1.

Record Nr.	UNISALENTO991001766969707536
Autore	La Rosa, Giovanna
Titolo	Robotica : lo scenario, le applicazioni, le nuove frontiere / Giovanna La Rosa, Claudio Moriconi, Attilio Sacripanti
Pubbl/distr/stampa	Roma : Enea, 2008
ISBN	8882861724
Descrizione fisica	144 p. : ill. ; 24 cm
Collana	Focus. Tecnologie
Altri autori (Persone)	Moriconi, Claudioauthor Sacripanti, Attilio
Altri autori (Enti)	ENEA <Ente per le nuove tecnologie, l'energia e l'ambiente>
Disciplina	629.892
Soggetti	Industrial Robotics
Lingua di pubblicazione	Italiano
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references

2.

Record Nr.	UNINA9911031637803321
Autore	Priyadarshan P. M
Titolo	Plant Breeding 2050 : Next-Gen Crops / / edited by P. M. Priyadarshan, Rodomiro Ortiz
Pubbl/distr/stampa	Singapore : , : Springer Nature Singapore : , : Imprint : Springer, , 2025
ISBN	981-9505-83-6
Edizione	[1st ed. 2025.]
Descrizione fisica	1 online resource (1014 pages)
Collana	Biomedical and Life Sciences Series
Altri autori (Persone)	OrtizRodomiro
Disciplina	630
Soggetti	Agriculture Botany Plants - Reproduction Plant biotechnology Plant genetics Plant molecular biology Plant Science Plant Reproduction Plant Biotechnology Plant Genetics Plant Molecular Biology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	1. Voyage of Plant Breeding to 2050 -- 2. From Deficiency to Sufficiency: Tackling Hidden Hunger with Biofortified Staples -- 3. Breeding climate-resilient varieties: Focus crops on Cereals and Pulses for future food security -- 4. Crop wild relatives for breeding climate-smart and highly productive crops -- 5. The power of de novo domestication of wild Solanaceae for a changing climate -- 6. Biotic stress buildup under climate change and breeding innovations -- 7. Potential Breeding Strategies for Abiotic Stress Tolerance in Crops -- 8. Genotype × Environment Interaction: Molecular Basis and Environmental Adaptation of Demand-led Crop Varieties -- 9. Post-Genomic Era in Crop Breeding -- 10. Phenomics and next-generation phenotyping to increase genetic gains in crop breeding -- 11.

Phenomics to improve gene bank value and utility -- 12. Doubled Haploids: Accelerating the Breeding of Resilient Crops for the Future -- 13. Speed breeding : a case study with cereals -- 14. Computational Biology and Bioinformatics Tools and Databases for Next-Generation Plant Breeding -- 15. Metabolic engineering of essential micronutrients -- 16. Machine Learning and Pangenomics: Revolutionizing Plant Breeding for a Sustainable Future -- 17. Phenomic selection and digital imaging for characterizing plant genetic resources: A case study from the Colombian maize collection -- 18. New plant breeding technologies for climate-smart agriculture: enhancing abi-otic stress tolerance -- 19. Gene editing to ensure food supply under global warming -- 20. Beyond Gene Editing in the Plant Breeding Toolbox -- 21. Nanotechnology in crop breeding -- 22. Systems Biology Approach for Plant Breeding -- 23. Computational Biology in Plants: Technological Innovations in the Post-Genomic Era.

Sommario/riassunto

This book addresses the global issue of food security for the year 2050, when the population is expected to rise to 10 billion people. It is estimated that by year 2025 itself, the number of people experiencing acute hunger will rise to 270 million due to food crisis. Enhancing the existing sustainable agriculture activities to increase global food production is thus a necessity for achieving the sustainable development goal of zero hunger. This book discusses the creation of highly annotated crop pan-genomes that provide a snapshot of the genetic diversity. The advancements in genomic-assisted breeding techniques which enables restoration of a specie's lost gene repertoire are also covered. The progression of agriculture to automation or digitalization through high-throughput phenotyping techniques and big data analytical tools like artificial intelligence and machine learning is also discussed. Other important topics covered include systems biology approach, speed breeding, multiomics data interpretation and multidisciplinary breeding platforms. This book is a reference book for students, researchers, scientists and policymakers working in the field of agriculture, plant breeding and global food security.