



Application Progress of Terahertz in Biology

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Message from the Guest Editors

Dear Colleagues,

THz waves penetrate various materials with little or no losses and provide a 3D image of the material or object under investigation, similarly to X-rays; however, they do not ionize living cells, are not harmful, and can be used for body scanners at security checkpoint as clothes are transparent for THz waves. Consequently, THz spectroscopy is used for cancer diagnostics *in vitro*, and is a good candidate to perform this *in vivo*. Initial lab investigations are confirming this, which may be a huge step in providing cancer diagnoses without cutting painful skin samples.

THz images of plant leaves provide the structure of the leaf and a map of its water contents.

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Message from the Editor-in-Chief

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