

Table S5. Capillary Electrophoresis – ECL systems.

Analyte	Luminophore/Coreactant ^a	Limit of Detection	Comments	Reference(s)
Arginine	Ru(bpy) ₃ ²⁺	0.1 μM	Pre-column derivitization with acetaldehyde.	520
Atropine	Ru(bpy) ₃ ²⁺	0.05 μM	Active ingredient in <i>Flos daturae</i>	521
β-Blocker	Ru(bpy) ₃ ²⁺	0.6 μg/mL	Cellulose acetate porous polymer joint as decoupler	270
Benzhexol	Ru(bpy) ₃ ²⁺	6.7 nM		522
Bupivacaine	Ru(bpy) ₃ ²⁺	3 ng/mL		523
Chlorpheniramine	Ru(bpy) ₃ ²⁺	0.5 μM		524
Chlorpheniramine	Ru(bpy) ₃ ²⁺	---	Enhanced ECL via gold nanoparticles (Nanogold).	525
Cocaine	Ru(bpy) ₃ ²⁺	60 nM	Field-amplified stacking CE applied to illicit drugs on banknotes.	526
Difenidol hydrochloride	Ru(bpy) ₃ ²⁺	0.1 μM		527
Dioxopromethazine hydrochloride	Ru(bpy) ₃ ²⁺	0.05 μM		528
Diphenylhydramine	Ru(bpy) ₃ ²⁺	20 nM		529
DMBA	Ru(bpy) ₃ ²⁺	-----	Solid State detector with Ru(bpy) ₃ ²⁺ immobilized in silica-carbon nanotube composite on ITO electrode.	530
Glucose	Ru(bpy) ₃ ²⁺	-----	Poly(dimethylsiloxane)-based ECL detection cell.	531
Heroin	Ru(bpy) ₃ ²⁺	50 nM	Field-amplified stacking CE applied to illicit drugs on banknotes.	526
Hydroxyproline	Ru(bpy) ₃ ²⁺	0.38 nL	DC power supply to bias ECL	532
Hydroxyproline	Ru(bpy) ₃ ²⁺	4 μM		533
Lactose	Ru(bpy) ₃ ²⁺	-----	Poly(dimethylsiloxane)-based ECL detection cell.	531
Lidocaine	Ru(bpy) ₃ ²⁺	20 nM	Investigation of the effect of high field on ECL	534
Lidocaine	Ru(bpy) ₃ ²⁺	30 nM	Porous etched joint as decoupler	535
Lidocaine	Ru(bpy) ₃ ²⁺	0.01 μM	Solid State detector with Ru(bpy) ₃ ²⁺	536

			immobilized in sol-gel derived zirconia-Nafion modified electrode.	
Lidocaine	$\text{Ru}(\text{bpy})_3^{2+}$	---	Enhanced ECL via gold nanoparticles (Nanogold).	525
Lidocaine	$\text{Ru}(\text{bpy})_3^{2+}$	0.1 μM	Zirconia-Nafion compose modified electrode.	537
Leucine	$\text{Ru}(\text{bpy})_3^{2+}$	01.6 μM	Pre-column derivitization with acetaldehyde.	520
Mefenacet	$\text{Ru}(\text{bpy})_3^{2+}$	4 nM		538
Norfloxacin	$\text{Ru}(\text{bpy})_3^{2+}$	4.8 nM		539
Octylamine	Luminol	0.56 μM		268
Ofloxacin	$\text{Ru}(\text{bpy})_3^{2+}$	500 nM	Porous etched joint as decoupler	535
Ofloxacin	$\text{Ru}(\text{bpy})_3^{2+}$	-----	Solid State detector with $\text{Ru}(\text{bpy})_3^{2+}$ immobilized in silica-carbon nanotube composite on ITO electrode.	530
Ofloxacin	$\text{Ru}(\text{bpy})_3^{2+}$	0.1 μM	Zirconia-Nafion compose modified electrode.	537
Oxalic Acid	$\text{Ru}(\text{bpy})_3^{2+}$	-----	Short Capillary	540
Pentoxifyverine	$\text{Ru}(\text{bpy})_3^{2+}$	6 nM	Enhanced ECL via gold nanoparticles (Nanogold).	525
Pentoxifyverine	$\text{Ru}(\text{bpy})_3^{2+}$	0.6 μM		525
Phenylalanine	$\text{Ru}(\text{bpy})_3^{2+}$	1.2 – 50 μM	Experiments varying flow injection sample introduction	541
Phenylalanine	$\text{Ru}(\text{bpy})_3^{2+}$	0.2 – 0.7 μM	On-column fracture covered with Nafion tube as decoupler	276
Procyclidine	$\text{Ru}(\text{bpy})_3^{2+}$	1 nM		542
Proline	$\text{Ru}(\text{bpy})_3^{2+}$	0.13 μM	Porous etched joint as decoupler	269
Proline	$\text{Ru}(\text{bpy})_3^{2+}$	1.2 – 50 μM	Experiments varying flow injection sample introduction	541
Proline	$\text{Ru}(\text{bpy})_3^{2+}$	2.0 μM	Solid-state electrode	543
Proline	$\text{Ru}(\text{bpy})_3^{2+}$	1.2 μM	ITO fabricated microchip electrode	273
Proline	$\text{Ru}(\text{bpy})_3^{2+}$	1 μM	DC power supply to bias ECL	550
Proline	$\text{Ru}(\text{bpy})_3^{2+}$	0.38 nL	DC power supply to bias ECL	532
Proline	$\text{Ru}(\text{bpy})_3^{2+}$	100 nM	DC power supply to bias ECL	544
Proline	$\text{Ru}(\text{bpy})_3^{2+}$	2 μM	Solid State detector with $\text{Ru}(\text{bpy})_3^{2+}$ immobilized in silica-	530

			carbon nanotube composite on ITO electrode.	
Proline	$\text{Ru}(\text{bpy})_3^{2+}$	12.2 fmol	Samples were from human plasma, serum and erythrocytes using prolidase activity.	545
Proline	$\text{Ru}(\text{bpy})_3^{2+}$	0.05 μM	Solid State detector with $\text{Ru}(\text{bpy})_3^{2+}$ immobilized in sol-gel derived zirconia-Nafion modified electrode.	536
Proline	$\text{Ru}(\text{bpy})_3^{2+}$	0.013 μM	Poly(dimethylsiloxane)-based ECL detection cell.	531
Proline	$\text{Ru}(\text{bpy})_3^{2+}$	0.08 μM	Pre-column derivitization with acetaldehyde.	520
Proline	$\text{Ru}(\text{bpy})_3^{2+}$	2 μM		533
Ranitidine	$\text{Ru}(\text{bpy})_3^{2+}$	0.07 μM		546
$\text{Ru}(\text{bpy})_3^{2+}$	$\text{Ru}(\text{bpy})_3^{2+}/\text{TPrA}$	$5 - 6 \times 10^{-16} \text{ M}$	Microfabricated floating platinum electrode in separation channel.	547
$\text{Ru}(\text{phen})_3^{2+}$	$\text{Ru}(\text{phen})_3^{2+}/\text{TPrA}$	$5 - 6 \times 10^{-16} \text{ M}$	Microfabricated floating platinum electrode in separation channel.	547
Scopolamine	$\text{Ru}(\text{bpy})_3^{2+}$	1 μM	Active ingredient in <i>Flos daturae</i>	521
Sucrose	$\text{Ru}(\text{bpy})_3^{2+}$	-----	Poly(dimethylsiloxane)-based ECL detection cell.	531
Sulpiride	$\text{Ru}(\text{bpy})_3^{2+}$	0.01 μM		548
Tiaprider	$\text{Ru}(\text{bpy})_3^{2+}$	0.015 μM		548
Tramadol	$\text{Ru}(\text{bpy})_3^{2+}$	0.1 μM	Zirconia-Nafion compose modified electrode.	537
Tributylamine	$\text{Ru}(\text{bpy})_3^{2+}$	32 nM	Stacking based on pH junctions and field amplification.	549
Triethylamine	$\text{Ru}(\text{bpy})_3^{2+}$	0.38 nL	DC power supply to bias ECL	532
Triethylamine	$\text{Ru}(\text{bpy})_3^{2+}$	24 nM	Stacking based on pH junctions and field amplification.	549
TPrA	$\text{Ru}(\text{bpy})_3^{2+}$	0.37 μM	Porous etched joint as decoupler	269
TPrA	$\text{Ru}(\text{bpy})_3^{2+}$	0.002 μM	Solid-state electrode	543
TPrA	$\text{Ru}(\text{bpy})_3^{2+}$	0.38 nL	DC power supply to bias ECL	532
TPrA	$\text{Ru}(\text{bpy})_3^{2+}$	0.2 nM	DC power supply to bias ECL	544
TPrA	$\text{Ru}(\text{bpy})_3^{2+}$	5 nM	Solid State detector with $\text{Ru}(\text{bpy})_3^{2+}$	536

			immobilized in sol-gel derived zirconia-Nafion modified electrode.	
TPrA	$\text{Ru}(\text{bpy})_3^{2+}$	5.2 nM	Poly(dimethylsiloxane)-based ECL detection cell.	531
TPrA	$\text{Ru}(\text{bpy})_3^{2+}$	20 nM	Stacking based on pH junctions and field amplification.	549
Valine	$\text{Ru}(\text{bpy})_3^{2+}$	1.2 – 50 μM	Experiments varying flow injection sample introduction	541
Valine	$\text{Ru}(\text{bpy})_3^{2+}$	0.2 – 0.7 μM	On-column fracture covered with Nafion tube as decoupler	276
Valine	$\text{Ru}(\text{bpy})_3^{2+}$	1 μM	Pre-column derivitization with acetaldehyde.	520

^aIf no coreactant is listed, then the analyte acted as the ECL coreactant.