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Title: Impedimetric electronic tongue based on nanocomposites for the analysis of red wines. Improving the variable selection method

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**Impedimetric electronic tongue based on nanocomposites for the analysis of red wines.
Improving the variable selection method.**

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Highlights

- An improved impedimetric e-tongue dedicated to wines has been developed
- New sensors are layered nanocomposites alternating PEDOT:PSS and AuNPs or LuPc₂
- A new feature extraction method based on an equivalent circuit has been developed
- PCA shows that the system can discriminate extremely similar red wines
- The improved e-tongue also enhances the capability to predict chemical variables using PLS-1.

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