



Publications List

This document contains a sampling of recent publications that reference LI-COR instrumentation and software. This list is provided for informational purposes only, and LI-COR neither endorses, nor makes any express or implied warranties with respect to any data included in these publications.

- Abdelbaki, A., M. Schlerf, R. Retzlaff, M. Machwitz, J. Verrelst and T. Udelhoven (2021). "Comparison of crop trait retrieval strategies using UAV-based VNIR hyperspectral imaging." *Remote Sensing* 13(9): 1748.
- Aboutalebi, M., L. N. Allen, A. F. Torres-Rua, M. McKee and C. Coopmans (2019). Estimation of soil moisture at different soil levels using machine learning techniques and unmanned aerial vehicle (UAV) multispectral imagery, SPIE.
- Aboutalebi, M., A. F. Torres-Rua and N. Allen (2018). Multispectral remote sensing for yield estimation using high-resolution imagery from an unmanned aerial vehicle, SPIE.
- Aboutalebi, M., A. F. Torres-Rua, M. McKee, W. P. Kustas, H. Nieto, M. M. Alsina, A. White, J. H. Prueger, L. McKee and J. Alfieri (2022). "Downscaling UAV land surface temperature using a coupled wavelet-machine learning-optimization algorithm and its impact on evapotranspiration." *Irrigation Science* 40(4): 553-574.
- Afrasiabian, Y., H. Noory, A. Mokhtari, M. R. Nikoo, F. Pourshakouri and P. Haghightmehr (2021). "Effects of spatial, temporal, and spectral resolutions on the estimation of wheat and barley leaf area index using multi-and hyper-spectral data (case study: Karaj, Iran)." *Precision Agriculture* 22(3): 660-688.
- Ali, A., M. Imran, A. Ali and M. A. Khan (2022). "Evaluating Sentinel-2 red edge through hyperspectral profiles for monitoring LAI & chlorophyll content of Kinnow Mandarin orchards." *Remote Sensing Applications: Society and Environment* 26: 100719.
- Al-Shareef, A. R., F. S. El-Nakhlawy and S. M. Ismail (2018). "Enhanced mungbean and water productivity under full irrigation and stress using humic acid in arid regions." *Legume Research-An International Journal* 41(3): 428-431.
- Baath, G. S., K. C. Flynn, P. H. Gowda, V. G. Kakani and B. K. Northup (2021). "Detecting Biophysical Characteristics and Nitrogen Status of Finger Millet at Hyperspectral and Multispectral Resolutions." *Frontiers in Agronomy* 2: 604598.
- Bakanogullari, F., S. Yesilkoy, N. Akataş and L. Saylan (2018). "EVALUATION OF CROP ALBEDO OF DIFFERENT SUNFLOWER CROP ROTATION CULTIVARS AND ITS EFFECT ON LATENT HEAT FLUX." *Journal of Agricultural, Food and Environmental Sciences, JAFES* 72(1): 140-145.
- Bellis, E. S., A. A. Hashem, J. L. Causey, B. R. K. Runkle, B. Moreno-García, B. W. Burns, V. S. Green, T. N. Burcham, M. L. Reba and X. Huang (2022). "Detecting Intra-Field Variation in Rice Yield With Unmanned Aerial Vehicle Imagery and Deep Learning." *UAV Remote Sensing for Plant Traits and Stress*.
- Bhatta, M., K. M. Eskridge, D. J. Rose, D. K. Santra, P. S. Baenziger and T. Regassa (2017). "Seeding rate, genotype, and topdressed nitrogen effects on yield and agronomic characteristics of winter wheat." *Crop Science* 57(2): 951-963.
- Biao, C. A. O., B. A. I. Yun-gang, C. Jun-ke and X. Jun (2018). "Experimental Study on Alfalfa Leaf Area Index with Different Irrigation Treatments in Cold and Arid Regions." *Xinjiang Agricultural Sciences* 55(4): 737.
- Boscutti, F., E. Pellegrini, V. Casolo, M. de Nobili, M. Buccheri and G. Alberti (2020). "Cascading effects from plant to soil elucidate how the invasive *Amorpha fruticosa* L. impacts dry grasslands." *Journal of Vegetation Science* 31(4): 667-677.
- Brenard, N., L. Bosmans, H. Leirs, L. De Bruyn, V. Sluydts and R. Moerkens (2020). "Is leaf pruning the key factor to successful biological control of aphids in sweet pepper?" *Pest management science* 76(2): 676-684.
- Brown, L. A., B. O. Ogutu and J. Dash (2020). "Tracking forest biophysical properties with automated digital repeat photography: A fisheye perspective using digital hemispherical photography from below the canopy." *Agricultural and Forest Meteorology* 287: 107944.
- Burchard-Levine, V., H. Nieto, D. Riaño, M. Migliavacca, T. S. El-Madany, R. Guzinski, A. Carrara and M. P. Martín (2021). "The effect of pixel heterogeneity for remote sensing based retrievals of evapotranspiration in a semi-arid tree-grass ecosystem." *Remote Sensing*

- of Environment 260: 112440.
- Busari, T. I., A. Senzanje, A. O. Odindo and C. A. Buckley (2018). "3 EVALUATING THE EFFECT OF IRRIGATION WATER MANAGEMENT TECHNIQUES ON (TARO) COCOYAM (COLOCASIA ESCULENTA (L.) SCHOTT) GROWN WITH ANAEROBIC BAFFLED REACTOR (ABR) EFFLUENT AT NEWLANDS, SOUTH AFRICA." INVESTIGATING THE EFFECTS OF IRRIGATION WATER MANAGEMENT TECHNIQUES USING ANAEROBIC BAFFLED REACTOR (ABR) EFFLUENTS FOR CROP PRODUCTION: 35.
- Busari, T. I., A. Senzanje, A. O. Odindo and C. A. Buckley (2018). "4 IRRIGATION WATER MANAGEMENT TECHNIQUES WITH ANAEROBIC BAFFLED REACTOR (ABR) EFFLUENTS: EFFECT ON RICE GROWTH, YIELD AND WATER PRODUCTIVITY." INVESTIGATING THE EFFECTS OF IRRIGATION WATER MANAGEMENT TECHNIQUES USING ANAEROBIC BAFFLED REACTOR (ABR) EFFLUENTS FOR CROP PRODUCTION: 53.
- Busari, T. I., A. Senzanje, A. O. Odindo and C. A. Buckley (2018). "5 THE IMPACT OF IRRIGATION WATER MANAGEMENT TECHNIQUES ON THE PERFORMANCE OF POTTED-RICE USING TREATED WASTEWATER REUSE IN DURBAN, SOUTH AFRICA." INVESTIGATING THE EFFECTS OF IRRIGATION WATER MANAGEMENT TECHNIQUES USING ANAEROBIC BAFFLED REACTOR (ABR) EFFLUENTS FOR CROP PRODUCTION: 75.
- Busari, T. I., A. Senzanje, A. O. Odindo and C. A. Buckley (2018). "DURBAN, SOUTH AFRICA." INVESTIGATING THE EFFECTS OF IRRIGATION WATER MANAGEMENT TECHNIQUES USING ANAEROBIC BAFFLED REACTOR (ABR) EFFLUENTS FOR CROP PRODUCTION: 89.
- Cai, L., Y. Zhao, Z. Huang, Y. Gao, H. Li and M. Zhang (2020). "Rapid Measurement of Potato Canopy Coverage and Leaf Area Index Inversion." Applied Engineering in Agriculture 36(4): 557-564.
- Canessa, R., L. van den Brink, A. Saldaña, R. S. Rios, S. Hättenschwiler, C. W. Mueller, I. Prater, K. Tielbörger and M. Y. Bader (2021). "Relative effects of climate and litter traits on decomposition change with time, climate and trait variability." Journal of Ecology 109(1): 447-458.
- Černý, J., J. Krejza, R. Pokorný and P. Bednář (2018). "LaiPen LP 100—a new device for estimating forest ecosystem leaf area index compared to the etalon: A methodologic case study." Journal of Forest Science 64(11): 455-468.
- Chai, L., H. Jiang, W. T. Crow, S. Liu, S. Zhao, J. Liu and S. Yang (2020). "Estimating corn canopy water content from normalized difference water index (NDWI): An optimized NDWI-Based scheme and its feasibility for retrieving corn VWC." IEEE Transactions on Geoscience and Remote Sensing 59(10): 8168-8181.
- Cheesman, A. W., H. Duff, K. Hill, L. A. Cernusak and F. A. McInerney (2020). "Isotopic and morphologic proxies for reconstructing light environment and leaf function of fossil leaves: A modern calibration in the Daintree Rainforest, Australia." American Journal of Botany 107(8): 1165-1176.
- Chen, Y., S. Jiao, Y. Cheng, H. Wei, L. Sun and Y. Sun (2022). "LAI-NOS: An automatic network observation system for leaf area index based on hemispherical photography." Agricultural and Forest Meteorology 322: 108999.
- Chen, Z., K. Jia, X. Wei, Y. Liu, Y. Zhan, M. Xia, Y. Yao and X. Zhang (2022). "Improving leaf area index estimation accuracy of wheat by involving leaf chlorophyll content information." Computers and Electronics in Agriculture 196: 106902.
- Chen, Z., K. Jia, C. Xiao, D. Wei, X. Zhao, J. Lan, X. Wei, Y. Yao, B. Wang and Y. Sun (2020). "Leaf area index estimation algorithm for GF-5 hyperspectral data based on different feature selection and machine learning methods." Remote Sensing 12(13): 2110.
- Chen, Z., T. Shi, X. Zhang, K. Jia, H. Jiang and B. Yuan (2022). "A hybrid leaf area index estimation method of *Dioscorea polystachya* Turczaninow using Sentinel-2 vegetation indices." IEEE Transactions on Geoscience and Remote Sensing.
- Chibarabada, T. P., A. T. Modi and T. Mabhaudhi (2020). "Calibration and evaluation of aquacrop for groundnut (*Arachis hypogaea*) under water deficit conditions." Agricultural and Forest Meteorology 281: 107850.
- Chiozza, M. V., K. A. Parmley, R. H. Higgins, A. K. Singh and F. E. Miguez (2021). "Comparative prediction accuracy of hyperspectral bands for different soybean crop variables: From leaf area to seed composition." Field Crops Research 271: 108260.
- Choi, J., J. Ko, C. T. Ng, S. Jeong, J. Tenhunen, W. Xue and J. Cho (2018). "Quantification of CO₂ fluxes in paddy rice based on the characterization and simulation of CO₂ assimilation approaches."

- Agricultural and Forest Meteorology 249: 348-366.
- Cohrs, C. W., R. L. Cook, J. M. Gray and T. J. Albaugh (2020). "Sentinel-2 Leaf Area Index Estimation for Pine Plantations in the Southeastern United States." *Remote Sensing* 12(9): 1406.
- Corassa, G. M., A. L. Santi, T. J. C. Amado, G. B. Reimche, R. Gaviraghi, M. B. Bisognin and J. L. F. Pires (2019). "Performance of soybean varieties differs according to yield class: a case study from Southern Brazil." *Precision Agriculture* 20(3): 520-540.
- Cunha, H. F. V., K. M. Andersen, L. F. Lugli, F. D. Santana, I. F. Aleixo, A. M. Moraes, S. Garcia, R. Di Ponzio, E. O. Mendoza and B. Brum (2022). "Direct evidence for phosphorus limitation on Amazon forest productivity." *Nature* 608(7923): 558-562.
- da Silva, E. H. F. M., L. A. S. Antolin, A. J. Zanon, A. S. A. Junior, H. A. de Souza, K. dos Santos Carvalho, N. A. V. Junior and F. R. Marin (2021). "Impact assessment of soybean yield and water productivity in Brazil due to climate change." *European Journal of Agronomy* 129: 126329.
- da Silva, E. H. F. M., K. J. Boote, G. Hoogenboom, A. O. Gonçalves, A. S. A. Junior and F. R. Marin (2021). "Performance of the CSM-CROPGRO-soybean in simulating soybean growth and development and the soil water balance for a tropical environment." *Agricultural Water Management* 252: 106929.
- da Silva, E. H. F. M., G. Hoogenboom, K. J. Boote, A. O. Gonçalves and F. R. Marin (2022). "Predicting soybean evapotranspiration and crop water productivity for a tropical environment using the CSM-CROPGRO-Soybean model." *Agricultural and Forest Meteorology* 323: 109075.
- Dąbrowska-Zielińska, K., K. Misiura, A. Malińska, R. I. Gurdak, P. Grzybowski, M. Bartold and M. Kluczek (2022). "Spatiotemporal estimation of gross primary production for terrestrial wetlands using satellite and field data." *Remote Sensing Applications: Society and Environment*: 100786.
- Dai, Y., J. Fan, Z. Liao, C. Zhang, J. Yu, H. Feng, F. Zhang and Z. Li (2022). "Supplemental irrigation and modified plant density improved photosynthesis, grain yield and water productivity of winter wheat under ridge-furrow mulching." *Agricultural Water Management* 274: 107985.
- Danner, M., K. Berger, M. Wocher, W. Mauser and T. Hank (2019). "Fitted PROSAIL parameterization of leaf inclinations, water content and brown pigment content for winter wheat and maize canopies." *Remote Sensing* 11(10): 1150.
- Darvishzadeh, R., T. Wang, A. Skidmore, A. Vrieling, B. O'Connor, T. W. Gara, B. J. Ens and M. Paganini (2019). "Analysis of Sentinel-2 and RapidEye for retrieval of leaf area index in a saltmarsh using a radiative transfer model." *Remote sensing* 11(6): 671.
- De Almeida, D. R. A., E. N. Broadbent, M. P. Ferreira, P. Meli, A. M. A. Zambrano, E. B. Gorgens, A. F. Resende, C. T. de Almeida, C. H. Do Amaral and A. P. Dalla Corte (2021). "Monitoring restored tropical forest diversity and structure through UAV-borne hyperspectral and lidar fusion." *Remote Sensing of Environment* 264: 112582.
- De Bortoli, L., S. Marsi, F. Marinello, S. Carrato, G. Ramponi and P. Gallina (2022). "Structure from Linear Motion (SfLM): An On-the-Go Canopy Profiling System Based on Off-the-Shelf RGB Cameras for Effective Sprayers Control." *Agronomy* 12(6): 1276.
- Deng, Y., J. Dong, W. Zhang, S. Yuan, Z. Tan, Q. Song, X. Deng and M. Cao (2022). "Quantifying the vertical microclimate profile within a tropical seasonal rainforest, based on both ground-and canopy-referenced approaches." *iForest-Biogeosciences and Forestry* 15(1): 24.
- Du, X., L. Wan, H. Cen, S. Chen, J. Zhu, H. Wang and Y. He (2020). "Multi-temporal monitoring of leaf area index of rice under different nitrogen treatments using UAV images." *International Journal of Precision Agricultural Aviation* 3(1).
- Duan, C., J. Chen, J. Li, S. Su, Q. Lei, H. Feng, S. Wu, T. Zhang, K. H. M. Siddique and Y. Zou (2022). "Biomaterial amendments combined with ridge-furrow mulching improve soil hydrothermal characteristics and wolfberry (*Lycium barbarum* L.) growth in the Qaidam Basin of China." *Agricultural Water Management* 259: 107213.
- Duan, J., Y. Wu, Y. Zhou, X. Ren, Y. Shao, W. Feng, Y. Zhu, L. He and T. Guo (2018). "Approach to higher wheat yield in the huang-huai plain: Improving post-anthesis productivity to increase harvest index." *Frontiers in Plant Science* 9: 1457.
- Dymond, S. F., P. W. Richardson, L. A. Webb, E. T. Keppeler, I. Arismendi, K. D. Bladon, P. H. Cafferata, H. E. Dahlke, D. L. Longstreth and P. K. Brand (2021). "A field-based experiment on the influence of stand density reduction on watershed processes at the

- Caspar creek experimental watersheds in northern California." *Frontiers in Forests and Global Change* 4: 691732.
- Eldakkak, E. M. (2021). Effects of Southern Live Oak Tree Canopies on Reduction of Solar Ultraviolet-B (UVB) and Ultraviolet-A (UVA) Radiation in the Urban Environment PhD Thesis, Southern University and Agricultural and Mechanical College.
- Eliades, M., A. Bruggeman, H. Djuma, A. Christou, K. Rovani and M. W. Lubczynski (2022). "Testing three rainfall interception models and different parameterization methods with data from an open Mediterranean pine forest." *Agricultural and forest meteorology* 313: 108755.
- Ethridge, S. R., A. M. Locke, W. J. Everman, D. L. Jordan and R. G. Leon "Crop physiological considerations for combining variable density planting to optimize seed costs and weed suppression." *Weed Science*: 1-35.
- Ethridge, S. R., A. M. Locke, W. J. Everman, D. L. Jordan and R. G. Leon (2022). "Response of Maize, Cotton, and Soybean to Increased Crop Density in Heterogeneous Planting Arrangements." *Agronomy* 12(5): 1238.
- Farooq, T. H., W. Yan, X. Chen, A. Shakoor, M. H. U. Rashid, M. M. Gilani, Z. He and P. Wu (2020). "Dynamics of canopy development of Cunninghamia lanceolata mid-age plantation in relation to foliar nitrogen and soil quality influenced by stand density." *Global Ecology and Conservation* 24: e01209.
- Fenghua, Y., X. Tongyu, D. Wen, M. Hang, Z. Guosheng and C. Chunling (2017). "Radiative transfer models (RTMs) for field phenotyping inversion of rice based on UAV hyperspectral remote sensing." *International Journal of Agricultural and Biological Engineering* 10(4): 150-157.
- Fernandez, J. A., C. D. Messina, J. L. Rotundo and I. A. Ciampitti (2021). "Integrating nitrogen and water-soluble carbohydrates dynamics in maize: A comparison of hybrids from different decades." *Crop Science* 61(2): 1360-1373.
- Florentino, A. L., L. S. Masullo, A. de Vicente Ferraz, N. de Souza Mateus, R. C. R. Monteleone, L. B. B. Pastoriza, J. H. T. Rocha, L. R. F. Alleoni, J. Lavres and J. L. de Moraes Gonçalves (2021). "Nutritional status of Eucalyptus plantation and chemical attributes of a Ferralsol amended with lime and copper plus zinc." *Forest Ecology and Management* 502: 119742.
- Fong, B. N., M. L. Reba, T. G. Teague, B. R. K. Runkle and K. Suvočarev (2020). "Eddy covariance measurements of carbon dioxide and water fluxes in US mid-south cotton production." *Agriculture, Ecosystems & Environment* 292: 106813.
- Forsyth, L. Z. and B. Gilbert (2021). "Parallel responses of species diversity and functional diversity to changes in patch size are driven by distinct processes." *Journal of Ecology* 109(2): 793-805.
- Gadri, Y., L. E. Williams and Z. Peleg (2020). "Tradeoffs between yield components promote crop stability in sesame." *Plant Science* 295: 110105.
- Gao, L., P. Zhao, S. Kang, S. Li, L. Tong, R. Ding and H. Lu (2019). "Surface soil water content dominates the difference between ecosystem and canopy water use efficiency in a sparse vineyard." *Agricultural Water Management* 226: 105817.
- Gao, L., P. Zhao, S. Kang, S. Li, L. Tong, R. Ding and H. Lu (2020). "Comparison of evapotranspiration and energy partitioning related to main biotic and abiotic controllers in vineyards using different irrigation methods." *Frontiers of Agricultural Science and Engineering* 7(4): 490-504.
- Gao, R., A. Torres-Rua, A. Nassar, J. Alfieri, M. Aboutalebi, L. Hipps, N. B. Ortiz, A. J. McElrone, C. Coopmans and W. Kustas (2021). Evapotranspiration partitioning assessment using a machine-learning-based leaf area index and the two-source energy balance model with sUAV information, SPIE.
- Gao, R., A. F. Torres-Rua, M. Aboutalebi, W. A. White, M. Anderson, W. P. Kustas, N. Agam, M. M. Alsina, J. Alfieri and L. Hipps (2022). "LAI estimation across California vineyards using sUAS multi-seasonal multi-spectral, thermal, and elevation information and machine learning." *Irrigation Science*: 1-29.
- Gloaguen, R. M., A. Couch, D. L. Rowland, J. Bennett, G. Hochmuth, D. R. Langham and Z. T. Brym (2019). "Root life history of non-dehiscent sesame (*Sesamum indicum* L.) cultivars and the relationship with canopy development." *Field Crops Research* 241: 107560.
- Gloaguen, R. M., D. L. Rowland, Z. T. Brym, C. H. Wilson, H. C. Chun and R. Langham (2021). "A method for developing irrigation decision support systems de novo: example of sesame (*Sesamum indicum* L.) a known drought tolerant species." *Agricultural Water Management* 243: 106435.

- Gong, L.-s., S.-j. Qu, G.-m. Huang, Y.-l. Guo, M.-c. Zhang, Z.-h. Li, Y.-y. Zhou and L.-s. Duan (2021). "Improving maize grain yield by formulating plant growth regulator strategies in North China." *Journal of Integrative Agriculture* 20(2): 622-632.
- Gonsamo, A., J.-M. Walter, J. M. Chen, P. Pellikka and P. Schleppi (2018). "A robust leaf area index algorithm accounting for the expected errors in gap fraction observations." *Agricultural and Forest Meteorology* 248: 197-204.
- Guo, Y., G. Huang, Q. Guo, C. Peng, Y. Liu, M. Zhang, Z. Li, Y. Zhou and L. Duan (2022). "Increase in root density induced by coronatine improves maize drought resistance in North China." *The Crop Journal*.
- Gurdak, R., K. Dabrowska-Zielinska, Z. Bochenek, M. Kluczek, M. Bartold, S. W. Newete and G. J. Chirima (2021). *Crop Growth Monitoring and Yield Prediction System Applying Copernicus Data for Poland & South Africa*, IEEE.
- Han, S.-S., H.-J. Park, T. Shin, J. Ko, W.-J. Choi, Y.-H. Lee, H.-S. Bae, S.-H. Ahn, J.-T. Youn and H.-Y. Kim (2022). "Effects of Tillage System, Sowing Date, and Weather Course on Yield of Double-Crop Soybeans Cultivated in Drained Paddy Fields." *Agronomy* 12(8): 1901.
- Han, T., H. Ren, D. Hui, J. Wang, H. Lu and Z. Liu (2020). "Light availability, soil phosphorus and different nitrogen forms negatively affect the functional diversity of subtropical forests." *Global Ecology and Conservation* 24: e01334.
- Han, X., Z. Wei, H. Chen, B. Zhang, Y. Li and T. Du (2021). "Inversion of winter wheat growth parameters and yield under different water treatments based on UAV multispectral remote sensing." *Frontiers in plant science*: 639.
- Hanqi, P., Y. U. Xiaoe, O. U. Yuan, W. Baoqing, C. Hong and H. U. Haifang (2022). "Changes of Photosynthetic Characteristics of Wheat and Fruit Quality of Walnut under the Condition of Kernel-Wheat Intercropping Mode." *Xinjiang Agricultural Sciences* 59(2): 361.
- Harders, S. J., K. R. Thorp, A. French and R. Ward (2018). *Unmanned Aerial Vehicle Use in Assessing Crop Vitality and Height in Arid Land Cotton Crops*, American Society of Agricultural and Biological Engineers.
- Hashimoto, N., Y. Saito, M. Maki and K. Homma (2019). "Simulation of reflectance and vegetation indices for unmanned aerial vehicle (UAV) monitoring of paddy fields." *Remote Sensing* 11(18): 2119.
- Hashimoto, N., Y. Saito, S. Yamamoto, T. Ishibashi, R. Ito, M. Maki and K. Homma (2022). "Feasibility of yield estimation based on leaf area dynamics measurements in rice paddy fields of farmers." *Field Crops Research* 286: 108609.
- Heinzen, A. S., A. Lugaresi, C. Leonardo Fenili, C. V. T. Do Amarante, C. A. Steffens and K. C. Dos Santos (2022). "Ecophysiology and Vegetative and Productive Behavior of Chardonnay'Vines under Protected Cultivation Systems in Serra Catarinense of Brazil." *Journal of Experimental Agriculture International*: 24-36.
- Helm, J., T. Dutoit, A. Saatkamp, S. F. Bucher, M. Leiterer and C. Römermann (2019). "Recovery of Mediterranean steppe vegetation after cultivation: Legacy effects on plant composition, soil properties and functional traits." *Applied Vegetation Science* 22(1): 71-84.
- Hodges, B., M. L. Tagert and J. O. Paz (2022). "Use of a crop model and soil moisture sensors for estimating soil moisture and irrigation applications in a production soybean field." *Irrigation Science* 40(6): 925-939.
- Hosseini, M., H. McNairn, S. Mitchell, L. D. Robertson, A. Davidson, N. Ahmadian, A. Bhattacharya, E. Borg, C. Conrad and K. Dabrowska-Zielinska (2021). "A comparison between support vector machine and water cloud model for estimating crop leaf area index." *Remote Sensing* 13(7): 1348.
- Hu, F., C. Lin, J. Peng, J. Wang and R. Zhai (2022). "Rapeseed Leaf Estimation Methods at Field Scale by Using Terrestrial LiDAR Point Cloud." *Agronomy* 12(10): 2409.
- Hu, S., L. Shi, K. Huang, Y. Zha, X. Hu, H. Ye and Q. Yang (2019). "Improvement of sugarcane crop simulation by SWAP-WOFOST model via data assimilation." *Field Crops Research* 232: 49-61.
- Hu, S., L. Shi, Y. Zha and K. Huang (2022). "A new sugarcane yield model using the SiPAR model." *Agronomy Journal* 114(1): 490-507.
- Hu, Y., R. Ding, S. Kang and M. Lana (2022). "The trade-offs between resistance and resilience of forage stay robust with varied growth potentials under different soil water and salt stress." *Science of The Total Environment* 846: 157421.

- Huang, G., Y. Liu, Y. Guo, C. Peng, W. Tan, M. Zhang, Z. Li, Y. Zhou and L. Duan (2021). "A novel plant growth regulator improves the grain yield of high-density maize crops by reducing stalk lodging and promoting a compact plant type." *Field Crops Research* 260: 107982.
- Huang, Y., C. Zhou, M. Du, P. Wu, L. Yuan and J. Tang (2022). "Tidal influence on the relationship between solar-induced chlorophyll fluorescence and canopy photosynthesis in a coastal salt marsh." *Remote Sensing of Environment* 270: 112865.
- Ihsan, M. Z., F. S. El-Nakhlawy, S. M. Ismail, S. Fahad and I. Daur (2016). "Wheat phenological development and growth studies as affected by drought and late season high temperature stress under arid environment." *Frontiers in Plant Science* 7: 795.
- Jahan, N. (2018). INFLUENCE OF MORPHO-PHYSIOLOGICAL CHARACTERS AND YIELD OF OKRA THROUGH APPLICATION OF ZINC AND BORON PhD Thesis, DEPARTMENT OF AGRICULTURAL BOTANY SHER-E-BANGLA AGRICULTURAL UNIVERSITY
- Jia, Q., L. Sun, H. Mou, S. Ali, D. Liu, Y. Zhang, P. Zhang, X. Ren and Z. Jia (2018). "Effects of planting patterns and sowing densities on grain-filling, radiation use efficiency and yield of maize (*Zea mays* L.) in semi-arid regions." *Agricultural Water Management* 201: 287-298.
- Jia, Y., S. Jin, Q. Yan and J. Zou (2022). Assessment of Signal Degradation Performance on Vegetations for GNSS-R SM Retrieval, IEEE.
- Jiang, J., K. Johansen, C. S. Stanschewski, G. Wellman, M. A. A. Mousa, G. M. Fiene, K. A. Asiry, M. Tester and M. F. McCabe (2022). "Phenotyping a diversity panel of quinoa using UAV-retrieved leaf area index, SPAD-based chlorophyll and a random forest approach." *Precision Agriculture* 23(3): 961-983.
- Jin, Y., J. Li, C. Liu, Y. Liu, Y. Zhang, Q. Song, L. Sha, A. Chen, D. Yang and P. Li (2018). "Response of net primary productivity to precipitation exclusion in a savanna ecosystem." *Forest ecology and management* 429: 69-76.
- Kandert, S., H. Kreft, N. DiManno, A. Uowolo, S. Cordell and R. Ostertag (2021). "Influence of Light and Substrate Conditions on Regeneration of Native Tree Saplings in the Hawaiian Lowland Wet Forest." *Pacific Science* 75(1): 107-127.
- Kaneko, T., N. Gould, D. Campbell, P. Snelgar and M. J. Clearwater (2022). "The effect of soil type, fruit load and shaded area on 'Hass' avocado (*Persea americana* Mill.) water use and crop coefficients." *Agricultural Water Management* 264: 107519.
- Kang, Y., F. Gao, M. Anderson, W. Kustas, H. Nieto, K. Knipper, Y. Yang, W. White, J. Alfieri and A. Torres-Rua (2022). "Evaluation of satellite leaf area index in California vineyards for improving water use estimation." *Irrigation Science*: 1-21.
- Kiala, Z., J. Odindi and O. Mutanga (2017). "Potential of interval partial least square regression in estimating leaf area index." *South African Journal of Science* 113(9-10): 1-9.
- Kim, G. and C.-I. Na (2018). Planting Dates and Tillage Practices Affect Soil Water Contents in Soybean and Maize Grown in Paddy, The Korean Society of Crop Science.
- Klingler, A., A. Schaumberger, F. Vuolo, L. B. Kalmár and E. M. Pötsch (2020). "Comparison of direct and indirect determination of leaf area index in permanent grassland." *PFG-Journal of Photogrammetry, Remote Sensing and Geoinformation Science* 88(5): 369-378.
- Klupar, I., A. V. Rocha and E. B. Rastetter (2021). "Alleviation of nutrient co-limitation induces regime shifts in post-fire community composition and productivity in Arctic tundra." *Global Change Biology* 27(14): 3324-3335.
- Kompanizare, M., R. M. Petrone, M. L. Macrae, K. De Haan and M. Khomik (2022). "Assessment of effective LAI and water use efficiency using Eddy Covariance data." *Science of The Total Environment* 802: 149628.
- Kong, W., W. Huang, L. Ma, B. Chen, C. Li and L. Tang (2021). Estimation of leaf area index at the late growth stage of crops using unmanned aerial vehicle hyperspectral images, SPIE.
- Larbi, P. A., M. Culumber, G. Zhuang, G. Douhan, H. W. Thistle and M. J. Willett (2022). Evaluation of Downwind Spray Drift from Airblast Spray Applications in Almond, Citrus, and Grape, American Society of Agricultural and Biological Engineers.
- Lee, J., Y. Kang, B. Son, J. Im and K. Jang (2021). "Estimation of Leaf Area Index Based on Machine Learning/PROSAIL Using Optical Satellite Imagery." *Korean Journal of Remote Sensing* 37(6_1): 1719-1729.
- Li, D., J. E. Fernández, X. Li, B. Xi, L. Jia and V.

- Hernandez-Santana (2020). "Tree growth patterns and diagnosis of water status based on trunk diameter fluctuations in fast-growing *Populus tomentosa* plantations." Agricultural Water Management 241: 106348.
- Li, D., X. Li, B. Xi and V. Hernandez-Santana (2022). "Evaluation of method to model stomatal conductance and its use to assess biomass increase in poplar trees." Agricultural Water Management 259: 107228.
- Li, H., D. Li, K. Xu, W. Cao, X. Jiang and J. Ni (2022). "Monitoring of Nitrogen Indices in Wheat Leaves Based on the Integration of Spectral and Canopy Structure Information." Agronomy 12(4): 833.
- Li, X., N. Zhao, R. Jin, S. Liu, X. Sun, X. Wen, D. Wu, Y. Zhou, J. Guo and S. Chen (2019). "Internet of Things to network smart devices for ecosystem monitoring." Science Bulletin 64(17): 1234-1245.
- Li, Y., Z. Dou, H. Guo, Q. Xu, J. Jiang, Y. Che, J. Li, Y. Liu and H. Gao (2022). "Effects of Mechanical Transplanting Methods and Planting Geometry on Yield Formation and Canopy Structure of Indica Rice under Rice-Crayfish Rotation." Agriculture 12(11): 1817.
- Li, Y., W. Gao, J. Jia, S. Tao and Y. Ren (2022). "Developing and evaluating the feasibility of a new spatiotemporal fusion framework to improve remote sensing reflectance and dynamic LAI monitoring." Computers and Electronics in Agriculture 198: 107037.
- Li, Y., J. Z. Huang, W. L. Gao, J. D. Jia, S. Tao, Y. Z. Ren and X. L. Liu (2022). "Comparison of Inversion Methods for Maize Canopy Time-Series LAI Based on SupReME Reconstructed Images." Journal of the ASABE: 0.
- Lichthardt, C., T.-W. Chen, A. Stahl and H. Stützel (2020). "Co-evolution of sink and source in the recent breeding history of winter wheat in Germany." Frontiers in plant science 10: 1771.
- Lin, J., Y. Pan, H. Lyu, X. Zhu, X. Li, B. Dong and H. Li (2019). "Developing a two-step algorithm to estimate the leaf area index of forests with complex structures based on CHRIS/PROBA data." Forest Ecology and Management 441: 57-70.
- Lin, J., Q. Shen, J. Wu, W. Zhao and L. Liu (2022). "Assessing the Potential of Downscaled Far Red Solar-Induced Chlorophyll Fluorescence from the Canopy to Leaf Level for Drought Monitoring in Winter Wheat." Remote Sensing 14(6): 1357.
- Liu, J., D. Li, J.-E. Fernández, M. Coleman, W. Hu, N. Di, S. Zou, Y. Liu, B. Xi and B. Clothier (2022). "Variations in water-balance components and carbon stocks in poplar plantations with differing water inputs over a whole rotation: implications for sustainable forest management under climate change." Agricultural and Forest Meteorology 320: 108958.
- Liu, L., X. Gao, B. Cao, Y. Ba, J. Chen, X. Cheng, Y. Zhou, H. Huang and J. Zhang (2022). "Comparing Different Light Use Efficiency Models to Estimate the Gross Primary Productivity of a Cork Oak Plantation in Northern China." Remote Sensing 14(22): 5905.
- Liu, L., X. Gao, C. Ren, X. Cheng, Y. Zhou, H. Huang, J. Zhang and Y. Ba (2022). "Applicability of the crop water stress index based on canopy-air temperature differences for monitoring water status in a cork oak plantation, northern China." Agricultural and Forest Meteorology 327: 109226.
- Liu, L., W. Zhao, Q. Shen, J. Wu, Y. Teng, J. Yang, X. Han and F. Tian (2020). "Nonlinear Relationship Between the Yield of Solar-Induced Chlorophyll Fluorescence and Photosynthetic Efficiency in Senescent Crops." Remote Sensing 12(9): 1518.
- Liu, L., W. Zhao, J. Wu, S. Liu, Y. Teng, J. Yang and X. Han (2019). "The impacts of growth and environmental parameters on solar-induced chlorophyll fluorescence at seasonal and diurnal scales." Remote Sensing 11(17): 2002.
- Liu, W. J., L. F. Li, J. A. Biederman, Y. B. Hao, H. Zhang, X. M. Kang, X. Y. Cui, Y. F. Wang, M. W. Li and Z. H. Xu (2017). "Repackaging precipitation into fewer, larger storms reduces ecosystem exchanges of CO₂ and H₂O in a semiarid steppe." Agricultural and Forest Meteorology 247: 356-364.
- Liu, Z., P. Guo, H. Liu, P. Fan, P. Zeng, X. Liu, C. Feng, W. Wang and F. Yang (2021). "Gradient Boosting Estimation of the Leaf Area Index of Apple Orchards in UAV Remote Sensing." Remote Sensing 13(16): 3263.
- Liu, Z., Y. Wang, Y. Liu, A. Tian, Y. Wang and H.-J. Zuo (2017). "Spatiotemporal variation and scale effect of canopy leaf area index of larch plantation on a slope of the semi-humid Liupan Mountains, Ningxia, China." Chinese Journal of Plant Ecology 41(7): 749.
- Lo, T. H., D. R. Rudnick, C. A. Burr, M. C. Stockton and R. Werle (2019). "Approaches to evaluating grower

- irrigation and fertilizer nitrogen amount and timing." *Agricultural Water Management* 213: 693-706.
- Lu, G., C. Li, G. Yang, H. Yu, X. Zhao and X. Zhang (2016). "Retrieving soybean leaf area index based on high imaging spectrometer." *Soybean Science* 35(4): 599-608.
- Lu, Z., L. Deng and H. Lu (2022). "An Improved LAI Estimation Method Incorporating with Growth Characteristics of Field-Grown Wheat." *Remote Sensing* 14(16): 4013.
- Lusk, C. H., S. K. Wiser and D. C. Laughlin (2021). "Climate influences the value of a plant structural defence against browsing." *Journal of Ecology* 109(3): 1411-1423.
- Lynggaard, C., D. W. Yu, G. Oliveira, C. F. Caldeira, S. J. Ramos, M. R. Ellegaard, M. T. P. Gilbert, M. Gastauer and K. Bohmann (2020). "DNA-based arthropod diversity assessment in amazonian iron mine lands show ecological succession towards undisturbed reference sites." *Frontiers in ecology and evolution* 8: 590976.
- Magwaza, S. T., L. S. Magwaza, A. O. Odindo, J. Mashilo, A. Mditshwa and C. Buckley (2020). "Evaluating the feasibility of human excreta-derived material for the production of hydroponically grown tomato plants-Part I: Photosynthetic efficiency, leaf gas exchange and tissue mineral content." *Agricultural Water Management* 234: 106114.
- Maimaitijiang, M., V. Sagan, H. Erkbol, J. Adrian, M. Newcomb, D. LeBauer, D. Pauli, N. Shakoor and T. C. Mockler (2020). "UAV-BASED SORGHUM GROWTH MONITORING: A COMPARATIVE ANALYSIS OF LIDAR AND PHOTOGRAHAMMETRY." *ISPRS Annals of Photogrammetry, Remote Sensing & Spatial Information Sciences* 5(3).
- Maimaitijiang, M., V. Sagan, P. Sidike, A. M. Daloye, H. Erkbol and F. B. Fritschi (2020). "Crop monitoring using satellite/UAV data fusion and machine learning." *Remote Sensing* 12(9): 1357.
- Maimaitiyiming, M., V. Sagan, P. Sidike and M. T. Kwasniewski (2019). "Dual activation function-based Extreme Learning Machine (ELM) for estimating grapevine berry yield and quality." *Remote Sensing* 11(7): 740.
- Malahlela, O. E., C. Adjorlolo and J. M. Olwoch (2019). "Comparison of the Sentinel-2 broadband and narrowband vegetation indices for mapping LAI in malaria-prone heterogeneous semi-arid environment of Southern Africa." *Remote Sensing of Environmental Variables for Mapping Malaria Distribution: The Case of Vhembe District Municipality, South Africa* 85.
- McNairn, H., M. Hosseini, L. Dingle-Robertson, A. Davidson, S. Mitchell and K. Dabrowska-Zielinska (2019). "Retrieval of Crop Biophysical Parameters Using C-Band: Preparing for the Radarsat-Constellation," IEEE.
- Mendonca, C. C., L. J. Samuelson and M. J. Aspinwall (2022). "Experimental throughfall reduction has little effect on shoot and needle developmental patterns or leaf area dynamics in a young longleaf pine (*Pinus palustris* Mill.) plantation." *Forest Ecology and Management* 517: 120246.
- Meng, X., X. Wang, Z. Zhang, S. Xiong, Y. Wei, J. Guo, J. Zhang, L. Wang, X. Ma and M. Tegeder (2021). "Transcriptomic, proteomic, and physiological studies reveal key players in wheat nitrogen use efficiency under both high and low nitrogen supply." *Journal of Experimental Botany* 72(12): 4435-4456.
- Mihretie, F. A., A. Tsunekawa, N. Haregeweyn, E. Adgo, M. Tsubo, T. Masunaga, D. T. Meshesha, K. Ebabu and M. Bayable (2021). "Agro-Economic Evaluation of Alternative Crop Management Options for Teff Production in Midland Agro-Ecology, Ethiopia." *Agriculture* 11(4): 298.
- Mihretie, F. A., A. Tsunekawa, N. Haregeweyn, E. Adgo, M. Tsubo, T. Masunaga, D. T. Meshesha, W. Tsuji, K. Ebabu and A. Tassew (2021). "Tillage and sowing options for enhancing productivity and profitability of teff in a sub-tropical highland environment." *Field Crops Research* 263: 108050.
- Mokhtari, A., H. Noory, F. Pourshakouri, P. Haghighatmehr, Y. Afrasiabian, M. Razavi, F. Fereydooni and A. S. Naeni (2019). "Calculating potential evapotranspiration and single crop coefficient based on energy balance equation using Landsat 8 and Sentinel-2." *ISPRS Journal of Photogrammetry and Remote Sensing* 154: 231-245.
- Mokhtari, A., H. Noory, M. Vazifedoust, M. Palouj, A. Bakhtiari, E. Barikani, R. A. Z. Afroz, F. Fereydooni, A. S. Naeni and F. Pourshakouri (2019). "Evaluation of single crop coefficient curves derived from Landsat satellite images for major crops in Iran." *Agricultural Water Management* 218: 234-249.
- Mudau, A. R., H. T. Araya and F. N. Mudau (2019). "The quality of baby spinach as affected by developmental

- stage as well as postharvest storage conditions." *Acta Agriculturae Scandinavica, Section B—Soil & Plant Science* 69(1): 26-35.
- Myrgiotis, V., E. Blei, R. Clement, S. K. Jones, B. Keane, M. A. Lee, P. E. Levy, R. M. Rees, U. M. Skiba and T. L. Smallman (2020). "A model-data fusion approach to analyse carbon dynamics in managed grasslands." *Agricultural Systems* 184: 102907.
- Naidoo, L., R. Main, M. A. Cho, S. Madonsela and N. Majozzi (2021). Estimating South African maize biomass using integrated high-resolution UAV and sentinel 1 and 2 datasets, IEEE.
- Narmilan, A. and S. Puvanitha (2020). "The effect of different planting methods on growth and yield of selected of Cassava (*Manihot esculenta*) cultivars." *Agricultural Science Digest-A Research Journal* 40(4): 364-369.
- Nazeri, B. and M. Crawford (2021). "Detection of Outliers in LiDAR Data Acquired by Multiple Platforms over Sorghum and Maize." *Remote Sensing* 13(21): 4445.
- Nazeri, B., M. M. Crawford and M. R. Tuinstra (2021). "Estimating leaf area index in row crops using wheel-based and airborne discrete return light detection and ranging data." *Frontiers in Plant Science* 12.
- Niu, Q., H. Feng, G. Yang, C. Li, H. Yang, B. Xu and Y. Zhao (2018). "Monitoring plant height and leaf area index of maize breeding material based on UAV digital images." *Transactions of the Chinese Society of Agricultural Engineering* 34(5): 73-82.
- Niu, Y., H. Lyu, X. Liu, M. Zhang and H. Li (2022). "Effects of supplemental lighting duration and matrix moisture on net photosynthetic rate of tomato plants under solar greenhouse in winter." *Computers and Electronics in Agriculture* 198: 107102.
- Noh, E., B. Fallen, J. Payero and S. Narayanan (2022). "Parsimonious root systems and better root distribution can improve biomass production and yield of soybean." *Plos one* 17(6): e0270109.
- Nomura, K., M. Saito, M. Kitayama, Y. Goto, K. Nagao, H. Yamasaki, T. Iwao, T. Yamazaki, I. Tada and M. Kitano (2022). "Leaf area index estimation of a row-planted eggplant canopy using wide-angle time-lapse photography divided according to view zenith-angle contours." *Agricultural and Forest Meteorology* 319: 108930.
- Nomura, K., M. Saito, I. Tada, T. Iwao, T. Yamazaki, N. Kira, Y. Nishimura, M. Mori, E. Baeza and M. Kitano (2022). "Estimation of Photosynthesis Loss Due to Greenhouse Superstructures and Shade Nets: A Case Study with Paprika and Tomato Canopies." *HortScience* 57(3): 464-471.
- Novelli, F., H. Spiegel, T. Sandén and F. Vuolo (2019). "Assimilation of sentinel-2 leaf area index data into a physically-based crop growth model for yield estimation." *Agronomy* 9(5): 255.
- O'Keefe, M. (2018). Unmanned Aerial Systems for Estimating Canopy Structure and Assessing Vegetation Health in Willow Crops PhD Thesis, State University of New York College of Environmental Science and Forestry.
- Osen, K., M. R. Soazafy, D. A. Martin, A. Wurz, A. März, H. L. T. Ranarijaona and D. Hölscher (2021). "Land-use history determines stand structure and tree diversity in vanilla agroforests of northeastern Madagascar." *Applied Vegetation Science* 24(1): e12563.
- Otieno, D., Y. Li, X. Liu, G. Zhou, J. Cheng, Y. Ou, S. Liu, X. Chen, Q. Zhang and X. Tang (2017). "Spatial heterogeneity in stand characteristics alters water use patterns of mountain forests." *Agricultural and Forest Meteorology* 236: 78-86.
- Ouyang, K. T., H. Ren, Z. H. Xu, F. G. Wang, S. Z. Liu, Q. M. Zhang, M. F. Hu, Y. J. Zhang, Z. J. Liu and Q. F. Guo (2021). "HABITAT CHARACTERISTICS AND POPULATION STRUCTURE OF DIPTERIS CHINENSIS, A RELICT PLANT IN CHINA." *APPLIED ECOLOGY AND ENVIRONMENTAL RESEARCH* 19(3): 1939-1951.
- Pádua, L., P. Marques, L. Martins, A. Sousa, E. Peres and J. J. Sousa (2020). Estimation of Leaf Area Index in Chestnut Trees using Multispectral Data from an Unmanned Aerial Vehicle, IEEE.
- Pan, Y., S. Gao, K. Xie, Z. Lu, X. Meng, S. Wang, J. Lu and S. Guo (2020). "Higher radiation use efficiency produces greater biomass before heading and grain yield in super hybrid rice." *Agronomy* 10(2): 209.
- Pan, Y., J. Jiang, Z. Liu, Y. Du and K. Xiong (2022). "Identification of vegetation under natural gas leakage by spectral index based on feature selection." *International Journal of Remote Sensing* 43(8): 3082-3105.
- Panozzo, A., H. Huang, B. Bernazeau, T. Vamerali, M. F. Samson and D. Desclaux (2020). "Morphology, phenology, yield, and quality of durum wheat cultivated within organic olive orchards of the

- Mediterranean area." *Agronomy* 10(11): 1789.
- Park, W., G. Kim, Y. Jeong, N. Choi and C.-I. Na (2021). "Effects of Tillage Practice and Planting Date on Maize-onion Growth and Yield in Southern Regions Paddy Field." *KOREAN JOURNAL OF CROP SCIENCE* 66(4): 392-402.
- Pei, Z., S. Hao, G. Pang, K. Wang and T. Liu (2019). "Sap flow of *Salix psammophila* and its principal influencing factors at different slope positions in the Mu Us desert." *Plos one* 14(12): e0225653.
- Peng, M., W. Han, C. Li, G. Li, X. Yao and M. Zhang (2021). "Diurnal and seasonal CO₂ exchange and yield of maize cropland under different irrigation treatments in semiarid Inner Mongolia." *Agricultural Water Management* 255: 107041.
- Peng, Y., Y. Li, C. Dai, S. Fang, Y. Gong, X. Wu, R. Zhu and K. Liu (2019). "Remote prediction of yield based on LAI estimation in oilseed rape under different planting methods and nitrogen fertilizer applications." *Agricultural and Forest Meteorology* 271: 116-125.
- Pokovai, K. and N. Fodor (2019). "Adjusting ceptometer data to improve leaf area index measurements." *Agronomy* 9(12): 866.
- Prada, M., C. Cabo, R. Hernández-Clemente, A. Hornero, J. Majada and C. Martínez-Alonso (2020). "Assessing canopy responses to thinnings for sweet chestnut coppice with time-series vegetation indices derived from landsat-8 and sentinel-2 imagery." *Remote Sensing* 12(18): 3068.
- Prajapati, D. R., N. S. Thakur, V. R. Patel, R. P. Gunaga, L. Mahatma and D. P. Patel (2022). "Influence of Spatial Configurations on Quantitative *Melia dubia* and Qualitative Performance of Hybrid Napier (*Pennisetum purpureum* P. *americanum* x) and Soil Biota Status." *Indian Journal of Ecology* 49(1): 9-20.
- Prudente, V. H. R., L. V. Oldoni, D. C. Vieira, C. E. V. Cattani and I. D. Sanches (2019). "RELATIONSHIP BETWEEN SAR/SENTINEL-1 POLARIMETRIC AND INTERFEROMETRIC DATA WITH BIOPHYSICAL PARAMETERS OF AGRICULTURAL CROPS." *International Archives of the Photogrammetry, Remote Sensing & Spatial Information Sciences*.
- Qiao, L., D. Gao, R. Zhao, W. Tang, L. An, M. Li and H. Sun (2022). "Improving estimation of LAI dynamic by fusion of morphological and vegetation indices based on UAV imagery." *Computers and Electronics in Agriculture* 192: 106603.
- Qiao, L., R. Zhao, W. Tang, L. An, H. Sun, M. Li, N. Wang, Y. Liu and G. Liu (2022). "Estimating maize LAI by exploring deep features of vegetation index map from UAV multispectral images." *Field Crops Research* 289: 108739.
- Qu, Y., Z. Gao, J. Shang, J. Liu and R. Casa (2021). "Simultaneous measurements of corn leaf area index and mean tilt angle from multi-directional sunlit and shaded fractions using downward-looking photography." *Computers and Electronics in Agriculture* 180: 105881.
- Rabbane, G. M. (2018). *EFFECT OF FOLIAR APPLICATION OF GIBBERELLIC ACID ON MORPHO-PHYSIOLOGICAL CHARACTERS AND YIELD OF OKRA (Abelmoschus esculentus L.)* PhD Thesis, DEPARTMENT OF AGRICULTURAL BOTANY, SHER-E-BANGLA AGRICULTURAL UNIVERSITY
- Ricci, G. F., G. Romano, V. Leronni and F. Gentile (2019). "Effect of check dams on riparian vegetation cover: A multiscale approach based on field measurements and satellite images for Leaf Area Index assessment." *Science of the Total Environment* 657: 827-838.
- Richardson, B., T. M. Strand, H. Thistle, A. Hiscox, M. O. Kimberley and W. C. Schou (2017). "Influence of a young *pinus radiata* canopy on aerial spray drift." *Transactions of the ASABE* 60(6): 1851-1861.
- Roby, M. C., M. G. S. Fernandez, E. A. Heaton, F. E. Miguez and A. VanLoocke (2017). "Biomass sorghum and maize have similar water-use-efficiency under non-drought conditions in the rain-fed Midwest US." *Agricultural and Forest Meteorology* 247: 434-444.
- Romano, G., G. F. Ricci and F. Gentile (2019). *Comparing LAI Field Measurements and Remote Sensing to Assess the Influence of Check Dams on Riparian Vegetation Cover*, Springer.
- Rugenski, A. T., G. W. Minshall and F. R. Hauer (2017). *Riparian processes and interactions. Methods in Stream Ecology*, Elsevier: 83-111.
- Ruiz-Vera, U. M., A. P. De Souza, M. R. Ament, R. M. Gleadow and D. R. Ort (2021). "High sink strength prevents photosynthetic down-regulation in cassava grown at elevated CO₂ concentration." *Journal of experimental botany* 72(2): 542-560.
- Sagan, V., M. Maimaitijiang, P. Sidike, K. Ebilimit, K. T. Peterson, S. Hartling, F. Esposito, K. Khanal, M. Newcomb and D. Pauli (2019). "UAV-based high resolution thermal imaging for vegetation monitoring,

- and plant phenotyping using ICI 8640 P, FLIR Vue Pro R 640, and thermomap cameras." *Remote Sensing* 11(3): 330.
- Salinero-Delgado, M., J. Estévez, L. Pipia, S. Belda, K. Berger, V. Paredes Gómez and J. Verrelst (2021). "Monitoring Cropland Phenology on Google Earth Engine Using Gaussian Process Regression." *Remote Sensing* 14(1): 146.
- Samuelson, L. J., T. A. Stokes, M. R. Ramirez and C. C. Mendonca (2019). "Drought tolerance of a *Pinus palustris* plantation." *Forest Ecology and Management* 451: 117557.
- Sawada, H., H. Matsuyama, H. Matsunaka, M. Fujita, N. Okamura, M. Seki, H. Kojima, C. Kiribuchi-Otobe, T. Takayama and S. Oda (2019). "Evaluation of dry matter production and yield in early-sown wheat using near-isogenic lines for the vernalization locus Vrn-D1." *Plant Production Science* 22(2): 275-284.
- Schwantes, A. M., A. J. Parolari, J. J. Swenson, D. M. Johnson, J. C. Domec, R. B. Jackson, N. Pelak and A. Porporato (2018). "Accounting for landscape heterogeneity improves spatial predictions of tree vulnerability to drought." *New Phytologist* 220(1): 132-146.
- Shafian, S., N. Rajan, R. Schnell, M. Bagavathiannan, J. Valasek, Y. Shi and J. Olsenholter (2018). "Unmanned aerial systems-based remote sensing for monitoring sorghum growth and development." *PLoS one* 13(5): e0196605.
- Shao, G., W. Han, H. Zhang, S. Liu, Y. Wang, L. Zhang and X. Cui (2021). "Mapping maize crop coefficient Kc using random forest algorithm based on leaf area index and UAV-based multispectral vegetation indices." *Agricultural Water Management* 252: 106906.
- Shao, G., W. Han, H. Zhang, Y. Wang, L. Zhang, Y. Niu, Y. Zhang and P. Cao (2022). "Estimation of transpiration coefficient and aboveground biomass in maize using time-series UAV multispectral imagery." *The Crop Journal* 10(5): 1376-1385.
- Shawon, A. R., J. Ko, B. Ha, S. Jeong, D. K. Kim and H.-Y. Kim (2020). "Assessment of a proximal sensing-integrated crop model for simulation of soybean growth and yield." *Remote Sensing* 12(3): 410.
- Shawon, A. R., J. Ko, S. Jeong, T. Shin, K. D. Lee and S. I. Shim (2020). "Two-dimensional simulation of barley growth and yield using a model integrated with remote-controlled aerial imagery." *Remote Sensing* 12(22): 3766.
- Shen, B., L. Ding, L. Ma, Z. Li, A. Pulatov, Z. Kulenbekov, J. Chen, S. Mambetova, L. Hou and D. Xu (2022). "Modeling the Leaf Area Index of Inner Mongolia Grassland Based on Machine Learning Regression Algorithms Incorporating Empirical Knowledge." *Remote Sensing* 14(17): 4196.
- Shen, X., L. Cao, N. C. Coops, H. Fan, X. Wu, H. Liu, G. Wang and F. Cao (2020). "Quantifying vertical profiles of biochemical traits for forest plantation species using advanced remote sensing approaches." *Remote Sensing of Environment* 250: 112041.
- Shephard, N. T., O. Joshi, C. R. Meek and R. E. Will (2021). "Long-term growth effects of simulated-drought, mid-rotation fertilization, and thinning on a loblolly pine plantation in southeastern Oklahoma, USA." *Forest Ecology and Management* 494: 119323.
- Shi, Y., J. A. Thomasson, S. C. Murray, N. A. Pugh, W. L. Rooney, S. Shafian, N. Rajan, G. Rouze, C. L. S. Morgan and H. L. Neely (2016). "Unmanned aerial vehicles for high-throughput phenotyping and agronomic research." *PLoS one* 11(7): e0159781.
- Shin, T., J. Ko, S. Jeong, J. Kang, K. Lee and S. Shim (2022). "Assimilation of Deep Learning and Machine Learning Schemes into a Remote Sensing-Incorporated Crop Model to Simulate Barley and Wheat Productivities." *Remote Sensing* 14(21): 5443.
- Shin, T., J. Ko, S. Jeong, A. R. Shawon, K. D. Lee and S. I. Shim (2021). "Simulation of wheat productivity using a model integrated with proximal and remotely controlled aerial sensing information." *Frontiers in plant science* 12: 649660.
- Siakou, M., A. Bruggeman, M. Eliades, H. Djuma, M. C. Kyriacou and A. Moriana (2022). "Phenology, Morphology and Physiology Responses of Deficit Irrigated 'Koroneiki' Olive Trees as Affected by Environmental Conditions and Alternate Bearing." *Agronomy* 12(4): 879.
- Sim, H. S., D. S. Kim, M. G. Ahn, S. R. Ahn and S. K. Kim (2020). "Prediction of strawberry growth and fruit yield based on environmental and growth data in a greenhouse for soil cultivation with applied autonomous facilities."
- Singh, Y. P., S. Arora, V. K. Mishra, H. Dixit and R. K. Gupta (2019). "Plant and soil responses to the combined application of organic amendments and

- inorganic fertilizers in degraded sodic soils of indo-gangetic plains." *Communications in Soil Science and Plant Analysis* 50(20): 2640-2654.
- Sobejano-Paz, V., T. N. Mikkelsen, A. Baum, X. Mo, S. Liu, C. J. Köppl, M. S. Johnson, L. Gulyas and M. García (2020). "Hyperspectral and thermal sensing of stomatal conductance, transpiration, and photosynthesis for soybean and maize under drought." *Remote Sensing* 12(19): 3182.
- Song, Y., J. Wang and B. Shan (2019). An Effective Leaf Area Index Estimation Method for Wheat from UAV-Based Point Cloud Data, IEEE.
- Sperlich, D., D. Nadal-Sala, C. Gracia, J. Kreuzwieser, M. Hanewinkel and R. Yousefpour (2020). "Gains or losses in forest productivity under climate change? The uncertainty of CO₂ fertilization and climate effects." *Climate* 8(12): 141.
- Stone, C. H., D. C. Close, S. A. Bound and I. Hunt (2022). "Training Systems for Sweet Cherry: Light Relations, Fruit Yield and Quality." *Agronomy* 12(3): 643.
- Su, B., G. Zhao and C. Dong (2018). "Spatiotemporal variability of soil nutrients and the responses of growth during growth stages of winter wheat in northern China." *PloS one* 13(12): e0203509.
- Su, W., J. Huang, D. Liu and M. Zhang (2019). "Retrieving corn canopy leaf area index from multitemporal Landsat imagery and terrestrial LiDAR data." *Remote Sensing* 11(5): 572.
- Sugai, L. S. M., T. S. F. Silva, D. Llusia and T. Siqueira (2021). "Drivers of assemblage-wide calling activity in tropical anurans and the role of temporal resolution." *Journal of Animal Ecology* 90(3): 673-684.
- Sumnall, M. J., T. J. Albaugh, D. R. Carter, R. L. Cook, W. C. Hession, O. C. Campoe, R. A. Rubilar, R. H. Wynne and V. A. Thomas (2022). "Effect of varied unmanned aerial vehicle laser scanning pulse density on accurately quantifying forest structure." *International Journal of Remote Sensing* 43(2): 721-750.
- Sun, C., J. Zhou, Y. Ma, Y. Xu, B. Pan and Z. Zhang (2022). "A review of remote sensing for potato traits characterization in precision agriculture." *Frontiers in Plant Science* 13.
- Sun, D., W. Zhang, Y. Lin, Z. Liu, W. Shen, L. Zhou, X. Rao, S. Liu, X.-a. Cai and D. He (2018). "Soil erosion and water retention varies with plantation type and age." *Forest Ecology and Management* 422: 1-10.
- Susaki, J., R. Miyagaki, A. Kuriki and S. Jin (2019). "EXAMINATION OF THE TERRAIN EFFECT FOR TERRESTRIAL ALBEDO ESTIMATION VIA BRDF MODEL PARAMETERS." *ISPRS Annals of Photogrammetry, Remote Sensing & Spatial Information Sciences* 4.
- Tagert, M. L. M., B. C. Hodges, J. O. Paz and D. B. Reginelli (2021). Factors Affecting In-Field Soil Water Variability and Irrigation, American Society of Agricultural and Biological Engineers.
- Tang, J., W. Han and L. Zhang (2019). "UAV multispectral imagery combined with the FAO-56 dual approach for maize evapotranspiration mapping in the north China Plain." *Remote Sensing* 11(21): 2519.
- Tang, W., R. Tang, T. Guo and J. Wei (2022). "Remote Prediction of Oilseed Rape Yield via Gaofen-1 Images and a Crop Model." *Remote Sensing* 14(9): 2041.
- Tao, Z., H. Li and B. Si (2021). "Stand age and precipitation affect deep soil water depletion of economical forest in the loess area." *Agricultural and Forest Meteorology* 310: 108636.
- Tao, Z., E. Neil and B. Si (2021). "Determining deep root water uptake patterns with tree age in the Chinese loess area." *Agricultural Water Management* 249: 106810.
- Tatsumi, K. (2021). "A Dynamic Model for the Relationship between Rice Growth and Meteorology, Water, Nitrogen, and Canopy Structure." *Transactions of the ASABE* 64(5): 1581-1610.
- Tewes, A., H. Hoffmann, G. Krauss, F. Schäfer, C. Kerkhoff and T. Gaiser (2020). "New approaches for the assimilation of LAI measurements into a crop model ensemble to improve wheat biomass estimations." *Agronomy* 10(3): 446.
- Tewes, A., C. Montzka, M. Nolte, G. Krauss, H. Hoffmann and T. Gaiser (2020). "Assimilation of sentinel-2 estimated LAI into a crop model: Influence of timing and frequency of acquisitions on simulation of water stress and biomass production of winter wheat." *Agronomy* 10(11): 1813.
- Thacker, S. J. and S. A. Quideau (2021). "Rhizosphere response to predicted vegetation shifts in boreal forest floors." *Soil Biology and Biochemistry* 154: 108141.
- Tian, L., Y. Qu and J. Qi (2021). "Estimation of forest LAI using discrete airborne LiDAR: a review." *Remote Sensing* 13(12): 2408.

- Tor-Ngern, P. and N. Leksungnoen (2020). "Investigating carbon dioxide absorption by urban trees in a new park of Bangkok, Thailand." *BMC ecology* 20(1): 1-10.
- Upreti, D., W. Huang, W. Kong, S. Pascucci, S. Pignatti, X. Zhou, H. Ye and R. Casa (2019). "A comparison of hybrid machine learning algorithms for the retrieval of wheat biophysical variables from sentinel-2." *Remote Sensing* 11(5): 481.
- Upreti, D., S. Pignatti, S. Pascucci, M. Tolomio, W. Huang and R. Casa (2020). "Bayesian Calibration of the Aquacrop-OS Model for Durum Wheat by Assimilation of Canopy Cover Retrieved from VENµS Satellite Data." *Remote Sensing* 12(16): 2666.
- Vanli, Ö., B. B. Ustundag, I. Ahmad, I. M. Hernandez-Ochoa and G. Hoogenboom (2019). "Using crop modeling to evaluate the impacts of climate change on wheat in southeastern turkey." *Environmental Science and Pollution Research* 26(28): 29397-29408.
- Verma, B., R. Prasad, P. K. Srivastava, S. A. Yadav, P. Singh and R. K. Singh (2022). "Investigation of optimal vegetation indices for retrieval of leaf chlorophyll and leaf area index using enhanced learning algorithms." *Computers and Electronics in Agriculture* 192: 106581.
- Verma, S., J.-P. Salminen, F. Taube and C. S. Malisch (2021). "Large inter-and intraspecies variability of polyphenols and proanthocyanidins in eight temperate forage species indicates potential for their exploitation as nutraceuticals." *Journal of Agricultural and Food Chemistry* 69(42): 12445-12455.
- Wagle, P., P. H. Gowda, S. S. Anapalli, K. N. Reddy and B. K. Northup (2017). "Growing season variability in carbon dioxide exchange of irrigated and rainfed soybean in the southern United States." *Science of the Total Environment* 593: 263-273.
- Wagle, P., P. H. Gowda, P. Manjunatha, B. K. Northup, A. C. Rocateli and S. Taghvaeian (2019). "Carbon and water dynamics in co-located winter wheat and canola fields in the US Southern Great Plains." *Agricultural and Forest Meteorology* 279: 107714.
- Wagle, P., P. H. Gowda, J. P. S. Neel, B. K. Northup and Y. Zhou (2020). "Integrating eddy fluxes and remote sensing products in a rotational grazing native tallgrass prairie pasture." *Science of The Total Environment* 712: 136407.
- Wagle, P., P. H. Gowda, B. K. Northup, J. P. S. Neel, P. J. Starks, K. E. Turner, D. N. Moriasi, X. Xiao and J. L. Steiner (2021). "Carbon dioxide and water vapor fluxes of multi-purpose winter wheat production systems in the US Southern Great Plains." *Agricultural and Forest Meteorology* 310: 108631.
- Wagle, P., P. H. Gowda, B. K. Northup, P. J. Starks and J. P. S. Neel (2019). "Response of tallgrass prairie to management in the US Southern Great Plains: Site descriptions, management practices, and eddy covariance instrumentation for a long-term experiment." *Remote Sensing* 11(17): 1988.
- Waldrep, K. S., M. L. M. Tagert, J. McCoy, M. Harrison and A. Taylor (2022). UAV Multispectral Imagery for Site-Specific Management of Iron Deficiency Chlorosis (IDC) in Soybean, American Society of Agricultural and Biological Engineers.
- Wan, L., J. Zhang, X. Dong, X. Du, J. Zhu, D. Sun, Y. Liu, Y. He and H. Cen (2021). "Unmanned aerial vehicle-based field phenotyping of crop biomass using growth traits retrieved from PROSAIL model." *Computers and Electronics in Agriculture* 187: 106304.
- Wan, L., J. Zhu, X. Du, J. Zhang, X. Han, W. Zhou, X. Li, J. Liu, F. Liang and Y. He (2021). "A model for phenotyping crop fractional vegetation cover using imagery from unmanned aerial vehicles." *Journal of experimental botany* 72(13): 4691-4707.
- Wang, D. and L. Wang (2017). "Dynamics of evapotranspiration partitioning for apple trees of different ages in a semiarid region of northwest China." *Agricultural Water Management* 191: 1-15.
- Wang, D., H. Zhang and J. Gartung (2020). "Long-term productivity of early season peach trees under different irrigation methods and postharvest deficit irrigation." *Agricultural Water Management* 230: 105940.
- Wang, J., X. Gao, X. Zhao, H. Wan, Y. Zeng, L. Yu, B. Robinson, Y. Zhou, K. H. M. Siddique and P. Wu (2021). "Soil hydrothermal modeling in a dry alpine agricultural zone: The effect of soil airflow." *Geoderma* 402: 115354.
- Wang, L., Z. Liu, J. Guo, Y. Wang, J. Ma, S. Yu, P. Yu and L. Xu (2021). "Estimate canopy transpiration in larch plantations via the interactions among reference evapotranspiration, leaf area index, and soil moisture." *Forest Ecology and Management* 481: 118749.
- Wang, N., J. G. P. W. Clevers, S. Wieneke, H. Bartholomeus and L. Kooistra (2022). "Potential of

- UAV-based sun-induced chlorophyll fluorescence to detect water stress in sugar beet." *Agricultural and Forest Meteorology* 323: 109033.
- Wang, N., B. Siegmann, U. Rascher, J. G. P. W. Clevers, O. Muller, H. Bartholomeus, J. Bendig, D. Masiliūnas, R. Pude and L. Kooistra (2022). "Comparison of a UAV-and an airborne-based system to acquire far-red sun-induced chlorophyll fluorescence measurements over structurally different crops." *Agricultural and Forest Meteorology* 323: 109081.
- Wang, P., B. Gao, X. Gong, L. Tong, Y. Sun and X. Gu (2020). The Research of Leaf Area Index Analyzer based on Embedded Platform, IEEE.
- Wang, P., L. Tong, X. Zhou, X. Gang, B. Gao, Y. Li and Y. Sun (2021). Estimation of Leaf Area Index Based on Hemispherical Canopy Photography, IEEE.
- Wang, S., A. Ibrom, P. Bauer-Gottwein and M. Garcia (2018). "Incorporating diffuse radiation into a light use efficiency and evapotranspiration model: An 11-year study in a high latitude deciduous forest." *Agricultural and Forest Meteorology* 248: 479-493.
- Wang, S., G. Zhu, D. Xia, J. Ma, T. Han, T. Ma, K. Zhang and S. Shang (2019). "The characteristics of evapotranspiration and crop coefficients of an irrigated vineyard in arid Northwest China." *Agricultural Water Management* 212: 388-398.
- Wang, W., X. Gao, Y. Cheng, Y. Ren, Z. Zhang, R. Wang, J. Cao and H. Geng (2022). "QTL Mapping of Leaf Area Index and Chlorophyll Content Based on UAV Remote Sensing in Wheat." *Agriculture* 12(5): 595.
- Wang, W., J. Jiang, X. Qiao and D. Yuan (2019). "Identification of plants responding to natural gas microleakage stress using solar-induced chlorophyll fluorescence." *Journal of Applied Remote Sensing* 13(3): 034531.
- Wang, Z., Y. Ma, Y. Zhang and J. Shang (2022). "Review of remote sensing applications in grassland monitoring." *Remote Sensing* 14(12): 2903.
- Wei, B., D. Zhang, D. Kou, G. Yang, F. Liu, Y. Peng and Y. Yang (2022). "Decreased ultraviolet radiation and decomposer biodiversity inhibit litter decomposition under continuous nitrogen inputs." *Functional Ecology* 36(4): 998-1009.
- Weiß, T., T. Ramsauer, T. Jagdhuber, A. Löw and P. Marzahn (2021). "Sentinel-1 backscatter analysis and radiative transfer modeling of dense winter wheat time series." *Remote Sensing* 13(12): 2320.
- Weiß, T., T. Ramsauer, A. Löw and P. Marzahn (2020). "Evaluation of different radiative transfer models for microwave backscatter estimation of wheat fields." *Remote Sensing* 12(18): 3037.
- Wen-shi, H. U., M. Fan-jin, L. I. Jing, L. U. Zhi-feng, R. E. N. Tao and L. U. Jian-wei (2021). "Effects of potassium application rates on succession of main photosynthetic organs in oilseed rape." *CHINESE JOURNAL OF OIL CROP SCIENCES* 43(5): 843.
- Weselek, A., A. Bauerle, J. Hartung, S. Zikeli, I. Lewandowski and P. Högy (2021). "Agrivoltaic system impacts on microclimate and yield of different crops within an organic crop rotation in a temperate climate." *Agronomy for Sustainable Development* 41(5): 1-15.
- Weselek, A., A. Bauerle, S. Zikeli, I. Lewandowski and P. Högy (2021). "Effects on crop development, yields and chemical composition of celeriac (*Apium graveolens* L. Var. *Rapaceum*) cultivated underneath an agrivoltaic system." *Agronomy* 11(4): 733.
- White, W. A., M. M. Alsina, H. Nieto, L. G. McKee, F. Gao and W. P. Kustas (2019). "Determining a robust indirect measurement of leaf area index in California vineyards for validating remote sensing-based retrievals." *Irrigation Science* 37(3): 269-280.
- Whyte, H. D. and C. H. Lusk (2019). "Woody debris in treefall gaps shelters palatable plant species from deer browsing, in an old-growth temperate forest." *Forest Ecology and Management* 448: 198-207.
- Wilkinson, M., M. C. Bell and J. I. L. Morison (2021). "A Raspberry Pi-based camera system and image processing procedure for low cost and long-term monitoring of forest canopy dynamics." *Methods in Ecology and Evolution* 12(7): 1316-1322.
- Wilson, C. R., C. H. Lusk and D. I. Campbell (2022). "The role of the peat seed bank in plant community dynamics of a fire-prone New Zealand restiad bog." *Austral Ecology* 47(7): 1515-1527.
- Wittstruck, L., T. Jarmer, D. Trautz and B. Waske (2022). "Estimating LAI From Winter Wheat Using UAV Data and CNNs." *IEEE Geoscience and Remote Sensing Letters* 19: 1-5.
- Wocher, M., K. Berger, J. Verrelst and T. Hank (2022). "Retrieval of carbon content and biomass from hyperspectral imagery over cultivated areas." *ISPRS*

- Journal of Photogrammetry and Remote Sensing 193: 104-114.
- Wolter, P. T., J. J. Olbrich and P. J. Johnson (2021). "Modeling sub-boreal forest canopy bulk density in Minnesota, USA, using synthetic aperture radar and optical satellite sensor data." *Fire Ecology* 17(1): 1-23.
- Wu, G., K. Guan, C. Jiang, H. Kimm, G. Miao, C. J. Bernacchi, C. E. Moore, E. A. Ainsworth, X. Yang and J. A. Berry (2022). "Attributing differences of solar-induced chlorophyll fluorescence (SIF)-gross primary production (GPP) relationships between two C4 crops: corn and miscanthus." *Agricultural and Forest Meteorology* 323: 109046.
- Xi, Y., Q. Tian, W. Zhang, Z. Zhang, X. Tong, M. Brandt and R. Fensholt (2022). "Quantifying understory vegetation density using multi-temporal Sentinel-2 and GEDI LiDAR data." *GIScience & Remote Sensing* 59(1): 2068-2083.
- Xing, N., W. Huang, H. Ye, Y. Ren and Q. Xie (2021). "Joint Retrieval of Winter Wheat Leaf Area Index and Canopy Chlorophyll Density Using Hyperspectral Vegetation Indices." *Remote Sensing* 13(16): 3175.
- Xu, M., R. Liu, J. M. Chen, Y. Liu, R. Shang, W. Ju, C. Wu and W. Huang (2019). "Retrieving leaf chlorophyll content using a matrix-based vegetation index combination approach." *Remote Sensing of Environment* 224: 60-73.
- Xu, Z., H. Ren, X. Wei, K. Ouyang, D. Li, Y. Guo, S. Wen, J. Long, J. Wang and D. Hui (2021). "Distribution and conservation status of *Camellia longzhouensis* (Theaceae), a critically endangered plant species endemic to southern China." *Global Ecology and Conservation* 27: e01585.
- Yadav, S. A., R. Prasad, A. K. Vishwakarma, J. Sharma, B. Verma and P. K. Srivastava (2020). "Optimization of dual-polarized bistatic specular scatterometer for studying microwave scattering response and vegetation growth parameters retrieval of paddy crop using a machine learning algorithm." *Computers and Electronics in Agriculture* 175: 105592.
- Yadav, S. A., R. Prasad, V. P. Yadav, B. Verma, S. K. Singh, J. Sharma and P. K. Srivastava (2022). "Far-field bistatic scattering simulation for rice crop biophysical parameters retrieval using modified radiative transfer model at X-and C-band." *Remote Sensing of Environment* 272: 112959.
- Yadav, V. P., R. Prasad, R. Bala and A. kumar Vishwakarma (2019). Estimation of soil moisture through water cloud model using sentinel-1A SAR data, IEEE.
- Yadav, V. P., R. Prasad, R. Bala and P. K. Srivastava (2020). "Synergy of vegetation and soil microwave scattering model for leaf area index retrieval using C-band sentinel-1A satellite data." *IEEE Geoscience and Remote Sensing Letters* 19: 1-5.
- Yadav, V. P., R. Prasad, R. Bala and A. K. Vishwakarma (2020). "An improved inversion algorithm for spatio-temporal retrieval of soil moisture through modified water cloud model using C-band Sentinel-1A SAR data." *Computers and Electronics in Agriculture* 173: 105447.
- Yadav, V. P., R. Prasad, R. Bala, A. K. Vishwakarma, S. A. Yadav and S. K. Singh (2019). "A COMPARISON OF MACHINE-LEARNING REGRESSION ALGORITHMS FOR THE ESTIMATION OF LAI USING LANDSAT-8 SA LITE DATA." *International Archives of the Photogrammetry, Remote Sensing & Spatial Information Sciences*.
- Yan, G., R. Hu, J. Luo, M. Weiss, H. Jiang, X. Mu, D. Xie and W. Zhang (2019). "Review of indirect optical measurements of leaf area index: Recent advances, challenges, and perspectives." *Agricultural and forest meteorology* 265: 390-411.
- Yang, H., G. Yang, R. Gaulton, C. Zhao, Z. Li, J. Taylor, D. Wicks, A. Minchella, E. Chen and X. Yang (2019). "In-season biomass estimation of oilseed rape (*Brassica napus* L.) using fully polarimetric SAR imagery." *Precision Agriculture* 20(3): 630-648.
- Yi, R., W. Luo and C. Soulsby (2014). "Hysteresis in sap flow and its controlling mechanisms for a deciduous broad-leaved tree species in a humid karst region." *Chinese Science Bulletin* 59: 2359.
- Yin, H., F. Kong, I. Dronova, A. Middel and P. James (2019). "Investigation of extensive green roof outdoor spatio-temporal thermal performance during summer in a subtropical monsoon climate." *Science of the Total Environment* 696: 133976.
- Yu, L., J. Shang, Z. Cheng, Z. Gao, Z. Wang, L. Tian, D. Wang, T. Che, R. Jin and J. Liu (2020). "Assessment of Cornfield LAI Retrieved from Multi-Source Satellite Data Using Continuous Field LAI Measurements Based on a Wireless Sensor Network." *Remote Sensing* 12(20): 3304.
- Yuan, H., J. Yang, X. Jiang, Y. Zhu, W. Cao and J. Ni

- (2022). "Design and testing of a crop growth sensor aboard a fixed-wing unmanned aerial vehicle." *Computers and Electronics in Agriculture* 194: 106762.
- Zabret, K. and M. Šraj (2021). "How characteristics of a rainfall event and the meteorological conditions determine the development of stemflow: A case study of a birch tree." *Frontiers in Forests and Global Change* 4: 663100.
- Zagirova, S. V. and O. A. Mikhailov (2021). "Ecosystem Exchange of Carbon Dioxide and Water in Cowberry-Lichen Pine Forest in the Middle Taiga Subzone of Eastern Europe." *Russian Journal of Ecology* 52(3): 201-211.
- Zeng, L., G. Peng, R. Meng, J. Man, W. Li, B. Xu, Z. Lv and R. Sun (2021). "Wheat Yield Prediction Based on Unmanned Aerial Vehicles-Collected Red-Green-Blue Imagery." *Remote Sensing* 13(15): 2937.
- Zeng, Y., J. Li, Q. Liu, A. R. Huete, B. Xu, G. Yin, W. Fan, Y. Ouyang, K. Yan and D. Hao (2019). "A Radiative transfer model for patchy landscapes based on stochastic Radiative transfer theory." *IEEE Transactions on Geoscience and Remote Sensing* 58(4): 2571-2589.
- Zhai, L., L. Zhou, Z. Qiu and H. Cen (2021). An automatic system for measuring canopy solar-induced chlorophyll fluorescence in the field for long-term, American Society of Agricultural and Biological Engineers.
- Zhang, L., Y. Niu, H. Zhang, W. Han, G. Li, J. Tang and X. Peng (2019). "Maize canopy temperature extracted from UAV thermal and RGB imagery and its application in water stress monitoring." *Frontiers in plant science* 10: 1270.
- Zhang, R., X. Xu, M. Liu, Y. Zhang, C. Xu, R. Yi and W. Luo (2018). "Comparing ET-VPD hysteresis in three agroforestry ecosystems in a subtropical humid karst area." *Agricultural Water Management* 208: 454-464.
- Zhang, R., X. Xu, M. Liu, Y. Zhang, C. Xu, R. Yi, W. Luo and C. Soulsby (2019). "Hysteresis in sap flow and its controlling mechanisms for a deciduous broad-leaved tree species in a humid karst region." *Science China Earth Sciences* 62(11): 1744-1755.
- Zhang, X., K. Zhang, Y. Sun, Y. Zhao, H. Zhuang, W. Ban, Y. Chen, E. Fu, S. Chen and J. Liu (2022). "Combining spectral and texture features of UAS-based multispectral images for maize leaf area index estimation." *Remote Sensing* 14(2): 331.
- Zhang, X., K. Zhang, S. Wu, H. Shi, Y. Sun, Y. Zhao, E. Fu, S. Chen, C. Bian and W. Ban (2022). "An Investigation of Winter Wheat Leaf Area Index Fitting Model Using Spectral and Canopy Height Model Data from Unmanned Aerial Vehicle Imagery." *Remote Sensing* 14(20): 5087.
- Zhang, Y., G. Zhu, L. Yin, L. Ma, C. Xu, H. Chen, T. Ma, Y. Su, Y. Zhu and L. He (2022). "Optimal soil water content and temperature sensitivity differ among heterotrophic and autotrophic respiration from oasis agroecosystems." *Geoderma* 425: 116071.
- Zhang, Z., S. Xu, Q. Wei, Y. Yang, H. Pan, X. Fu, Z. Fan, B. Qin, X. Wang and X. Ma (2022). "Variation in Leaf Type, Canopy Architecture, and Light and Nitrogen Distribution Characteristics of Two Winter Wheat (*Triticum aestivum* L.) Varieties with High Nitrogen-Use Efficiency." *Agronomy* 12(10): 2411.
- Zhao, T., J. Shi, L. Lv, H. Xu, D. Chen, Q. Cui, T. J. Jackson, G. Yan, L. Jia and L. Chen (2020). "Soil moisture experiment in the Luan River supporting new satellite mission opportunities." *Remote Sensing of Environment* 240: 111680.
- Zhao, W., X. Ji, B. Jin, Z. Du, J. Zhang, D. Jiao and L. Zhao (2022). "Experimental partitioning of rainfall into throughfall, stemflow and interception loss by *Haloxylon ammodendron*, a dominant sand-stabilizing shrub in northwestern China." *Science of The Total Environment*: 159928.
- Zhou, Q., F. Li, X.-a. Cai, X. Rao, L. Zhou, Z. Liu, Y. Lin and S. Fu (2019). "Survivorship of plant species from soil seedbank after translocation from subtropical natural forests to plantation forests." *Forest Ecology and Management* 432: 741-747.
- Zhou, Q., X. Xue, W. Qin, C. Chen and C. Cai (2020). "Analysis of pesticide use efficiency of a UAV sprayer at different growth stages of rice." *International Journal of Precision Agricultural Aviation* 3(1).
- Zhou, X., L. Tong, P. Wang, X. Gong, Y. Li, B. Gao, Y. Sun and X. Gu (2020). Research on the Optical Method of Leaf Area Index Measurement Base on the Hemispherical Image, IEEE.
- Zhu, X., W. Liu, X. Yuan, C. Chen, K. Zhu, W. Zhang and B. Yang (2022). "Aggregate stability and size distribution regulate rainsplash erosion: Evidence from a humid tropical soil under different land-use regimes." *Geoderma* 420: 115880.

- Zhu, Y., E. M. Ludwig and K. A. Cherkauer (2022). "Estimation of Corn Latent Heat Flux from High Resolution Thermal Imagery." *Remote Sensing* 14(11): 2682.
- Zribi, M., S. Muddu, S. Bousbih, A. Al Bitar, S. K. Tomer, N. Baghdadi and S. Bandyopadhyay (2019). "Analysis of L-band SAR data for soil moisture estimations over agricultural areas in the tropics." *Remote Sensing* 11(9): 1122.
- 박원상, 김감곤, 정용현, 최나영 and 나채인 (2021). "경운방법 및 파종시기가 남부지역 논 재배 옥수수와 후작 양파의 생육과 수량에 미치는 영향." *한작지* (Korean J. Crop Sci.) 66(4): 392-402.
- 付波霖, 孙军, 李雨阳, 左萍萍, 邓腾芳, 何宏昌, 范冬林 and 高二涛 (2022). "基于多光谱影像和机器学习算法的红树林树种 LAI 估算." *Transactions of the Chinese Society of Agricultural Engineering* 38(7).
- 张东彦, 韩宣言, 林芬芳, 杜世州, 张淦 and 洪琪 (2022). "基于多源无人机影像特征融合的冬小麦 LAI 估算." *Transactions of the Chinese Society of Agricultural Engineering* 38(9).
- 林维潘, 李怀民, 倪军, 蒋小平 and 朱艳 (2020). "基于便携式三波段作物生长监测仪的水稻长势监测." *Transactions of the Chinese Society of Agricultural Engineering* 36(20).
- 苏伟, 王伟, 刘哲, 张明政, 边大红, 崔彦宏 and 黄健熙 (2020). "无人机影像反演玉米冠层 LAI 和叶绿素含量的参数确定." *Transactions of the Chinese Society of Agricultural Engineering* 36(18).
- 莊忠翰, 陳忠義 and 蔡慧萍 (2022). "結合作物量測指標與無人機多光譜影像於茶樹生長評估." *Journal of Photogrammetry and Remote Sensing* 27(3): 131-150.



Please contact us with any corrections or potential additions to this list.
Tell us about your research by visiting www.licor.com/case-study.

LI-COR Environmental
4647 Superior Street
Lincoln, Nebraska 68504
Phone: +1-402-467-3576
Toll free: 800-447-3576 (U.S. &
Canada)
envsales@licor.com
envsupport@licor.com
licor.com/env

LI-COR GmbH, Germany
Siemensstrasse 25A
61352 Bad Homburg
Germany
Phone: +49 (0) 6172 17 17 771
envsales-gmbh@licor.com
envsupport-eu@licor.com

LI-COR Ltd., United Kingdom
St. John's Innovation Centre
Cowley Road
Cambridge
CB4 0WS
United Kingdom
Phone: +44 (0) 1223 422102
envsales-UK@licor.com
envsupport-eu@licor.com

Beijing LI-COR Bioscience Ltd.
Room 502-503, 5th Floor, Jimen
No.1 Office Building
Xitucheng Road, Haidian District
Beijing, China
Phone: +86-400-1131-511
china-sales@licor.com
china-support@licor.com