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Redox interconversion between metal thiolate and disulfide compounds

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Redox Interconversion between Metal Thiolate and Disulfide Compounds

PROEFSCHRIFT

ter verkrijging van
de graad van Doctor aan de Universiteit Leiden,
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volgens besluit van het College voor Promoties
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Feng Jiang
geboren te Jiangsu in 1988

Samenstelling Promotiecommissie

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Haste makes waste

欲速则不达

<The Analects of Confucius>

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List of Abbreviations

a.u.	arbitrary units
Bu	butyl
CcO	cytochrome <i>c</i> oxidase
CDO	cysteine dioxygenase
Cys	cysteine
DCM	dichloromethane
DFT	density functional theory
ESI	electrospray ionization
Eq	equation
ET	electron transfer
Glu	glutamic acid
His	histidine
IR	infrared
<i>J</i>	coupling constant
LMCT	ligand-to-metal charge transfer
m	medium (IR); multiplet (NMR)
min	minutes
Me	methyl
Met	methionine
MLCT	metal-to-ligand charge transfer
NMR	nuclear magnetic resonance
NHases	Nitrile hydratases
MS	mass spectrometry
<i>o</i>	ortho
OTf	trifluoromethanesulfonate
<i>p</i>	para
Ph	phenyl
Py	2-pyridyl
ppm	parts per million
RT	room temperature
s	singlet (NMR); strong (IR)
t	triplet
THF	tetrahydrofuran
TPA	tris(2-pyridylmethyl)amine
Ts	4-toluenesulfonyl
Tyr	tyrosine
UV	ultra-violet
vis	visible
vs	very strong (IR)
w	weak (IR)

