C) Comparison of feature extraction with EPF and the proposed method

Three quality indexes of the proposed method is compared with the existing feature extraction method with Edge preserving filtering (EPF). The graph clearly shows that the proposed method has high performance compared to the existing method.

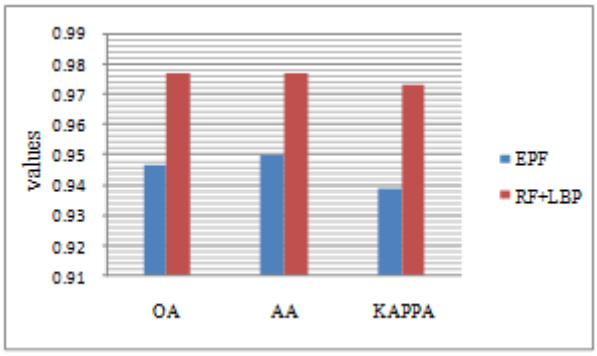

Figure 5: Comparison of feature extraction with EPF and the proposed method

4. Conclusion

Novel method to extract the features from a hyperspectral image is proposed. The proposed approach utilizes the advantages of image fusion techniques to reduce the difficulties related to the high dimensionality of the hyperspectral data. Both RF and LBP features of the input images are extracted. The performance of the method is measured by evaluating quality indexes. The results of this method indicate the effectiveness of the proposed approach. The attractive features of the proposed method are 1) it is time efficient and 2) the accuracy of the classification can be increased.

The future work of this approach includes the use of other EPFs for processing the fused images.

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