

## List of Symbols/Abbreviations

AEC	Aqueous extract of <i>Croton bonplandianum</i>
AEX	Aqueous extract of <i>Xanthium strumarium</i>
AFM	Atomic force microscopy
AgNPs	Silver nanoparticles
APS	Ammonium persulphate
AuNPs	Gold nanoparticles
c	Concentration absorbing molecule in mol dm <sup>-3</sup>
<i>C. bonplandianum</i>	<i>Croton bonplandianum</i>
CeONPs	Cerium oxide nanoparticles
CNTs	Carbon nanotubes
CV	Cyclic voltammograms
CVD	Chemical vapor deposition
CVS	Chemical vapor synthesis
d	Interplanar spacing
UPW	Ultra pure water
<i>E. Coli</i>	<i>Escherichia coli</i> .
e.g.	Example
EDX	Energy-dispersive X-ray spectroscopy
et al.	Co-authors
FT-IR	Fourier transform infrared spectroscopy
GAE	Gallic acid equivalents
GCE	Glassy carbon electrode
GO	Graphene oxide
GSH	Glutathione
$I_0$	Intensity of the incident radiation
IONPs	Iron oxide nanoparticles
$I_t$	Intensity of the transmitted radiation
JCPDS	Joint committee on powder diffraction standards
MHB	Mueller hinton broth
MICs	Minimum inhibitory concentrations

MNPs	Metal nanoparticles
MONPs	Metal oxide nanoparticles
MRI	Magnetic resonance imaging
MTT	3-(4, 5-dimethylthiazol-2-yl)-2, 5-diphenyl-tetrazolium bromide
NaAc	Sodium acetate buffer
NC-AuNPs	Negatively charged aunps
NMNP	Noble metal nanoparticles
ONPG	<i>O</i> -nitrophenol- $\beta$ -D-galactopyranoside
oxTMB	Oxidized TMB
PANI	Plyaniline
PBS	Phosphate buffer saline
PdNPs	Palladium nanoparticles
PdNPs	Palladium nanoparticles
PGMs	Platinum group metals
PVD	Physical vapor deposition
R <sup>2</sup>	Correlation coefficient
rGO	Reduced graphene oxide
<i>S. aureus</i>	<i>Staphylococcus aureus</i>
SAED	Selected area diffraction pattern
SEM	Scanning electron microscopy
t	Time (min)
TA	Tannic acid
TEM	Transmission electron microscopy
TiONPs	Titanium dioxide nanoparticles
TMB	Tetramethylbenzidine
TP	Total phenolics
<i>X. strumarium</i>	<i>Xanthium strumarium</i>
XPS	X-ray photoelectron spectroscopy
XRD	X-ray diffraction spectroscopy
ZnONPs	Zinc oxide nanoparticles

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$\varepsilon$	Molar absorption coefficient
$\theta$	Angle (degree)
$\lambda$	Wavelength