

62

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Title:Optical properties of selected Chinese Traditional Patent Medicines and Western Medicines terahertz range

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Abstract:The spectral characteristics of Sang Ju Gan Mao Granules, Gan Mao Jie Du Tablet, Fu Fang Jin Yin Hua Granules and Compound Paracetamol, and Amantadine Hydrochloride Tablets are studied by terahertz time-domain spectroscopy (THz-TDS) technologies in the spectral range of 0.2-1.7 THz. The absorption spectra and the indexes of refraction are obtained. It can be seen that the three samples of Chinese Traditional Patent Medicines have almost the same absorption peaks at 1.44 THz. However, the absorption peaks of the three western medicine samples are at 0.73, 1.01, and 1.18 THz, respectively. The large spectral differences between different drugs are strong evidences that THz time-domain spectroscopy is a useful fingerprint technique in the study of pharmaceutical compounds and the crack down on the fake medicines.

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Main heading:Patents and inventions

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