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Title:Identifying Radix Curcumae by using terahertz spectroscopy

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Abstract:The absorption spectra from 0.2 THz to 1.6 THz of four kinds of similar Chinese herbs, including huangyujin, lvyujin, guiyujin and wenyujin, have been investigated by terahertz time-domain spectroscopy (THz-TDS). Furthermore, by using support vector machines (SVM) method, the linear kernel function, the polynomial kernel function, and the radial basis kernel function are employed for separating four kinds of Radix Curcumae. The calculated results show that the accuracy of discrimination for these four kinds of Chinese herbs is 100%. &copy; 2011 Elsevier GmbH. All rights reserved.

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