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Transition metal compounds with S/N-functionalized NHC ligands: structures, redox properties and electrocatalytic activity

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To my parents
and my sister

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List of abbreviations

CPC	controlled-potential coulometry
CPE	controlled-potential electrolysis
CV	cyclic voltammetry
Cys	cysteine
DCM	dichloromethane
DMF	dimethylformamide
DMSO	dimethylsulfoxide
dme	dimethoxyethane
dd (NMR)	doublet of doublets
Eq	equation
ESI	electrospray ionization
GC	gas chromatography
HER	hydrogen evolution reaction
IR	infrared
<i>J</i>	coupling constant (Hz)
m (NMR)	multiplet
MS	mass spectrometry
MeCN	acetonitrile
MeOH	methanol
NMR	nuclear magnetic resonance
NHC	N-Heterocyclic Carbene
OAc	acetate
PE	petroleum ether 40-65
ppm	parts per million
p (NMR)	pentet
PCET	proton-coupled electron transfer
q (NMR)	quintet
s (NMR)	singlet
t (NMR)	triplet
TBAB	tetrabutylammonium bromide
TBAP	tetrabutylammonium hexafluoridophosphate
THF	tetrahydrofuran
TMS	tetramethylsilane
UV	ultraviolet

