

Abbreviations

Ab ₁	Primary antibody
Ab ₂	Secondary antibody
ACHE	Acetylcholine esterase
AFM	Atomic force microscope
AFP	Alpha fetoprotein
Ag NPs	Silver nanoparticles
APCs	Antigen presenting cells
Au NPs	Gold nanoparticles
BSA	Bovine serum albumin
CA	Cancer antigens
CAGR	Compound annual growth rate
CBA	Cancer biomarker antigens
CEA	Carcinoembryonic antigen
ChO	Choline oxidase
CNTs	Carbon nanotubes
Co	Cobalt
CoSO ₄	Cobalt sulfate
CpG	Deoxycytidyl-deoxyguanosin
CRP	C-reactive protein
CT-Scan	X-ray computerized tomography scan
Cu NPs	Copper nanoparticles
Cur	Curcumin
CVD	Chemical vapor deposition

Cyt-c	Cytochrome-c
DC	Direct Current
DNA	Deoxyribonucleic acid
DOX	Doxorubicin
DWCNTs	Double walled carbon nanotubes
EB	Evans blue
ECM	Extracellular matrix
EDC	1-ethyl-3-(3-dimethylaminopropyl) carbodiimide hydrochloride
ELISA	Enzyme-linked immunosorbent assay
EPR	Enhanced permeation and retention
FA	Folic acid
f-CNTs	Functionalized carbon nanotubes
Fe	Iron
FeSO ₄	Ferrous sulfate
FITC	Fluorescein isothiocyanate
FMDV	Foot- and- mouth disease virus
f-MWNTs	Functionalized multi walled carbon nanotubes
f-MWNTs-abs	Functionlized multiwalled carbon nanotubes with antibodies
FR	Folate receptor
f-SWNTs	Functionalized single walled carbon nanotubes
GCE	Glassy carbon electrode
GFP	Green fluorescence protein
GO	Glucose oxidase
H ₂ O ₂	Hydrogen peroxide

HCG	Human chorionic gonadotrophin
HEK	Human embryonic kidney
Hp	Haptoglobin
HRP	Horseradish peroxidase
ICG	Indocyanine green
IFN	Interferon
Ig	Immunoglobulin
IL	Interleukin
LOD	Limit of detection
miRNA	micro RNA
MRI	Magnetic resonance imaging
MSCs	Mesenchymal stem cells
MWCNTs	Multi walled carbon nanotubes
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N ₂	Nitrogen
NaCl	Sodium chloride
NADH	Nicotinamide adenine dinucleotide
NGR peptide	Asparagine-glycine-arginine peptide
NH ₃	Ammonia
Ni	Nickel
Ni(NO ₃) ₂	Nickel nitrate
Ni/Y	Nickel/Yttrium
NIR	Near infrared
NiSO ₄	Nickel sulfate

NK	Natural killer
ODN	Oligodeoxynucleotides
OP	oragno-phosphorous
PAA	Polyallylamine
PAGE	Polyacrylamide gel electrophoresis
PAM	Polyacrylamide
PB	Prussian blue
PDDA	Poly (diallyl dimethyl ammonium) chloride
PEG	Polyethylene glycol
PEI	Polyethyleneimine
PET	Positron emission tomography
PF	Platelet factor
PL	Phospholipid
PLA	Poly lactic acid
PLGA	Poly-lactic glycolic acid
PLK	Polo-like kinase
POC	Point-of-care
PSA	Prostate-specific antigen
PSA-ACT	Prostate-specific antigen- Antichymotrypsin
PSMA	Prostate specific membrane antigen
Pt	Platinum
RCT	Root canal treatment
RES	Reticuloendothelial system
RF	Radio frequency

RNA	Ribonucleic acid
RNAi	Interference Ribonucleic acid
ROS	Reactive oxygen species
SA node	Sinoatrial
SA	Streptavidin
SANS	Small angle neutron scattering
SAXS	Small angle X-ray scattering
SDS	Sodium dodecyl sulfate
SDS-PAGE	Sodium dodecyl sulphate-Polyacrylamide gel electrophoresis
SiO ₂	Silicon dioxide
siRNA	Small-interfering ribonucleic acid
SpA	Protein A
SPE	Screen printed electrodes
SPE/CT	Single-photon emission computed tomography
SPM	Scanning probe microscope
SRP	Surface plasmon resonance
STM	Scanning tunneling microscope
SWCNTs	Single walled carbon nanotubes
SWNTs	Single walled carbon nanotubes
TAM	Tamoxifen
TLR	Toll like receptors
TNF- α	Tumor necrosis factor- α