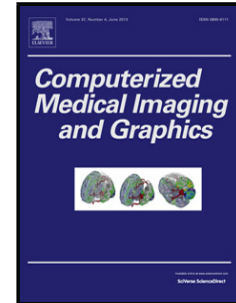


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Automatic histologically-closer classification of skin lesions

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Abstract

According to the American Cancer Society, melanoma is one of the most common types of cancer in the world. In 2017, approximately 87,110 new cases of skin cancer were diagnosed in the United States alone. A dermatoscope is a tool that captures lesion images with high resolution and is one of the main clinical tools to diagnose, evaluate and monitor this disease. This paper presents a new approach to classify melanoma automatically using Structural Co-occurrence Matrix (SCM) of main frequencies extracted from dermoscopy images. The main advantage of this approach consists in transform the SCM in an adaptive feature extractor improving his power of discrimination using only the image as parameter. The images was collected from the International Skin Imaging Collaboration (ISIC) 2016, 2017 and Pedro Hispano Hospital (PH²) datasets. Specificity (Spe), sensitivity (Sen), positive predictive value, F Score, Harmonic Mean, accuracy (Acc) and area under the curve (AUC) were used to

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