Abbreviations

CIP	Ciprofloxacin
MG	Methyl orange
DW	Double distilled water
MAPS	Materials and Process Simulation
MD	Molecular dynamics
RDF	Radial distribution function
LAMMPS	Large-scale Atomic/Molecular Massively Parallel System
XRD	X-ray diffractometer
VSM	Vibrating sample magnetometry
SEM	Scanning electron microscopy
UV-vis	Ultra-violet visible Spectroscopy
UV-DRS	Ultra-violet diffuse reflectance spectroscopy
BET	Brunauer-Emmett-Teller
FT-IR	Fourier transforms infrared spectroscopy
TEM	Transmission electron microscopy
TOF	Turn over frequency
HOMO	Highest occupied molecular orbital
LUMO	Lowest unoccupied molecular orbital
TD-DFT	Time-dependent density functional theory
DFT	Density functional theory
$^{\bullet}$OH	Hydroxyl radical
$^{\bullet}$OOH	Hydroperoxyl radical

OH^-	Hydroxide ion
NaOH	Sodium hydroxide
$O_2^{\bullet-}$	Superoxide radical
VB	Valence band
CB	Conduction band
TC	Tetracycline
EIS	Electrochemical Impedance Spectroscopy
MS	Mott-Schottky
IPA	Isopropyl alcohol
NBT	Nitro blue tetrazolium

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