عنوان مقاله:

Maturity detection of apricot fruit using the extraction of Gabor imaging features

محل انتشار:

دومین همایش ملی فناوری های نوین برداشت و پس از برداشت محصولات کشاورزی (سال: 1396)

تعداد صفحات اصل مقاله: 6

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خلاصه مقاله:

Apricot fruits were categorized into three maturity levels based on apricots color by using the extracted image features. The extraction of Gabor imaging features including mean-squared energy and mean -amplitude for different orientations and scales was implemented. All the experiments were carried out at Tarbiat Modares University in June 2017. The images of fruits were captured in a standard lighting room. The written code captured the images, cropped the edges, found the boundaries of fruits, removed the background, and extracted the Gabor features of the red, green, and blue layers. The physical properties of fruits were measured and compared between maturity levels. There were no significant relationships between maturity levels concerning physical properties. The result of statistical analysis indicated that there were significant differences among the maturity levels with respect to Gabor features. Results showed that the algorithm could properly classify the apricot fruits using the imaging properties based on Gabor features

کلمات کلیدی:

Image processing; Maturity level; classification; Gabor feature; Apricot

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