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LIST OF ABBREVIATIONS / SYMBOLS

Abbreviation/Symbol	Description
α	Alpha
β	Beta
γ	Gamma
Δ	Delta
$^{\circ}\text{C}$	Degree centigrade
\AA	Angstrom
Ac	Acetyl
Ac_2O	Acetic anhydride
AcOH	Acetic acid
AIBN	Azobisisobutyronitrile
Aq	Aqueous
Ar	Aryl
[Bmim][BF ₄]	1-Butyl-3-methylimidazolium tetrafluoroborate
Bu	Butyl
<i>t</i> -BuOK	Potassium <i>tert</i> -butoxide
Calcd.	Calculated
¹³ C	Carbon-13
CAN	Ceric ammonium nitrate
Cat.	Catalyst
cm	Centimeter
CDCl ₃	Deuterated chloroform
<i>m</i> -CPBA	<i>meta</i> -Chloroperoxybenzoic acid
Conc	Concentration
COSY	Correlation spectroscopy (NMR)

d	Doublet
δ	Chemical shift
DABCO	1,4-Diazabicyclo[2.2.2]octane
DBU	1,8-Diazabicyclo[5.4.0]undec-7-ene
TEMPO	2,2,6,6-Tetramethyl-1-piperidinyloxy
dd	Doublet of doublet
DNBS	2,4-Dinitrobenzenesulfonyl
DCE	Dichloroethane
DCM	Dichloromethane
DMA	<i>N,N</i> -Dimethylacetamide
DMEDA	<i>N,N'</i> -Dimethylethylenediamine
DMF	<i>N,N</i> -Dimethylformamide
DMF- <i>d</i> ₇	Deuterated <i>N,N</i> -Dimethylformamide
DMSO- <i>d</i> ₆	Deuterated dimethylsulfoxide
DMSO	Dimethylsulfoxide
DOS	Diversity oriented synthesis
EI	Electron ionization
ESI	Electron-spray ionization
EDDA	Ethylenediamine- <i>N,N'</i> -diacetic acid
EtOAc	Ethyl acetate
Eq.	equation
Equiv.	Equivalent
ESI-MS	Electrospray ionization mass spectrometry
g	Gram
h	Hours

HDNIB	[Hydroxy-(2,4-dinitrobenzenesulfonyloxy)iodo]benzene
HRMS	High resolution mass spectra
HTIB	(Hydroxy(tosyloxy)iodo)benzene
IBX	2-Iodoxybenzoic acid
IBD	Iodobenzene diacetate
ILs	Ionic liquids
IR	Infra-red
Hz	Hertz
<i>J</i>	Coupling constant
Lit.	Literature
LDA	Lithium diisopropylamide
MCR	Multicomponent reaction
Me	Methyl
MS	Molecular sieve
MsCl	Methanesulfonyl chloride
mp	Melting point
m	Multiplet
mg	Milligram
MHz	Mega hertz
min	Minutes
mmol	Millimole
MW	Microwave
N ₂	Nitrogen
Nu	Nucleophile
NMR	Nuclear magnetic resonance

NOE	Nuclear overhauser effect
NOESY	Nuclear overhauser effect spectroscopy
NBS	<i>N</i> -Bromosuccinimide
NIS	<i>N</i> -Iodosuccinimide
NCS	<i>N</i> -Chlorosuccinimide
NMO	<i>N</i> -Methylmorpholine <i>N</i> -oxide
O ₂	Oxygen
PEG	Polyethylene glycol
PIDA	Phenyl iodonium diacetate
Ph	Phenyl
Py	Pyridine
ppm	Parts per million
π	Pi
PPA	Polyphosphoric acid
%	Percentage
psi	Per square inch
<i>p</i> -TSA or <i>p</i> -TsOH	<i>p</i> -Toluenesulfonic acid
rt	Room temperature
s	Singlet
SDS	Sodium dodecyl sulfate
TA-Au	1,2,3-Triazole Bound Au
TFA	Trifluoroacetic acid
TfOH	Trifluoromethanesulfonic acid
t	Triplet
TBAI	Tetrabutylammonium iodide

TBAB	Tetrabutylammonium bromide
TBHP	<i>tert</i> -Butyl hydroperoxide
T3P	Propylphosphonic anhydride
qTOF	Quadrupole time-of-flight
THF	Tetrahydrofuran
TLC	Thin layer chromatography
TMS	Tetramethylsilane
TMSCl	Trimethylsilyl chloride
-OTf	Trifluoromethanesulfonate