Ultraviolet Radiation to Inactivate *Alicyclobacillus Acidoterrestris* Spores in Apple Juice,” Institute of Food Technologist Annual Meeting and Food Expo, Paper no. P03-075, Chicago, IL.
4. Manivannan, V. (2016). “Mild heat and ultraviolet radiation in sequence to inactivate *Alicyclobacillus acidoterrestris* spores in apple juice,” Master’s Thesis, Rutgers University-Graduate School-New Brunswick, New Jersey, USA.
5. Henley, SC, Gleason, J & Quinlan, JJ 2016. [Don't Wash Your Chicken!: A food safety education campaign to address a common food mishandling practice](https://www.foodprotection.org/publications/food-protection-trends/archive/2016-01-don-t-wash-your-chicken-a-food-safety-education-campaign-to-address-a-common-food-mishandlin/). Food Protection Trends 36(1):43-53.
6. Chamberlin, B, Trespalacios, JH, Muise, AS, Garza, MC (2016). [User Testing in the Learning Games Lab: Getting Valuable Feedback through Frequent Formative Evaluation](http://www.crcnetbase.com/doi/abs/10.1201/b21564-4). In M. A. Garcia-Ruiz (Ed.) Games User Research: A Case Study Approach (pp.55-75). Boca Raton, FL: A K Peters/CRC Press DOI: 10.1201/b21564-4.

Presentations

1. Gleason, JB, Chamberlin, B. A., Conference of Food Engineering, Society of Food Engineering, Columbus, Ohio, "Enhancing Stakeholder Understanding of Food Engineering Research" (September 12, 2016).
2. Gleason, JB, Chamberlin, BA, Society for Nutrition Education and Behavior Annual Conference, Society for Nutrition Education and Behavior, San Diego, CA, "Food Safety and Nutrition Educational Tools from NMSU’s Media Productions" (July 31, 2016).
3. Ulery, AL, White, L, Chamberlin, BA, Gleason, JB, Beltran, N, NACTA, Honolulu, HI, "Digital Tools to Teach Chemistry in Agriculture" (June 22, 2016).
4. Gleason, JB, Chamberlin, BA, Muise, AS, CONSERVE (**CO**ordinating **N**ontraditional **S**ustainable wat**ER** Use in **V**ariable climat**E**s) Grant Project Meeting, University of Maryland, USDA, Baltimore, MD, "NMSU Media Development" (April 2016).
5. Gleason, JB, Chamberlin, BA, Powers, S, Sohn, E, NoroCORE Full Collaborative and Stakeholders Meeting, NoroCORE Food Virology—Collaborative for Outreach, Research & Education, Crystal City, VA, "NMSU's Visual Media for NoroCORE Education and Outreach" (April 13, 2016).
6. Chamberlin, BA, Gleason, JB, S1056 Food Safety Research Annual Meeting, USDA, Naraggansett, RI, "Using Media to Reach Food Safety Audiences" (October 6, 2015).\

**Ohio**

Journal papers

1. Samaranayake, C.P., and Sastry, S.K. 2016. Effects of controlled-frequency moderate electric fields on pectin methylesterase and polygalacturonase activities in tomato homogenate. Food Chemistry 199:265-272.
2. Wongsa-Ngasri, P., and Sastry, S.K. 2016. Tomato peeling by ohmic heating: effect of lye-salt combinations and post-treatments on weight loss, peeling quality and firmness. Innovative Food Science and Emerging Technologies. (Accepted for publication).
3. Wongsa-Ngasri, P., and Sastry, S.K. 2016. Tomato peeling by ohmic heating with lye-salt combinations: effects of operational parameters on peeling time and skin diffusivity. J. Food Engineering 18:10-16.
4. Gavahian, M., Farahnaky, A., and Sastry, S.K. 2016. Ohmic-assisted hydrodistillation: A novel method for ethanol distillation. Food and Bioproducts Processing (Accepted for publication).
5. Sastry, S.K. 2016. Toward a philosophy and theory of volumetric nonthermal processing. Journal of Food Science 81(6):E1431-E1446.
6. Samaranayake, C.P., and Sastry, S.K. 2016. Effect of moderate electric fields on inactivation kinetics of pectin methylesterase in tomatoes: the roles of electric field strength and temperature. J. Food Engineering, 198:17-26.
7. Shynkaryk, M., Pyatkovskyy, T., Yousef, A.E., and Sastry, S.K. 2016. Gaseous ozone treatment of baby spinach within the existing production chain for inactivation of Escherichia coli O157:H7. J. Food Engineering (accepted for publication).
8. Gavahian, M., Farahnaky, A., Shavezipur, M., and Sastry, S.K. 2016. Ethanol concentration of fermented broth by ohmic-assisted hydrodistillation. Innovative Food Science and Emerging Technologies 35:45-51.
9. Gavahian, M., Farahnaky, A., and Sastry, S.K. 2016. Multiple effect concentration of ethanol by ohmic-assisted hydrodistillation. Food and Bioproducts Processing (in press).
10. Pyatkovskyy, T., Shynkaryk, M.V., Yousef, A.E., and Sastry, S.K. 2016. Reduction of Escherichia coli O 157:H7 population on baby spinach leaves by liquid sanitizers. Journal of Food Process Engineering (in press).
11. Sergio I. Martínez-Monteagudo, Shreya Kamat, Nalini Patel, Gul Konuklar, Nagendra Rangavajla, and V.M. Balasubramaniam. 2017. Improvements in emulsion stability of dairy beverages treated by high pressure homogenization: A pilot-scale feasibility study. J. Food Engineering. 193 42–52
12. Musfirah Zulkurnain, Farnaz Maleky, and VM Balasubramaniam. 2016. High Pressure Processing Effects on Lipids Thermophysical Properties and Crystallization Kinetics. Food Engineering Reviews (in press).
13. Musfirah Zulkurnain, Farnaz Maleky, V.M. Balasubramaniam. 2016. High pressure crystallization of binary fat blend: A feasibility study. Innovative Food Science and Emerging Technologies (in press).
14. Santosh Dhakal, M Monica Giusti and VM Balasubramaniam.2016. Effect of high pressure processing on dispersive and aggregative properties of almond milk. Journal of the Science of Food and Agriculture 96(11) 3821-30.
15. K.E. Casulli, S. Dhakal, K.P. Sandeep and V.M. Balasubramaniam. 2016. Compression heating of selected polymers during high-pressure processing. J. Food Process Engineering.
16. Daryaei, Hossein, V.M. Balasubramaniam, Ahmed E. Yousef, J. David Legan, and Abdullatif Tay. 2016. Lethality enhancement of pressure-assisted thermal processing against Bacillus amyloliquefaciens spores in low-acid media using antimicrobial compounds. Food Control.
17. Sergio I Martinez-Monteagudo and V.M. Balasubramaniam**.**2016**.**Fundamentals and Applications of High Pressure Processing Technology. Chapter 1. In High Pressure Processing of Food-Principles, Technology and Application. Balasubramaniam, V.M. Gustavo V. Barbosa-Canovas and Huub Lelieveld. (editors). Springer LLC, New York, NY. pp 3-17.
18. Balasubramaniam, V.M., Gustavo V. Barbosa-Cánovas, and Huub L.M. Lelieveld. 2016. Industrial Scale High Pressure Processing Equipment. Chapter 3. In High Pressure Processing of Food-Principles, Technology and Application. Balasubramaniam, V.M. Gustavo V. Barbosa-Canovas and Huub Lelieveld. (editors). Springer LLC, New York, NY. Pp 39-65.
19. Balasubramaniam, V.M., Gustavo V. Barbosa-Cánovas, and Huub L.M. Lelieveld. 2016. Preface. In High Pressure Processing of Food-Principles, Technology and Application. Balasubramaniam, V.M. Gustavo V. Barbosa-Canovas and Huub Lelieveld. (editors). Springer LLC, New York, NY. Pp v-vii.
20. Ayvaz, H.,VM. Balasubramaniam**,**and Tatiana Koutchma**.**2016. High Pressure Effects on Packaging Material. Chapter 5. In High Pressure Processing of Food-Principles, Technology and Application. Balasubramaniam, V.M. Gustavo V. Barbosa-Canovas and Huub Lelieveld. (editors). Springer LLC, New York, NY. Pp 73-93.
21. Sung Hee Park, Loc Thai Nguyen, Stephen Min, VM. Balasubramaniam, and Sudhir K. Sastry. 2016. In Situ Thermal, Volumetric and Electrical Properties of Food Matrices Under Elevated Pressure and the Techniques Employed to Measure Them. Chapter 6. In High Pressure Processing of Food-Principles, Technology and Application.
22. Balasubramaniam, V.M. Gustavo V. Barbosa-Canovas and Huub Lelieveld. (editors). Springer LLC, New York, NY. Pp 97-121.
23. Hossein Daryaei, Ahmed E. Yousef, and V.M. Balasubramaniam. 2016. Microbiological Aspects of High Pressure Food Processing: Inactivation of Vegetative Microorganisms and Spores. Chapter 14. In High Pressure Processing of Food-Principles, Technology and Application. Balasubramaniam, V.M. Gustavo V. Barbosa-Canovas and Huub Lelieveld. (editors). Springer LLC, New York, NY. Pp 271-294.
24. Fan, M., Phinney, D. M. and Heldman, D. R. 2015. Effectiveness of rinse water during in-place cleaning of stainless steel pipe lines. J. of Food Sci. doi: 10.1111/1750-3841.12914
25. Sravanti Paluri, Mohammed Shavezipur, Dennis R. Heldman and Fatemeh Maleky. 2015. Analysis of moisture diffusion mechanisms in structured lipids using magnetic resonance imaging. RSC Adv.. Vol. 5, 76904-76911.
26. Phinney, David M., John C. Frelka, and Dennis R. Heldman. "Modelling the chemical free neutralization of caustic peeled tomato slurry as a continuously stirred tank." Food and Bioproducts Processing (2016).

Abstracts, proceedings

1. Sastry, S.K. 2016. Research in advanced thermal and nonthermal processing technologies: opportunities and pitfalls. Abstract No. 026-001, Institute of Food Technologists’ Annual Meeting IFT16, Chicago, IL, July 16-19.
2. Shynkaryk, M., Mohamed, H., Pyatkovskyy, T., Yousef, A., and Sastry, S.K. 2016. Engineering aspects of fresh produce safety. Abstract No. 102 at the Conference of Food Engineering, 2016, Columbus, OH, September 12-14, 2016.
3. Pyatkovskyy, T., Shynkaryk, M., Yousef, A., and Sastry, S.K. 2016. Baby spinach sanitation by combination of gaseous ozone and liquid sanitizer. Abstract No. 109 at the Conference of Food Engineering, 2016, Columbus, OH, September 12-14, 2016.
4. Phinney, D.M., Lliamas E., Fryer, P.J., Heldman, D.R., Bakalis, S. 2016. Detection of Residual Micro-Foulant After Clean-In Place (CIP) Using Atomic Force Microscopy. International Union of Food Science and Technology. August 21-25. Dublin, Ireland.
5. Fan, M., Phinney, D.M., Heldman, D.R. 2016. The Effectiveness of Reused and Reclaimed Cleaning Solutions for Clean-In-Place (CIP) Operations. International Union of Food Science and Technology. August 21-25. Dublin, Ireland.

Presentations

1. Samaranayake, C., de la Torre, J., Durham, E., and Sastry, S.K. 2016. Effects of electric fields on enzymes. Presentation at the ICHIA (Chilean Food Engineering Institute) workshop on Paradigms in Food Processing: Study Cases, Santiago, Chile, May 27, 2016.
2. Sastry, S.K. 2016. Advanced thermal and nonthermal food safety technologies – academic perspective and future research. Plenary Lecture at the CICTA Conference, Havana, Cuba, June 6-10, 2016.
3. Sastry, S.K. 2016. Toward improved scientific understanding of volumetric nonthermal (HPP and PEF) processing. Invited presentation at the International Nonthermal Processing Workshop, Beijing, China, October 19-20, 2016.
4. Balasubramaniam, V.M. 2016. High Pressure Processing For Extending Shelf Life Foods with Fresh-like Quality Attributes. The first international forum of ultra high pressure technology and application. South China University of Technology, Zhuhai. Jan 17-18th.
5. Balasubramaniam, V.M. 2016. High pressure homogenization. The first international forum of ultra high pressure technology and application. South China University of Technology, Zhuhai. Jan 17-18th.
6. Balasubramaniam, V.M. 2016. Advanced Food Manufacturing Methods for Food Pasteurization and Sterilization. Thermal Processing of Ready-to-Eat Meat Products Short Course, Nationwide & Ohio Farm Bureau 4-H Center, The Ohio State University, Columbus, OH. April 20-22.
7. Balausbramaniam, V.M. 2016. High pressure based advanced food manufacturing research at The Ohio State University. U.S. Army Natick Solider Research, Development and Engineering Center, NATICK, MA. May 16th.
8. Balasubramaniam, V.M. 2016. Nonthermal based advanced food manufacturing research at The Ohio State University. Honorary Symposium for Professor Emeritus Marcus Karel, European Academy of Food Engineering, Samberg Conference Center at MIT, Cambridge, MA. May 16th.
9. Balasubramaniam, V.M. 2016. Advanced nonthermal food manufacturing engineering research: Opportunities and challenges. Ohio Food Industry Summit, Center for Innovative Food Technology, South Lewis Center, OH March 17.
10. Balasubramaniam, V.M. 2016. Application of high pressure based technologies in the food industry: Present status and future prospects. Nonthermal Processing Division Lecture. 2016 Annual Meeting of Institute of Food Technologists, Chicago, IL July 16-19.
11. Balasubramaniam, V.M. 2016. High Pressure Homogenization of Beverage Products: Principles and Applications. 2016 Annual Meeting of Institute of Food Technologists, Chicago, IL July 16-19.
12. Balasubramaniam, V.M. 2016. Food manufacturing through application of high pressure. 2016 Conference of Food Engineering, Columbus, OH. Sep 12-14.
13. Balasubramaniam, VM. 2016. Food Engineering Research: Strength, Weakness, Opportunity and Threat (SWOT) Analysis-Community Perspective. 2016 Conference of Food Engineering, Columbus, OH. Sep 12-14.
14. Balasubramaniam, VM. 2016. Food Engineering Research: Opportunities and Challenges – Panel Introduction. 2016 Conference of Food Engineering, Columbus, OH. Sep 12-14.
15. Balasubramaniam, V.M. 2016. Application of high pressure for commercial sterilization of low-acid shelf-stable foods. Institute of Thermal Processing Specialists (IFTPS), Columbus, OH. Sep 15-16.
16. Balasubramaniam, V.M. 2016. High Pressure Homogenization of Beverages–Opportunities and Challenges. 18th World Congress of Food Science and Technology. International Union of Food Science and Technology (IUFOST), Dublin, Ireland. August 21-25th.
17. Santosh Dhakal, VM Balasubramaniam, Ana Paula Alonso, Jean-Christophe Cocuron Erdal Egcam Shreya Kamat. 201*6.* Formation of Furan in Fruit and Vegetable Juices Subjected to Combined Pressure-Thermal Treatments. Abstract 069. 2016 Annual Meeting of Institute of Food Technologists, Chicago, IL July 16-19.
18. Santosh Dhakal, VM Balasubramaniam, Ana Paula Alonso, Jean-Christophe Cocuron Erdal Egcam Shreya Kamat. 2016. Pressure-thermal kinetics of furan formation in selected fruits and vegetable juices. 2016 Conference of Food Engineering, Columbus, OH. Sep 12-14.
19. Bing Yan, Sergio I. Martínez-Monteagudo, Jessica L. Cooperstone, Ken M. Riedl, Steven J. Schwartz, V.M. Balasubramaniam. 2016. Impact of thermal and pressure-based technologies on carotenoid retention and selected quality parameters in tomato juice. 2016 Conference of Food Engineering, Columbus, OH. Sep 12-14.
20. Musfirah Zulkurnain, VM. (Bala) Balasubramaniam and Farnaz Maleky. 2016. Structural and Physical Characteristics of Fats Crystallized Under High Pressure. 2016 AOCS Meeting. Chicago, IL.
21. Musfirah Zulkurnain, Farnaz Maleky and V.M. Balasubramaniam. 2016. Mechanical and physical properties of binary fat blends crystalized under high pressure. 2016 Conference of Food Engineering, Columbus, OH. Sep 12-14.
22. Erica Cramer, Fatemeh Maleky and Dennis R. Heldman. 2016. Effects of Water on Physical Properties of Rice Bran Wax Oleogel. Institute of Food Technologists Annual Meeting. Chicago, IL. July 16-19.
23. Sravanti Paluri, Dennis R. Heldman, Fatemeh Maleky. 2016. Influence of Cooling Rate on Moisture Diffusion in Structured Lipids. Institute of Food Technologists Annual Meeting. Chicago, IL. July 16-19.
24. Fan, Mengyuan, Dennis R. Heldman and David M. Phinney. 2016. Design of a Benchtop Clean-in-Place System Using Computational-Fluid-Dynamics. Institute of Food Technologists Annual Meeting. Chicago, IL. July 16-19.
25. Feldman, Ariella, David M. Phinney and Dennis R. Heldman. 2016. Quantification of Fouling During UHT Processing in a Tubular Heat Exchanger. Institute of Food Technologists Annual Meeting. Chicago, IL. July 16-19.
26. Huang, Chloe, David M. Phinney and Dennis R. Heldman. 2016. Influence of Food Residues on Electrical Conductivity and Active Alkaline Magnitudes in CIP Cleaning. Institute of Food Technologists Annual Meeting. Chicago, IL. July 16-19.
27. Fan, Mengyuan, Dennis R. Heldman and David M. Phinney. 2016. Reclamation and Reuse of Waste Streams from Clean-in-Place Operations of Dairy Processing. Institute of Food Technologists Annual Meeting. Chicago, IL. July 16-19.
28. John C. Frelka, David M. Phinney, Yael Vodovotz, Macdonald Wick and Dennis R. Heldman. 2016. Influence of Freezing on Water State in Chicken Breast Meat: An NMR Micro-Imaging Analysis. Institute of Food Technologists Annual Meeting. Chicago, IL. July 16-19.
29. Helen Bunker, Dennis R. Heldman, Farnaz Maleky and David M. Phinney. 2016. Influence of Freezing on Quality Attributes of Low-Moisture Part-Skim Mozzarella. Institute of Food Technologists Annual Meeting. Chicago, IL. July 16-19.
30. Dennis R. Heldman. and David M. Phinney. 2016. Maintenance of frozen food quality during storage and distribution. Institute of Food Technologists Annual Meeting. Chicago, IL. July 16-19.

Theses, dissertations

1. Xiaoyi Zhu. 2015. Prediction of Specific Heat Capacity of Food Lipids and Foods. M.S. Thesis. The Ohio State University. Columbus OH.

Other (i.e., media)

1. Sastry, S.K., Heskitt, B.F., Jun, S., and Somavat, R. 2016. Ohmic heating packet. US Patent 9,259,121.
2. Balasubramaniam, V.M. Gustavo V. Barbosa-Canovas and Huub Lelieveld. 2016. High Pressure Processing of Food-Principles, Technology and Application. Springer LLC, New York.

**Oregon**

Journal papers

1. Athaillah, Z, Park JW. 2016. Characterization of surimi slurries and their films derived from myofibrillar proteins with different extraction methods. Food Bioscience 15:118-125.
2. Kokkaew H, Thawornchinsombut S, Pitirith T, Park JW. 2015. Optimal conditions to remove chemical hazards in fish protein isolates from tilapia frame using response surface methodology. J Aquat Food Product Tech. 24(7): 672-685.
3. Jiao S, Deng Y, Zhao Y. 2016. Effects of Hot Air-assisted Radio Frequency Heating on Quality and Shelf-life of Roasted Peanuts. Food and Bioprocess Technology. 9(2), 308-319.
4. Jung J, Deng Z, Simonsen J, Zhao Y. 2016. Development and preliminary field validation of water-resistant cellulose nanofiber based coatings with high surface adhesion and elasticity for reducing cherry rain-cracking. Scientia Horticulturae, 200, 161-169.
5. Lee JH, Park JW. 2016. Pacific whiting frozen fillets as affected by postharvest processing and storage conditions. Food Chemistry 201-177-184.
6. Lian Z, Zhang J, Zhao Y. 2016. Nano-TiO2 particles and high hydrostatic pressure treatment for improving functionality of polyvinyl alcohol and chitosan composite films and nano-TiO2 migration from film matrix in food simulants. *Innovative Food Sci. & Emerging Technol.* 33, 145-153.
7. Poowakanjana S, Park JW, Moon JH, Yoon WB. 2015. Assessing the dynamic rheology of surimi paste as affected by heating rates frequencies, and moisture contents. J. Texture Studies 46:302-311.
8. Wang W, Jung J, Tomasino E, Zhao Y. 2016. Optimization of solvent and ultrasound-assisted extraction for different anthocyanin rich fruit and their effects on anthocyanin compositions. LWT-Food Science & Technology, 72, 229–238.
9. Yue J, Zhang Y, Jin Y, Deng Y, Zhao Y. 2016. Impact of high hydrostatic pressure on non-volatile and volatile compounds of squid muscles. Food Chem. 194, 12–19.
10. Zhang, Y., Wang, G., Jin, Y., Deng, Y., Zhao, Y. 2016. Effects of high hydrostatic pressure processing on purine, taurine, cholesterol, antioxidant micronutrients and antioxidant activity of squid (*Todarodes pacificus*) muscles. Food Control. 60, 189–195.
11. Zhang H, Jung J, Zhao Y. 2016. Preparation, characterization and evaluation of antibacterial activity of catechins and catechins-Zn complex loaded β-chitosan nanoparticles of different particle sizes. *Carbohydrate Polymers*. 137, 82-91.
12. Zhang H, Zhang Y, Bao E, Zhao Y. 2016. Preparation, characterization and toxicology properties of α- and β-chitosan Maillard reaction products nanoparticles. International Journal of Biological Macromolecules. 89, 287–296.

Abstracts

1. Lee JW, Park JW. 2016. The Effect of Various Postharvest Conditions on Physicochemical Properties of Alaska Pollock Subjected to Different Freeze/Thaw Cycles. The 67th PFT Annual Meeting (Blaine, WA). Feb 21-24.
2. Kobayashi Y, Park JW. 2016. Effect of Chopping Temperature and Time on Gelation Properties of Tilapia Fish Protein Isolate and Surimi. The 67th PFT Annual Meeting (Blaine, WA). Feb 21-24.
3. Lee JH, Park JW. 2016. Physicochemical Properties of At-Sea Frozen Alaska Pollock as Affected by Various Postharvest Conditions. Poster #1-004. IFT Annual Meeting (Chicago, IL). July 17.
4. Kobayashi Y, Park JW. 2016. Physicochemical Characterizations of Tilapia Fish Protein Isolate Under Various Comminution. Poster #1-005. IFT Annual Meeting (Chicago, IL). July 17.
5. Kobayashi Y, Park JW. 2016. Optimal Blending of Two Refined Fish Proteins Prepared Using Different Methods. Poster #2-001. IFT Annual Meeting (Chicago, IL). July 17.
6. Junes K, Park JW. 2016. Nutritional Values of Korean Gim (Sea Veggie) for American Consumers. Poster #2-002. IFT Annual Meeting (Chicago, IL). July 17.
7. Lee JH, Park JW. 2016. The Effect of Pre-Freezing Treatments on B-Season Frozen Alaska Pollock Fillets. Poster #2-004. IFT Annual Meeting (Chicago, IL). July 17.
8. Junes k, Park, JW. 2016. Heavy Metals in Korean Gim (Sea Veggie) for American Consumers. Poster #3-001. IFT Annual Meeting (Chicago, IL). July 18.
9. Park HW, Yoon WB, Park JW. 2016. Relationships Among Penetration, Tensile, and Torsion at the Fracture of Surimi Gels Under Image Analysis. Poster #3-002. IFT Annual Meeting (Chicago, IL). July 18.
10. Hunt A, Park JW. 2016. Altering Batter Formulation to Reduce Fat Content of Fried Seafood. Poster #5-002. IFT Annual Meeting (Chicago, IL). July 19.
11. Jung HB, Yoon WB, Park JW. 2016. Measuring the Mechanical Properties of Dried Gim (Korean Sea Veggie) as Affected by Relative Humidity Using a Ring Tensile Test. Poster #5-005. IFT Annual Meeting (Chicago, IL). July 19.
12. Park HW, Yoon WB, Park. 2016. Heat and Mass Transfer Simulation Based on Moisture Evaporation and Temperature Distribution During Temperature Sweep. Poster #6-002. IFT Annual Meeting (Chicago, IL). July 19.
13. Gouw V, Jung Y, Simonsen J, Zhao Y. 2016. Development of Value-added Applications of Fruit Juice Processing Byproducts. 2016 Oregon BEST FEST (Portland, OR). Sept. 9.
14. Deng ZL, Jung J, Simonsen J, Zhao Y. 2016. Functionality of Cellulose Nanofiber Based Films Modified by Different Concentrations and Molecular Weights of Chitosan. Poster #067. IFT Annual Conference (Chicago, IL.) July 17.
15. Gouw V, Jung Y, Simonsen J, Zhao Y. Physicochemical Properties and Bioactive Compounds of Different Fruit Pomaces. Poster #071. IFT Annual Conference (Chicago, IL.). July 17.

Presentations

1. Park J. 2015. My research (fish proteins) and Oregon State University. Jeju National University, Jeju, S Korea. Oct 27.
2. Park J. 2016. US Trends: Value-added products from various seafood byproducts. Tokyo University of Marine Science and Technology, Tokyo, Japan. Feb 22.
3. Park JW. 2016. Surimi Technology – Past, Present, and Future. Keynote speech. The 7th World Fisheries Congress (Busan, Korea). May 23-26.
4. Zhao Y. 2016. Fruit Pomace as Antioxidant Dietary Fiber for Enhancing Nutritional Value of Food and Bulk Material for Developing Biodegradable Packaging. 2016 IFT Symposium, Chicago, IL, July 18.
5. Zhao Y.2016. Conducting High Quality Research: From Research Topics, Experimental Design, Methods To Publication. Xinjiang Agricultural University, China. June 8.
6. Zhao Y. 2016 InnofreshTM Coatings for Retaining Natural Fruit Pigments, Preventing Cherry Rain Cracking, and Extending Postharvest Shelf-life of Fresh Produce. Zhejiang Gongshang University, China. June 3.
7. Zhao Y. 2016. Development of Value-added Applications of Juice Processing and Winemaking Bioresiduals (Pomace). NWFPA Sustainability Summit, Portland, OR, March 15.
8. Zhao Y. 2015. Mechanisms to Retain Naturally-Occurring Anthocyanin Pigments In Thermally Processed Whole Fruits in Aqueous Media. ACS PacifiChem, Honolulu, HA. Dec. 18.

Theses, dissertations

1. Investigation of Optimal Extraction Conditions and Microencapsulation Technique for Stabilizing Anthocyanins and Polyphenols from Fruit Materials. Wenjie Wang, M.S. thesis, 2016.
2. Investigation of Bioactive Compounds in Different Types of Fruit Pomace and Their Applications as Bulk Materials for Creating Biocomposite. Virginia Gouw, M.S. thesis, 2016.

**Pennsylvania**

Journal Articles

1. Stanley, T., Van Buiten, C., Elias, R., Anantheswaran, R. C. & Lambert. J. D. 2016. Impact of Roasting on the Flavan-3-ol Composition and Aroma Chemistry of Cocoa Beans. J.Ag Food Chem (Submitted).
2. Journal Articles Chandrasekhar, V, Coupland, J. C. & Anantheswaran, R. C. 2016. Characterization of nisin containing chitosan-alginate microparticles. Food Hydrocolloids (Submitted).
3. Chandrasekhar, V, Coupland, J. C. & Anantheswaran, R. C. 2016. Release Kinetics of Nisin from Chitosan-Alginate Complex Films. Journal of Food Science (in press).
4. Casasnovas, J. C. & Anantheswaran, R. C. 2016. Dynamic measurement of starch granule swelling during microwave heating. Carbohydrate Polymers (in press).
5. Chandrasekar, V, Knabel, S.J. & Anantheswaran, R. C. 2015. Modeling development of inhibition zones in an agar diffusion bioassay.. Food Science & Nutrition 3(5): 394-403.
6. Wang, X., A. Demirci, V. M. Puri, and R. E. Graves. 2016. Evaluation of blended electrolyzed oxidizing water-based cleaning-in-place (CIP) technique using a laboratory-scale milking system. Transactions of the ASABE. 59(1): 359-370. DOI: 10.13031/trans.59.11146.
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9. Zamil, Shafayet M., Hojae Yi, and Virendra M. Puri. 2015. The mechanical properties of plant cell walls at the subcellular scale: the implications of water and of the middle lamella. Journal of Materials Science, 50(20): 6608-6623.

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2. Oner, M. and A. Demirci. 2016. Ozone for food decontamination: Theory and Applications. In Handbook of Hygiene in the Food Industry. 2nd Edition. Gabric, D., Lelieveld, H., and Holah, J. Eds. Elsevier Inc. Philadelphia, PA.
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1. Demirci, A. 2016. Decontamination of foods by pulsed ultraviolet light. The NSF Food, Energy, and Water (FEW) Nexus Workshop on Transformative Food Technologies to Enhance Sustainability. February 22-24. University of Nebraska, Lincoln, NE.
2. Demirci, A., X. Wang, R. E. Graves, and V. M. Puri. 2016. Electrolyzed oxidizing water as novel alternative chemical for CIP Process for the food industry. The NSF Food, Energy, and Water (FEW) Nexus Workshop on Transformative Food Technologies to Enhance Sustainability. February 22-24. University of Nebraska, Lincoln, NE.
3. Can, F. O., A. Demirci, V. Puri, and H. Gourama. 2016. Decontamination of hard cheeses by pulsed UV-light. 1st International Tourism and Microbial Food Safety Congress. 21-23 April. Antalya, Turkey.
4. Ercan, D. and A. Demirci. 2016. Decontamination of hard-cooked eggs by pulsed UV-light processing. ASABE Annual International Meeting. July 17-20. Orlando, FL. Paper # 2456233.
5. Ercan, D., S. Wang, A. Demirci, L. LaBorde, R. Elias. 2016. Effect of UV-C and pulsed-UV treatments on reduction of Penicillium expansum spores and E. coli K12 in a model apple juice. ASABE Annual International Meeting. July 17-20. Orlando, FL. Paper # 2456220.
6. Ercan, D., S. Wang, A. Demirci, L.F. LaBorde, R.J. Elias. 2016. Effect of UV-C and pulsed-UV treatments on reduction of Penicillium expansum spores and E. coli K12 in a model apple juice. Institute of Food Technologists Annual Meeting. July 16-19. Chicago, IL. Abstract # 14310.

**Tennessee**

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2. Zhang, Y, Jun L, Zhong Q. 2016. Effects of media, heat adaptation, and outlet temperature on the survival of *Lactobacillus salivarius* NRRL B-30514 after spray drying and subsequent storage. LWT - Food Sci Technol. 74: 441-447.
3. Wang, T, Wang R, Chen Z, Zhong Q. 2016. Coating oil droplets with rice proteins to control the release rate of encapsulated beta-carotene during in vitro digestions. RSC Adv **6**: 73627-73635.
4. Ma, Q, Zhang Y, Critzer F, Davidson PM, Zhong Q. 2016. 2016. Quality attributes and microbial survival on whole cantaloupes with antimicrobial coatings containing chitosan, lauric arginate, cinnamon oil and ethylenediaminetetraacetic acid. Int J Food Microbiol 235: 103-108.
5. Hilbig, J, Ma Q, Davidson PM, Weiss J, Zhong Q. 2016. Physical and antimicrobial properties of cinnamon bark oil co-nanoemulsified by lauric arginate and Tween 80. Int J Food Microbiol 233:52-59.
6. Ma, Q, Davidson PM, Critzer F, Zhong Q. 2016. Antimicrobial activities of lauric arginate and cinnamon oil combination against foodborne pathogens: Improvement by ethylenediaminetetraacete and possible mechanisms. LWT - Food Sci Technol 72: 9–18.
7. Ma, Q, Davidson PM, Zhong Q. 2016. Antimicrobial properties of microemulsions formulated with essential oils, soybean oil, and Tween 80. Int J Food Microbiol 226: 20-25.
8. Ma, Q, Davidson PM, Zhong Q. 2016. Nanoemulsions of thymol and eugenol co-emulsified by lauric arginate and lecithin. Food Chem 206: 167-173.
9. Li, K, Zhong Q. 2016. Aggregation and gelation properties of preheated whey protein and pectin mixtures at pH 1.0-4.0. Food Hydrocolloids 60: 11-20.
10. Zhang, Y, Ma Q, Critzer F, Davidson PM, Zhong Q. 2016. Organic thyme oil emulsion as an alternative washing solution to enhance the microbial safety of organic cantaloupes. Food Control 67: 31-38.
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16. Pan, K, Zhong Q. 2016. Low energy, organic solvent-free co-assembly of zein and caseinate to prepare stable dispersions. Food Hydrocolloids 52: 600-606.
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2. Zhong, Q. 2016. Solid/oil/water emulsions as novel approaches of encapsulating probiotic bacteria. *The 252nd American Chemical Society National Meeting & Exposition*, Aug. 21-25, Philadelphia, PA. Paper # AGFD 173.
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1. Zhang, Y. 2016. *Structuring S/O/W emulsions to deliver water-soluble bioactive food ingredients*. PhD dissertation, University of Tennessee Knoxville.

**Texas**

Journal papers

1. Puerta-Gomez, A.F. and Castell-Perez. M.E. 2017. Visual Spectroscopy Method to Evaluate Entrapment Efficiency of Electrostatically Precipitated Proteins in Combination with Octenyl Succinic Anhydrate (OSA)-Modified Polysaccharides. Food Hydrocolloids, 63(2017), 160-169.
2. Puerta-Gomez, A.F. and Castell-Perez, M.E. 2016. Studies on Self-Assembly Interactions of Proteins and Octenyl Succinic Anhydrate (OSA)-Modified Depolymerized Waxy Rice Starch using Rheological Principles. Journal of Applied Polymer Science. 133(27), July 2016.
3. Ruengvisesh, S., Loquercio, A., Castell-Perez, E., Taylor, M.T. 2015. Inhibition of Bacterial Pathogens in Medium and on Spinach Leaf Surfaces using Plant-Derived Antimicrobials Loaded in Surfactant Micelles. Journal of Food Science. DOI: 10.1111/1750-3841.13085.
4. Loquercio, A., Castell-Perez, M. E., Gomes, C. and Moreira, R.G. 2015. Preparation of Chitosan-Alginate Nanoparticles for Trans-cinnamaldehyde Entrapment. Journal of Food Science. Nanoscale Food Science Section, 80(10), N2305-N2315.
5. Santos, E., Kamimura, J., Hill, L., Gomes, C. 2015. Characterization of carvacrol beta-cyclodextrin inclusion complexes as delivery systems for antibacterial and antioxidant applications. LWT-Food Science and Technology. 60 (1): 583-592. [DOI:10.1016/j.lwt.2014.08.046](http://dx.doi.org/10.1016/j.lwt.2014.08.046).
6. Burrs, S. L., Bhargava, M., Sidhu, R., Kieman-Lewis, J., Gomes, C., Claussen, J. C., McLamore, E. S. 2016. A paper based graphene-nanocauliflower hybrid composite for point of care. Biosensor and Bioelectronics. 85: 479-487. DOI: 10.1016/j.bios.2016.05.037.
7. Oliveira, D. A., Angonese, M., Gomes, C., Ferreira, S. R. S. 2016. Valorization of passion fruit (Passiflora edulis sp.) by-products: sustainable recovery and biological activities. The Journal of supercritical Fluids. 111:55-62. DOI: 10.1016/j.supflu.2016.01.010.
8. Vanegas, D. C., Gomes, C., McLamore, E. S. 2016. Biosensors for indirect monitoring of foodborne bacteria. Biosensor Journal. 5:137. DOI: 10.4172/2090- 4967.1000137.
9. McLamore, E.S., M. Convertino, I. Oksoy, M. Taguchi, D.C. Vanegas, C. Gomes, J.C. Claussen (2016). Biomimetic Fractal Nanometals as a Transducer Layer in Electrochemical Biosensing. In: Semiconductor Device-Based Sensors for Gas, Chemical, and Biomedical Applications. Ed by Fan Ren and Stephen J Pearton, CRC Press; ISBN: 1439813876.
10. Vanegas, D.C. J.C. Claussen, E.S. McLamore, C. Gomes (2016) Microbial Pathogen Detection Strategies. In: Encyclopedia of Agricultural, Food , and Biological Engineering, Third Edition. Eds: D.R. Heldman, C.I. Moraru, Taylor & Francis. *In press*

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1. Martinon, M., Sevimli, Z. and Moreira, R.G. 2016. Intermolecular interactions and structure characterization of Anthocyanin with different protein matrices. IFT (Institute of Food Technologists) Annual Meeting, Chicago, IL, July 2016.
2. Al-Mohaimeed, S., Moreira, R.G. and Da Silva. P.F. 2016. Vacuum impregnation and vacuum frying to produce potato chips with phenolic compound of red beetroot. IFT (Institute of Food Technologists) Annual Meeting, Chicago, IL, July 2016.
3. Lopez , S. , Moreira, R.G. and Da Silva, P.F. (2016). Improved Vacuum-Fried Chips. With Green Tea Extract IFT (Institute of Food Technologists) Annual Meeting, Chicago, IL, July 2016
4. Omac, B, Moreira, R.G., Castell-Perez, M.E. 2016. Modeling Growth of Cold-Adapted *Listeria innocua* and *Listeria monocytogenes* on Fresh Baby Spinach Leaves under Different Cold Storage Temperatures. IFT (Institute of Food Technologists) Annual Meeting, Chicago, IL, July 2016.
5. Huizhu Tong, E. Castell-Perez, P. da Silva, R.G. Moreira. 2016. Vacuum impregnation treatment to enhance texture and quality of fresh blueberries (*Vaccinium corymbosum*). IFT (Institute of Food Technologists) Annual Meeting, Chicago, IL, July 2016.
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8. McLamore, E. S., Convertino, M., Hondred, J., Das, S., Claussen, J. C., Vanegas, D. C., Gomes, C. Bio-inspired patterned networks (BIPS) for development of wearable/disposable biosensors. Proceeding of SPIE, Volume 9863, Smart Biomedical and Physiological Sensor Technology XIII. International Society for Optics and Photonics. DOI:10.1117/12.2223345.
9. Hills, K. D., \*Giacobassi, C. A., Vanegas, D. C., Claussen, J., McLamore, E. S., Gomes, C**.** 2016. Aptasensor based approach using chitosan biopolymer-metal nanostructures for real-monitoring of *Listeria innocua* and *Listeria monocytogenes.* Institute of Biological Engineers meeting, Greenville, SC, April.
10. Giacobassi, C. A., Hills, K.D., Vanegas, D. C., Claussen, J., McLamore, E. S., **Gomes, C.** 2016. Real-time detection of *Escherichia coli* spp. using Concanavalin A lectin carbon-hydrogel nanostructure functionalized biosensor. Institute of Biological Engineers meeting, Greenville, SC, April. .
11. Oliveira, D. A., Hill, L. E., \*Giacobassi, C., Johnson, J., Summerlin, H., Taylor, T. M., Gomes, C. 2016. Effects of the application of nanoencapsulated cinnamon bark extract on microbial safety and quality of fresh-cut romaine lettuce.IFT International Meeting, Chicago, IL. July.
12. Kalia, A., Chen, C-I, Akbulut, M., Gomes, C. 2016 . Synthesis and characterization of urea-chitosan nanoparticles for controlled release properties. IFT International Meeting, Chicago, IL. July.
13. Oliveira, D. A., Pola, C., Kalia, A., Zha, Y. Gomes, C. 2016. Polymeric nanostructures as delivery systems for agricultural and food applications. Conference of Food Engineering, Columbus, OH. September.

Theses, dissertations

1. Sidhu, R. K. 2015. Aptamer based lab-on-a-chip biosensor for selective detection of foodborne pathogen, *Listeria* spp., in food products. M.S. Thesis. Biological and Agricultural Engineering, Texas A&M University.

**2.** Hills, K. 2015. Aptasensor based approach using chitosan biopolymer-metal nanostructures for real-monitoring of *Listeria innocua* and *Listeria monocytogenes.* M.S. Thesis, Biological and Agricultural Engineering, Texas A&M University.

3. Giacobassi, C. 2015. Real-time detection of *Escherichia coli* spp. using Concanavalin A lectin carbon-hydrogel nanostructure functionalized biosensor. M.S. Thesis, Biological and Agricultural Engineering, Texas A&M University.

**Washington**

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1. Aamir, M., Ovissipour, M., Rasco, B., Tang, J., Sablani, S. S. 2014. Seasonality of thermal kinetics of color changes in whole spinach (Spinacea oleracea) leaves under pasteurization conditions, *International Journal of Food Properties* 17:2012-2024.
2. Adhikari, A., Syamaladevi, R. M., Killinger, K., and Sablani, S. S. 2015. Ultraviolet-C light inactivation of *Escherichia* O157:H7 *and Listeria monocytogenes* on organic fruit surfaces, *Journal of International Food Microbiology* 210:136-142.
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4. Al-Qadiri, H., Sablani, S. S., Ovissipour, M., AL-Alami, N., Govindan, B., and Rasco, B. 2015. Effect of oxygen stress on growth and survival of *Clostridium perfrigens*, *Campylobacter jejuni*, and *Listeria monocytogenes* under different storage conditions, *Journal of Food Protection* 78: 691-697.
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9. Kaisangsri N, Kowalski RJ, Wijesekara I, Kerdchoechuen O, LaohakunjitN, GanjyalGM 2015. Enhancing the expansion and quality of the corn starch extrudates with carrot pomace. *LWT Food Science & Technology*. (Under Revision).
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11. Kowalski RJ, Morris C, and Ganjyal GM. 2015. Waxy Soft White Wheat: Extrusion Characteristics, Thermal and Rheological Properties. *Cereal Chemistry.* Vol. 92(2): 145-153.
12. Kowalski RJ, Morrow C, McDonald A, and Ganjyal, GM. 2015. X-ray density profiler as a new tool to gain better understanding of the extruded products by measuring the cross-sectional density profiles. *Food Structure.* (Under Revision).
13. Kuang, P., Zhang, H., Bajaj, P. R., Yuan, Q., Tang, J., Chen, S., and Sablani, S. S. 2015. Physicochemical properties and storage stability of lutein microcapsules prepared with maltodextrins and sucrose by spray drying, *Journal of Food Science* 80: E359-E369.
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15. Ovissipour, M., Al-Qadiri, H., Sablani, S. S., Govindan, B. N., and Rasco, B. 2015. Efficacy of acidic and alkaline electrolyzed waters for inactivation *Escherichia coli* O104:H4, *Listeria monocytogenes*, *Campylobacter jejuni*, *Aeromonas hydrophila*, and *Vibrio parahaemolyticus* in cell suspensions, *Food Control* 53: 117-123.
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17. Rahman R, Hiregoudar S, Veeranagouda M, Ramachandra CT, Nidoni U, Roopa RS, Kowalski RJ, and Ganjyal GM. 2015. Effects of Wheat Grass Powder Incorporation on Physiochemical Properties of Muffins. *International Journal Food Properties.* Vol. 18(4): 785-795.
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19. Syamaladevi, R. M., Adhikari,A., Lupien, S. L., Dugan, F., Bhunia, K., Dhingra, A., and Sablani, S. S. 2015. Ultraviolet-C light inactivation of *Penicillium expansum* on fruit surfaces, *Food Control* 50:297-303.
20. Syamaladevi, R. M., Lupien, S., Bhunia, K., Sablani, S. S., Dugan, F., Rasco, B., Killinger, K., Dhingra, A., and Ross, C. 2014. UV-C light inactivation kinetics of Penicillium expansum on pear surfaces: Influence on physicochemical and sensory quality during storage, *Postharvest Biology and Technology* 87: 27-32.
21. Tarek, A. E., Rasco, B., and Sablani, S. S. 2015. Ultraviolet-C light inactivation kinetics of *E. coli* on bologna beef packaged in plastic film, *Food and Bioprocess Technologies* 8:1267-1280: DOI 10.1007/s11947-015-1487-y.
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**Conference abstract/presentation**

1. Bajaj, P. and Sablani, S. S. 2015. Pea protein isolates as a novel wall material for microencapsulation of flaxseed oil, *Institute of Food Technologists* (IFT) Annual meeting, Chicago, IL, July 11-14.
2. Zhang, H., Tang, J., Rasco, B., and Sablani, S. S. 2015. Gas and vapor barrier properties influence of polymer packaging on quality of microwave-assisted thermal sterilized food, *Institute of Food Technologists* (IFT) Annual meeting, Chicago, IL, July 11-14.
3. Zhang, H., Tang, J., Rasco, B., and Sablani, S. S. 2015. Quality changes in high barrier polymeric packages – a shelf-life study for microwave-assisted thermal sterilized food, *American Society of Agriculture and Biological Engineer (ASABE) Annual International Meeting*, New Orleans, LA, July 26-29.
4. Sablani, S. S. 2014. Innovative Thermal Processing to Control Pathogens and Spoilage Microorganisms, 9th FoodHACCP Annual Conference, Chicago, IL, November 03-07.
5. Sablani, S. S. 2014. Polymer packaging for microwave assisted thermal processes, *Institute of Food Technologists* (IFT) Annual meeting, New Orleans, LA, June 21-24.
6. Bhunia, K., Rasco, B., Tang, J., and Sablani, S. S. 2014. Understanding package film oxygen transmission rate on lipid oxidation and oxygen reduction potential of pasteurized blue mussels (*Mytilus edulis*) in red sauce: A storage study, *Institute of Food Technologists* (IFT) Annual meeting, New Orleans, LA, June 21-24.

**Thesis:**

1. Sravya Kallu. July 2015. Impact of cellulose fiber particle sizes and starch types on macro and microstructural properties during extrusion processing. (MS Thesis).

**West Virginia**

Journal papers

1. Akharume F, Singh K, Sivanandan L. 2016. Characteristics of apple juice and sugar infused fresh and frozen blueberries. LWT - Food Science and Technology 73: 448-457.

Presentations

1. Akharume F, Singh K, McGee W, Sivanandan L. 2016. Characteristics of Apple Juice and Sugar-infused Fresh and Frozen Blueberries. Poster presented at Conference of Food Engineering, Columbus, OH, September 12-14, 2016.
2. Akharume F, Singh K, Sivanandan L. 2016. Desorption Isotherm of Frozen and Osmotic-dehydrated Blueberries. Poster presented at Conference of Food Engineering, Columbus, OH, September 12-14, 2016.
3. Akharume F, Singh K, McGee W, Sivanandan L. 2016. Influence of Osmotic Solution Type on Osmotic De-hydration and Drying Characteristic of Fresh and Frozen Blueberries. Lecture presented at American Society of Agricultural and Biological Engineers’ (ASABE) Annual International Meeting, Orlando, FL, July 17- 21, 2016.
4. Akharume F, Singh K, Sivanandan L. 2016. Desorption Isotherm of Frozen and Osmotic-dehydrated Blueberries. Poster presented at American Society of Agricultural and Biological Engineers’ (ASABE) Annual International Meeting, Orlando, FL, July 17- 21, 2016.
5. Akharume F, Singh K, Sivanandan L. 2016. Characteristics of Apple Juice and Sugar-infused Fresh and Frozen Blueberries. Oral presentation at Student Research & Creative Scholarship Conference, WVU Davis College of Agriculture, Natural Resources and Design, Morgantown, WV, April 5, 2016.
6. Akharume F, Singh K, Sivanandan L. 2016. Characteristics of Apple Juice and Sugar-infused Fresh and Frozen Blueberries. Poster presented at Northeast Agricultural and Biological Engineering Conference (NABEC), Orono, ME, July 31- August 3, 2016.

**Wisconsin**

Journal papers

1. DeJong AE, Hartel RW. 2016. Determination of sorbitol crystal content and crystallization rate using TD-NMR, J. Food Eng. 178:117-123.
2. Hartel RW, Iwaoka W. 2016. A report from the Higher Education Review Board (HERB): Assessment of undergraduate student learning outcomes in food science, J. Food Sci. Education.
3. Mendenhall HN, Hartel RW. 2016. Protein content affects caramel processing and properties, J. Food Eng. 186:58-68.
4. Levin M, Burrington KJ, Hartel RW. 2016. Whey Protein Phospholipid Concentrate and Delactosed Permeate: Composition and Functionality, J. Dairy Sci., 99:6937-6947.
5. Levin M, Burrington KJ, Hartel RW. 2016. Whey Protein Phospholipid Concentrate and Delactosed Permeate: Applications in Caramel, Ice Cream, and Cake, J Dairy Sci., 99:6948-6960.
6. Thiel AE, Hartel RW, Spicer PT, Hendrickson KJ. 2016. Coalescence behavior of pure and natural fat droplets characterized via micromanipulation, J. Amer. Oil Chem. Soc.
7. Hartel RW, Jin J, and Jaures E. 2016. Particulate effects on storage bloom in chocolate, Manufacturing Confectioner, January.
8. Wang YC, Lu L, Gunasekaran S. 2015. Gold nanoparticle-based thermal history indicator for monitoring low-temperature storage. Microchimica Acta 182:1305-11.
9. Wang YC, Lu L, Gunasekaran S. 2016. Bioplymer/gold nanoparticles composite plasmonic thermal history indicator to monitor quality and safety of perishable bioproducts. Biosensors & Bioelectronics (in press).

Presentations

1. Eberle A, Mendenhall, HN, Hartel RW. 2016. Protein aggregation in high protein caramel. Amer. Assoc. Candy Technol., Oak Brook, IL.
2. Bagci PO, Y-C Wang, S Gunasekaran. 2015. One-step green synthesis of gold nanoparticles using Fuji apple juice EuroFoodChem XVII, October 13-16, Madrid, Spain.
3. Wang Y-C, L Lu, S Gunasekaran. 2015. Green synthesis gold nanoparticle based visible thermal history indicator for food quality monitoring. IFT Annual Meeting, July 11-14, Chicago, IL.
4. Wang Y-C, S Gunasekaran. 2015. Nanomaterial-Based Thermal History Indicator for Monitoring Safety of Foods and Perishable Products. Nanoscale Science & Engineering for Agriculture & Food Systems Gordon Research Conference. June 7-12, Waltham, MA.

Theses, dissertations

1. Lu Y. 2016. Whey protein and hydrocolloids in thickened fluids, MS Thesis.
2. Eberle A. 2016. Impacts of “emulsifying salts” on protein aggregation in caramel, MS Thesis.
3. Amador J. 2016. Impact of microstructure on ice crystal perception and other sensory textural attributes of ice cream, MS Thesis.
4. Geary M. 2016. Crystallization behavior and kinetics of chocolate-lauric fat blends and model systems, MS Thesis.
5. Wang, Y.-C. 2016. Biopolymer/Gold Nanoparticles Based Thermal History Indicator for Monitoring Quality and Safety of Foods and Perishable Products, PhD Thesis.

Other (i.e., media)

1. Hartel RW. 2016. Ice cream chemistry, Amer. Chem. Soc. Webinar.
2. Hartel RW. 2016. Ice cream engineering: Controlling ice crystallization, Amer. Inst. Chem. Eng. Webinar.