

Special Issue

Advances in Plant Metabolomics and Metabolic Engineering for Crop Improvement

Message from the Guest Editors

Global food security faces unprecedented challenges from population growth, climate change, and land degradation. Traditional breeding alone is insufficient to meet future demands, making innovative strategies essential to enhance yield, nutritional quality, and stress resilience. Plant metabolomics, providing a comprehensive view of the biochemical phenotype, combined with metabolic engineering, offers powerful tools for designing next-generation crops. This Special Issue, "Advances in Plant Metabolomics and Metabolic Engineering for Crop Improvement," invites original research, reviews, and perspectives that explore novel analytical and computational methods, integration of multi-omics data, and case studies applying metabolomics and metabolic engineering to improve food, feed, and bioenergy crops.

Guest Editors

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Editor-in-Chief

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