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A Kernel Partial Least Square Based Feature Selection Method

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#### ACCEPTED MANUSCRIPT

### Highlights

- The paper proposes a Kernel Partial Least Square (KPLS) based Feature Selection Method aiming for easy computation and improving classification accuracy for high dimensional data.
- The proposed method makes use of KPLS regression coefficients to identify an optimal set of features, thus avoiding non-linear optimization.
- Experiments were carried out on seven real life datasets with four different classifiers: SVM, LDA, Random Forest and Naïve Bayes.
- Experimental results highlight the advantage of the proposed method over several competing feature selection techniques.



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