

SUPPLEMENTARY MATERIALS TO:

Exploring the performances of a functionalized CNT-based sensor array for breathomics through clustering and classification algorithms: from gas sensing of selective biomarkers to discrimination of chronic obstructive pulmonary disease

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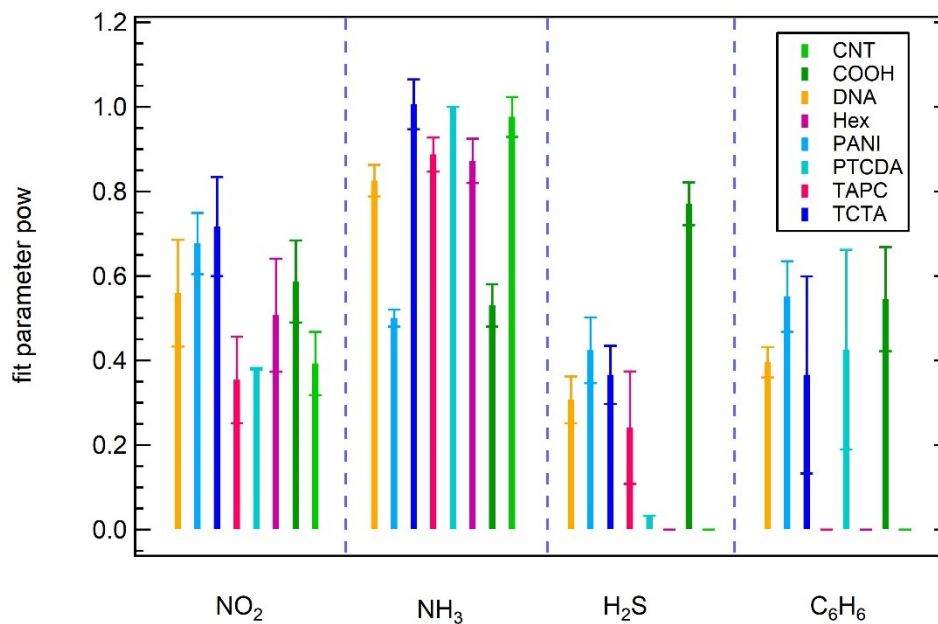


Figure S1: pow parameter obtained from the Freundlich isotherm interpolation of each sensor calibration curve for NO₂, NH₃, H₂S and C₆H₆ exposures, reported in Figure 3 of the main text.

Table S1: Subjects characteristics and number of tests carried out for each subject. From A to C the COPD severity increases.

Subject	Class	Gender	Age	COPD category	Number of tests
1	COPD	M	75	B	4
2	COPD	F	32	A	4
3	COPD	F	62	C	4
4	COPD	F	64	B	6
5	COPD	M	72	A	3
6	COPD	F	73	B	6
7	COPD	F	88	C	3
8	Healthy	F	28	-	9
9	Healthy	M	45	-	6
10	Healthy	M	22	-	3
11	Healthy	F	42	-	4

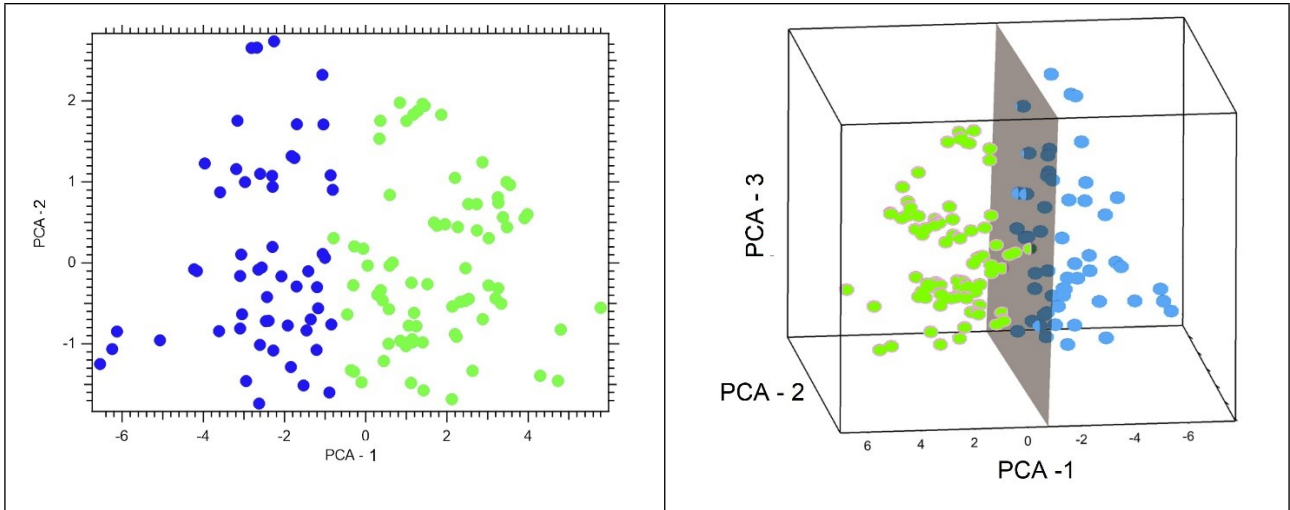


Figure S2. Left panel: 2D plot along the main PCA components obtained from the analysis of 130 cases. Blue dots: healthy, green dots: COPD. Right panel: 3D plot along the three main PCA components obtained from the analysis of 130 cases. Blue dots: healthy, green dots: COPD. Gray plane: SVM separation plane.