

Abbreviations

AA	Ascorbic acid
AAO	Ascorbic Acid Oxidase
bamnp	2,6-bis(aminomethyl)-4-nitrophenol
B3LYP	Becke, 3-parameter, Lee-Yang-Parr
BSA	Bovine Serum Albumin
CO	Catechol Oxidase
CSD	Cambridge Structural Database
ct-DNA	Calf Thymus DNA
<i>d</i>	doublet
dac	2,6-diacetyl-p-cresol
dap	1,3-diaminopropan-2-ol
DCM	dichloromethane
dfc	2,6-diformyl-p-cresol
DFT	Density-functional theory
DMF	dimethylformamide
DMSO	dimethylsulfoxide
DNA	Deoxyribonucleic Acid
3,5-DTBC	3,5-ditertbutylcatechol
EB / EtBr	Ethidium Bromide
ESI-MS	Electrospray Ionization Mass Spectrometry
ESR/EPR	Electron Spin/Paramagnetic Resonance
FI	Fluorescence intensity
IR	Fourier transform infrared spectroscopy
HOMO	Highest Occupied Molecular Orbital
HSA	Human Serum Albumin
IC ₅₀	concentration of the complex that caused 50% inhibition of NBT reduction
K _b	intrinsic binding constant
K _{SV}	Stern-Volmer quenching constant
K _a	association binding constant
LANL2DZ	Los Alamos National Laboratory 2 Double-Zeta
LOD	Limit of detection
LUMO	Lowest Unoccupied Molecular Orbital
<i>m</i>	multiplet
M	Molar

μM	microMolar
mM	miliMolar
m/z	mass to charge ratio
4-MC	4-methyl catechol
NADH	Nicotinamide Adenine Dinucleotide- Reduced
NBT	Nitroblue Tetrazolium
NMR	Nuclear Magnetic Resonance
ORTEP	Oak Ridge Thermal Ellipsoid Plot
PMS	Phenazine Methosulphate
ROS	Reactive Oxygen Species
s	singlet
SOD	Superoxide Dismutase
t	triplet
TBAA	
<i>tert</i> -Butylacetic Acid	
TMS	Tetramethyl Silane
TRIS-HCl	Tris(Hydroxymethyl)-Aminomethane-Hcl
Trp	Tryptophan
Tyr	Tyrosine
UV-Vis	Ultra Violet - Visible Region
VT-NMR	Variable Temperature Nuclear Magnetic Resonance
WHO	World Health Organization
XRD	X-ray diffraction