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## LIST OF ABBREVIATIONS

Abbreviation	Description
AcOH	Acetic acid
acac	Acetylacetone
ADA	1-Adamantancarboxylic acid
Aq	Aqueous
Ar	Aryl
BHT	Butylated hydroxy toluene
<i>t</i> -BuOK	Potassium <i>tert</i> -butoxide
<i>t</i> -BuONO	<i>tert</i> -Butyl nitrite
Cat.	Catalytic
CMD	Concerted metalation deprotonation
<sup>13</sup> C	Carbon-13
CH <sub>3</sub> CN	Acetonitrile
CDCl <sub>3</sub>	Deuterated chloroform
<i>m</i> -CPBA	<i>meta</i> -Chloroperoxybenzoic acid
CDC	Cross-dehydrogenative coupling
CAN	Ceric ammonium nitrate
Cp*	1,2,3,4,5-Pentamethylcyclopenta-1,3-diene
<i>p</i> -Cymene	1-Methyl-4-(propan-2-yl)benzene
DMAP	4-Dimethylaminopyridine
d	Doublet
DBU	1,8-Diazabicyclo[5.4.0]undec-7-ene

dd	Doublet of doublet
DCE	1,2-Dichloroethane
DCM	Dichloromethane
DMA	<i>N,N</i> -Dimethylacetamide
DME	Dimethoxyethane
DMF	<i>N,N</i> -Dimethylformamide
DMSO- <i>d</i> <sub>6</sub>	Deuterated dimethylsulfoxide
DMSO	Dimethylsulfoxide
DMAc	Dimethylacetamide
DMAP	4-Dimethylaminopyridine
DDQ	2,3-Dichloro-5,6-dicyano-1,4-benzoquinone
DGs	Directing groups
dppf	1,1'-Bis(diphenylphosphino)ferrocene
EDC.HCl	1-Ethyl-3-(3-dimethylaminopropyl)carbodiimide
EI	Electron ionization
EtOAc	Ethyl acetate
equiv.	Equivalent
ESI-MS	Electrospray ionization mass spectrometry
EtOH	Ethanol
FID	Free induction decay
FT-IR	Fourier transform infrared
g	Gram
h	Hours



HFIP	1,1,1,3,3,3-Hexafluoro-2-propanol
HRMS	High resolution mass spectra
Hz	Hertz
HOMO	Highest occupied molecular orbital
IR	Infra-red
IPA	Isopropanol
IBD	Iodobenzene diacetate
IOC	Intramolecular oxidative coupling
IP	Imidazo[1,2- <i>a</i> ]pyridines
<i>J</i>	Coupling constant
KOAc	Potassium acetate
KIE	Kinetic isotope effect
Lit.	Literature
LUMO	Lowest unoccupied molecular orbital
mp	Melting point
<i>m</i>	Multiplet
mg	Milligram
MHz	Mega hertz
min	Minutes
mmol	Millimole
MW	Microwave
nm	Nanometer
N <sub>2</sub>	Nitrogen
DIPEA	N,N-Diisopropylethylamine

Nu	Nucleophile
NMR	Nuclear magnetic resonance
NBS	<i>N</i> -Bromosuccinimide
NCS	<i>N</i> -Chlorosuccinimide
NIS	<i>N</i> -Iodoosuccinimide
NMP	<i>N</i> -Methyl-2-pyrrolidone
O <sub>2</sub>	Oxygen
OTf	Trifluoromethanesulfonate
OLEDs	Organic light-emitting diode
PEG400	Polyethylene glycol 400
PIDA	Phenyliodine(III) diacetate
1,10-Phen	1,10-Phenanthroline
PivOH	Pivalic acid
PhCl	Chlorobenzene
ppm	Parts per million
r.t.	Room temperature
s	Singlet
SET	Single electron transfer
S <sub>E</sub> Ar	Substitution electrophilic aromatic
TFA	Trifluoroacetic acid
TFE	2,2,2-Trifluoroethanol
TEA	Triethyl amine
t	Triplet
TMDEA	Tetramethylethylenediamine

TBAB	Tetrabutylammonium bromide
TBHP	<i>tert</i> -Butyl hydroperoxide
THF	Tetrahydrofuran
TEMPO	2,2,6,6-Tetramethyl-1-piperidinyloxy
<i>p</i> -TSA or <i>p</i> -TsOH	<i>p</i> -Toluenesulfonic acid
qTOF	Quadrupole time-of-flight
TLC	Thin layer chromatography
TfOH	Trifluoromethanesulfonic acid
TFAA	Trifluoroacetic anhydride
TMS	Tetramethylsilane
TMSCl	Trimethylsilyl chloride
TD-DFT	Time dependent density functional theory
UV	Ultraviolet-visible