NC1023 List of Publications 2016-2017

- 1. Acevedo NC, Franchetty D. 2016. Analysis of co-crystallized free phytosterols with triacylglycerols as a functional food ingredient. Food Research International 85:104-112.
- 2. Acevedo NC, MacMillan B.B., Newling B., Marangoni A.G. 2017. The effect of shear on the diffusive movement of oil in fats. RCS Advances, 7:1634-1642.
- 3. Adeyanju JA, Olajide JO, Adedeji AA. 2016. Development of optimum operating conditions for quality attributes in deep-fat frying of dodo produced from plantain using response surface methodology. Fd Nutrit. Sci. 7(14), 1423 1433.
- 4. Adeyanju JA, Olajide JO, Adedeji AA. 2016. Optimisation of deep-fat frying of plantain chips (Ipekere) using response surface methodology. J Fd Proc Tech 7(5), 584 589.
- 5. Agcam E, Akyıldız E, and V.M. Balasubramaniam. 2017. Optimization of anthocyanins extraction from black carrot pomace with thermosonication. Food Chemistry. 237: 461-470.
- 6. Agudelo-Laverde LM, Acevedo NC, Schebor C, Buera MP. 2016. Opacity studies in dehydrated fruits in relations to proton mobility and supramolecular aspects. Food Bioprocess Technology 9(10): 1674-1680.
- 7. Alkahtani, M. H., Gomes, C. L., Hemmer, P. R., 2017. Engineering water-tolerant core/shell upconversion nanoparticles for optical temperature sensing. Optics Letters. 42 (13): 2451-2454.
- 8. Amador J, Hartel RW, Rankin SR. 2017. The Effects of Fat Structures and Serum Phase Viscosity on Physical and Sensory Properties of Ice Cream. J. Food Sci. 82:1851-1860.
- 9. Amponsah, A. and Nayak, B. 2017. Evaluation of the efficiency of three extraction conditions for the immunochemical detection of allergenic soy proteins in different food matrices. Journal of the Science of Food and Agriculture. DOI 10.1002/jsfa.8729.
- 10. Anvari M, Joyner (Melito) HS. 2017. Effect of formulation on structure-function relationships of concentrated emulsions: Rheological, tribological, and microstructural characterization. Food Hydrocolloids. 72:11-26. doi: 10.1016/j.foodhyd.2017.04.034.
- 11. Anvari M, Tabarsa M, Cao RCC, You S, Joyner (Melito) H, Behnam S, Rezaei M. 2016. Compositional characterization and rheological properties of an anionic gum from Alyssum homolocarpum seeds. Food Hydrocolloids. 52: 766-773. doi:10.1016/j.foodhyd.2015.07.030.
- 12. 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.
- 13. Bajaj P, Bhunia K, Kleiner L; Joyner H, Smith D, Ganjyal G, Sablani SS. 2017. Improving functional properties of pea protein isolate for microencapsulation of flaxseed oil. Journal of Microencapsulation. 24:1-11. doi: 10.1080/02652048.
- 14. Ban, G.H., Lee, J., Choi, C., and Jun, S. 2017. Nano-patterned aluminum surface with oil-impregnation for the improved antibacterial performance LWT Food Science and Technology 84: 359-363.

- 15. Banach, J.C., Clark, S. and Lamsal, B.P. 2017. Particle Size of Milk Protein Concentrate Powder Affects the Texture of High-Protein Nutrition Bars During Storage. Journal of Food Science, 82: 913-921.
- 16. 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.
- 17. 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.
- 18. Banach, J.C., Clark, S., and Lamsal B.P. 2016. Textural performance of cross-linked or reduced- calcium milk protein ingredients in model high-protein nutrition bars, Journal of Dairy Science, 99:6061-6070.
- 19. Bastarrachea L; Walsh M; Wrenn S; Tikekar R. 2017. Enhanced antimicrobial effect of ultrasound by the food colorant Erythrosin B. Food Res Intl. In Press.
- 20. Belayneh HD, Wehling RL, Cahoon E, Ciftci ON. 2017. Effect of extraction method on the oxidative stability of camelina seed oil studied by differential scanning calorimetry. J Food Sci 82:632-7.
- 21. Belayneh HD, Wehling RL, Reddy AK, Cahoon EB, Ciftci ON. 2017. Ethanol-modified supercritical carbon dioxide extraction of the bioactive lipid components of Camelina sativa seed. J Am Oil Chem Soc 94:855-65.
- 22. Booren, B.L., M.E. Castell-Perez, and R.K. Miller. 2017. Effect of meat enhancement solutions with hydroxypropyl methylcellulose and konjac flour on texture and quality attributes of Pale, soft, and exudative pork. 2017. J Texture Stud. 00: 1-12.
- 23. Bornhorst, G.M. 2017. Gastric mixing during food digestion: Mechanisms and Applications. Annual Review of Food Science and Technology. 8(1): 523-542.
- 24. Cadesky L., Ribeiro M.W., Kriner K., Karwe M.V., and Moraru C.I. 2017. Structural changes induced by high pressure processing in micellar casein and milk protein concentrates. Journal of Dairy Science 100(9):7055-7070.
- 25. Casulli KE, Dhakal S, Sandeep KP, Balasubramaniam VM. 2017. Compression heating of selected polymers during high-pressure processing. J. Food Process Engineering. 40(2): 1-7.
- 26. Cebricos, J., Hoptowit, R., and Jun, S. 2017. Separation of *Escherichia coli* K12 from contaminated tap water using a single-stage, continuous flow dielectrophoresis (DEP) device. *LWT Food Science and Technology* 80: 185-192.
- 27. Chan L. C., Cohen J.L., de Moura Bell J.M.L.N. 2018. Conversion of Agricultural Streams and Food Processing Byproducts to Value-Added Compounds using Filamentous Fungi. Annual Review of Food Science. In Press.
- 28. Chen J, S Lau, Chen L, Wang S, Subbiah J. 2017. Modeling radio frequency heating of food moving on a conveyor belt. Food Bioprod Process. 10.1016/j.fbp.2017.01.009.

- 29. Chen, H, and Zhong, Q. 2017. Lactobionic acid enhances the synergistic effect of nisin and thymol against Listeria monocytogenes Scott A in tryptic soy broth and milk. Int J Food Microbiol. 260: 36–41.
- 30. Cohen J.L., Barile D., Liu Y., De Moura Bell J.M.LN.M 2017. Role of pH in the recovery of bovine milk oligosaccharides from colostrum whey permeate by nanofiltration. International Dairy Journal. 66:68-75.
- 31. Cossu A; Ercan D; Tikekar R; Nitin N. 2016, Antimicrobial Effect of Photosensitized Rose Bengal on Bacteria and Viruses in Model Wash Water. Food Bioprocess Tech. 9(3), 441-451.
- 32. Cossu A; Ercan D; Wang Q; Peer W; Nitin N; Tikekar R. 2016. Antimicrobial effect of synergistic interaction between UV-A light and Gallic Acid against Escherichia coli O157:H7 in fresh produce wash water and biofilm. Innov Food Sci Emerg. 37 (part A), 44-52.
- 33. Dahiya P, Caggioni M, Atherton TJ, deBenedictus A, Prescott SW, Hartel RW, Spicer PT. 2017. Arrested coalescence of viscoelastic droplets: Triplet shape and re-structuring. Soft Matter. 13: 2686-2697 (2017).
- 34. Dalmau M.E., 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.
- 35. de Aquino L.F.M.C., de Moura Bell J.M.L.N., Cohen J.L, Liu Y., Lee Y., de Melo Silva V.L., Domizio P.,Conte Junior C.A., Barile D. 2017. Purification of caprine oligosaccharides at pilot-scale. J of Food Eng. http://dx.doi.org/10.1016/j.jfoodeng.2017.06.009.
- 36. de Moura Bell J.M.L.N., Cohen J.L., de Aquino L.F.M.C., Lee H., de Melo Silva V. L., Liu Y, Domizio P., Barile D. 2017. An Integrated Bioprocess to Recover Bovine Milk Oligosaccharides from Colostrum Whey Permeate. J of Food Eng. doi: 10.1016/j.jfoodeng.2017.07.022.
- 37. De Oliveira E; Cossu A; Tikekar R; Nitin N. 2017. Enhanced Antimicrobial Activity Based on a Synergistic Combination of Sub-Lethal Levels of Stresses Induced by UV-A Light and Organic Acids. App Environ Microbiol. 83(11), e00383-17.
- 38. Deng ZL, Jung J, Simonsen J, Wang Y, Zhao Y. 2017. Cellulose nanocrystal reinforced chitosan coatings for improving the storability of postharvest pears under both ambient and cold storages. J. Food Sci. 82(2): 453–462.
- 39. Deng ZL, Jung JY, Simonsen J., Zhao Y. 2017. Cellulose nanomaterials emulsion coatings for controlling physiological activity, modifying surface morphology, and enhancing storability of postharvest bananas (Musa acuminate) banana coating. Food Chem. 232(1): 359–368.
- 40. Deng ZL, Jung JY, Zhao Y. 2017. Development, characterization, and validation of chitosan adsorbed cellulose nanofiber (CNF) films as water resistant and antibacterial food contact packaging. LWT-Food Sci. & Technol. 83: 132–140.

- 41. Dhakal S, Balasubramaniam VM, Cocuron JC, Alonso AP, Agcam E, Kamat S. 2017. Pressure-thermal kinetics of furan formation in selected fruit and vegetable juices. Food and Bioprocess Technology 10 (11): 1959-1969.
- 42. Ding J, Ulanov AV, Dong M, Yang T, Nemzer BV, Xiong S, Zhao S, Feng H. 2017. Enhancement of gama-aminobutyric acid (GABA), riboflavin, and other health-related metabolites in germinated red rice (Oryza sativa L.) by ultrasonication, Ultrasonics Sonochemistry, 40(Pt A):791-797.
- 43. Edwards, K., Faulkner, W.B., Castell-Perez, E., Riaz, M. and Mack, C. 2017. Preliminary evaluation of a process for producing refined guar splits for a target guar solution viscosity. App. Eng. in Ag. 33(2): 1-6.
- 44. Ekramirad N, Rady A, Adedeji AA, and Alimardani, R. 2017. Application of hyperspectral imaging and acoustic emission techniques for apple quality prediction. Trans. ASABE 60(4).
- 45. Ercan D; Cossu A; Nitin N; Tikekar R. 2016. Synergistic interaction of ultraviolet light and zinc oxide photosensitizer for enhanced microbial inactivation in simulated wash-water. Innov Food Sci Emerg. 33, 240-250.
- 46. F.U. Akharume, K. Singh, J. Jaczynski and L. Sivanandan. 2017. Microbial shelf stability assessment of osmotically dehydrated smoky apples. LWT Food Science and Technology. doi: https://doi.org/10.1016/j.lwt.2017.12.012.
- 47. Fang ZX, Zhao Y, Warner RD, Johnson SK. 2017. Active and intelligent packaging in meat industry. Trends in Food Sci & Technol. 61: 60-71.
- 48. Flores FP, Kong F. 2017. In Vitro Release Kinetics of Microencapsulated Materials and the Effect of the Food Matrix. Annual Review of Food Science and Technology. 28;8:237-59.
- 49. Gan J., G.M. Bornhorst, B.M. Henrick, J.B. German. 2017. Protein digestion of baby foods: study approaches and implications for infant health. Molecular Nutrition and Food Research. doi:10.1002/mnfr.201700231.
- 50. Geary MR, Hartel RW. 2017. Crystallization behavior and kinetics of chocolate-lauric fat blends and model systems, J. Amer. Oil Chem. Soc. 94:683-692.
- 51. Girard A., Castell-Perez ME, Bean SR., Awika J. 2016. Effect of condensed tannin profile on wheat flour dough rheology. J of Ag Food Chem. 64(39): 7348-7356.
- 52. Goulart, D, Hartel RW. 2017. Lactose crystallization in milk protein concentrate and its effects on rheology. J. Food Eng. 212: 97-107.
- 53. Gouw V, Jung J, Zhao Y. 2017. Functional properties, bioactive compounds, and in vitro gastrointestinal digestion study of dried fruit pomace powders as functional food ingredients. LWT-Food Sci. & Technol. 80: 136–144.
- 54. Gouw V, Jung JY, Simonsen J, Zhao Y. 2017. Fruit pomace as a source of alternative fibers and cellulose nanofiber as reinforcement agent to create molded pulp packaging boards. Composites Part A: Applied Sci. & Manufacturing. 99: 48–57.

- 55. Greiby, I., Mishra, D.M., Dolan, K.D., Siddiq, M. 2017. Inverse method to estimate anthocyanin degradation kinetic parameters in cherry pomace during non-isothermal heating. J. Food Eng. 198: 54-62.
- 56. Guan, Y, and Zhong Q. 2017. Encapsulation of ferulic acid ethyl ester in caseinate to suppress off-flavor formation in UHT milk. Food Chemistry. 237: 532–537.
- 57. Guiwei Tan, Yinggang Tian, Min Addy, Yanling Cheng, Qinglong Xie, Bo Zhang, Yuhuan Liu, Paul Chen, Roger Ruan. 2017. Structural analysis of phosphatidylcholine using a thin layer chromatography-based method. European Journal of Lipid Science and Technology. DOI: 10.1002/ejlt.201600282.
- 58. Guo C, Zhang Z, Chen J, Fu H, Subbiah J, Chen X, Wang Y. 2017. Effects of Radio Frequency Heating Treatment on Structure Changes of Soy Protein Isolate. Food Bioprocess Technol. DOI 10.1007/s11947-017-1923-2.
- 59. Guo, S., Huang, R., and Chen. H. 2017. Application of water-assisted ultraviolet light in combination of chlorine and hydrogen peroxide to inactivate Salmonella on fresh produce. Int. J. Food Microbiol. In press.
- 60. Guzel M, Moreira RG, Omac B, Castell-Perez E. 2017. Quantifying the effectiveness of washing treatments on the microbial quality of fresh cut romaine lettuce and cantaloupe. LWT-Food Sci Tech. In Press.
- 61. Hartel RW, Rankin SA, Bradley RL. 2017. Milestones in development of ice cream and frozen desserts. J. Dairy Sci. In Press.
- 62. Hill, L. E., Oliveira, D. A., Hills, K., Giacobassi, C., Johnson, J., Summerlin, H., Taylor, T. M., Gomes. C. 2017. A comparative study of natural antimicrobial delivery systems for microbial safety and quality of fresh-cut lettuce. Journal of Food Science. 82(5): 1132-1141.
- 63. 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.
- 64. Jeong S., Marks B.P., James M.K. 2017. Comparing thermal process validation methods for Salmonella inactivation on almond kernels. J. Food Protect. 80:169-176.
- 65. Jiang S, Ding J, Andrade J, Rababah TM, Almajwal A, Abulmeaty MM, Feng H. 2017. Modifying the physicochemical properties of pea protein by pH-shifting and ultrasound combined treatments, Ultrasonics Sonochemistry, 38: 835-842.
- 66. Joyner (Melito) HS, Francis D, Johnson J, Luzzi B. 2017. The effect of storage temperature on blue cheese mechanical properties. Journal of Texture Studies. In Press.
- 67. Joyner (Melito) HS, Meldrum AD. 2016. Rheological study of different mashed potato preparations using large amplitude oscillatory shear and confocal microscopy. Journal of Food Engineering. 169:326-337. doi: 10.1016/j.jfoodeng.2015.08.032.
- 68. Joyner (Melito) HS, Rasco B, Jones KE. 2016. Microwave pasteurization of cooked pasta: effect of process parameters on texture and quality for heat-and-eat and ready-to-eat meals. Journal of Food Engineering. 81(6):E1447-E1456. doi: 10.1111/1750-3841.13334.

- 69. Joyner (Melito) HS, Rasco B, Jones, KE. 2017. Rheological and sensory behaviors of parboiled pasta cooked using a microwave pasteurization process. Journal of Texture Studies. doi: 10.1111/jtxs.12251.
- 70. Kahraman O, Lee H, Zhang W, Feng H. 2017. Manothermosonication (MTS) treatment of apple-carrot juice blend for inactivation of Escherichia coli 0157:H7, Ultrasonics Sonochemistry, 38: 820-828.
- 71. Karav S., Cohen J.L., Barile D., de Moura Bell J.M.L.N. 2016. Recent Advances in Immobilization Strategies for Glycosidases. Biotechnology Progress. DOI 10.1002/btpr.2385.
- 72. Kayner A.J., G.M. Bornhorst, M.A. Marco, C.W. Bamforth. 2017 Is beer a source of prebiotics? Journal of the Institute of Brewing. DOI: 10.1002/jib.439.
- 73. Kobayashi Y and Park JW. 2017. Physicochemical characterizations of tilapia fish protein isolate under two distinctively different comminution conditions. J Food Processing and Preservation. https://doi.org/10.1111/jfpp.13233.
- 74. Kobayashi Y, Mayer SG, Park JW. 2017. FT-IR and Raman spectroscopies determine structural changes of tilapia fish protein isolate and surimi under different comminution conditions. Food Chemistry. 226: 156–164.
- 75. Kobayashi Y, Mayer SG, Park JW. 2017. Gelation properties of tilapia fish protein isolate and surimi pre- and post-rigor. Food Bioscience. 17: 17–23.
- 76. Kobayashi Y, Park JW. 2017. Biochemical and physical characterizations of fish protein isolate and surimi prepared from fresh and frozen whole fish. LWT Food Science and Technology. 77: 200-207.
- 77. Kobayashi Y, Park JW. 2017. Optimal blending of differently refined fish proteins based on their functional properties. J Food Processing and Preservation. https://doi.org/10.1111/jfpp.13346.
- 78. Kokkaew H, Thawornchinsombut S, Park JW. 2016. Optimal condition to remove mercury in yellowfin tuna protein isolates and ACE-inhibitory property of peptide prepared using commercial proteases. Songklanakarin J. Sci. Technol. 38 (4): 439-447.
- 79. Kowalski RJ, Meldrum A, Wang S, Joyner (Melito) HS, Ganjyal G. 2017. Waxy wheat flour as a freeze-thaw stable ingredient through rheological studies. Food Bioprocessing Technology. 1-16. doi: 10.1007/s11947-017-1899-y.
- 80. Lasekan, A.O., Cao, H, Maleki, S. and Nayak, B. 2017. Shrimp tropomyosin retains antibody reactivity after exposure to acidic condition. Journal of the Science of Food and Agriculture. 97(11): 3623 3630.
- 81. Lee J, Fong Q, and Park JW. 2016. Effect of pre-freezing treatments on the quality of Alaska pollock fillets subjected to freezing/thawing. Food Bioscience. 16:50-55.
- 82. Lee J, Park HW, Jenkins R, and Park JW. 2017. Image and chemical analyses for freezing-induced aggregates of fish natural actomyosin as affected by various phosphate compounds. Food BioScience. 19:57-64.

- 83. Lee J, Park JW. 2017. Roles of TMAOase in muscle and drips of Alaska pollock fillets at various freeze/thaw cycles. J Food Processing and Preservation. https://doi.org/10.1111/jfpp.13427.
- 84. Lee MG, Yoon WB, and Park JW. 2017. Combined effect of pH and heating conditions on the physical properties of Alaska pollock surimi gels. J Texture Stud. 48:215–220.
- 85. Lee S.H., Park, J. G., Lee, D. Y., Kandpal, L. M., Cho, B., Hong, S., and Jun, S. 2016. Investigation for Drying Characteristics of Agricultural Products under Different Drying Methods: A Review. *Journal of Biosystems Engineering* 41(4): 389-395.
- 86. 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.
- 87. Li, Q., Liu, Y., Liao, W., Powers, W. 2017. Microalgal cultivation using animal production exhaust air: technical and economic feasibility. CLEAN Soil, Air, Water 45, 1-8.
- 88. Liou P, Nayigiziki FX, Kong F, Mustapha A, Lin M. 2017. Cellulose nanofibers coated with silver nanoparticles as a SERS platform for detection of pesticides in apples. Carbohydrate polymers. 10;157:643-50.
- 89. Liu Junying, Song Yunmeng, Liu Yuhuan, and Ruan Roger. 2016. Yeast as a Bioremediation Nanoparticle Agent in Piggery-Digested Wastewater Treatment. Environmental Engineering Science. 33(5): 317-323. doi:10.1089/ees.2015.0376.
- 90. Liu S, Ozturk S, Xu J, Kong F, Gray P, Zhu MJ, Sablani SS, Tang J. Microbial validation of radio frequency pasteurization of wheat flour by inoculated pack studies. Journal of Food Engineering. In press.
- 91. Liu, M; Wang, Yp; Liu, Yh; Ruan, R. 2016. Bioactive peptides derived from traditional Chinese medicine and traditional Chinese food: A review. Food Research International. 2016 Nov. 89: 63-73.
- 92. Liu, Z., Oyetunde, T., Hollingshead, W., Hermanns, A, Tang, Y., Liao, W., Liu, Y. 2017. Exploring Eukaryotic Formate Metabolisms to enhance Microbial Growth and Lipid Accumulation. Biotechnology for Biofuels 10, 19-31.
- 93. MacLellan, J., Chen, R., Yue, Z.B., Kraemer, R., Liu, Y., Liao, W. 2017. Effects of protein and lignin on cellulose and xylan analyses of lignocellulosic biomass. Journal of Integrative Agriculture 16, 1268-1275.
- 94. Martínez-Monteagudo SI, Kamat S, Patel N, Konuklar G, Rangavajla N, Balasubramaniam VM. 2017. Improvements in emulsion stability of dairy beverages treated by high pressure homogenization: A pilot-scale feasibility study. J. Food Engineering. 193: 42–52.
- 95. Mennah-Govela Y.A., G.M. Bornhorst. 2017. Fresh-squeezed orange juice properties before and during in vitro digestion as influenced by orange variety and processing method. Journal of Food Science. doi: 10.1111/1750-3841.13842.
- 96. Mishra, D.K., Dolan, K.D., Beck, J.V., Ozadali, F. 2017. Use of scaled sensitivity coefficient relations for intrinsic verification of numerical codes and parameter estimation for heat conduction. J. Verification, Validation, and Uncertainty Quantification. (2) 031005: 1-7.

- 97. Moon JH, Yoon WB, Park JW. 2017. Assessing the textural properties of Pacific whiting and Alaska pollock surimi gels prepared with carrot under various heating rates. Food Bioscience. 20: 12-16.
- 98. Mukherjee D, Chang SKC, Zhang Y, Mukherjee S. 2017. Effects of ultra-high pressure homogenization and hydrocolloids on physico-chemical and storage properties of soymilk. J. Food Science. In Press.
- 99. Multu S., Y.A. Mennah-Govela, F. Marra, G.M. Bornhorst. 2017 Effects of preparation method on acid diffusion into red beets during in vitro gastric digestion. Chemical Engineering Transactions. 51: 1927-1932.
- 100. Muramatsu, Y., Greiby, I., Mishra, D.K., Dolan, K.D. 2017. Rapid inverse method to measure thermal diffusivity of low-moisture foods. J. Food Sci. 82(2): 420-428.
- 101. Oliveira, D. A., Mezzomo, N., Gomes, C., Ferreira, S. R. S. 2017. Encapsulation of passion fruit seedoil by means of supercritical antisolvent process. The Journal of Supercritical Fluids. 104: 137-146.
- 102. Omac B, Moreira RG, Puerta-Gomez AF, Castell-Perez E. 2017. Effect of intervention strategies on the risk of infection from Listeria monocytogenes due to consumption of fresh baby spinach leaves: A quantitative approach. LWT-Food Sci Tech. 80: 208-220.
- 103. Ozturk S, Kong F, Singh RK, Kuzy JD, Li C. Radio frequency heating of corn flour: Heating rate and uniformity. Innovative Food Science & Emerging Technologies. In Press.
- 104. Paluri, S., D.R. Heldman and F. Maleky. 2017. Effects of structural attributes and phase ratio on moisture diffusion in crystallized lipids. Crystal Growth Des. DOI: 10.1021/acs.cgd.7b00552.
- 105. Paluri, S., F. Maleky and D.R. Heldman. 2017. Development of a structure-based model for moisture diffusion in multiphase lipid networks. J Food Eng. 214: 60-68.
- 106. Pavlik, D., Zhong, Y., Daiek, C., Liao, W., Mrogan, R., Clary, B., Liu. Y. 2017 Microalgae Cultivation for of Carbon Dioxide Sequestration and Protein Production using a High-efficiency Photobioreactor System, Algal Research 25, 413-430.
- 107. Peng Peng, Hao Song, Tingting Zhang, Min Addy, Yaning Zhang, Yanling Cheng, Raymond Hatzenbeller, Xindi Zhu, Shiyu Liu, Yuhuan Liu, Xiangzhong Huang, Xiangyang Lin, Paul Chen, Roger Ruan. 2017. Concentrated high intensity electric field (CHIEF) system for non-thermal pasteurization of liquid foods: Modeling and simulation of fluid mechanics, electric analysis, and heat transfer. Computers and Chemical Engineering 97 (2017): 183–193.
- 108. Peng Peng, Yanling Cheng, Hao Song, Tingting Zhang, Shaobo Deng, Erik Anderson, Min Addy, Xindi Zhu, Shiyu Liu, Raymond Hatzenbeller, Yun Li, Xiangyang Lin, Yuhuan Liu, Xiangzhong Huang, Paul Chen, Roger Ruan. 2016. Bacterial inactivation of liquid food and water using high intensity alternate electric field. J. of Food Processing Engineering. DOI 10.1111/jfpe.12504.
- 109. Pereira, M. C., Oliveira, D. A., Hill, L. E., Zambiazi, R. C., Borges, C. D., Vizzotto, M. Mertens-Talcott, S., Talcott, S. Gomes, C. 2017. Effect of nanoencapsulation using PLGA on

- antioxidant and antimicrobial activities of guabiroba fruit phenolic extract. Food Chemistry. 240: 396-404.
- 110. Phinney, D.M., J.C. Frelka and D.R. Heldman. 2016. Composition-based prediction of temperature-dependent thermophysical food properties: reevaluating component groups and prediction models. J Food Sci. 82(1): 6-15.
- 111. Primacella M., Wang T., Acevedo N.C. 2017. Use of reconstituted yolk systems to study the roles of plasma and granules in yolk gelation induced by freezing-thawing. Journal of Agricultural and Food Chemistry. In Press.
- 112. Pyatkovskyy, T., Shynkaryk, M.V., Yousef, A.E., and Sastry, S.K. 2017. Reduction of Escherichia coli O 157:H7 population on baby spinach leaves by liquid sanitizers. Journal of Food Process Engineering 40(3):e12479. https://doi.org/10.1111/jfpe.12479.
- 113. Pyatkovskyy, T., Shynkaryk, M.V., Yousef, A.E., and Sastry, S.K. 2017. Fresh produce sanitization by combination of gaseous ozone and liquid sanitizer. Journal of Food Engineering 210:19-26.
- 114. 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. 2016. Mitigating ammonia nitrogen deficiency in dairy wastewaters for algae cultivation. Bioresource technology. 201:33-40.
- 115. Qu, B, and Zhong Q. 2017. Casein-maltodextrin conjugate as an emulsifier for fabrication of structured calcium carbonate particles as dispersible fat globule mimetics. Food Hydrocolloids. 66: 61-70.
- 116. Rady A, Ekramirad N, Adedeji AA, Li M, limardani R. 2017. Hyperspectral Imaging for detection of codling moth infestation in GoldRush apples. Posth Bio Tech 129, 37 44.
- 117. Ramirez-Gomez NO, Acevedo NC, Toro-Vazquez JF, Ornelas-Paz JJ, Dibildoz-Alvarado E. 2016. Phase behavior, structure and rheology of candelilla wax/fully hydrogenated soybean oil mixtures with and without vegetable oil. Food Research International. In Press.
- 118. Roidoung, S., Dolan, K.D., Siddiq, M. 2017. Estimation of kinetic parameters of anthocyanins and color degradation in vitamin C fortified cranberry juice during storage. Food Res. Intnl. 94: 29-35.
- 119. Sappati, P., Nayak, B. and vanWalsum, P. 2017. Effect of glass transition on the shrinkage of Sugar Kelp (Saccharina latissima) during hot air convective drying. Journal of Food Engineering. 210: 50-61.
- 120. Siddiq, M., Dolan, K.D. 2017. Characterization of polyphenol oxidase from blueberry. Food Chem. 218: 216-220.
- 121. Silva RC, Lee J, Gibon V, Martini, S. 2017. Effects of High Intensity Ultrasound Frequency and High-Speed Agitation on Fat Crystallization. J Am Oil Chem Soc. 94:1063-1076 DOI: 10.1007/s11746-017-3009-8.
- 122. Singh M, and Adedeji AA. 2017. Characterization of hydrothermal and acid modified proso millet starch. LWT Fd Sci Tech 79, 21 26.

- 123. Tabarsa M, Anvari M, Joyner (Melito) HS, Behnam S, Tabarsa. 2017. Rheological behavior and antioxidant activity of a highly acidic gum from Althaea officinalis flower. Food Hydrocolloids. 69:432-439.
- 124. Thiel AE, Hartel RW, Spicer PT. 2017. Fat crystals influence methylcellulose stabilization of lipid emulsions, J. Amer. Oil Chem. Soc. Short Comm. 94(2):325-331.
- 125. Ubeyitogullari A, Ciftci ON. 2016. Formation of nanoporous aerogels from wheat starch. Carbohydrate Polymers. 147:125-32.
- 126. Ubeyitogullari A, Ciftci ON. 2016. Phytosterol nanoparticles with reduced crystallinity generated using nanoporous starch aerogels. RSC Adv 6:108319-27.
- 127. Ubeyitogullari A, Ciftci ON. 2017. Generating phytosterol nanoparticles in nanoporous bioaerogels via supercritical carbon dioxide impregnation: Effect of impregnation conditions. J Food Eng 207:99-107.
- 128. Vijayakumar PP, Adedeji AA. 2017. Measuring the pH of Food Products. Published by University of Kentucky College Agriculture, Food and Environment Cooperative Extension Service. ID- 246.
- 129. Villa-Rojas R., Zhu M.J., Marks B.P., Tang J. 2017. Radiofrequency inactivation of Salmonella Enteritidis PT30 and Enterococcus faecium in wheat flour at different water activities. Biosystems Engineering. 156:7-16.
- 130. Wang Q; De Oliveira E; Alborzi S; Bastarrachea L.; Tikekar R. 2017. On mechanism behind UV-A light enhanced antibacterial activity of gallic acid and propyl gallate against Escherichia coli O157:H7. Sci Rep. 7:8325.
- 131. Wang YC, Lu L, Gunasekaran S. 2017. Bioplymer/gold nanoparticles composite plasmonic thermal history indicator to monitor quality and safety of perishable bioproducts. Biosensors & Bioelectronics 92:109-116.
- 132. Wang, F.C.; Acevedo N.C., Marangoni A.G. 2017. Encapsulation of phytosterols and phytosterol esters in liposomes made with soy phospholipids by high pressure homogenization. Food and Function, 8, 3964-3969.
- 133. Wang, W, Jung J, Zhao Y. 2017. Chitosan-cellulose nanocrystal microencapsulation to improve encapsulation efficiency and stability of entrapped fruit anthocyanins. Carbohydrate Polymers. 157: 1246–1253.
- 134. Wang, X., S., V. M. Puri, A. Demirci, and R. E. Graves. 2016. One-step cleaning-in-place for milking systems and mathematical modeling for deposit removal from stainless steel pipeline using blended electrolyzed oxidizing water. Transactions of the ASABE. 59(6): 1893-1904. DOI: 10.13031/trans.59.11823.
- 135. Waqas, A., Butt, M.S., Dolan, K.D. 2017. Pasting properties of pectin coated iron-folate fortified basmati rice. J. Food Proc. & Pres. 41(4).
- 136. Westphal A, Riedl KM, Cooperstone JL, Kamat S, Balasubramaniam VM, Schwartz SJ, and Böhm V. 2017. High Pressure Processing of Broccoli Sprouts Influence on Bioactivation of

- Glucosinolates to Isothiocyanates. Journal of Agricultural and Food Chemistry 69(39), 8578-8585.
- 137. Wongsa, J., Rungsardthong, V., Uttapap, D., Lamsal, B. P., and Puttanlek, C. 2017. Effect of Extrusion Conditions, Monoglyceride and Gum Arabic Addition on Physical and Cooking Properties of Extruded Instant Rice. KMUTNB International Journal of Applied Science and Technology. 10: 23-30
- 138. 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. 180: 679-686.
- 139. Xiang C., Acevedo, N.C. 2017. In situ self-assembled nanocomposites from bacterial cellulose reinforced with eletrospun poly(lactic acid)/lipids nanofibers. Polymers, 9, 179; DOI:10.3390/polym9050179.
- 140. Xiao, J and Zhong Q. 2017. Suppression of retrogradation of gelatinized rice starch by antilisterial grass carp protein hydrolysate. Food Hydrocolloids. 72: 338-345.
- 141. Xiaodan Wu, Chi Yan, Hongli Zheng, Shanshan Luo, Yuhuan Liu, Wen Li, Yanling Cheng, Min Addy, Wenguang Zhou, Paul Chen, and Roger Ruan. 2017. Fixing CO2 and Treating Wastewater from Beer Brewery Using Microalgae. Journal of Biobased Materials and Bioenergy Vol. 11, 1–5, 2017.
- 142. Xindi Zhu, Yanling Cheng, Paul Chen, Peng Peng, Shiyu Liu, Dong Li, Roger Ruan. 2016. Effect of alkaline and high-pressure homogenization on the extraction of phenolic acids from potato peels. Innovative Food Science & Emerging Technologies. 37A: 91-97.
- 143. Xu J, Mukherjee D, Chang, SKC. 2017. Physicochemical properties and storage stability of soybean protein nanoemulsions prepared by ultra-high pressure homogenization. Food Chemistry. In Press.
- 144. Xue, J, Davidson PM, and Zhong Q. 2017. Inhibition of Escherichia coli O157:H7 and Listeria monocytognes growth in milk and cantaloupe juice by thymol nanoemulsions prepared with gelatin and lecithin. Food Control. 73: 1499-1507.
- 145. 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. 7(6):53-60.
- 146. Yan B, Martinez-Montegudo SI, Cooperstone J, Ridel KM, Schwartz SJ, Balasubramaniam VM. 2017. Impact of Thermal and Pressure-Based Technologies on Carotenoid Retention and Quality Attributes in Tomato Juice. Food and Bioprocess Technology. 10 (5): 808-818.
- 147. Yang J, Ciftci ON. 2016. Development of free-flowing peppermint essential oil-loaded hollow solid lipid micro- and nanoparticles via atomization with carbon dioxide. Food Res Int 87:83-91.
- 148. Yang J, Ciftci ON. 2016. Formation of hollow solid lipid micro- and nanoparticles using supercritical carbon dioxide. Food Bioprod Process 98:151-60.

- 149. Yang J, Ciftci ON. 2017. Encapsulation of fish oil into hollow solid lipid micro- and nanoparticles using carbon dioxide. Food Chem 231:105-13.
- 150. Yanling Cheng, Liang Li, Paul Chen, Roger Ruan. 2016. Synthesis and characterization of starch-based cationic flocculants for microalgae harvesting. International Journal of Agricultural and Biological Engineering 9(3): 139—145.
- 151. Yildiz G, Andrade J, Engeseth NE, Feng H. 2017. Functionalizing soy protein nanoaggregates with pH-shifting and mano-thermo-sonication, Journal of Colloid and Interface Science, 505: 836-846.
- 152. Yin T, Park JW, Xiong SB. 2017. Effects of micron fish bone with different particle size on the properties of silver carp (Hypophthalmichthys molitrix) surimi gel. J of Food Quality. https://doi.org/10.1155/2017/8078062.
- 153. Yoshikawa H.Y., Pink D., Acevedo N.C., Peyronel F., Marangoni A.G., Tanaka M. 2017. Mechanical response of single triacylglycerol spherulites by using microcolloidal probes. Chemistry Letters, 64(4).
- 154. Zamil, Shafayet M., Hojae Yi, and Virendra M. Puri. 2017. A multiscale FEA framework to bridge subcellular to tissue scale mechanical properties of plant cell wall material: The contributions of middle lamella interface and cell shape. Journal of Materials Science, 52: 7947-7968.
- 155. Zhang H, Jung J, Zhao Y. 2017. Preparation and characterization of cellulose nanocrystals films incorporated with essential oil loaded β-chitosan beads. Food Hydrocolloids. 69: 164–172.
- 156. Zhang J, He S, Kong F, Huang S, Xiong S, Yin T, Du H, Liu R, Zhang M. Size Reduction and Calcium Release of Fish Bone Particles During Nanomilling as Affected by Bone Structure. Food and Bioprocess Technology. In press.
- 157. Zhang, Y, Chen H, Critzer F, Davidson PM, and Zhong Q. 2017. Potential of cinnamon oil emulsions as alternative washing solutions of carrots. J Food Protection. 80(6): 994–1001.
- 158. Zhao Y, Zhao W, Yang R, Singh Sidhu J, Kong F. 2017. Radio frequency heating to inactivate microorganisms in broccoli powder. Food Quality and Safety. 1(1):93-100.
- 159. Zhao, Y. and P.S. Takhar. 2017. Freezing of Foods: Mathematical and Experimental Aspects. Food Engineering Reviews. 9 (1):1-12.
- 160. Zhao, Y. and P.S. Takhar. 2017. Micro X-ray computed tomography and image analysis of frozen potatoes subjected to freeze-thaw cycles. LWT Food Science and Technology. 79: 278-286.
- 161. Zhong, X., Siddiq, M., Sogi, D.S., Harte, B., Dolan, K.D., Almenar, E. 2017. Effect of microwave steamable bag design on the preservation of ascorbic acid and antioxidant capacity and on the physical properties of cooked frozen vegetables: A case study on broccoli (Brassica oleracea). LWT Food Science and Tech. 83:165-171.

- 162. Zhu L, Adedeji AA, Alavi S. 2017. Effect of germination and extrusion on physicochemical properties and nutritional qualities of extrudates and tortilla from wheat. J Food Sci. In Press.
- 163. Zulkurnain M, Balasubramaniam VM, Maleky F. 2017. Thermal effects on lipids crystallization kinetics under high pressure. Crystal Growth and Design. 17: 4835-4843.