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LIST OF ABBREVIATIONS

BNPs	: Bimetallic Nanoparticles
N_2H_4	: Hydrous Hydrazine
GO	: Graphene Oxide
MWCNTs	: Multiwalled Carbon Nanotube
EETMS	: 2-(3, 4-epoxycyclohexyl)ethyltrimethoxysilane
3-APTMS	: 3-aminopropyltrimethoxysilane
GPTMS	: 3-glycidoxypropyltrimethoxysilane
TMS	: Trimethoxysilane
MB	: Methylene Blue
LeucoMB	: Leuco Methylene Blue
PNA	: para – Nitroanaline
THF-HPO	: Tetrahydrofuranhydroperoxide
PdNPs	: Palladium nanoparticles
SAED	: Selected Area Electron Diffraction
TEM	: Transmission Electron Microscopy
EDX	: Energy Dispersive X-Ray Analysis
FTIR	: Fourier Transform Infrared Spectroscopy
PEI	: Polyethyleneimine
TMB	: 3,3,5,5-tetramethyl benzidine
K_2PdCl_4	: Potassium tetrachloropalladate
PVP	: Polyvinylpyrrolidone
PBNPs	: Prussian blue Nanoparticles

DTA	: Differential Thermal Analysis
TGA	: Thermogravimetric analysis
AFM	: Atomic Force Spectrosopy
ITO	: Indium Titanium Oxide
$AgNO_3$	: Silver nitrate
GCE	: Glassy Carbon Electrode
DPV	: Differential Pulse Voltammetry
L-Trp	: L-Tryptophan
XPS	: X-ray Photoelectron Spectroscopy
DLS	: Dynamic Light Scattering
CMC	: Critical Micelle Concentration
EDL	: Electrical Double Layer
R_H	: Hydrodynamic radius
TNPs	: Trimetallic Nanoparticles
$NaBH_4$	: Sodium Borohydride
HER	: Hydrogen Evolution Reaction
RHE	: Reverse Hydrogen electrode
PVA	: Polyvinylalcohol
XRD	: X-ray Diffraction
TOF	: Turn Over Frequency
R_{ct}	: Charge Transfer Resistance
EIS	: Electrochemical Impedance spectroscopy
RhB	: Rhodamine B
L-Trp	: L-Tryptophan