Electronic Supplementary Material (ESI) for Dalton Transactions

Supporting Information for

A novel dinuclear Schiff base copper(II) complex modified electrode for ascorbic acid catalytic oxidation and determination

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Table S1 Comparison of the analytical data's obtained by some modified electrodes proposed for the determination of ascorbic acid

Working electrode	Modified material	pH	E_{pa}(V)	Method	Linear range(μM)	Detection Limit(μM)	Ref.
CPE[a]	SiO2/SnO2/Phosphate/Meldola's blue	7.0	0.04 vs. SCE	amperometric	0.4 - 2000	0.4	[1]
GCE[b]	ruthenium oxide hexacyanoferrate	6.9	0.1 vs. Ag/Cl(sat)	FIA[l]	100 -1000	2.2	[2]
GCE	Poly(direct blue 71)	7.0	0.1 vs. Ag/AgCl(sat)	amperometric	1-100	1	[3]
RGCDE[c]	cadmium pentacyanonitrosylferrate film	7.0	0.5 vs. Ag/AgCl(3M)	voltammetry	5 - 50	2.25	[4]
GCE	poly(luminol)/ ZnO-NPs hybrid film	7.0	0.1 vs. Ag/AgCl(sat)	amperometric	1 - 360	1	[5]
CPE	2,2'-(1,8-octanediylbisnitriloethylidine)-bis-hydroquinone	7.0	0.169 vs. Ag/AgCl	DPV[m]	5 - 30 40 - 1500	0.6	[6]
PtE[d]	Cu(II)-zeolite	4.5	0.11 vs. Ag/AgCl	CV[n]	3 - 6000	0.276	[7]
AuE[e]	Laccase/CdTe/cysteine	4.5	0.36 vs. SCE	amperometric	10 - 1400	1.4	[8]
GCE	$Fe(CN)_6^{3-}$/PAH/PSS–CaCO3/CS[i]	7.0	0.27 vs. Ag/AgCl(sat)	amperometric	1 - 2143	0.7	[9]
CFME[f]	nickel oxide /ruthenium hexacyanoferrate	2.0	0.23 vs. Ag/AgCl(sat)	amperometric	10 - 1600	1	[10]
AuE	Polyaniline-poly(acrylic acid)	6.98	0.1 vs. SCE	amperometric	1 - 9300	1	[11]
GCE	MWNT–silica-NW–AuNPs	7.0	0.23 vs. Ag/AgCl(sat)	CV	1000 - 5000	-	[12]
GCE	Pd nanowire	14.0	0.18 vs. Ag/AgCl(sat)	amperometric	25 - 900	0.2	[13]
PGE[g]	mesopore-rich active carbon	7.0	-0.02 vs. SCE	amperometric	0.5 – 2000	0.3	[14]
GCE	NiHCF-PEDOT hybrid Film[j]	7.0	0.2 vs. Ag/AgCl(sat)	amperometric	5 - 150 155 - 300	1	[15]
GCE	$[1\text{-butyl-3-methylimidazolium}]_6P_2Mo_{18}O_{62}$	7.0	0.07 vs. Ag/AgCl	amperometric	0.1 - 22000	<0.1	[16]
AuE	propargyl- functionalized ferrocene	7.1	0.3 vs. Ag/AgCl(sat)	EIS[o]	5pM - 1nM	2.6pM	[17]
ITOE[h]	Naphthol green B and layered double hydroxides nanoplatelets	7.5	0.7 vs. Ag/AgCl(sat)	CV	1.2 - 55.2	0.51	[18]
PtE	ascorbate oxidase in PEDOT/MWCNTs[k]	6.5	0.4 vs. SCE	amperometric	50 - 20000	15	[19]
AuE	MWCNT/PANI immobilized with ascorbate oxidase	5.8	0.6 vs. Ag/AgCl	amperometric	2 - 206	0.9	[20]
GCE	$[Cu_2(Sal\text{-}GLy)_2(H_2O)_2]$	6.8	0.16 vs. SCE	amperometric	2 - 500	0.39	Present work

a CPE carbon paste electrode
b GCE glassy carbon electrode
c RDE rotating glassy carbon disk electrode
d PtE platinum electrode
e AuE gold electrode
f CFME carbon fiber microelectrode
g PGE pyrolytic graphite electrode
h ITOE indium tin oxide electrode
i PAH = poly(allylamine) hydrochloride PSS = poly(sodium 4-styrenesulfonate) CS = chitosan
j NiHCF-PEDOT = nickel hexacyanoferrate and poly(3,4-ethylenedioxythiophene) hybrid fil
k PEDOT = poly(3,4-ethylenedioxythiophene)
l FIA = flow injection analysis
m DPV = Differential pulse voltammetry
n CV = Cyclic voltammetry
o EIS = Electrochemicalimpedance spectroscopy

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