1.	Record Nr.	UNINA990004180890403321
	Titolo	Annali del lessico contemporaneo italiano : neologismi 1993-94 / a cura di Michele A. Cortelazzo
	Pubbl/distr/stampa	Padova : Esedra, 1995
	ISBN	88-86413-03-3
	Descrizione fisica	91 p. ; 21 cm
	Disciplina	452.03
	Locazione	FLFBC
	Collocazione	452.03 COR 4
	Lingua di pubblicazione	Italiano
	Formato	Materiale a stampa
	Livello bibliografico	Monografia

2.	Record Nr.	UNINA9910842292703321
	Autore	Niu Haoyu
	Titolo	Smart Big Data in Digital Agriculture Applications : Acquisition, Advanced Analytics, and Plant Physiology-informed Artificial Intelligence / / by Haoyu Niu, YangQuan Chen
	Pubbl/distr/stampa	Cham : , : Springer Nature Switzerland : , : Imprint : Springer, , 2024
	ISBN	3-031-52645-7
	Edizione	[1st ed. 2024.]
	Descrizione fisica	1 online resource (243 pages)
	Collana	Agriculture Automation and Control, , 2731-3506
	Disciplina	338.10285
	Soggetti	Agriculture Plant physiology Quantitative research Engineering design Plant Physiology Data Analysis and Big Data Engineering Design
	Lingua di pubblicazione	Inglese
	Formato	Materiale a stampa
	Livello bibliografico	Monografia

Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Part I Why Big Data Is Not Smart Yet? -- 1. Introduction -- 2. Why Do Big Data and Machine Learning Entail the Fractional Dynamics? -- Part II Smart Big Data Acquisition Platforms -- 3. Small Unmanned Aerial Vehicles (UAVs) and Remote Sensing Payloads -- 4. The Edge-AI Sensors and Internet of Living Things (IoLT) -- 5. The Unmanned Ground Vehicles (UGVs) for Digital Agriculture -- Part III Advanced Big Data Analytics, Plant Physiology-informed Machine Learning, and Fractional-order Thinking -- 6. Fundamentals of Big Data, Machine Learning, and Computer VisionWorkflow -- 7. A Low-cost Proximate Sensing Method for Early Detection of Nematodes inWalnut Using Machine Learning Algorithms -- 8. Tree-level Evapotranspiration Estimation of Pomegranate Trees Using Lysimeter and UAV Multispectral Imagery -- 9. Individual Tree-level Water Status Inference Using High-resolution UAV Thermal Imagery and Complexity-informed Machine Learning -- 10. Scale-aware Pomegranate Yield Prediction Using UAV Imagery and Machine Learning -- Part IV Towards Smart Big Data in Digital Agriculture -- 11. Intelligent Bugs Mapping and Wiping (iBMW): An Affordable Robot-Driven Robot for Farmers -- 12. A Non-invasive Stem Water Potential Monitoring Method Using Proximate Sensor and Machine Learning Classification Algorithms -- 13. A Low-cost Soil Moisture Monitoring Method by Using Walabot and Machine Learning Algorithms -- 14. Conclusions and Future Research.
Sommario/riassunto	In the dynamic realm of digital agriculture, the integration of big data acquisition platforms has sparked both curiosity and enthusiasm among researchers and agricultural practitioners. This book embarks on a journey to explore the intersection of artificial intelligence and agriculture, focusing on small-unmanned aerial vehicles (UAVs), unmanned ground vehicles (UGVs), edge-AI sensors and the profound impact they have on digital agriculture, particularly in the context of heterogeneous crops, such as walnuts, pomegranates, cotton, etc. For example, lightweight sensors mounted on UAVs, including multispectral and thermal infrared cameras, serve as invaluable tools for capturing high-resolution images. Their enhanced temporal and spatial resolutions, coupled with cost effectiveness and near-real-time data acquisition, position UAVs as an optimal platform for mapping and monitoring crop variability in vast expanses. This combination of data acquisition platforms and advanced analytics generates substantial datasets, necessitating a deep understanding of fractional-order thinking, which is imperative due to the inherent “complexity” and consequent variability within the agricultural process. Much optimism is vested in the field of artificial intelligence, such as machine learning (ML) and computer vision (CV), where the efficient utilization of big data to make it “smart” is of paramount importance in agricultural research. Central to this learning process lies the intricate relationship between plant physiology and optimization methods. The key to the learning process is the plant physiology and optimization method. Crafting an efficient optimization method raises three pivotal questions: 1.) What represents the best approach to optimization? 2.) How can we achieve a more optimal optimization? 3.) Is it possible to demand “more optimal machine learning,” exemplified by deep learning, while minimizing the need for extensive labeled data for digital agriculture? This book details the foundations of the plant physiology-informed machine learning (PPIML) and the principle of tail matching (POTM) framework. It is the 9th title of the "Agriculture Automation and Control" book series published by Springer.