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UNIVERSITAT ROVIRA I VIRGILI  
SENSORS BASED ON CARBON NANOTUBE FIELD-EFFECT TRANSISTORS  
AND MOLECULAR RECOGNITION APPROACHES  
Cristina Carlota Cid Salavert  
ISBN:/DL:T-370-2009

Term used	Definition
Ab	Antibody
AFM	Atomic force microscope
Ag	Antigen
CB	Conduction band
CHEMFET	Chemical sensitive field-effect transistor
CMOS	Complementary metal oxide semiconductor
CNT	Carbon nanotube
CNTFET	Carbon nanotube field-effect transistor
CVD	Chemical vapor deposition
Da	Dalton
DOS	Density of states
EIA	Enzyme immunosorbent assay
ELISA	Enzyme-linked immunosorbent assay
ESEM	Environmental scanning electron microscope
eV	Electron volt
FET	Field-effect transistor
GA	Glutaraldehyde
HIgG	Human Immunoglobulin G
I	Electrical current
IgG	Immunoglobulin G
Ionophores	Small hydrophobic molecules that dissolve in lipid bilayers and increase their permeability to specific inorganic ions.
ISE	Ion selective electrode
ISFET	Ion sensitive field-effect transistor
IUPAC	International union pure applied chemistry
MIP	Molecular imprinted polymer
MOSFET	Metal-oxide-semiconductor field-effect transistor
MWCNT	Multi-walled carbon nanotube
NAS	N-acryloxysuccinimide
nm	Nanometer ( $10^{-9}$ m)

PBS	Phosphate buffered saline solution
PEI	Polyethyleneimine
PVC	Poly (vinyl chloride)
QD	Quantum dot
r.p.m.	Revolutions per minute
sccm	Square cubic centimeter
SEM	Scanning electron microscope
SWCNT	Single-walled carbon nanotube
Valinomycin	Potassium ionophore
VB	Valence band
V <sub>g</sub>	Gate-to-source voltage
V <sub>sd</sub>	Source-to-drain voltage
μm	Micrometer (10 <sup>-6</sup> m)

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*Carpe diem*