**Report   
∗ University of Laghouat , algeria**

Design and development of new sensors based on perovskite It has recently become popular among researchers..Metal oxide semiconductor (MOS) Gas sensors are frequently used and Researchers have recently become interested in the ABO3 Perovskite-type due to its controllable physical and chemical properties [1].the perovskite oxide LaFeO3, the new MOS material has been investigated using DFT calculations and expriments to study and analys the gas sensor sensing mechanisms[2]. ‘’ the macroporous LaFeO3 nanosphere structure was prepared by a low-cost and simple hydrothermal method. Further sensing measurements showed that the macroporous perovskite-type LaFeO3 microspheres exhibited good sensing properties, which showed high selectivity for alcohols gas.’’[1]

**REFERENCES**

[1] W. Qin, Z. Yuan, Y. Shen, and F. Meng, “Macroporous perovskite-structured LaFeO3 microspheres and their highly sensitive and selective sensing properties to alcohols gas,” *IEEE Trans. Ind. Electron.*, pp. 1–1, 2022, doi: 10.1109/TIE.2022.3167149.

[2] M. Wu, S. Chen, and W. Xiang, “Oxygen vacancy induced performance enhancement of toluene catalytic oxidation using LaFeO3 perovskite oxides,” *Chem. Eng. J.*, vol. 387, p. 124101, May 2020, doi: 10.1016/j.cej.2020.124101.