- [73] T. Udelhoven et al., "Retrieving the bioenergy potential from maize crops using hyperspectral remote sensing," *Remote Sens.*, vol. 5, no. 1, pp. 254–273, 2013.
- [74] X. Kang, Z. Fei, P. Duan, and S. Li, "Fog model-based hyperspectral image defogging," *IEEE Trans. Geosci. Remote Sens.*, vol. 60, 2022, Art. no. 5512512.
- [75] A. S. Laliberte, M. A. Goforth, C. M. Steele, and A. Rango, "Multispectral remote sensing from unmanned aircraft: Image processing workflows and applications for rangeland environments," *Remote Sens.*, vol. 3, no. 11, pp. 2529–2551, 2011.
- [76] K. Whitehead and C. H. Hugenholtz, "Remote sensing of the environment with small unmanned aircraft systems (UASs), Part 1: A review of progress and challenges," *J. Unmanned Veh. Syst.*, vol. 2, no. 3, pp. 69–85, 2014.
- [77] M. J. Barnsley, J. J. Settle, M. A. Cutter, D. R. Lobb, and F. Teston, "The PROBA/CHRIS mission: A low-cost smallsat for hyperspectral multiangle observations of the Earth surface and atmosphere," *IEEE Trans. Geosci. Remote Sens.*, vol. 42, no. 7, pp. 1512–1520, Jul. 2004.
- [78] P. Jarecke and L. Liao, "Radiometric performance characterization of the Hyperion imaging spectrometer instrument," in *Proc. Conf. Characterization Radiometric Calibration Remote Sens.*, 1999.
- [79] W. Zhang and S. Liu, "Applications of the small satellite constellation for environment and disaster monitoring and forecasting," *Int. J. Disaster Risk Sci.*, vol. 1, pp. 9–16, 2010.
- [80] C. Galeazzi, A. Sacchetti, A. Cisbani, and G. Babini, "The PRISMA program," in *Proc. IEEE Int. Geosci. Remote Sens. Symp.*, 2008, pp. IV-105–IV-108.
- [81] H. Kaufmann et al., "Environmental mapping and analysis program (EnMAP)—Recent advances and status," in *Proc. IEEE Int. Geosci. Remote Sens. Symp.*, 2008, pp. IV-109–IV-112.
- [82] S. Chien, D. Silverman, A. G. Davies, and D. Mandl, "Onboard science processing concepts for the HyspIRI mission," *IEEE Intell. Syst.*, vol. 24, no. 6, pp. 12–19, Nov./Dec. 2009.
- [83] S. Lu, B. Wu, N. Yan, and H. Wang, "Water body mapping method with HJ-1A/B satellite imagery," *Int. J. Appl. Earth Observ. Geoinf.*, vol. 13, no. 3, pp. 428–434, 2011.
- [84] D. H. Pearlshtien, S. Pignatti, U. Greisman-Ran, and E. Ben-Dor, "PRISMA sensor evaluation: A case study of mineral mapping performance over Makhtesh Ramon, Israel," *Int. J. Remote Sens.*, vol. 42, no. 15, pp. 5882–5914, 2021.
- [85] "PRISMA (hyperspectral)," *eoPortal*, 2012. Accessed: Sep. 7, 2023. [Online]. Available: https://www.eoportal.org/satellite-missions/prisma-hyperspectral
- [86] M. Teke, H. S. Deveci, O. Haliloğlu, S. Z. Gürbüz, and U. Sakarya, "A short survey of hyperspectral remote sensing applications in agriculture," in *Proc. 6th Int. Conf. Recent Adv. Space Technol.*, 2013, pp. 171–176.
- [87] "EnMAP (Environmental Monitoring and Analysis Program)," *eoPortal*, 2012. Accessed: Sep. 7, 2023. [online]. Available: https://www.eoportal.org/satellite-missions/enmap
- [88] C. M. Lee et al., "An introduction to the nasa hyperspectral infrared imager (HyspIRI) mission and preparatory activities," *Remote Sens. Environ.*, vol. 167, pp. 6–19, 2015.
- [89] S. Moharana and S. Dutta, "Spatial variability of chlorophyll and nitrogen content of rice from hyperspectral imagery," *J. Photogrammetry Remote Sens.*, vol. 122, pp. 17–29, 2016.
- [90] P. S. Thenkabail, I. Mariotto, M. K. Gumma, E. M. Middleton, D. R. Landis, and K. F. Huemmrich, "Selection of hyperspectral narrowbands (HNBs) and composition of hyperspectral two-band vegetation indices (HVIs) for biophysical characterization and discrimination of crop types using field reflectance and Hyperion/EO-1 data," *IEEE J. Sel. Topics Appl. Earth Observ. Remote Sens.*, vol. 6, no. 2, pp. 427–439, Apr. 2013.
- [91] A. Bannari, K. Staenz, C. Champagne, and K. S. Khurshid, "Spatial variability mapping of crop residue using Hyperion (EO-1) hyperspectral data," *Remote Sens.*, vol. 7, no. 6, pp. 8107–8127, 2015.
- [92] A. Apan, A. Held, S. Phinn, and J. Markley, "Detecting sugarcane 'orange rust' disease using EO-1 Hyperion hyperspectral imagery," *Int. J. Remote Sens.*, vol. 25, no. 2, pp. 489–498, 2004.
- [93] C. Gomez, R. A. V. Rossel, and A. B. McBratney, "Soil organic carbon prediction by hyperspectral remote sensing and field Vis-NIR spectroscopy: An Australian case study," *Geoderma*, vol. 146, nos. 3/4, pp. 403–411, 2008.
- [94] H. Liu, B. Bruning, T. Garnett, and B. Berger, "Hyperspectral imaging and 3D technologies for plant phenotyping: From satellite to close-range sensing," *Comput. Electron. Agriculture*, vol. 175, 2020, Art. no. 105621.

- [95] I. A. Huqqani and K. Khurshid, "Comparative study of supervised classification of urban area hyperspectral satellite imagery," *J. Space Technol.*, vol. 4, no. 1, pp. 7–14, 2014.
- [96] C. Yang, J. H. Everitt, Q. Du, B. Luo, and J. Chanussot, "Using high-resolution airborne and satellite imagery to assess crop growth and yield variability for precision agriculture," *Proc. IEEE*, vol. 101, no. 3, pp. 582–592, Mar. 2013.
- [97] S. Bandopadhyay, A. Rastogi, and R. Juszczak, "Review of top-of-canopy sun-induced fluorescence (SIF) studies from ground, UAV, airborne to spaceborne observations," *Sensors*, vol. 20, no. 4, 2020, Art. no. 1144.
- [98] D. Pimentel, R. Zuniga, and D. Morrison, "Update on the environmental and economic costs associated with alien-invasive species in the United States," *Ecol. Econ.*, vol. 52, no. 3, pp. 273–288, 2005.
- [99] M. M. López et al., "Innovative tools for detection of plant pathogenic viruses and bacteria," *Int. Microbiol.*, vol. 6, no. 4, pp. 233–243, 2003.
- [100] S. Sankaran, A. Mishra, R. Ehsani, and C. Davis, "A review of advanced techniques for detecting plant diseases," *Comput. Electron. Agriculture*, vol. 72, no. 1, pp. 1–13, 2010.
- [101] Y. Fang and R. P. Ramasamy, "Current and prospective methods for plant disease detection," *Biosensors*, vol. 5, no. 3, pp. 537–561, 2015.
- [102] R. D. Graham, R. M. Welch, and H. E. Bouis, "Addressing micronutrient malnutrition through enhancing the nutritional quality of staple foods: Principles, perspectives and knowledge gaps," in *Adv. Agronomy*, vol. 70, pp. 77–142, 2001.
- [103] T. Fairhurst and A. Dobermann, "Rice in the global food supply," World, vol. 5, pp. 454–349, 2002.
- [104] M. Figueroa, K. E. Hammond-Kosack, and P. S. Solomon, "A review of wheat diseases—A field perspective," *Mol. Plant Pathol.*, vol. 19, no. 6, pp. 1523–1536, 2018.
- [105] E. T. Nuss and S. A. Tanumihardjo, "Maize: A paramount staple crop in the context of global nutrition," *Comprehensive Rev. Food Sci. Food Saf.*, vol. 9, no. 4, pp. 417–436, 2010.
- [106] F. Schneider et al., "A methodological approach for the on-site quantification of food losses in primary production: Austrian and German case studies using the example of potato harvest," *Waste Manage.*, vol. 86, pp. 106–113, 2019.
- [107] A. Pathak, R. Kapur, S. Solomon, R. Kumar, S. Srivastava, and P. Singh, "Sugar beet: A historical perspective in Indian context," *Sugar Tech*, vol. 16, pp. 125–132, 2014.
- [108] R. Bro, "Exploratory study of sugar production using fluorescence spectroscopy and multi-way analysis," *Chemometrics Intell. Lab. Syst.*, vol. 46, no. 2, pp. 133–147, 1999.
- [109] C. Loganes, S. Ballali, and C. Minto, "Main properties of canola oil components: A descriptive review of current knowledge," *Open Agriculture J.*, vol. 10, no. 1, pp. 69–74, 2016.
- [110] G. Brookes, T.-H. Yu, S. Tokgoz, and A. Elobeid, "The production and price impact of biotech corn, canola, and soybean crops," in *AgBioForum*, vol. 13, pp. 25–52, 2010.
- [111] N. Sabir and B. Singh, "Protected cultivation of vegetables in global arena: A review," *Indian J. Agricultural Sci.*, vol. 83, no. 2, pp. 123–135, 2013.
- [112] J. Wijnands, "The international competitiveness of fresh tomatoes, peppers and cucumbers," in *Proc. Int. Congr. Greenhouse Vegetables, Prod. Chain Fresh Tomatoes, Peppers, Cucumbers*, 2001, pp. 79–90.
- [113] A. Hadidi, G. Vidalakis, and T. Sano, "Economic significance of fruit tree and grapevine viroids," in *Viroids and Satellites*. Amsterdam, The Netherlands: Elsevier, 2017, pp. 15–25.
- [114] R. Ahmad, B. Hussain, and T. Ahmad, "Fresh and dry fruit production in Himalayan Kashmir, sub-Himalayan Jammu and trans-Himalayan Ladakh, India," in *Heliyon*, vol. 7, no. 1, 2021, Art. no. e05835.
- [115] W. E. Nganje, D. A. Bangsund, F. L. Leistritz, W. W. Wilson, and N. M. Tiapo, "Estimating the economic impact of a crop disease: The case of fusarium head blight in us wheat and barley," in *Proc. Nat. Fusarium Head Blight Forum*, 2002, pp. 275–281.
- [116] A. P. Sathe et al., "Role of silicon in elevating resistance against sheath blight and blast diseases in rice (Oryza Sativa L.)," *Plant Physiol. Biochem.*, vol. 166, pp. 128–139, 2021.
- [117] S. Ahuja and M. Payak, "Symptoms and signs of banded leaf and sheath blight of maize," *Phytoparasitica*, vol. 10, pp. 41–49, 1982.
- [118] D. Mishra, R. S. Rajput, N. W. Zaidi, and H. Singh, "Sheath blight and drought stress management in rice (Oryza Sativa) through trichoderma SPP," *Indian Phytopathol.*, vol. 73, pp. 71–77, 2020.
- [119] S. Devi and G. Sharma, "Blast disease of rice caused by Magnaporthe grisea: A review," *Assam Univ. J. Sci. Technol.*, vol. 6, no. 1, pp. 144–154, 2010.