

Abbreviations

Hacac	acetylacetone; pentan-2,4-dione
Ala	alanine or alanate
Ar ^F	perfluoroaryl
Asp	aspartic acid or aspartate
ATP	adenosine triphosphate
H ₂ atsm	H ₂ NC(S)NHN=CMeCMe=NNHC(S)NH ₂
bipy	2,2'-bipyridyl
bipym	2,2'-bipyrimidine
Hbq	7,8-benzoquinoline
CDA	charge decomposition analysis
cod	cycloocta-1,5-diene
cot	cycloocta-1,3,5-triene
Cp	cyclopentadienyl
Cp*	pentamethylcyclopentadienyl
Hcupf	cupferron; <i>N</i> -nitrosophenylhydroxylamine
Cy	cyclohexyl
Cys	cysteine or cysteinate
dab	<i>N,N'</i> -disubstituted 1,4-diazabuta-1,3-diene
DCPIP	dichlorophenolindophenol
Hdct	2,6-dichlorothiophenol
depe	1,2-bis(diethylphosphino)ethane
diars	1,2-bis(dimethylarsino)benzene
digly	diethyleneglycol dimethyl ether
dmad	dimethyl acetylenedicarboxylate
Hdmavk	dimethyl- β -aminovinylketone
dme	1,2-dimethoxyethane
dmppe	1,2-bis(dimethylphosphino)ethane
dmso or DMSO	dimethyl sulfoxide
DMSOR	dimethyl sulfoxide reductase
DMS	dimethyl sulfide
Hdmt	2,6-dimethylthiophenol
dppe	1,2-bis(diphenylphosphino)ethane
dppf	[Fe(C ₅ H ₄ PPH ₂) ₂]

dppm	bis(diphenylphosphino)methane
dppp	1,3-bis(diphenylphosphino)propane
dta	dithiooxamide
en	ethane-1,2-diamine
EDESI-MS	energy-dependent electrospray ionisation mass spectrometry
ESI-MS	electrospray ionisation mass spectrometry
HFc	ferrocene; $[\text{Fe}(\eta^5\text{-C}_5\text{H}_5)_2]$
FeMoco	iron–molybdenum cofactor of nitrogenase
Glu	glutamic acid
H ₂ gts	$\text{H}_2\text{NC(S)NHN}=\text{CHCH}=\text{NNHC(S)NH}_2$
HiPIP	high potential iron protein
His	histidine
hmpa	hexamethylphosphoramide
HOMO	highest occupied molecular orbital
INS	inelastic neutron scattering
IR	infrared
Leu	leucine
LUMO	lowest unoccupied molecular orbital
Lys	lysine
Me ₈ [16]aneS ₄	2,4,6,8,10,12,14,16-octamethyl-1,5,9,13-tetrathiahexadecane
MeP	methyl propanoate
Mes	mesityl
mp	methyl propynoate
MPT	molybdopterin
NMR	nuclear magnetic resonance
H ₃ (NN ₃)	$\text{N}(\text{CH}_2\text{CH}_2\text{NHSiMe}_3)_3$
H ₂ (N _H S ₄)	1,2-HSC ₆ H ₄ SCH ₂ CH ₂ NHCH ₂ CH ₂ SC ₆ H ₄ SH-1,2
H ₃ (NS ₃)	$\text{N}(\text{CH}_2\text{CH}_2\text{SH})_3$
H ₂ (NPN)	$[\text{PhP}(\text{CH}_2\text{SiMe}_2\text{NPh})_2]$
Hoxin	8-hydroxyquinoline
H ₂ (2-pedt)	(2-pyridyl)ethylenedi-1,2-thiol
H ₂ (3-pedt)	(3-pyridyl)ethylenedi-1,2-thiol
H ₂ (4-pedt)	(4-pyridyl)ethylenedi-1,2-thiol
o-phen	1,10-phenanthroline
H(PNP)	$\text{NH}(\text{SiMe}_2\text{CH}_2\text{PR}_2)_2$

H ₂ (P ₂ N ₂)	PhP(CH ₂ SiMe ₂ NHSiMe ₂ CH ₂) ₂ PPh
H(PS)	2-Ph ₂ PC ₆ H ₄ SH
H(PSP)	2,6-(diphenylphosphino)thiophenol
H ₂ (PS ₂)	PhP(C ₆ H ₄ SH-2) ₂
H ₃ (PS ₃)	P(C ₆ H ₄ SH-2) ₃
H ₂ (NH ₂ -ptedt)	2-amino-3-methyl-4-oxopteridiny)ethylenedi-1,2-thiol
H ₂ (NC(H)NMe ₂ -ptedt)	(2- <i>N,N</i> -dimethylaminomethyleneamino)-3-methyl-4-oxopteridiny)ethylenedi-1,2-thiol
H ₂ ptsm	HMeNC(S)NHN=CMeCH=NNHC(S)NHMe
py	pyridine
H ₂ qedt	(2-(<i>N,N</i> -dimethylimino)-4-(qinoxalin-2-yl)ethylenedi-1,2-thiol
Hquin	2-quinaldic acid; 2-quinolinecarboxylic acid
RCM	ring-closing metathesis
Rd	rubredoxin
ROMP	ring-opening metathesis polymerisation
R-pyca	2-pyridine <i>N</i> -aryl carbaldimine
H ₂ (S ₄)	1,2-HSC ₆ H ₄ SCH ₂ CH ₂ SC ₆ H ₄ SH-1,2
H ₂ salen	<i>N,N'</i> -bis(salicylidene)ethane 1,2-diamine
H ₂ sdt	(2-C ₆ H ₅)C(SH)=CH(SH)
Ser	serine or serinate
SHE	standard hydrogen electrode
terpy	2,2':6',2''-terpyridine
TfOH	trifluoromethanesulfonic acid or triflic acid
thf	tetrahydrofuran
thpp	1,3,3a,6a-tetrahydropyrrolo[3,2- <i>b</i>]pyrrole
tht	tetrahydrothiophene
Htipt	2,4,6-tri- <i>iso</i> -propylthiophenol
TMAO	trimethylamine <i>N</i> -oxide
TMA	trimethylamine
tmen	<i>N,N,N',N'</i> -tetramethylethane-1,2-diamine
Tol	tolyl; 4-methylphenyl
tren	tris(2-aminoethyl)amine
tripod	tris(diphenylphosphino)methane
Tyr	tyrosine
UV	ultraviolet
Val	valine