

Supplementary materials

Chemometrics-assisted excitation-emission matrix fluorescence spectroscopy for rapid identification of commercial reconstituted and sweetened grape juices

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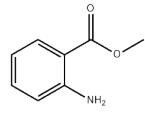
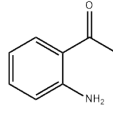
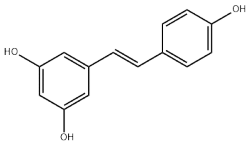
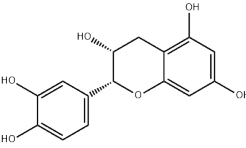
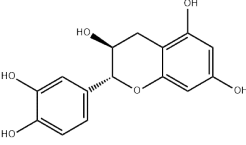
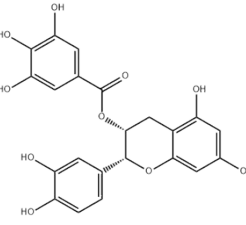
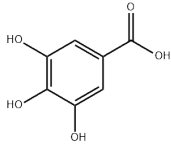
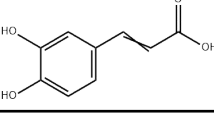
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Table. S1 The specific information of eight chemical compound.

| No. | Analyte | Abbreviation | CAS no. ^a | Chemical structure | $\lambda_{ex}/\lambda_{em}$ ^b (nm) |
|-----|----------------------|---------------|----------------------|--|--|
| 1 | Methyl anthranilate | MA | 134-20-3 |  | 245(325)/415 |
| 2 | 2'-aminoacetophenone | <i>o</i> -AAP | 551-93-9 |  | 260/460 350/465 |
| 3 | Resveratrol | RES | 501-36-0 |  | 265(335)/390 |
| 4 | Epicatechin | EC | 490-46-0 |  | 230/310 280/315 |
| 5 | Catechin | CC | 154-23-4 |  | 230/315 280/310 |
| 6 | Epicatechin gallate | ECG | 1257-08-5 |  | 270/325 |
| 8 | Gallic acid | GA | 149-91-7 |  | 265/335 |
| 9 | Caffeic acid | CA | 331-39-5 |  | 260/365 355/435 |

^a CAS no. is from <http://www.chemicalbook.com/>;

^b The values of $\lambda_{ex}/\lambda_{em}$ represents the maximum excitation/emission wavelengths of each analyte.

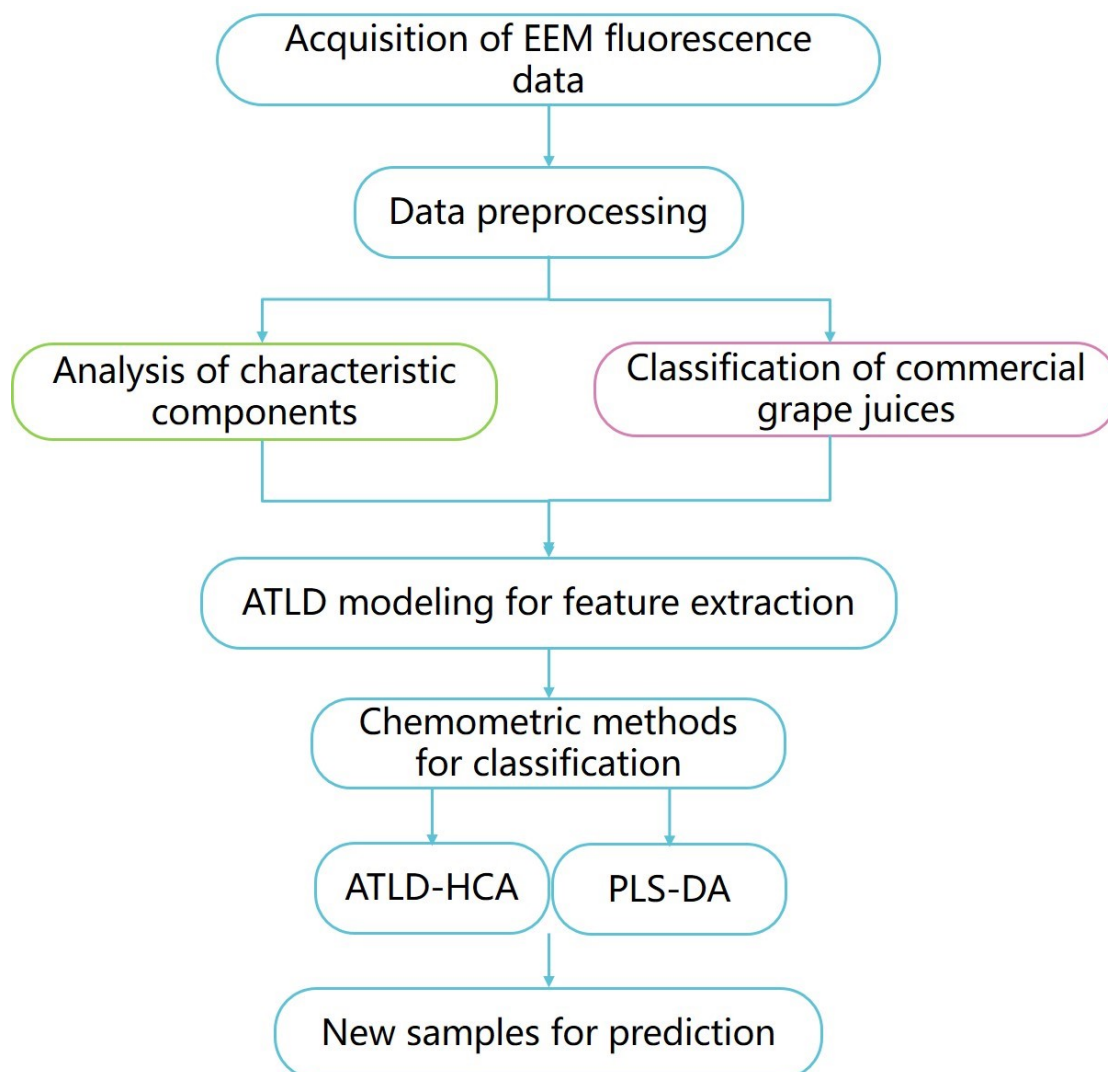


Fig. S1 The main flow chart of this work.

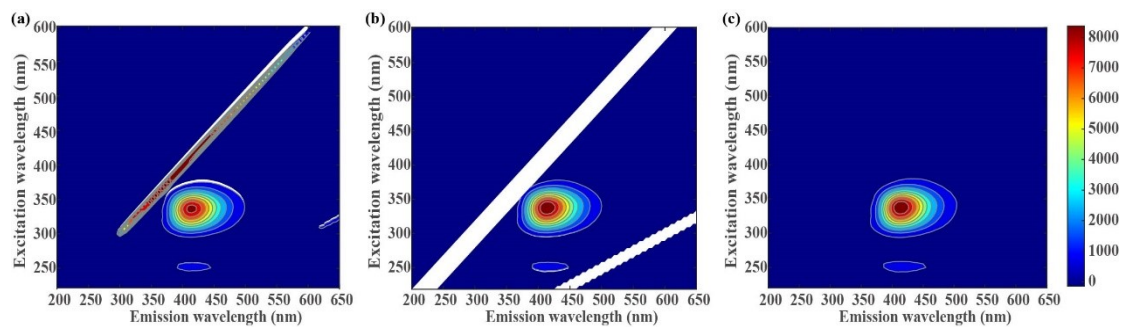


Fig. S2 The elimination of non-trilinear factor (Rayleigh scattering) in EEM fluorescence data: (a) raw data with visible Rayleigh scattering; (b) gapped data with scattering being removed in the regions; (c) repaired data fitted by an interpolation method.

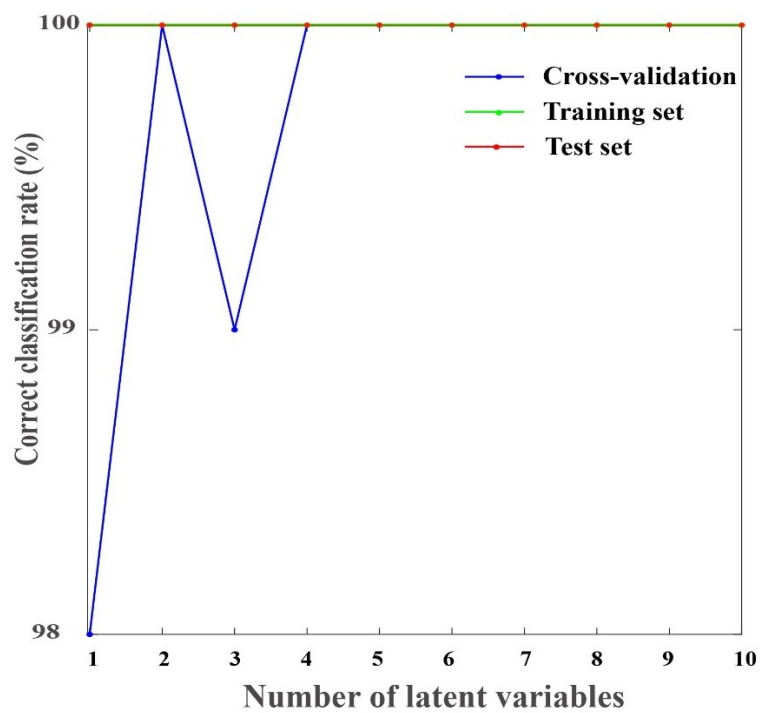


Fig. S3 Correct classification rates obtained by cross-validation in the training set, training set and test set, respectively, as a function of the *LVs* of PLS-DA.