

Special Issue

Nanotechnological Advances in Plant Essential Oils

Message from the Guest Editors

Despite their valuable biological properties, the commercial use of EOs is delayed because of their low water solubility, high volatility, thermal decomposition, high oxidation rates and in many cases, poor extraction yields. To overcome these problems and enhance EO efficacy, several nanotechnological advances have been reported over the past decades. Searching for more environmentally friendly extraction methods, innovative and alternative techniques are currently available to improve the recovery of these natural products, such as emergent and ecofriendly pretreatments or alternative faster and cheaper extractions methods. Additionally, the incorporation of these volatile and complex mixtures of secondary metabolites into nanoscale materials and nanodevices has proven to be a successful strategy to protect EOs from degradation and losses by evaporation, achieving a controlled release of EOs and facilitating their handling.

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Plants is an open access journal which provides an advanced forum for research findings in areas related to plant function, its physiology, biology, taxonomy, stresses, and its interactions with other organisms. It publishes original research articles, reviews, reports, conference proceedings (peer reviewed full articles) and communications. In original research papers, it is important that full experimental details are provided. We also encourage timely reviews and commentaries on topics of interest to the plant research community.

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