

Special Issue

Application Progress of Terahertz in Biology

Message from the Guest Editors

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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As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

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