Special Issue

Plant Metabolic Genetic Engineering

Message from the Guest Editors

Plant metabolic engineering is an effective and beneficial strategy in producing desired chemicals or other products. To boost the development of genetically modified plants, there is an urgent need to invent new technologies for the rapid identification of metabolites and isolate the key genes involved in the biosynthesis or regulation of these metabolites. In this Special Issue, we ask for contributions relating to **plant metabolic engineering** and **synthetic biology**. We would like to focus on metabolite identification, the isolation of key structural and/or regulatory genes, and precise genome engineering. We believe that quantitative approaches in metabolite analysis will help to reduce the time required to establish an efficient whole-cell biocatalyst, and the systems biology approach is helpful in reducing these unnecessary experiments at the wet-lab level and refining our targets (genes/enzymes) in the application of metabolic engineering. Therefore, successful examples of plant metabolic engineering using synthetic biology tools are also welcomed.

Guest Editors

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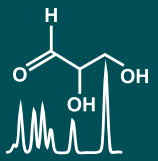

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Message from the Editor-in-Chief

The metabolome is the result of the combined effects of genetic and environmental influences on metabolic processes. Metabolomic studies can provide a global view of metabolism and thereby improve our understanding of the underlying biology. Advances in metabolomic technologies have shown utility for elucidating mechanisms which underlie fundamental biological processes including disease pathology. *Metabolites* is proud to be part of the development of metabolomics and we look forward to working with many of you to publish high quality metabolomic studies.

Editor-in-Chief

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