

5. NANOENGINEERING

5.1. Devices and Sensors

3.5.1.1. Single wall carbon nanotube gas sensors. /V.M. Aroutiounian/. Armenian Journal of Physics. – 2021. – vol. 14. – #1. – pp. 74-84. – eng.; abs.: eng.

DOI: <https://doi.org/10.52853/18291171-2021.14.1-74V>

Excellent physical properties of carbon nanotubes (CNTs) are used for manufacturing of many electronic devices. Single wall version of CNTs is promising for detection many important gases including gases exhaled by the organism. The most promising is the realization of gas sensors based on metal oxides doped with CNTs. Application of CNT-based sensors to breathe analysis, properties of the SWCNTs gas sensors with metal nanoparticles and metal oxides and CNTs biosensors are reviewed in this paper. Fig. 1. Tab. 2, Ref. 83.

Keywords: carbon nanotubes CNTs, electronic devices, gas sensors, CNT-based sensors, biosensors

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