Faculty of Education
Department of Biological Sciences & Geology

STUDIES ON BIOSYNTHESIS OF COPPER OXIDE NANOPARTICLES USING SOME SOIL FUNGI

Thesis

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This dissertation has not been previously submitted for any degree, at this or any other university. The references being checked whenever possible show the extent to which I have availed myself of the work of other authors.

Abubakr Abdulmo'men

We apologize for any errors we have inadvertently allowed into print

To

My Parents, my wife, my sons and my family the scent of my life 

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CONTENTS

LIST OF ABBREVIATIONS

Abbreviation	Meaning
Ag	Silver
AOP	Advanced oxidation processes
ATCC	American Type Culture Collection
Au	Absorbance unit
AUMC	Assuit University Mycological Center
CFU	Colony forming units
CS	Culture Supernatant
$Cu(NO_3)_2.3H_2O$	Copper nitrate
CuO	Copper Oxide
DLS	Dynamic light scattering
DPPH	2,2-Diphenyl 1-picrylhydrazil
EDX	Energy dispersive X-rays
FR	Free radicals
FTIR	Fourier Transform Infrared Spectroscopy
HR-TEM	High Resolution-Transmission Electron Microscopy
IC_{50}	The half maximal inhibitory concentration
KBr	Potassium Bromide
MB	Methylene Blue
MDR	Multidrug resistant
MIC	Minimum inhibitory concentration
mM	Milli molar
nm	Nanometer
NPs	Nanoparticles
O_2^-	Superoxide radical
O_2^{2-}	Hydrogen peroxide radical
OH^-	Hydroxyl radical
RSA	Radical scavenging activity
SAED	Selected area electron diffraction
TiO_2	Titanium dioxide
UV-Vis	Ultraviolet–visible
XRD	X-ray diffraction
ZnO	Zinc Oxide

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