Electronic Supplementary Information

Synthesis of a porous SiO₂-H₃BO₃ -V₂O₅ -P₂O₅ glassy composite: Structural and Surface Morphological Behaviour for CO₂ Gas Sensing Applications

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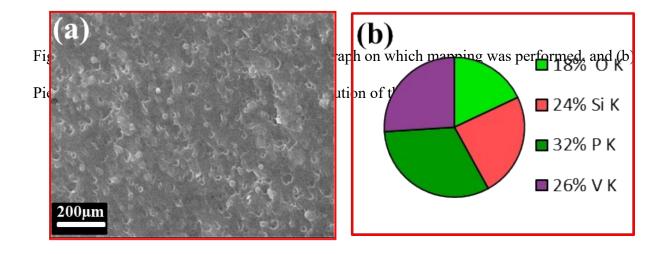


Table S1: Elements and their weight percentage of the synthesized glass sample.

| Element | Weight % | |
|---------|----------|--|
| ОК | 41.96 | |
| Al K | 0.73 | |
| Si K | 9.04 | |

| P K | 15.71 |
|-----|-------|
| VK | 32.56 |

Table S2. Response time, recovery time and sensing response of thin film SHVP6 porous glass at 200, 400, 600, 800 and 1000 ppm of CO_2 .

| CO ₂ (ppm) | Response time (sec) | Recovery time (sec) | Sensing Response (sec) |
|-----------------------|---------------------|---------------------------|------------------------------|
| 200 | 12.2 | 15.3 | 1.83 |
| 400 | 14.4 | 19.08 | 2.07 |
| 600 | 16.3 | 21.6 | 2.34 |
| 800 | 20.2 | 24.3 | 2.65 |
| 1000 | 22.6 | 25.8 | 3.05 |