

- Kim, Y.K., Baek, I., Lee, K.M., Qin, J., Kim, G., Shin, B. K., Chan, D.E., Herrman, T.J., Cho, S.K., and Kim, M.S. 2021. Investigation of reflectance, fluorescence, and Raman hyperspectral imaging techniques for rapid detection of aflatoxins in ground maize. *Food Control*. 132:108479.
- Barr, B.E., C. R. Hurburgh, and G.A. Mosher. Maximizing Processing Value with Selective Handling Strategies: An Analysis of Soybeans Received at Iowa Elevators. *Applied Engineering in Agriculture*. 37(4): 583-594. doi: <http://10.13031/aea.14534>
- Ignacio M.C.C.D. and Maier D.E. “*Analytic Hierarchy Process Applied to the Ranking of Commercially Available Hermetic Bag Liners*”, 3rd All Africa Postharvest Congress and Exhibition (Virtual Event), September 13 to 16, 2021 (**3rd Best Oral Presentation**)
- Ignacio M.C.C.D. and Maier D.E. “*Predicting Oxygen Depletion during Grain Storage using Hermetic Bag Technology*”, 3rd All Africa Postharvest Congress and Exhibition (Virtual Event), September 13 to 16, 2021
- Ignacio M.C.C.D. and Maier D.E. “*Predicting Oxygen Depletion during Grain Storage using Hermetic Bag Technology*”, 11th International Virtual Conference on Controlled Atmosphere and Fumigation in Stored Products (CAF2020), August 22-27, 2021
- Ignacio M.C.C.D. and Maier D.E. “*Characterizing Engineering Properties of Hermetic Storage Bag Technology for Standards Development*”, 11th International Virtual Conference on Controlled Atmosphere and Fumigation in Stored Products (CAF2020), August 22-27, 2021
- Ignacio M.C.C.D. and Maier D.E. “*Predicting Oxygen Depletion during Grain Storage using Hermetic Bag Technology*”, ASABE AIM 2021 Virtual and On Demand, July 12-16, 2021
- Ignacio M.C.C.D. and Maier D.E. “Understanding the properties of Hermetic Storage Bag to characterize its performance”, Graduate Student Research Symposium, Consortium for Innovation in Post-Harvest Loss and Food Waste Reduction, June 3, 2021 (**2nd Place-Best Presentation**)
- Ignacio M.C.C.D. and Maier D.E. “*Predicting Oxygen Depletion during Grain Storage using Hermetic Bag Technology*”, NC-213 Annual Meeting 2021 – Virtual, March 30 – 31, 2021
- Obeng-Akrofi, George, Joseph O. Akowuah, Dirk E. Maier, and Ahmad Addo. 2021. “Techno-Economic Analysis of a Crossflow Column Dryer for Maize Drying in Ghana.” *Agriculture* 11 (6): 568. <https://doi.org/10.3390/agriculture11060568>.
- Asante, Eric Amoah, Joseph Oppong Akowuah, Samuel Appah, and George Obeng-Akrofi. 2021. “Mechanised Threshing of Pod Grains Used as Food and Strategies to Optimise the Technique: A Review Eric.” *Journal of Advances in Agriculture* 12: 30–43. <https://doi.org/https://doi.org/10.24297/jaa.v12i.9045>
- Owusu-Sekyere, Ernest, George Obeng-Akrofi, Joseph O. Akowuah, and Dirk Maier. 2021. “Performance Analysis and Drying Kinetics of Maize in an AflaSTOP Dryer.” *Open Journal of Applied Sciences* 11 (03): 327–42. <https://doi.org/10.4236/ojapps.2021.113024>.

- Armah, Kwashie A., Joseph O. Akowuah, George Obeng-Akrofi, and Samuel G. McNeill. 2021. "Application of Analytic Hierarchy Process in Selection of an Appropriate Drying Platform for Maize Drying in a Solar Bubble Dryer." *Open Journal of Applied Sciences* 11 (01): 157–75.
<https://doi.org/10.4236/ojapps.2021.111011>.
- Boateng, H.A., G. Obeng-Akrofi, J.O. Akowuah, and D.E. Maier. Performance Evaluation of a Flatbed Maize Dryer with a Biomass Heat Source. ASABE 2021 Virtual Annual International Conference, July 12 - 16, 2021.
- Owusu, G., G. Obeng-Akrofi, J.O. Akowuah, and D.E. Maier. Comparative Assessment of Three Low-Capacity Drying System using Analytical Hierarchy Process. ASABE 2021 Virtual Annual International Conference, July 12 - 16, 2021.
- Obeng-Akrofi G., D. E. Maier, W. S. White, A. Bart-Plange, J. O. Akowuah, R. Bartosik and L. Cardoso Evaluation of Hermetic Bag Technology to Preserve Shea Nuts in Rural Ghana. 11th Conference on Controlled Atmospheres and Fumigation in Stored Products (CAF2020), August 22 - 27, 2021.
- Obeng-Akrofi G., D. E. Maier, W. S. White, A. Bart-Plange, J. O. Akowuah, R. Bartosik and L. Cardoso Evaluation of Hermetic Bag Technology to Preserve Shea Nuts in Rural Ghana. 3rd All Africa Post-Harvest Congress and Exhibition. Virtual Event. September 13 - 17, 2021.
- Obeng-Akrofi G., J.O. Akowuah, D.E. Maier and A. Addo. Selection of an Appropriate Biomass Burner for Drying Maize in a Column Dryer Using the Analytic Hierarchy Process (AHP). ASABE 2021 Virtual Annual International Conference, July 12 - 16, 2021.
- Obeng-Akrofi G., D. E. Maier, W. S. White, A. Bart-Plange, J. O. Akowuah, R. Bartosik and L. Cardoso Evaluation of Hermetic Bag Technology to Preserve Shea Nuts in Rural Ghana. ASABE 2021 Virtual Annual International Conference, July 12 - 16, 2021.
- Obeng-Akrofi G., J.O. Akowuah, D.E. Maier and A. Addo. Selection of an Appropriate Biomass Burner for Drying Maize in a Column Dryer Using the Analytic Hierarchy Process (AHP). 3rd All Africa Post-Harvest Congress and Exhibition. Virtual Event. September 13 - 17, 2021.
- Obeng-Akrofi G., D.E. Maier and J.O. Akowuah. Application of the Analytic Hierarchy Process (AHP) in the Selection of a Storage Bag for Possible Adoption in Ullo, a Shea Growing Community in Ghana. 3rd All Africa Post-Harvest Congress and Exhibition. Virtual Event. September 13 - 17, 2021.
- Motta-Romero H, Niyongira F, Boehm J, Rose DJ. 2021. Effects of foliar fungicide on yield, micronutrients, and cadmium in grains from historical and modern hard winter wheat genotypes. *PLoS One* 16:e0247809.
- Poudel R, Bhinderwala F, Morton M, Powers R, Rose DJ. 2021. Metabolic profiling of historical and modern wheat cultivars using proton nuclear magnetic resonance spectroscopy. *Scientific Reports* 11:3080.

- Jianxiong Yue, Zhenbao Zhu, Jianhua Yi, Hui Li, Bingcan Chen, Jiajia Rao* (2021). Impact of defatting treatment and oat varieties on structural, functional properties, and aromatic profile of oat protein. *Food hydrocolloids* 112, 106368.
- Jianxiong Yue, Zhenbao Zhu, Jianhua Yi, Yang Lan, Bingcan Chen, Jiajia Rao * (2021). Structure and functionality of oat protein extracted by choline chloride–dihydric alcohol deep eutectic solvent and its water binary mixtures. *Food hydrocolloids* 112, 106330.
- Kulathunga, J., Reuhs, B. L., Zwinger, S., & Simsek, S. (2021). Comparative Study on Kernel Quality and Chemical Composition of Ancient and Modern Wheat Species: Einkorn, Emmer, Spelt and Hard Red Spring Wheat. *Foods*, 10(4), 761.
- Lin, H., Bean, S.R., Tilley, M., Peiris, K.H.S., and Brabec, D. 2021. Qualitative and quantitative analysis of sorghum grain composition including protein and tannins using ATR-FTIR spectroscopy. *Food Analytical Methods*. 14:268-279.
- Weerasooriya, D., Bandara, A., Dowell, F., Peiris, S., Bean, S.R., Perumal, R., Adee, E., and Tesso, T. 2021. Performance of grain sorghum hybrids resistant to acetolactate synthase (ALS) and acetyl coenzyme-A carboxylase (ACCase) inhibitor herbicides. *Crop Science*. 61:896-916
- Akin, P.A., Sezer, B., Bean, S.R., Peiris, K., Tilley, M., Apaydin, H., and Boyaci, I.H. 2021. Discrimination of corn and sorghum flour mixtures using laser induced breakdown spectroscopy. *J. Sci. Food Agric*. 101: 076-1084.
- Taghvaei, M., Smith, B., Yazar, G., Bean, S., Tilley, M., Ioerger, B. 2021. Identification of gluten-like proteins in selected pod bearing leguminous tree seeds. *PLoS ONE* 16(4): e0249427. <https://doi.org/10.1371/journal.pone.0249427>.
- Bean, S.R., Akin, P.A., Aramouni, F.M. 2021. Zein functionality in viscoelastic dough for baked food products. *J. Cereal Sci*. 100:103270.
- Perumal, R., Tesso, T.T., Morris, G.P., Jagadish, S.V.K., Little, C.R., Bean, S.R., Yu, J., Prasad, P.V.V., and Tuinstra, M.R. 2021. Registration of the sorghum nested association mapping (NAM) population in RTx430 background. *J. Plant Registrations* 15:295-402.
- Yoganandan, M., Bean, S.R., Miller-Regan, R., Dogan, H., Pulivarth, M. K., and Siliveru, K. 2021. Effect of tempering conditions on white sorghum milling, flour, and bread properties. *Foods*. 10:1947.
- Cao, Z, Li, N., Qi, G., Sun, X.S., Bean, S.R., Tilley, M., Aramouni, F.M., and Wang, D. 2021. Optimization of camelina gum isolation from bran and protein extraction using decortication. *Journal of Agriculture and Food Research*. 6:100223
- Peiris, K.H.S., Wu, X., Bean, S.R., Perez-Fajardo, M., Hayes, C., Yerka, M.K., Jagadish, S.V., Ostmeier, T., Aramouni, F.M., Tesso, T., Perumal, R., Rooney, W.L., Kent, M.A., and Bean, B. 2021. Near infrared spectroscopic evaluation of starch properties of diverse sorghum populations. *Processes*. 9:1942. <https://doi.org/10.3390/pr9111942>

- Bruce RM, Atungulu GG*, Sadaka S, Smith D. 2021. Impact of specific energy input of a 915 MHz microwave dryer on quality, functional, and physicochemical properties of different rice cultivars. *Cereal Chemistry*, 98(3), 557-570. DOI: 10.1002/cche.10398
- Wilson SA, Mohammadi Shad Z, Oduola AA, Zhou Z, Jiang H, Carbonero F, Atungulu GG*. 2021. Decontamination of Mycotoxigenic Fungi on Shelled Corn Using Selective Infrared Heating Technique. *Cereal Chemistry*, 98(1), 31-43. <https://doi.org/10.1002/cche.10394>
- Mohammadi Shad Z, Oduola AA, Wilson S, Smith D, Shafiekhani S, Bruce R, Atungulu GG*. 2021. New infrared heat treatment approaches to dry and combat fungal contamination of shelled corn. *Journal of Food Safety*, 41(2):e12886. <http://doi.org/10.1111/jfs.12886>
- Oduola AA, Atungulu GG*. 2021. Inactivation of aflatoxin producing molds by selected and broadband infrared wavelength treatments, and the effects of the treatments on rice milling quality. *Journal of Food Processing and Preservation*, 45(5):e15384. <https://doi.org/10.1111/jfpp.15384>
- Smith D, Atungulu GG*. 2021. Impacts of specific power of microwave at 915 MHz frequency on drying and milling characteristics of parboiled rough rice. *Applied Engineering in Agriculture*, 37(2), 359-366. doi: 10.13031/aea.14191
- Luthra K, Sadaka S, Atungulu GG*. 2021. Effects of ambient air dehumidification, air temperature, and drying duration on rough rice quality and pasting properties using fluidized bed and fixed bed dryers. *Cereal Chemistry*, 98:968-979. DOI: 10.1002/cche.10438
- Freeland G, Hettiarachchy N, Atungulu GG, Apple J, Mukherjee S. 2021. Strategies to combat antimicrobial resistance from farm to table, *Food Reviews International*, DOI: 10.1080/87559129.2021.1893744
- Odek Z, Siebenmorgen TJ, Atungulu GG*. 2021. Validating the glass transition hypothesis in explaining fissure formation in rough rice. *Transactions of the ASABE*. 64(6): 1763-1770. (doi: 10.13031/trans.14595)
- Odek Z, Siebenmorgen TJ, Mauromoustakos A, Atungulu GG*. 2021. Effect of post-drying tempering of rice on minimizing kernel fissuring and maximizing moisture removal. *Transactions of the ASABE* (in press). Doi:10.13031/trans.14698
- Shafiekhani S, Rocha M, Finberg E, Shiflett M, Atungulu GG*. 2021. Modeling heat and mass transfer of long-grain hybrid rice in a chilled environment. *Applied Engineering in Agriculture*. In press. Doi: 10.13031/aea.14440.
- Hampton RM, Atungulu GG, Rolland V, Wilson S, McKay* T. 2021. Effects of infrared radiation on germination of long grain rice. *Applied Engineering in Agriculture*. Accepted
- Sadaka S*, Atungulu GG, Kelley J. 2021. Corn drying, storage, and aflatoxin levels. FSA1100. <https://www.uaex.uada.edu/publications/pdf/FSA1100.pdf> (Refereed Extension Factsheet)

- García-Pérez, E., D. Ryu, H.Y. Kim, H. Kim, H.J. Lee. 2021. Human proximal tubule epithelial cells (HK-2) as a sensitive *in vitro* system for ochratoxin A induced oxidative stress. *Toxins* 2021, 13(11):787 <https://doi.org/10.3390/toxins13110787>
- García-Pérez, E., D. Ryu, C. Lee, H.J. Lee. 2021. Ochratoxin A induces oxidative stress in HepG2 cells by impairing the gene expression of antioxidant enzymes. *Toxins* 2021, 13(4):271. <https://doi.org/10.3390/toxins13040271>.
- Lee, H.J., S. Lee, K. Gu, D. Ryu. 2021. Reduction of ochratoxin A during the preparation of porridge with sodium bicarbonate and fructose. *Toxins* 13(3):224. <https://doi.org/10.3390/toxins13030224>.
- Gu, K, D. Ryu, and H.J. Lee. 2021. Ochratoxin A and its reaction products affected by sugars during heat processing. *Food Chem.*348:129038. <https://doi.org/10.1016/j.foodchem.2021.129038>
- Gatsakos, A.B., Scatolini, T.B., Danao, M.-G.C., Gates, R.S. and Rausch, K.D. 2021. Effects of splits content on dry matter loss rates of soybeans measured using a static grain respiration measurement system. *Trans. ASABE* 64(4):1365-1372.
- Gatsakos, A.B., Trevisan, L.R., Sood, K., Rausch, K.D., Danao, M.-G.C. and Gates, R.S. 2021. Comparison of dry matter loss rates from static and dynamic grain respiration measurement systems for soybeans at 18% moisture content and 30°C. *Trans. ASABE* 64(3):893-903 (in press) <https://doi.org/10.13031/trans.14161>.
- Latanze, M.P. 2021. Dry matter loss and lipid oxidation evaluation of soybeans during storage at elevated moisture content and temperature. MS thesis, University of Illinois at Urbana-Champaign.
- Chavez, R. A., X. Cheng, T. J. Herrman, and M. J. Stasiewicz. 2022. Single kernel aflatoxin and fumonisin contamination distribution and spectral classification in commercial corn. *Food Control*. 131(2022)108393. <https://doi.org/10.1016/j.foodcont.2021.108393>.
- X. Cheng and M. J. Stasiewicz. 2021. Evaluation of the impact of skewness, clustering, and probe sampling plan on aflatoxin detection in corn. *Risk Analysis*. 41(11)2065-2080. <https://doi.org/10.1111/risa.13721>.
- Sharma, R, C. R. Hurburgh, and G. A. Mosher. 2021. Developing Guidance Templates and Terminology to Support Multiple Traceability Objectives in the Grain Supply Chain. *Cereal Chemistry*, 98(1), 52-69. Was a 2021 ‘Editor’s Pick’ for *Cereal Chemistry* – one of 12 published articles selected by *Cereal Chemistry*’s Editor-in-Chief as part of the “year in review”.
- Sharma, R., C.R. Hurburgh, and G.A. Mosher. “Vulnerability analysis using evidence-based traceability in the grain supply chain.” Under review by *Cereal Chemistry*.
- Pizarro, M., G.A. Mosher, and E.L. Bowers. 2021. Isolation and segregation of non-GM feed: A cost estimation model. Presented virtually at American Society of Agricultural and Biological Engineers (ASABE), July 2021.
- Gupta, Priyanka. Strategies for non-GM segregation in the U.S. grain and feed supply chain. Doctoral dissertation, August 2021.

- Maier, D.E., & Wright, J.J. 2021. Grain Storage Management – Number and Placement of Temperature Sensors and Cables Needed for Effective Monitoring of Stored Grain Quality. In *World Grain*. December 2021 Issue.
- Sserunjogi M., G. Obeng-Akrofi, D.E. Maier and J. Varikooty. Monitoring and Managing Stored Grain Quality with Novel Wireless Sensing and Fan Control Technology. ASABE 2021 Virtual Annual International Conference, July 12 - 16, 2021.
- Lawrence J., G. Obeng-Akrofi and D.E. Maier Effect of Fan Positions in the Plenum of Grain Bin on the Uniformity of Airflow Distribution through the Grain Mass during Natural Air Drying Using CFD Modeling. ASABE 2021 Virtual Annual International Conference, July 12 - 16, 2021.
- Afful E, Cato, A., Nayak, M. K., Phillips, T. W. 2021. A rapid assay for the detection of resistance to phosphine in the lesser grain borer, *Rhyzopertha dominica* (F.) (Coleoptera: Bostrichidae). *J. Stored Prod. Res.* [Vol. 91. https://doi.org/10.1016/j.jspr.2021.101776](https://doi.org/10.1016/j.jspr.2021.101776)
- Doud, C.W.; Cuperus, G.W.; Kenkel, P.; Payton, M.E.; Phillips, T.W. 2021. Trapping *Tribolium castaneum* (Coleoptera: Tenebrionidae) and other beetles in flourmills: evaluating fumigation efficacy and estimating population density. *Insects*, 12, 144. <https://doi.org/10.3390/insects12020144>
- Hasan, M. M., Aikins, M. J., Schilling, M. W. and Phillips, T. W. 2021. Sulfuryl fluoride as a methyl bromide alternative for fumigation of *Necrobia rufipes* (Coleoptera: Cleridae) and *Tyrophagus putrescentiae* (Sarcoptiformes: Acaridae), major pests of animal-based stored products. *J. Stored Prod Res.* Vol 91 online <https://doi.org/10.1016/j.jspr.2021.101769>
- Manu, N., Schilling, M. W. and Phillips, T. W. 2021. Natural and synthetic repellents for pest management of the storage mite *Tyrophagus putrescentiae* (Schrank) (Sarcoptiformes: Acaridae). *Insects*. 12, 711. <https://doi.org/10.3390/insects12080711>
- Myers, S.W., Ghimire, S. N., Arthur, F. H. and Phillips, T. W. 2021. A Combination sulfuryl fluoride and propylene oxide treatment for *Trogoderma granarium* (Coleoptera: Dermestidae). *J. Econ. Entomol.* 114: 1489–1495 <https://doi.org/10.1093/jee/toab124>
- Hasan, M. M., Aikins, M. J., Mahroof, R. M. and Phillips, T. W. 2021. Effects of diet and temperature on the life history of the red-legged ham beetle, *Necrobia rufipes* DeGeer (Coleoptera: Cleridae). *Environ. Entomol.* 51: 278–285 <https://doi.org/10.1093/ee/nvab116>
- Shao, W., Campbell, Y. L., Phillips, T. W., Freeman, C., Kundu, Crist, C. A., Williams, J. B. and Schilling, W. M.. 2021. The application of chitosan in food-grade coatings to control *Tyrophagus putrescentiae* on dry-cured hams and the effects on sensory properties. *J. Stored Prod. Res.* 94:101899. <https://doi.org/10.1016/j.jspr.2021.101899>
- Yao, K. D., Bh. Subramanyam, and R. G. Maghirang. 2021. Moisture content and application rates of inert dusts: Effects on dust and wheat physical properties. *Food Research* (in press).
- Yao, K. D., Bh. Subramanyam, K. Siliveru, J. Anthony, and R. G. Maghirang. 2021. Using the FT4 Powder Rheometer to characterize bulk and dynamic flow properties of Hard Red Winter wheat (HRW) treated with three amorphous silica dusts. *Journal of Stored Products Research* (in press).

- Pulivarthi, M.K., E. Nkurikiye, J. Watt, Y. Li, and K. Siliveru. 2021. Comprehensive understanding of roller milling on the physico chemical properties of red lentil and yellow pea flours. *Processes* (Accepted for publication).
- Zhang, Y., R. Hu, M. Tilley, K. Siliveru, and Y. Li. 2021. Effect of pulse type and substitution level on dough rheology and bread quality of whole wheat based composite flours. *Processes*, 9 (9), 1687.
- Barretto, R., R. M. Buenavista, R. Pandiselvam, and K. Siliveru. 2021. Influence of milling methods on the flow properties of ivory teff flour. *Journal of Texture Studies*, 1-14.
- Yoganandan, M., S. R. Bean, R. Miller-Regan, H. Dogan, M. K. Pulivarthi, and K. Siliveru. 2021. Effect of tempering conditions on white sorghum milling, flour, and bread properties. *Foods*, 10, 1947.
- Rivera, J. D.,* A. Deliephan, J. Dhakal, C. G. Aldrich, and K. Siliveru. 2021. Significance of Sodium Bisulfate (SBS) tempering in reducing the *Escheria coli* O121 and O26 load of wheat and its effects on wheat flour quality. *Foods*, 10 (7), 1479.
- Buenavista, R. M. E., K. Siliveru, and Y. Zheng. 2021. Utilization of dried distiller's grain with solubles: A review. *Journal of Agriculture and Food Research*, 5, 100195.
- Kheiralipour, K., H. Ahmadi, A. Rajabipour, S. Rafiee, M. Javan-Nikkhah, D. S. Jayas, K. Siliveru, and A. Malhipour. 2021. Processing the hyperspectral images for detecting infection of Pistachio kernel by R5 and KK11 isolates of *Aspergillus flavus* fungus. *Iranian Journal of Biosystems Engineering*, 52 (1), 13-25.
- Raj, A. S.,* R. Martin, B. Zaitoun, and K. Siliveru. 2021. Influence of particle size on baking characteristics of hard wheat flour. *Cereal Technology*, 61-68.
- Siliveru, K., and R. P. K. Ambrose. 2021. Predicting the particle separation and sieve blinding during wheat flour sifting. *Transactions of the ASABE*, 64(3), 1103-1112.
- Barretto, R.,* R. M. Buenavista,* J. Rivera,* S. Wang, P. V. Vara Prasad, and K. Siliveru. 2021. Teff (*eragrostis tef*) processing, utilization, and future opportunities: a review. *Invited Review Paper. International Journal of Food Science and Technology*, 56, 3125-3137.
- Tao, F., H. Yao, Z. Hruska, K. Rajasekaran, J. Qin, M. Kim. 2021. Use of line-scan Raman hyperspectral imaging to identify corn kernels infected with *Aspergillus flavus*. *Journal of Cereal Science*.
<https://doi.org/10.1016/j.jcs.2021.103364>.
- Yao, H., Z. Hruska, R. Kincaid, F. Tao, K. Rajasekaran. 2021 Relationship between maize kernel strength and *Aspergillus flavus* fungi infection. ASABE Paper No. 2100521. St. Joseph, MI.: ASABE.
- Tao, F., Yao, H., Hruska, Z., Rajasekaran, K. (2021). Evaluation of Fungal Contaminants in Agricultural Products by Hyperspectral Imaging. In Jiangbo Li, Zhao Zhang (Ed.), *Nondestructive Evaluation of Agro-products by Intelligent Sensing Techniques*. Bentham Science.
<https://benthambooks.com/book/9789811485800/chapter/190613/>

Hacisalihoglu, G., P.R. Armstrong. Flax and Sorghum: Multi-Elemental Contents and Nutritional Values within 210 Varieties and Potential Selection for Future Climates to Sustain Food Security. *Plants* 2022, 11, 451.
<https://doi.org/10.3390/plants11030451>

Elsayed, S., M.E. Casada, R.G. Maghirang, M. Wei. 2021. Evolution of phosphine from aluminum phosphide pellets. Transactions of the ASABE. 64(2): 615-624.

Issa, S.F., Gaither, D., Raza, M.M., & Field, W.E. (2021) Exploring Alternative Prevention Solutions to Reduce Grain Entrapments. Presented at American Society for Agricultural and Biological Engineers Annual Meeting, July 2021. Virtual

Maier, D.E. Causes and prevention of stored grain fires. World Grain, June 2021.

Maier, D.E. Sanitation, loading, aeration, monitoring. Grain Journal, July/August 2021.

Maier, D.E. and Wright, J. Grain storage management – Number and placement of temperature sensors and cables needed for effective monitoring of stored grain quality – Part 1. World Grain, December 2021.

Advanced Grain Elevator Operations Management – Grain Quality Management Virtual Course, Agribusiness Association of Iowa (AAI), February 15-19, 2021

An Iowa cooperative, February 22-26, 2021

Grain Elevator & Processing Society (GEAPS), May 10-15, 2021. (Maier, Hurburgh)

Grain and Feed Ingredient Analysis for Bangladesh Virtual Training Course, U.S. Grains Council, January - March, 2021. (Maier, Hurburgh)

Middle East & Africa (MEA) Feed Training Center, 18th International Marketing Conference & 61st Annual Membership Meeting, U.S. Grains Council, February 2, 2021. (Maier)

Challenges with Grain Storage and Quality Internationally – from Latin America to Africa to Asia, GEAPS Exchange Online Conference, February 23-25, 2021. (Maier)

Preserving Quality of Stored Grains and Ingredients in Hot Climates, Middle East Poultry Industry Virtual Training Course, Middle East and Africa Feed Manufacturing Training Center (Tunisia), U.S. Grains Council, May 24-28, 2021. (Maier)

Advanced Feed Manufacturing Practices: Conditioning, Pelleting, Crumbling, Middle East Poultry Industry Virtual Training Course, Middle East and Africa Feed Manufacturing Training Center (Tunisia), U.S. Grains Council, May 24-28, 2021. (Maier)

Advanced Feed Manufacturing Practices: Batching, Mixing, Grinding, Middle East Poultry Industry Virtual Training Course, Middle East and Africa Feed Manufacturing Training Center (Tunisia), U.S. Grains Council, May 24-28, 2021. (Ewing)

Practical Aspects of Feed Mill Management, Middle East Poultry Industry Virtual Training Course, Middle East and Africa Feed Manufacturing Training Center (Tunisia), U.S. Grains Council, May 24-28, 2021. (Ewing).

Subedi, M., H. A. Carcamo, J. J. Knodel, D. K. Weaver, R. D. Cuthbert, C. J. Pozniak, K. T. Nilsen, and B. L. Beres. 2021. Stability analysis of stem solidness, grain yield and grain protein concentration in spring wheat. *Canadian Journal of Plant Science* 101(4): 456-475

Achhami, B. B., G. V. P. Reddy, M. L. Hofland, J. D. Sherman, R. K. D. Peterson, and D. K. Weaver. 2021. Plant volatiles and oviposition behavior in the selection of barley cultivars by wheat stem sawfly (Hymenoptera: Cephidae). *Environmental Entomology* 50(4): 940 -947.

Weaver, D. K. 2021. IPM of stored-grain insects. Montana State University Extension Ag and Natural Resources Spring Update in Lewistown, Montana, May 18.