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# Nano-carbon Bendable Terahertz Camera: a Tool for Multi-view Inspection

Terahertz (THz) imaging technology is highly promising for the use in powerful non-destructive and non-contact inspections due to its abilities of high penetration and fingerprint spectra of various materials and molecules. My talk will present our recent development of two types of THz imaging systems: carbon-based THz flexible cameras [1-3] and plasmon-based near-field spectroscopic imagers [4-8]. Most real objects have various three-dimensional curvatures; however, conventional THz imaging technologies are mainly limited to flat samples, resulting in blind areas. The use of carbon nanotube films has enabled multi-view THz visualization and inspection without bulky optical components and systems (Fig. 1). The latter part of my talk explains plasmonic structures for sub-wavelength spectroscopy and imaging. I introduce novel resonant frequency tunable plasmonic structures and their applications to medical examination (Fig. 2).

### References

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### Figures

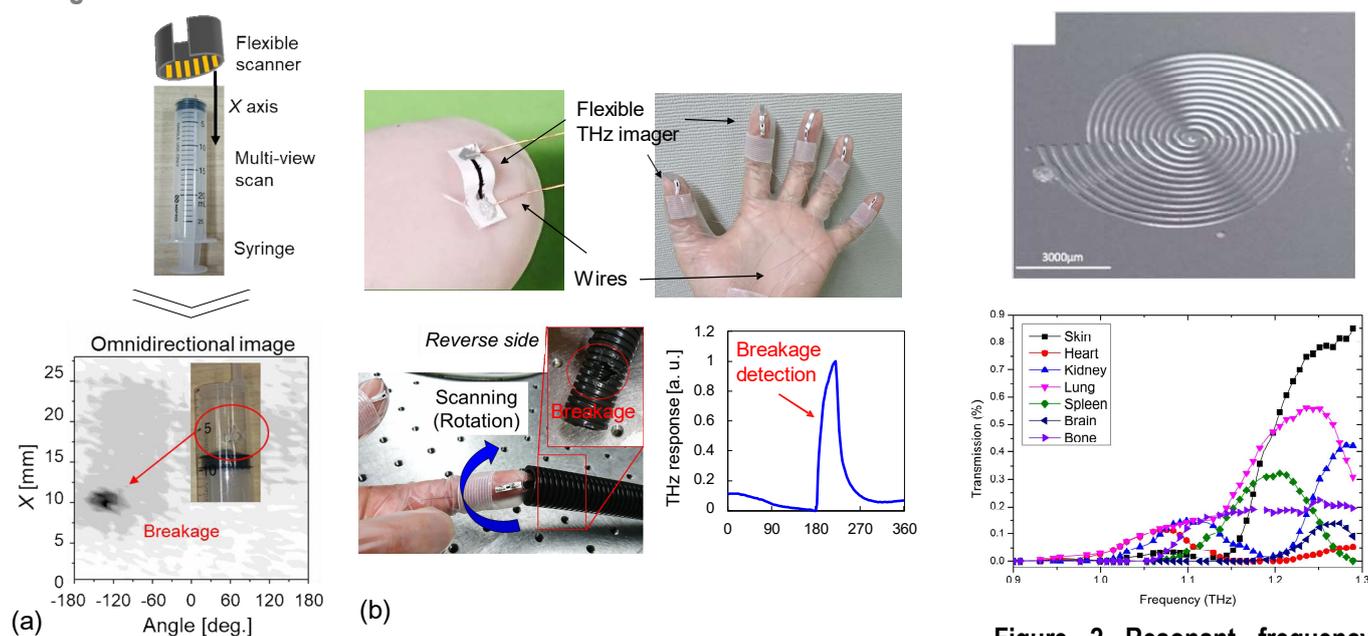


Figure 1: (a) Multi-view THz inspection of syringe with nano-carbon flexible camera. (b) Finger-wearable THz glove.

Figure 2 Resonant frequency tunable THz plasmonic structure and medical spectroscopy.