

# Effect of humidity on light activated NO and NO<sub>2</sub> gas sensing by hybrid materials

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## Supplementary Information

**Table S1.** Frequency ranges and structures of IR bands observed in DRFIT spectra in 5 ppm NO<sub>2</sub>/air and 50 ppm NO/air atmosphere on the surface of prepared samples in dry and humid (RH = 65 %) air at room temperature according to [1 - 4].

Structure	Assignments	Frequency range, cm <sup>-1</sup>
$M-O-N-O$	monodentate nitrite	1065 – 1210; 1400 – 1485;
$M-O \begin{array}{l} \diagdown \\ N \\ \diagup \end{array}$	bridging bidentate nitrite	1205 – 1220; 1470 – 1520;
$M \begin{array}{l} \diagup \\ O \\ \diagdown \end{array} \begin{array}{l} \diagdown \\ N \\ \diagup \end{array}$	chelating bidentate nitrite	1145 – 1205; 1266 – 1314;
$M-N \begin{array}{l} \diagup \\ O \\ \diagdown \end{array}$	nitro compound	1250 – 1350; 1370 – 1470;
$M-O-N \begin{array}{l} \diagup \\ O \\ \diagdown \end{array}$	monodentate nitrate	970 – 1035; 1250 – 1290; 1480 – 1540;
$M \begin{array}{l} \diagup \\ O \\ \diagdown \end{array} \begin{array}{l} \diagdown \\ N-O \\ \diagup \end{array}$	chelating bidentate nitrate	1010 – 1040; 1260 – 1300; 1550 – 1600;
	adsorbed NO <sub>2</sub>	1605 – 1642; 1673 – 1680;
$H-O-H$	bending H <sub>2</sub> O	1610 – 1640;
$O H \cdots O H$	H-bound rooted OH groups	3200 – 3550;
$M-O-H$	"free" or isolated OH groups	3600 – 3700.

M = Sn or In.

## References

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