

## List of abbreviations

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AIBN	Azobisisobutyronitrile
Ac	Acetyl
Aq	Aqueous
Ar	Aryl
br	Broad
BINAP	2,2'-bis(diphenylphosphino)-1,1'-binaphthyl
BET	Brunauer-Emmett-Teller
Cy	Cyclohexyl
d	Doublet
DABCO	1,4-Diazabicyclo[2,2,0]octane
DAPCy	transbis(dicyclohexylamine) palladiumdiacetate
DCM	Dichloromethane
DMBPA	<i>N,N'</i> -dimethyl biphenylamine
DMEDA	Dimethylethylenediamine
DMF	Dimethylformamide
DMSO	Dimethylsulphoxide
Dppe	1,2-Bis(diphenylphosphino)ethane
Dppf	1,2-Bis(diphenylphosphino)ferrocene
Dppp	1,2-Bis(diphenylphosphino)propane
DTBNpP	Di- <i>tert</i> -butylneopentylphosphine

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EDX	Energy dispersive X-Ray
Et	Ethyl
<sup>1</sup> H	Proton
<i>i</i> Pr	Iso-propyl
<i>J</i>	Coupling constant
LiHMDS	Lithium bis(trimethylsilyl)amide
m	Multiplet
m-CPBA	meta-chloroperbenzoic acid
Me	Methyl
MIDA	<i>N</i> -methyliminodiacetic acid
Mg	Milligram
Mmol	Millimol
NHC	Nitrogen heterocyclic carbene
NMR	Nuclear Magnetic Resonance
PEG	Polyethelene glycol
PTSA	<i>para</i> -toluenesulphonic acid
rt	Room temperature
RSA	Rice Straw Ash
SEM	Scanning Electron microscopy
t	Triplet
<i>t</i> Bu	tertiary butyl
TBHP	<i>tert</i> -butyl hydroperoxide
TDA	tris(3,6-dioxaheptyl)amine

TTBP	tri( <i>tert</i> -butyl)phosphine
<i>t</i> -OBuNO	<i>tert</i> -butyl nitrite
TEMPO	2,2,6,6-tetramethylpiperidiny-1-oxyl
THF	Tetrahydrofuran
TLC	Thin Layer Chromatography
TMEDA	Tetramethylethylenediamine
TMS	Tetramethylsilane
TPPTS	Tris(3-sulfophenyl)phosphine trisodium salt
TXPTS	Tri(4,6-dimethyl-3-sulfonatophenyl)phosphine trisodium salt
WEBPA	Water Extract of Banana Peel Ash
$\delta$	Chemical Shift