

ABSTRACT

COMPARISON CALCULATIONS SURFACE ROUGHNESS OF SKIN HAND WITH STATISTICAL ANALYSIS METHOD AND FRACTAL DIMENSION

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It has been realized system comparison calculations surface roughness of skin hand with statistical analysis method and fractal dimension. The calculation is performed based on the line profile of image hand skin surface was processed using software Matlab 7.8. Calculation of statistical analysis such as Mean Absolute Value (MAV), Variance (VAR) and Standard Deviation (STD) that was compared with the value of fractal dimension are method of Higuchi, Katz and Box Counting. The statistical value of a small, fractal dimension value will be small and shows good skin quality. Skin classification is divided into 3 categories namely rough, medium and smooth. Based on 10 test samples, 9 of them medium quality and 1 sample smooth quality.

Keywords: *Line Profile, Higuchi, Katz and Box Counting.*