

PHOTOACOUSTIC TOMOGRAPHY OF HUMAN BRAIN

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This technology features a photon recycler to increase light transmittance through the human skull, a subtraction imaging method to image targets through human skull, and a filtering method to improve the contrast. Optical imaging is desirable because high functional hemoglobin contrast can be directly measured. However, pure optical imaging has contrast or resolution limitations. This photoacoustic tomography with subtraction imaging method can be used in human brain imaging. Furthermore, the photon recycler can be used to increase light transmittance.