Electronic Supplementary Material (ESI) for Analytical Methods.

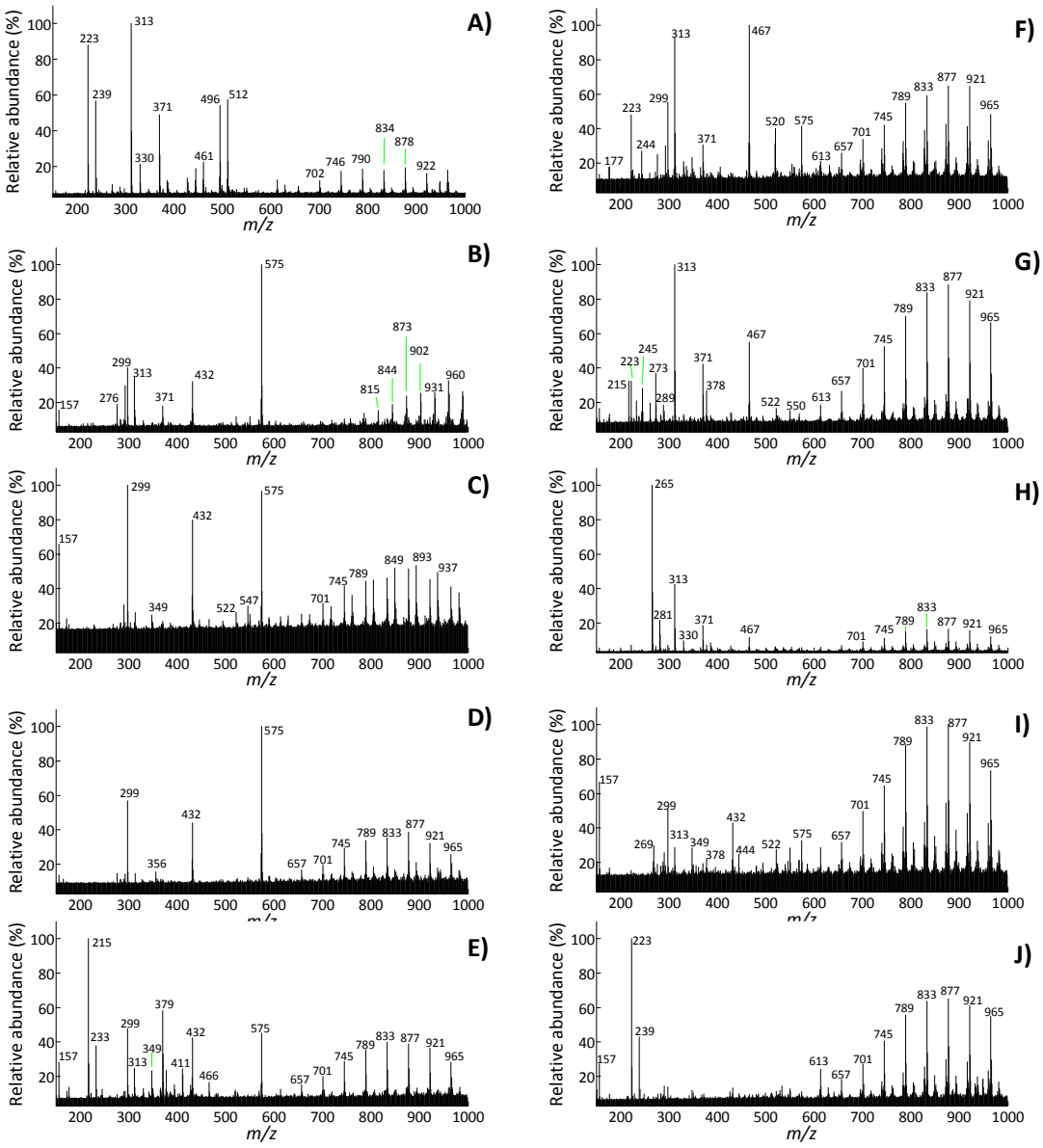

Figure S1 – PS(+)-MS fingerprints of authentic perfumes: A) Arbo, B) Malbec, C) Egeo Dolce, D) Egeo Woman, E) Egeo Man, F)Floratta in blue, G) Floratta in rose, H) Portinari, I) Quasar azul and J) Quasar vermelho.

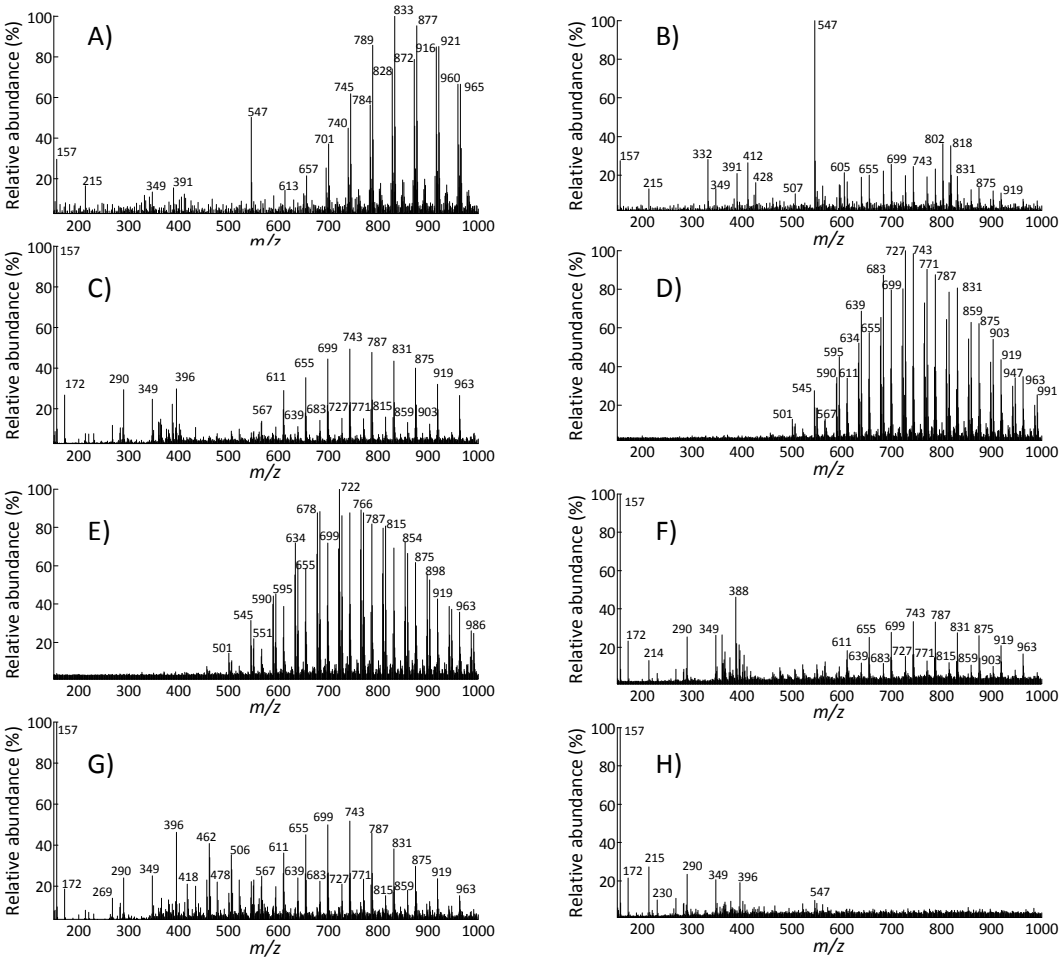

Fig S2 – Fingerprints PS(+)-MS of counterfeit perfumes: A-B) Arbo, C-F) Egeo Dolce, G) Egeo Woman and H) Egeo Man.

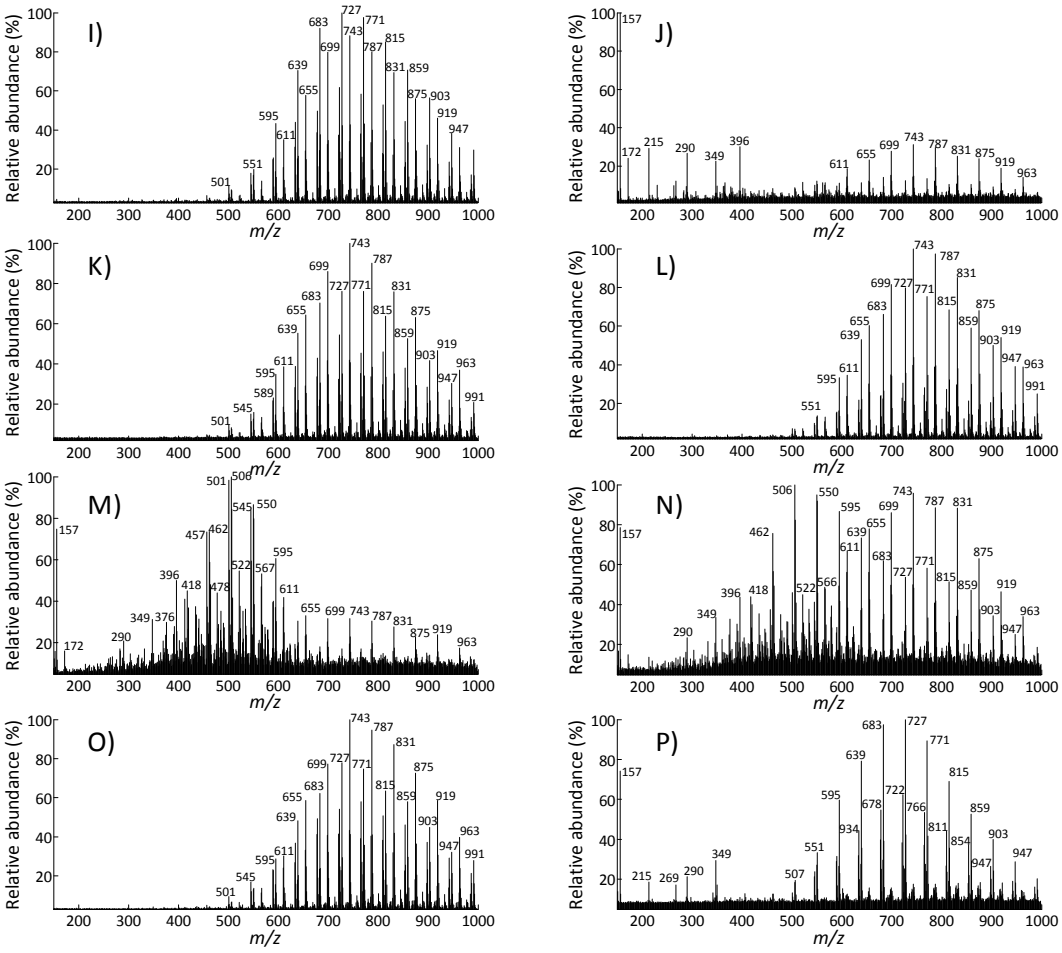

Fig S2 – Fingerprints PS(+)-MS of counterfeit perfumes: I-J) Egeo Man, K-M)Floratta in Blue N-O) Florata in Rose and P) Malbec.

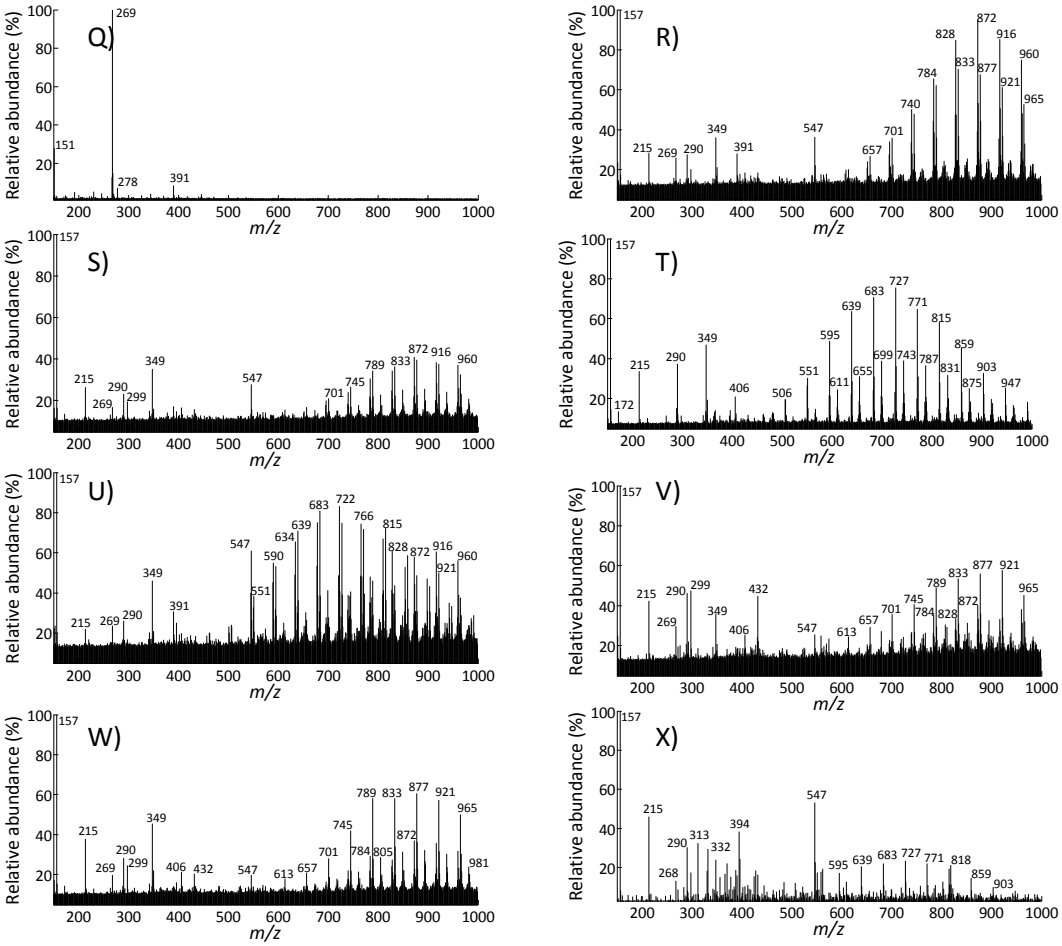

Fig S2 – Fingerprints PS(+)-MS of counterfeit perfumes: Q-W) Malbec and X) Portinari.

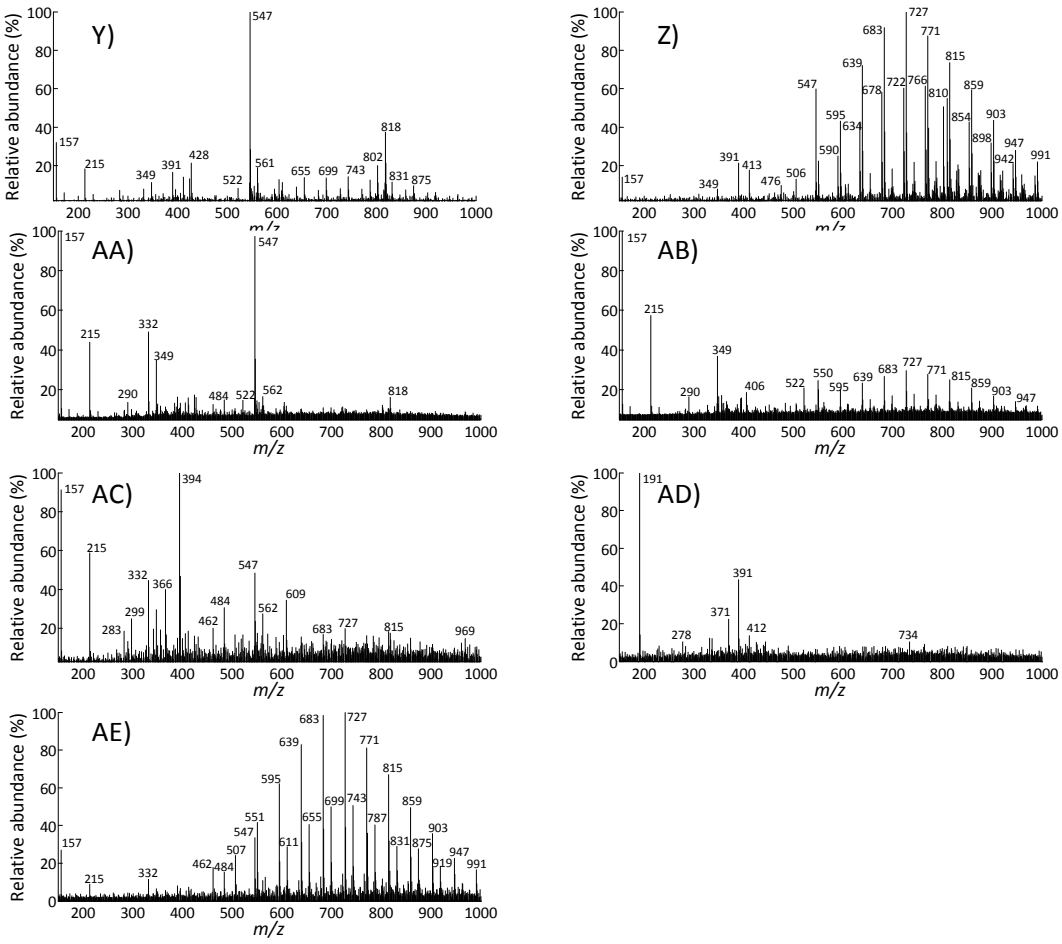

Fig S2 – Fingerprints PS(+)-MS of counterfeit perfumes: Y-Z) Portinari, AA-AD) Quasar Azul and X) Quasar Vermelho.

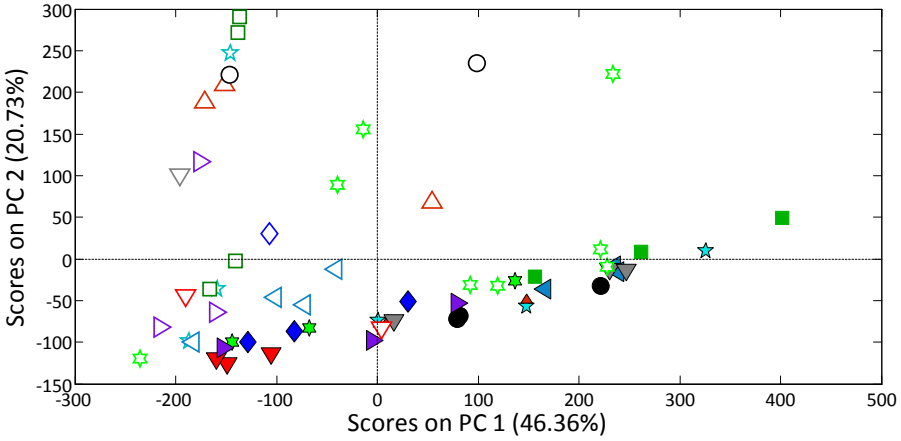

Figure S3 – Scores of PC1 and PC2. The authentic and counterfeit samples have filled and empty symbols, respectively: red triangles (AB), green square (ED), blue diamond (EW), light blue star (EM), brown triangle (FB), black circle (FR), green sun (MB), purple triangle (PT), blue triangle (QA) and gray triangle (QV).

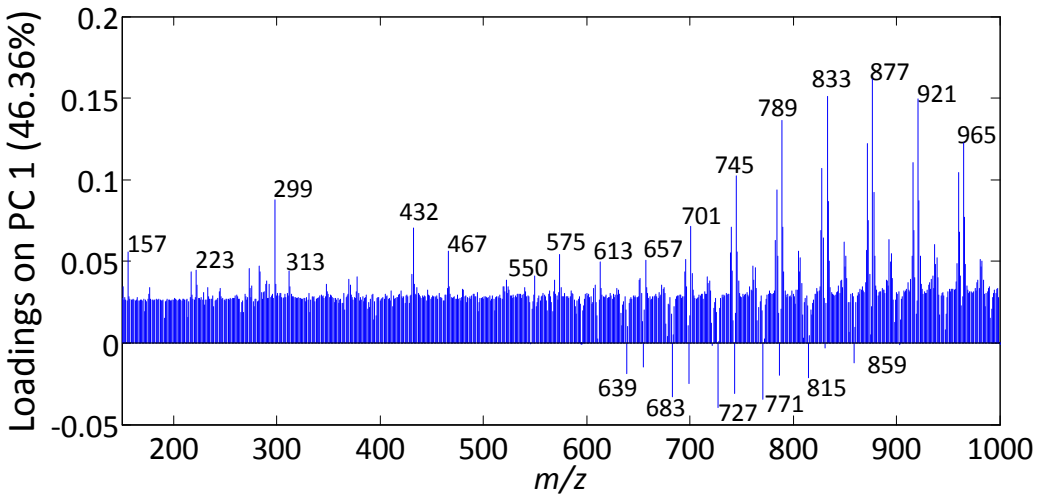

Figure S4 – Loadings of PC 1: PEG ion series (m/z 600-1000) were relevant for the discrimination of perfume brands. Other signals (m/z 157, 223, 299, 432, 467 and 550) were also important to clustering of samples.

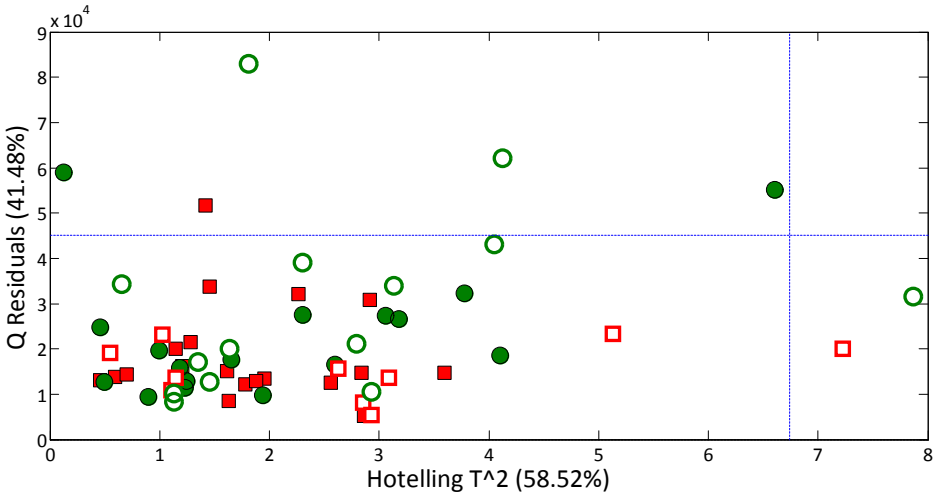

Figure S5 – Detection of outliers for PLS-DA model performed by analysis of Hotelling T^2 *versus* Q residuals plot. The authentic (red squares) and counterfeit (green circles) samples are represented by full symbols for training samples and empty symbols for test samples. Dashed lines indicate the confidence limits at 95%.