

Wine classification with gas sensors combined with Independent Component Analysis and ... (2009)

Título: Wine classification with gas sensors combined with Independent Component Analysis and Neural Networks

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Abstract: The aim of this work is to demonstrate the alternative of using Independent Component Analysis (ICA) as a dimensionality reduction technique combined with Artificial Neural Networks (ANNs) for wine classification in an electronic nose. ICA has been used to reduce the dimension of the data in order to show in two variables the discrimination capability of the gas sensors array and as a preprocessing tool for further analysis with ANNs for classification purposes.