List of Notations, Symbols and Abbreviations

Notation	Abbreviations
et al.	et alia, Latin for “and others “
i.e.	That is
e.g.	Example
etc.	Et cetera, Latin for "and other similar things"
Fig	Figure
mL	Milliliter
mg	Milligram
g	Gram
cm	Centimeter
Hz	Hertz
min	Minute
h	Hour
aq.	Aqueous
s^{-1}	Per Second
m.p.	Melting point
viz.	Namely
IR	Infrared
NMR	Nuclear magnetic resonance
TMS	Tetramethylsilane
RF	Retardation Factor
HRMS	High resolution mass spectroscopy
MHz	Megahertz
RT or rt	Room temperature
ppm	Part per million
brs	Broad

Calc.	Calculated
Obser.	Observed
o	ortho
p	para
dil.	Diluted
approx.	Approximate
Equiv.	Equivalent
tert.	Tertiary
MW	Microwave
US	Ultrasonicator
d	Doublet
m	Multiplet
q	Quartets
s	Singlet
t	Triplet
W	Watt
m.f.	Molecular formula
V	Volume
vs.	Versus
NR	No Reaction
sec	Second
CAN	Ceric ammonium nitrate
CH_3CN, MeCN	Acetonitrile
DDQ	2,3-Dichloro-5,6-dicyano-1,4-benzoquinone
EtOAc	Ethyl acetate
OH	Hydroxy
H_2O	Water
I_2	Molecular iodine

TBHP	*tert*-Butyl hydrogen peroxide
TBN	*tert*- butyl nitrite
BHT	Butylated hydroxytoluene
KI	Potassium iodide
TEMPO	(2,2,6,6-tetramethylpiperidin-1-yl)oxyl
DMAP	4-Dimethylaminopyridine
Na_2SO_4	Sodium sulfate
TLC	Thin layer chromatography
D_2O	Deuterium oxide
$CDCl_3$	Deuterated chloroform
EtOH	Ethanol
$CHCl_3$	Chloroform
MeOH	Methanol
DCM, CH_2Cl_2	Dichloromethane
DCE	Dichloroethane
DMF	*N*,*N*-Dimethyl formamide
DMSO	Dimethylsulfoxide
THF	Tetrahydrofuran
EtOAc	Ethyl acetate
PhH	Benzene
PhMe	Toluene
Py	Pyridine
DABCO	1,4-diazabicyclo[2.2.2]octane
AgOTF	Silver trifluoromethanesulfonate
PPh_3	Triphenylphosphine
KBr	Potassium bormide
$AlCl_3$	Aluminium Chloride
K_2CO_3	Potassium Carbonate

NaOH	Sodium hydroxide
CuCl	Copper(I) chloride
$MgFe_2O_4$	Magnesium Ferrite
p-TSA	*p*-Toluenesulfonic acid
NH_4Cl	Ammonium chloride
SiO_2	Silicon dioxide
ZnO	Zinc oxide
$FeCl_3$	Iron(III) chloride
H_2SO_4	Sulphuric acid
$ZrCl_4$	Zirconium tetrachloride
MCM	Mesoporous material
$SOCl_2$	Thionyl chloride
NaNCS	Sodium thiocyanate
Br_2	Bromine
PIFA	(Bis(trifluoroacetoxy)iodo)benzene
TCT	Trichloroisocyanuric acid
DIPEA	*N, N*-Diisopropylethylamine
TEA	Triethylamine
HI	Hydrogen iodide
IBX	Iodoxybenzoic acid
BAIB	(Diacetoxyiodo)benzene
$CuSO_4$	Copper(II)sulfate
N_2O_4	Dinitrogen tetroxide
IAN	*iso*-Amyl nitrite
NBN	*n*-Butyl nitrite
H_2S	Hydrogen sulfide
CsF	Caesium fluoride
EDDA	Ethylenediammonium diacetate

TiO_2	Titanium dioxide
Fe_3O_4	Iron(II, III) oxide
PEG	Polyethylene glycol
Ag_2CO_3	Silver carbonate
VOCs	Volatile organic solvent
MCRs	Multi component reaction
$NiFe_2O_4$	Nickel ferrite
KF	Potassium fluoride
NBS	N-Bromosuccinimide
NaI	Sodium iodide
GO	Graphene oxide
Na_2CO_3	Sodium carbonate
MgO	Magnesium oxide
$NaHCO_3$	Sodium bicarbonate
$InCl_3$	Indium(III) chloride
$PHI(OAC)_2$	(Diacetoxyiodo)benzene
$ZrOCl_2.8\ H_2O$	Zirconyl chloride octahydrate
$H_3PW_{12}O_{40}$	Phosphotungstic acid
NPs	Nanoparticles
ACOH	Acetic acid
$P(4\text{-}VPH)ClO_4$	Poly(4-vinylpyridinium)perchlorate
ZrO_2	Zirconium dioxide
BDMS	Bromodimethylsulfonium Bromide
Cu@MNPs	Copper magnetic nanoparticles

Symboles used

Symboles	Full name
α	Alfa
β	Beta
γ	Gamma
°C	Degree Celsius
K	Kelvin
σ	Sigma
μ	mu
Δ	Delta Upercase
©	Copyright
δ	Delta
>	Greater than
<	Less than
%	Percentage
Å	Angstrom
λ	Lambda
&	And
π	Pi
±	Either plus or minus