

Supporting Information

Some Interesting insights into the Acetone Sensing Characteristics of Monoclinic WO₃

Puja Ghosh^a, Manikandan M,^{b, c} Shrabanee Sen^{a*} and Parukuttyamma Sujatha Devi^{a,b,c*}

^aFunctional Materials and Devices Division, CSIR-Central Glass and Ceramic Research Institute, Jadavpur, Kolkata 700032, India

^bChemical Sciences and Technology Division, CSIR-National Institute of Interdisciplinary Science and Technology, Thiruvananthapuram 695019, India

^cAcademy of Scientific and Innovative Research (AcSIR), Ghaziabad 201002, India.

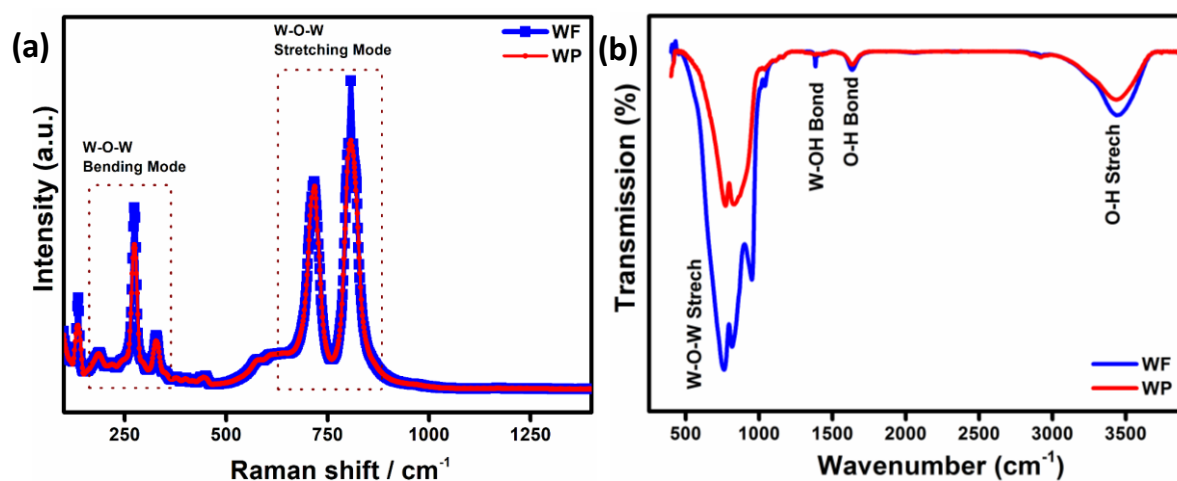


Fig. S1 (a) Raman spectra and (b) FTIR spectra of WP and WF samples, respectively.

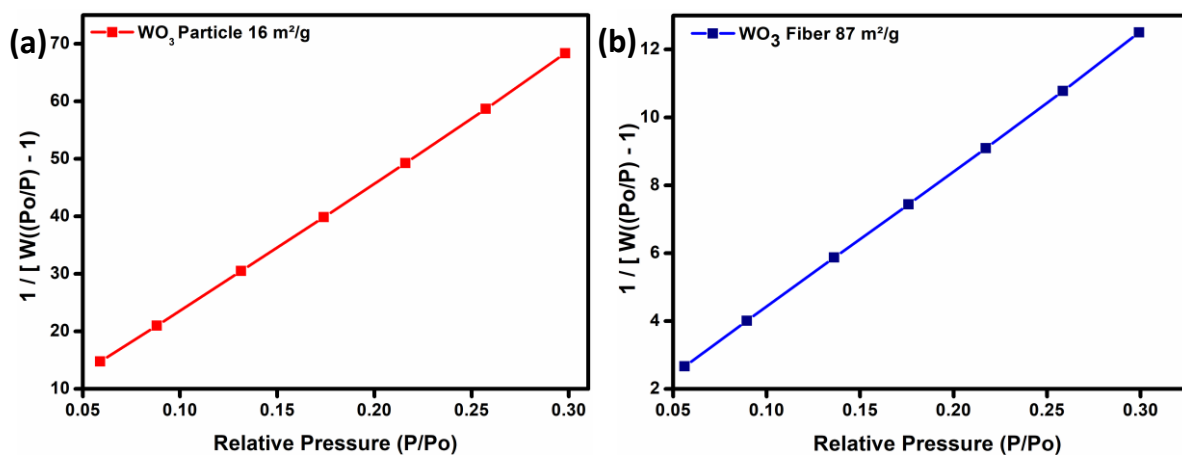


Fig. S2 BET surface area plots of (a) WP and (b) WF, respectively.

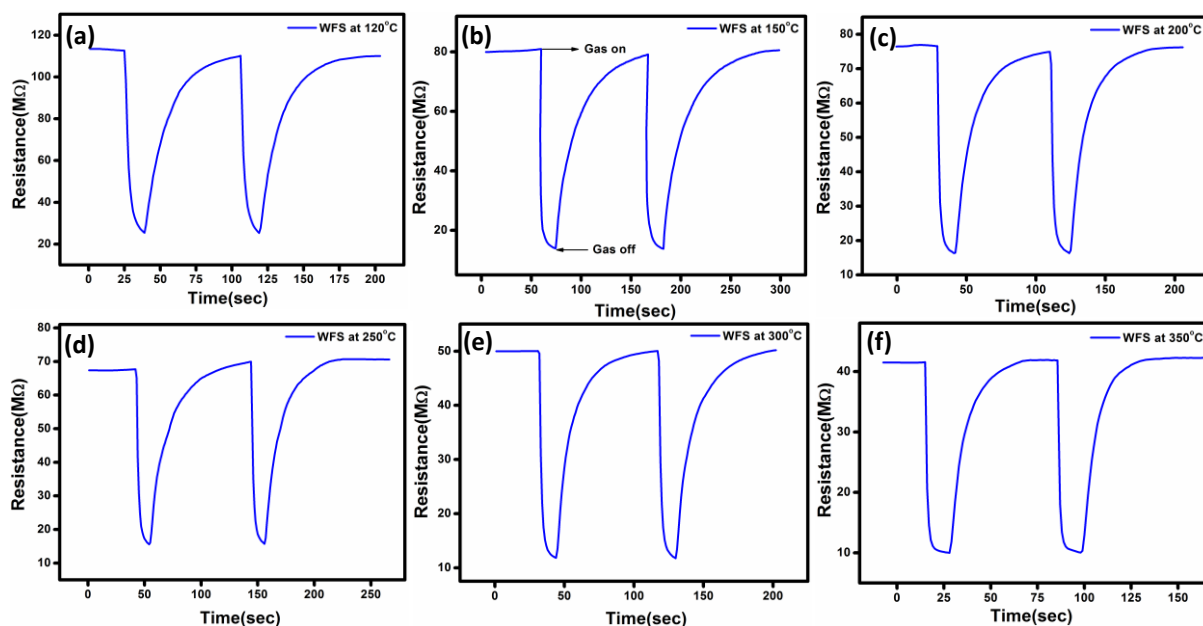


Fig. S3 Response-recover dynamic curve of WFS at different operating temperatures.

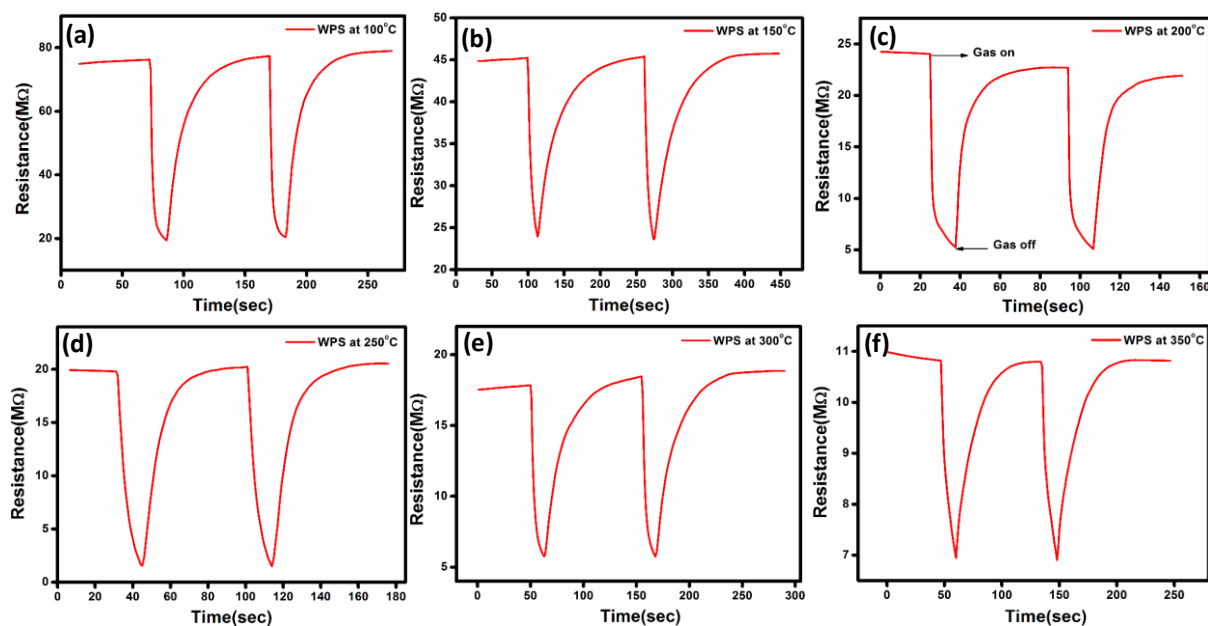


Fig. S4 Response-recover dynamic curve of WPS at different operating temperatures.

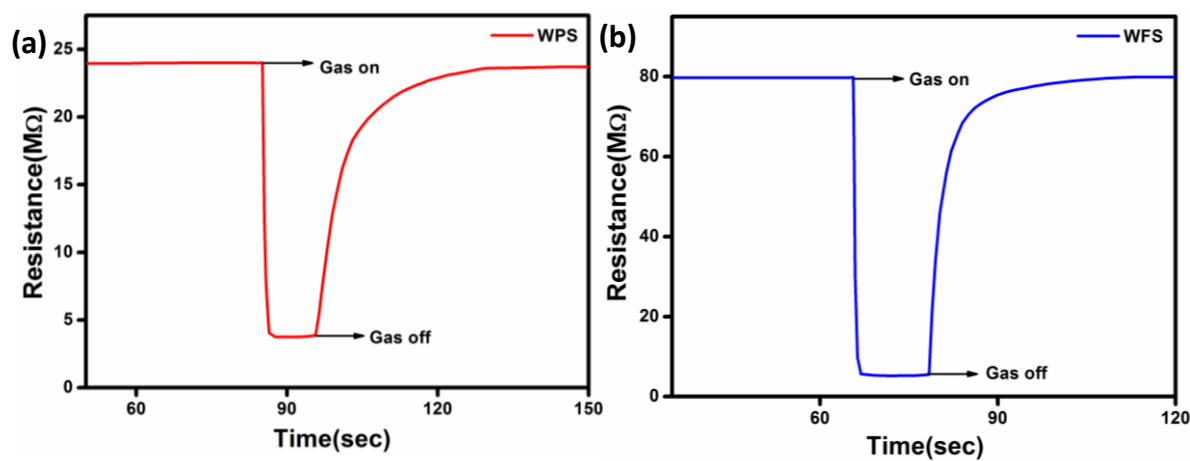


Fig. S5 Steady State dynamic curve of (a) WPS and (b) WFS.

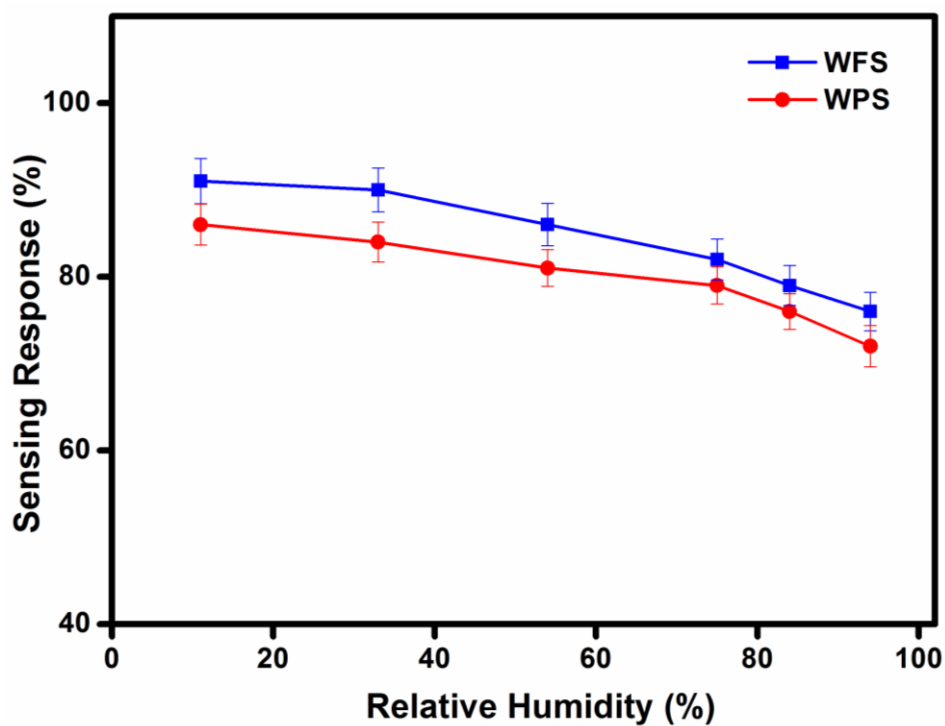


Fig. S6 Sensitivity Response variation with Relative Humidity (%) at 10ppm acetone.

Table S1. Saturated aqueous solutions for different salts and their corresponding % RH.

Sl. No.	Salts	% RH
1	Lithium chloride	11
2	Magnesium chloride	33
3	Sodium dichromate	54
4	Sodium chloride	75
5	Potassium chloride	84
6	Potassium nitrate	94

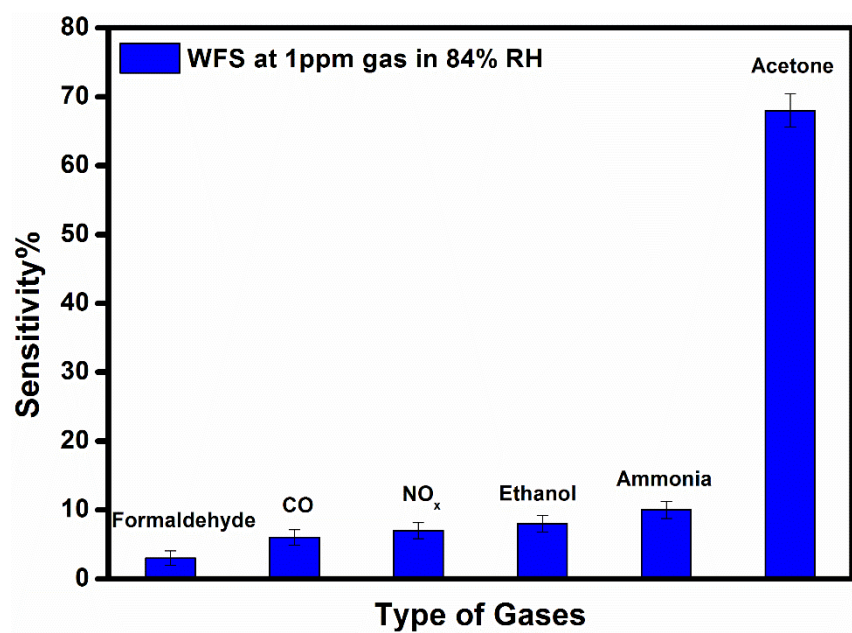


Fig.S7 : Sensitivity response bar graph of WFS sensor towards 1ppm of concentration of different interfering gases at 84% RH.