

Fig. 1. Flowchart of segmentation procedure

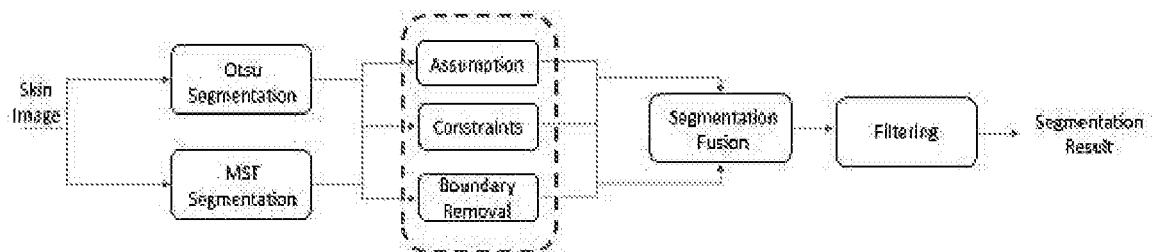


Figure 1(b)

2/13

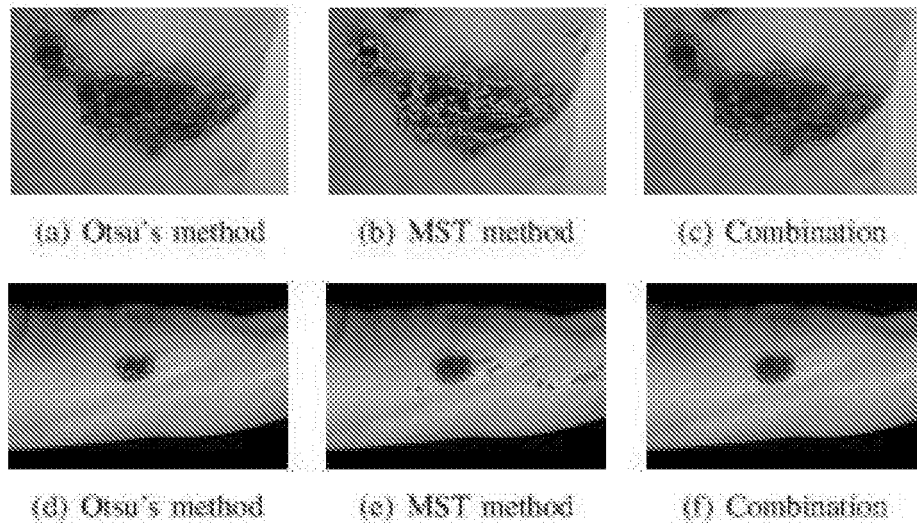


Fig. 2. Results of our proposed segmentation scheme. Images (a-c) are segmentation results by using Otsu's method, MST method, and combination of two methods for the first example. Images (d-f) are the segmentation results for the second example.

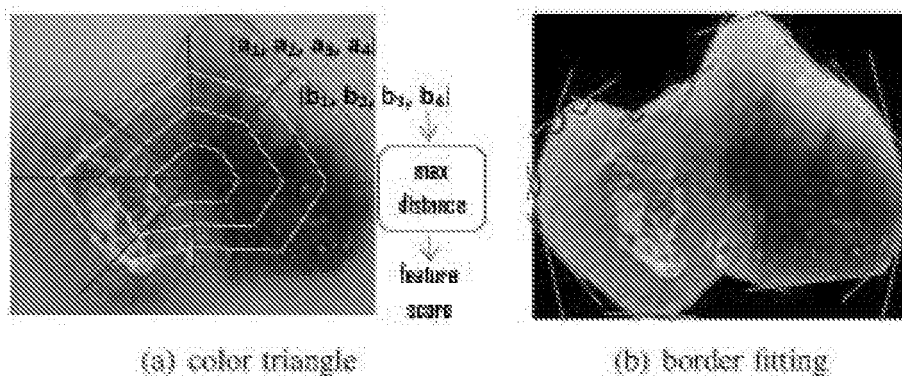


Fig. 3. Our proposed feature to quantify color variation (a) and border irregularity (b) of a skin lesion

3/13

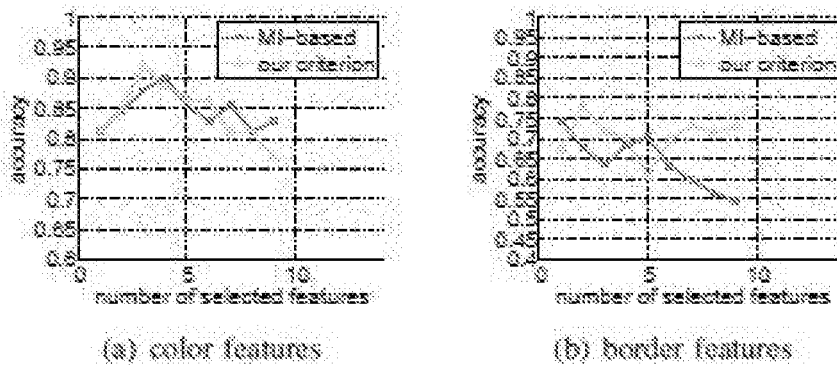


Fig. 4. classification accuracy for different number selected features when proposed criterion and MI-based criterion are used to select color features (a) and border features (b)

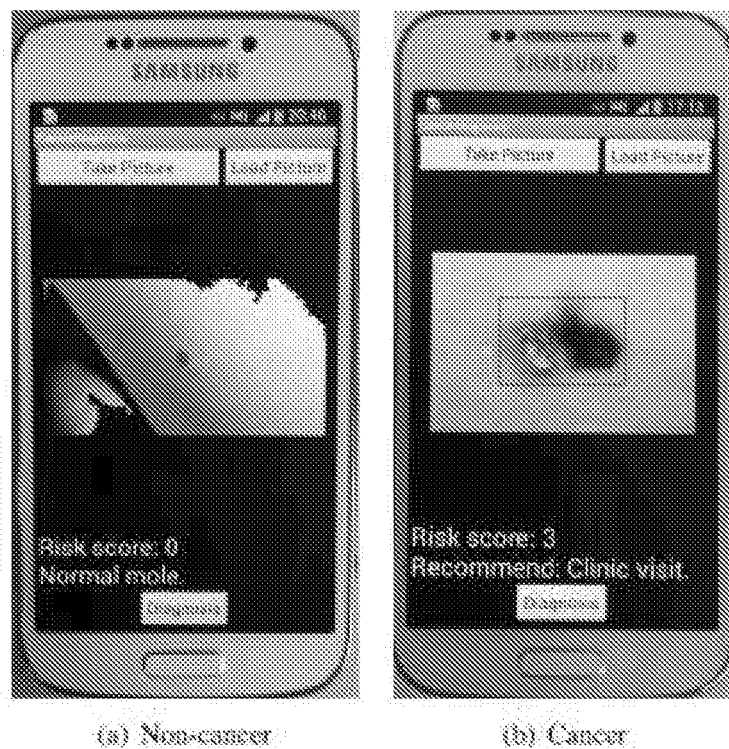


Fig. 5. Screenshot of application. (a) is a non-cancer sample. (b) is a cancer sample.

4/13

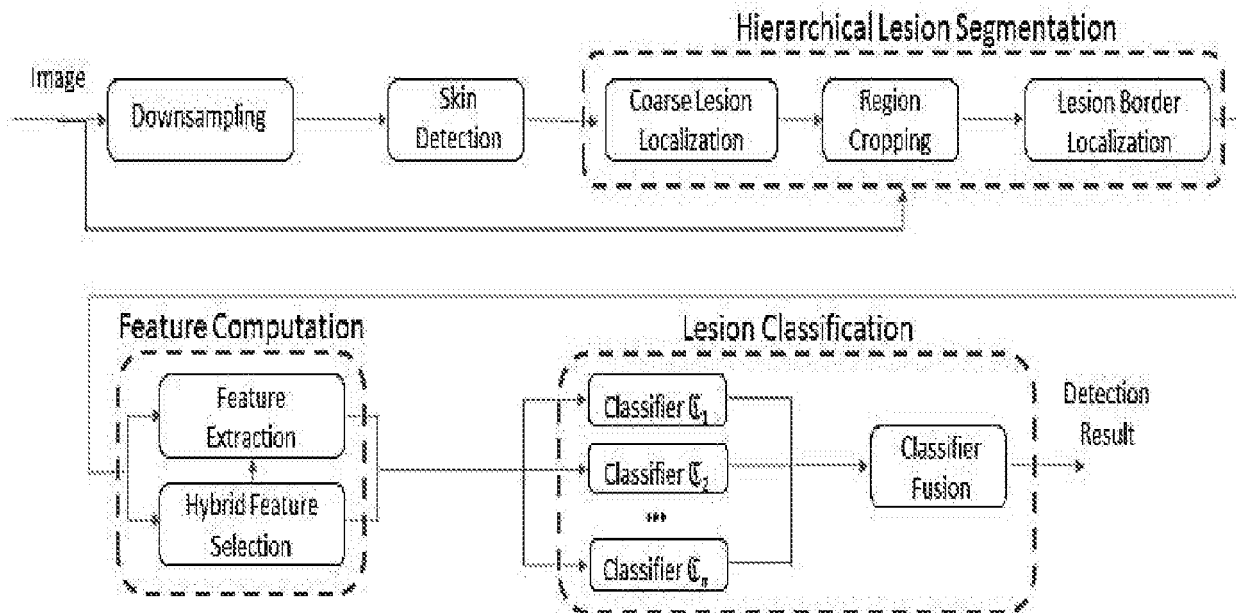


Figure 6

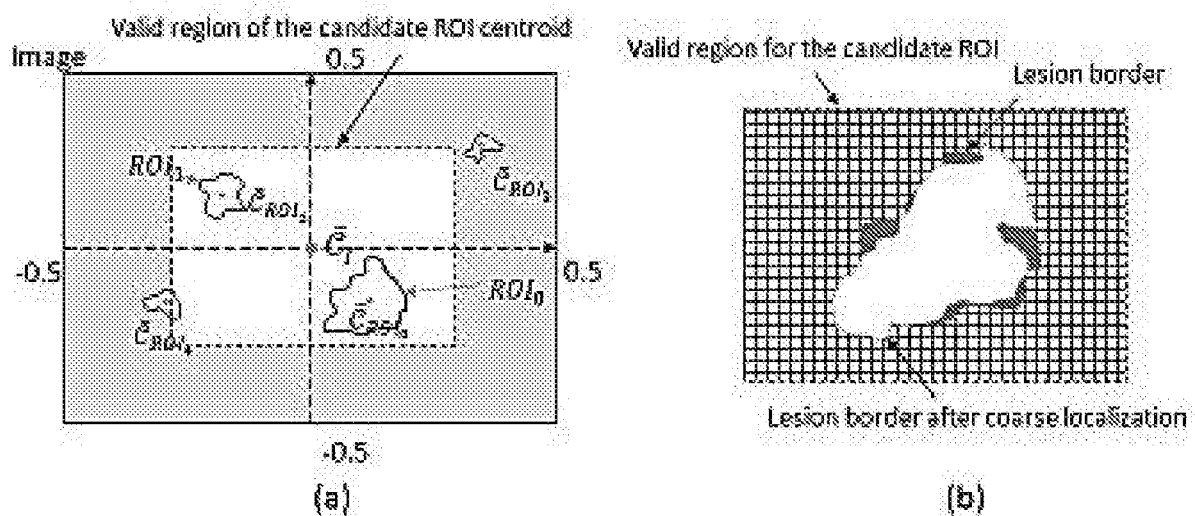


Figure 7

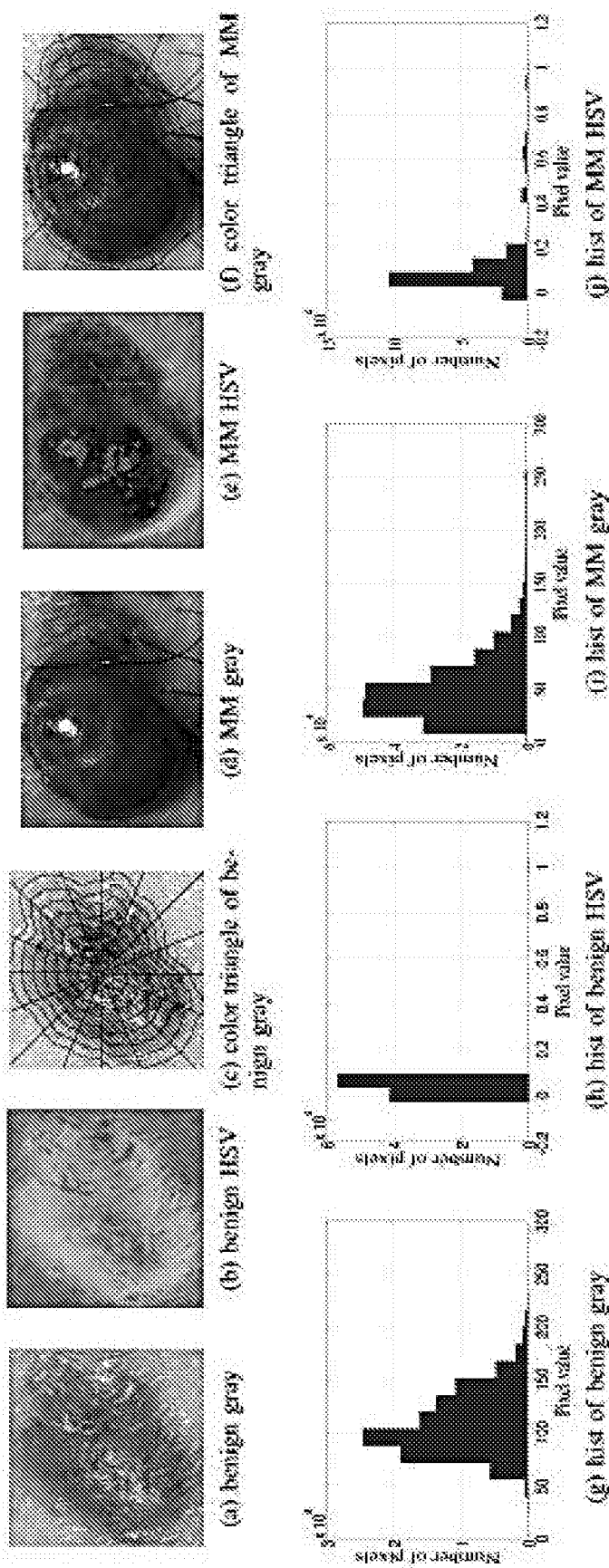


Figure 8

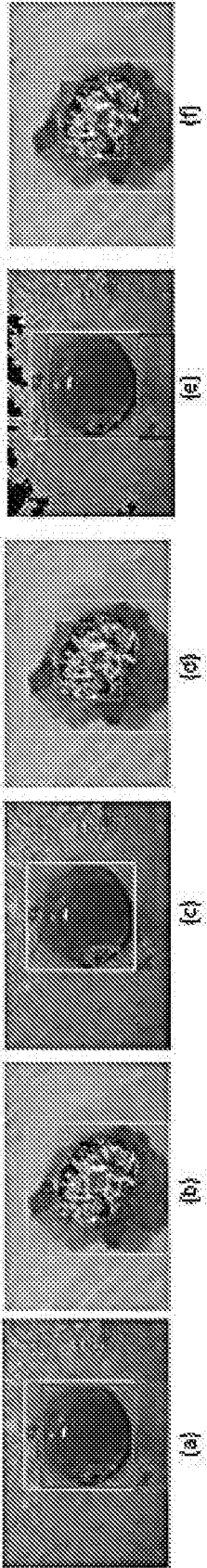


Figure 9

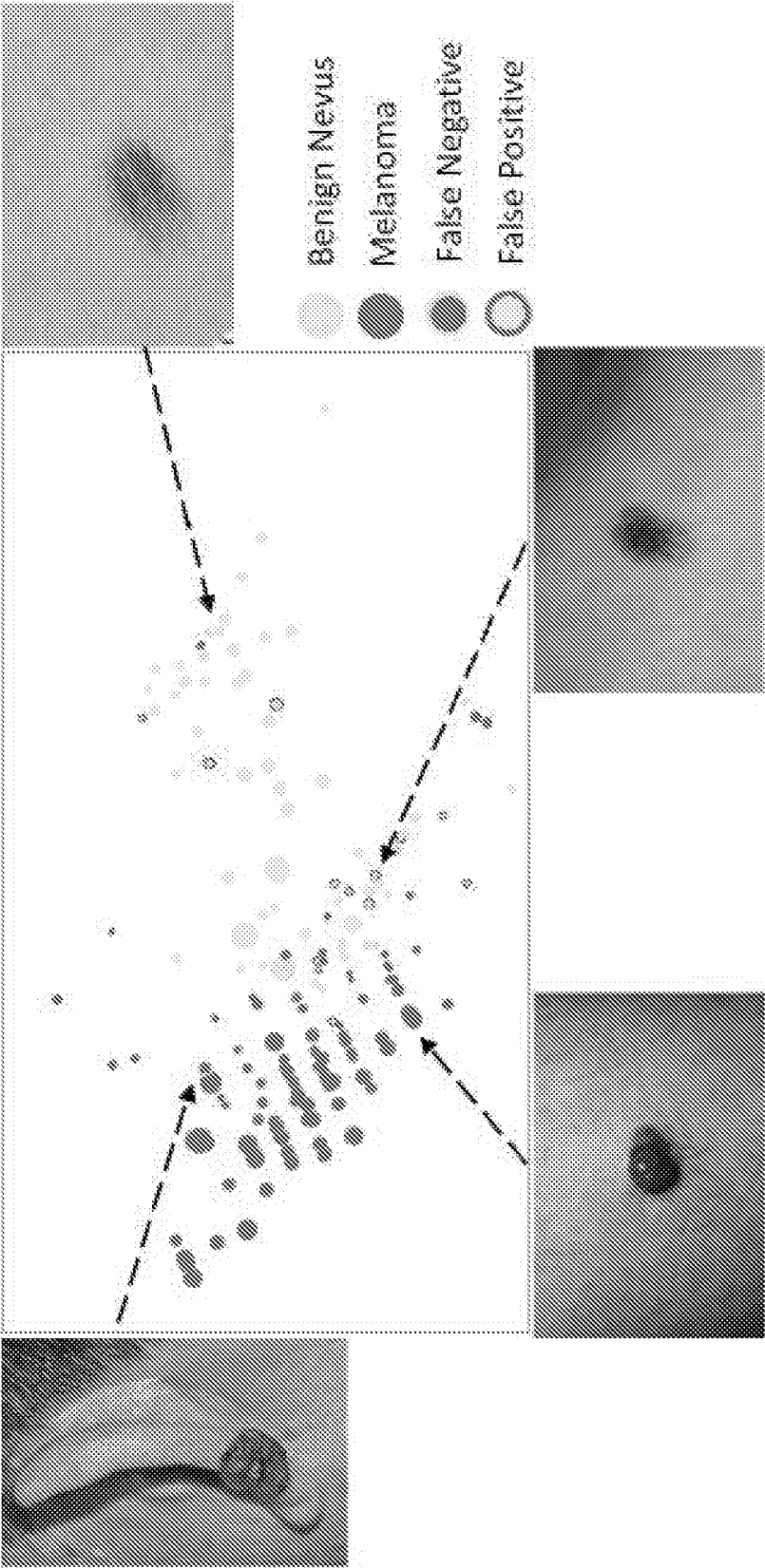


Figure 10

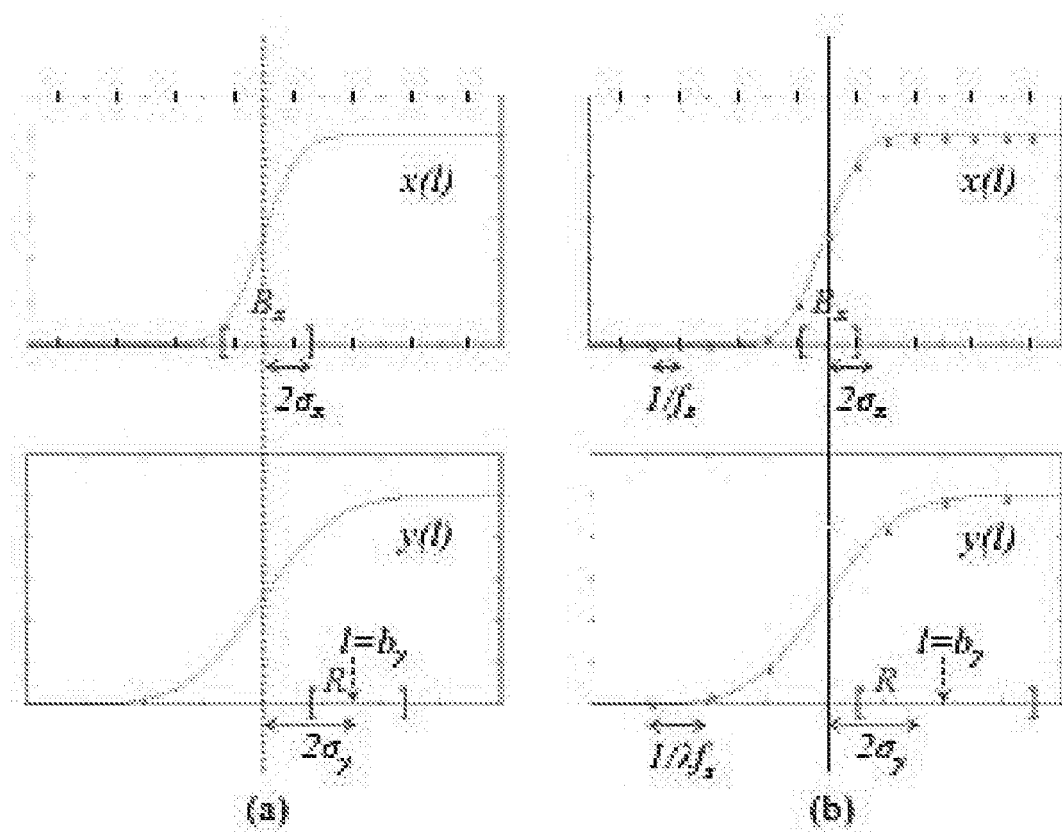


Figure 11

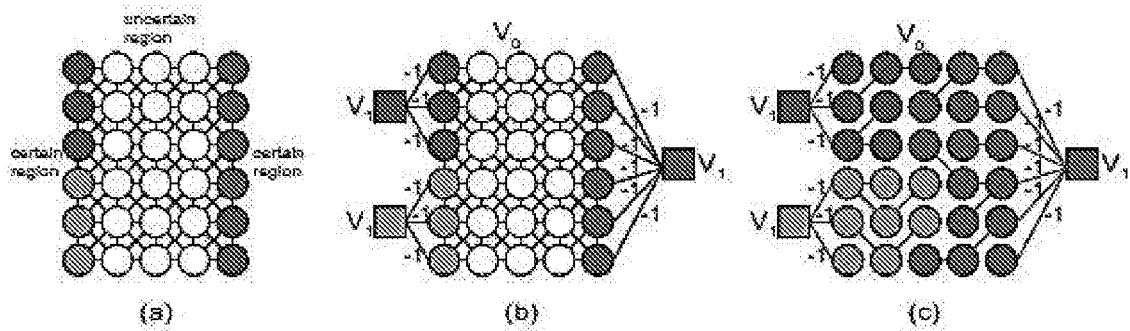


Figure 12

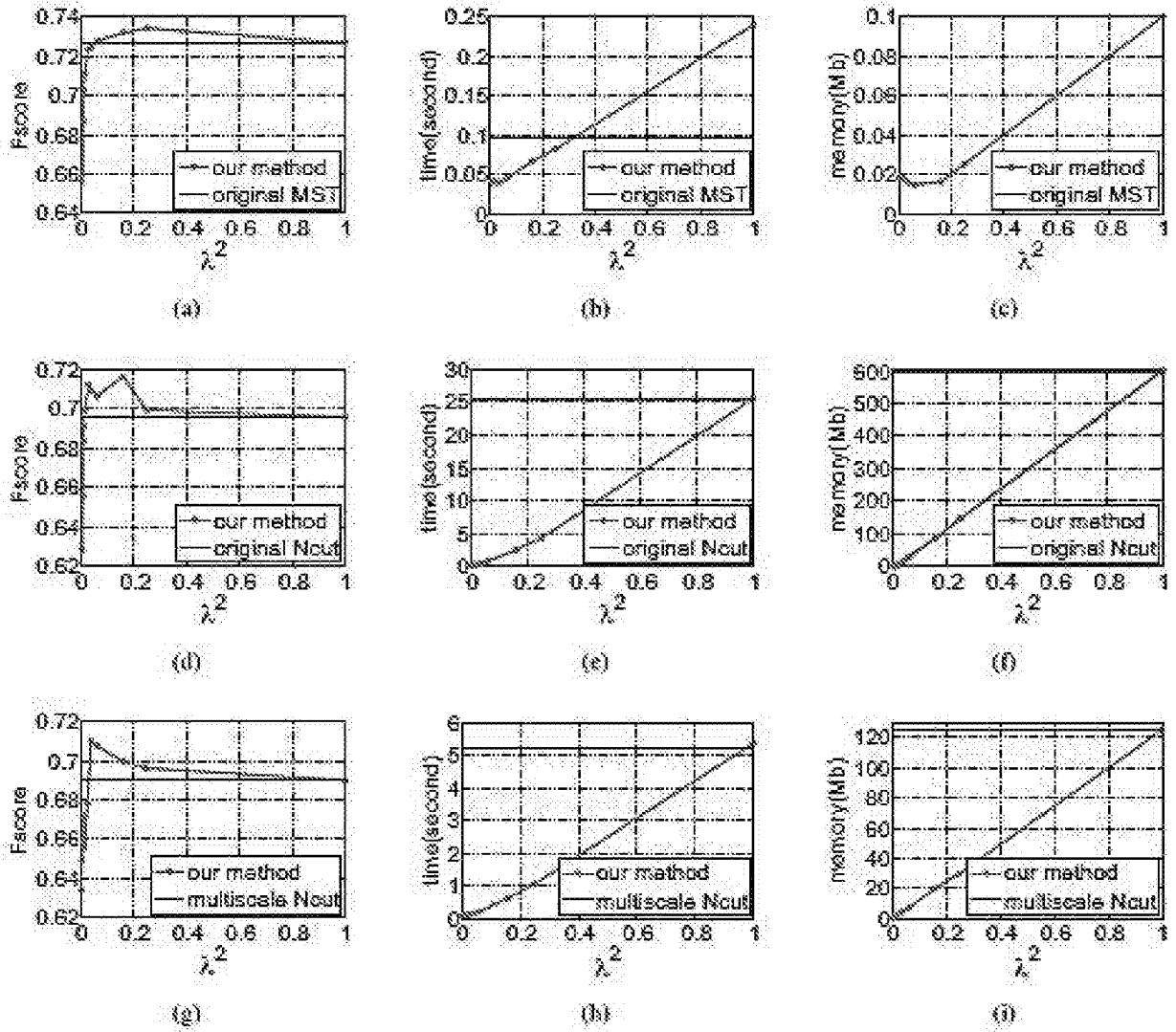


Figure 13

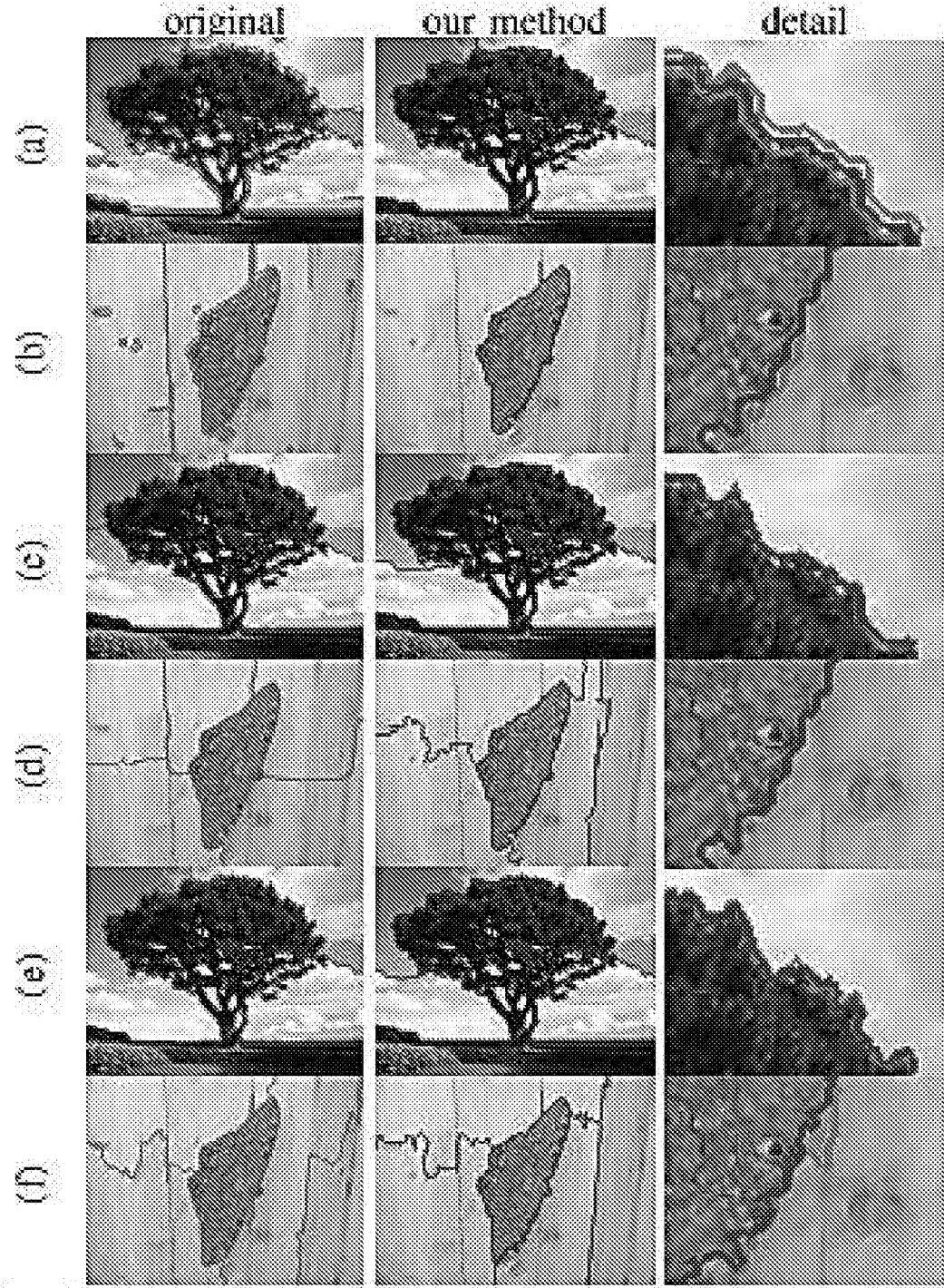


Figure 14

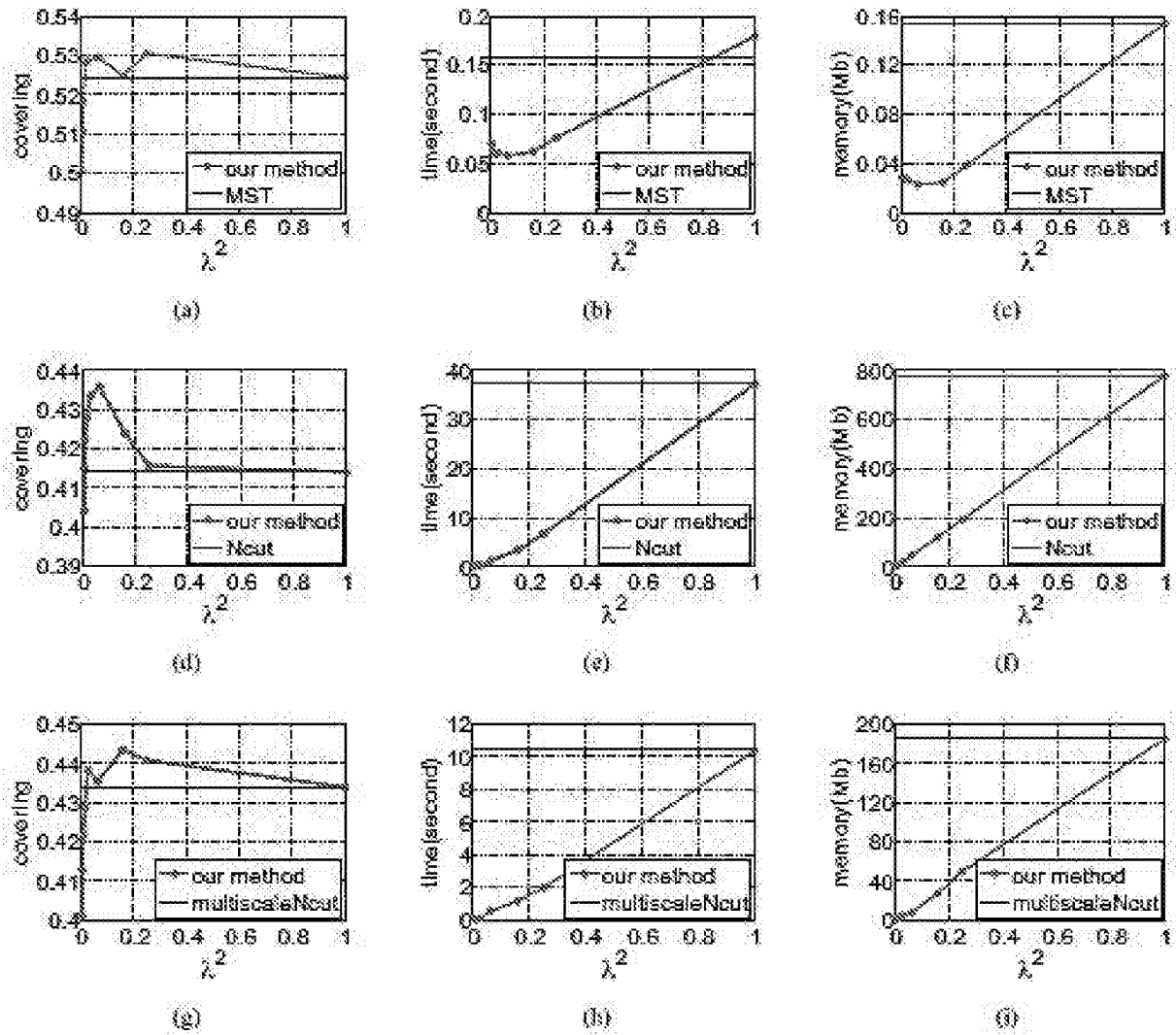


Figure 15

12/13

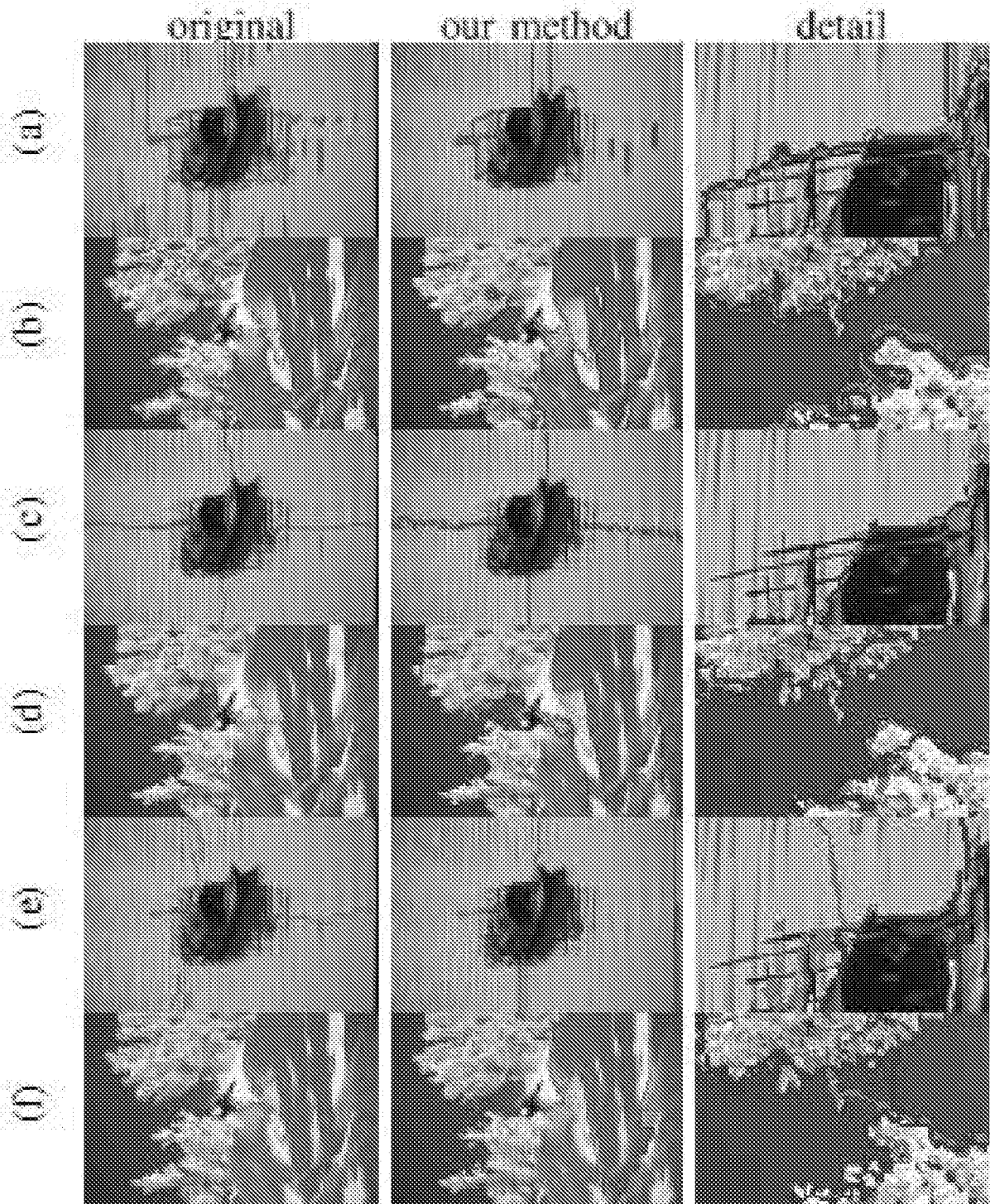


Figure 16

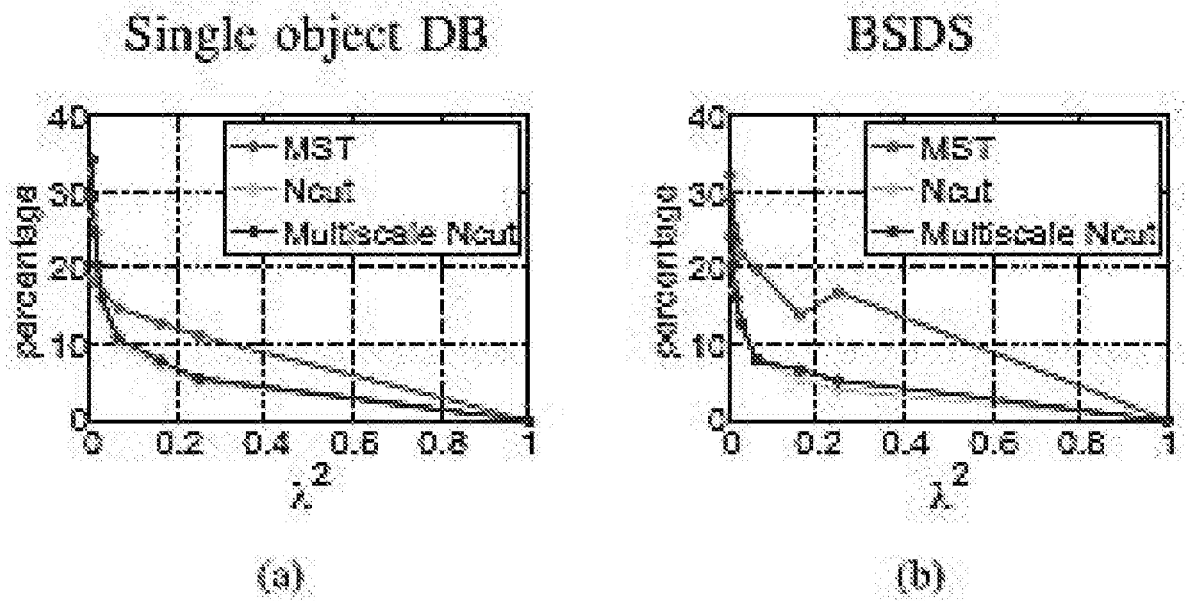


Figure 17