

Fig.S1 ORTEP view of the molecular structure of complex **2c** with thermal ellipsoids drawn at the 30% level. Hydrogen atoms are omitted for clarity. Selected distances (Å) and angles (°): Ru(1)-O(1) 2.030(4), Ru(1)-O(2) 2.063(4), Ru(2)-O(3) 2.032(4), Ru(2)-O(4) 2.050(4), Ru(1)-Cl(1) 2.410(2), Ru(2)-Cl(2) 2.404(2), O(1)-C(7) 1.302(6), O(2)-C(1) 1.286(7), O(3)-C(4) 1.283(7), O(4)-C(10) 1.284(6), C(2)-C(3) 1.339(8); O(1)-Ru(1)-O(2) 85.69(16), O(3)-Ru(2)-O(4) 85.48(17), O(1)-Ru(1)-Cl(1) 85.73(13), O(2)-Ru(1)-Cl(1) 84.40(13). Symmetry transformations used to generate equivalent atoms: $3/2-x$, $1/2-y$, z .

Table S1 Crystallographic Data for Ru-complex

	Ru-complex
Empirical formula	C ₃₄ H ₃₄ Cl ₂ O ₄ Ru ₂
Formula weight	779.65
Crystal size (mm ³)	0.12 x 0.10 x 0.08
Crystal system, Space group	Monoclinic <i>C2/c</i>
a (Å)	39.475(15)
b (Å)	7.891(3)
c (Å)	19.526(7)
α (deg)	90
β (deg)	92.223(6)
γ (deg)	90
V (Å ³)	6078(4)
Z, ρ_{calcd} (g/cm ³)	8, 1.704
μ (Mo K α)(mm ⁻¹)	1.208
Limiting indices	-46 \leq h \leq 44, -9 \leq k \leq 9, -23 \leq l \leq 20
Reflections collected / unique	12066 / 5328 [R(int) = 0.0800]
Data / restraints / parameters	5328 / 0 / 385
Goodness of fit	0.658
R_1 , wR_2 [$I > 2\sigma(I)$]	$R_1 = 0.0424$, $wR_2 = 0.0712$
R_1 , wR_2 (all data)	$R_1 = 0.1063$, $wR_2 = 0.0789$
Max/min residual density (eÅ ⁻³)	0.650 and -0.577

CCDC No. 818216 contains the supplementary crystallographic data for Ru-complex.

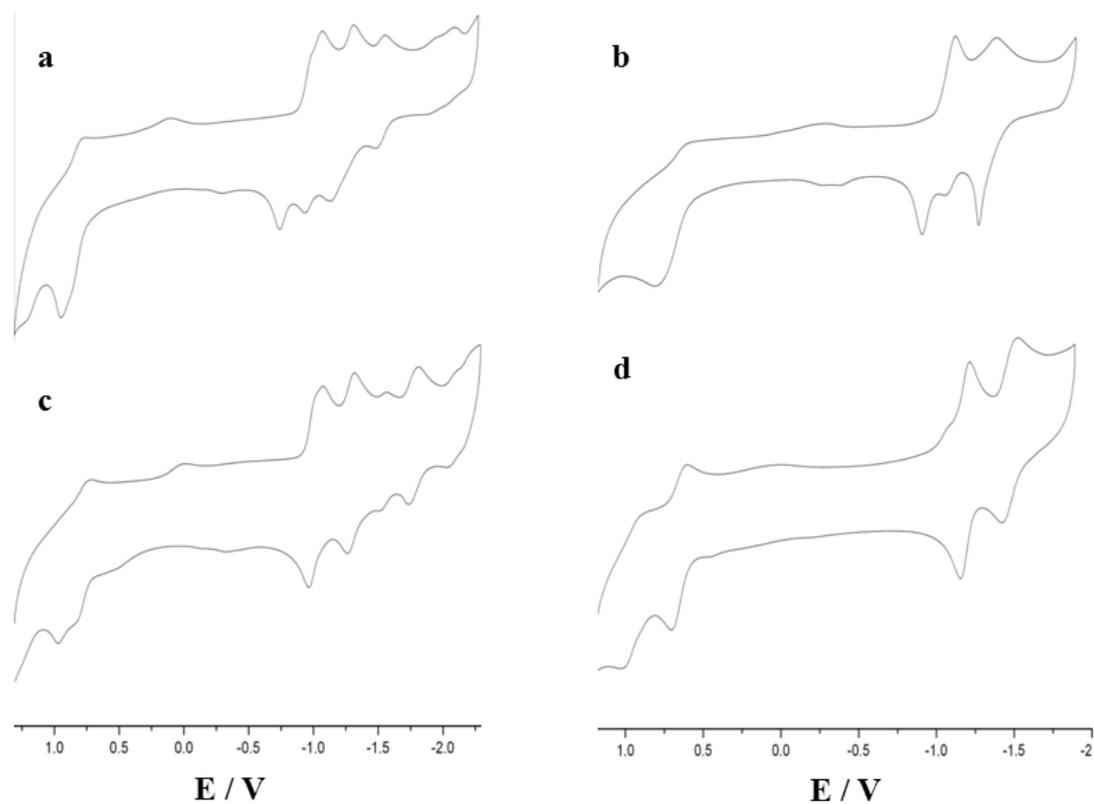


Fig.S2 Cyclic voltammograms of (a) **4a**, (b) **4b**, (c) **5a** and (d) **5b** in $\text{CH}_2\text{Cl}_2/0.1 \text{ M}$ $(\text{n-Bu})_4\text{NPF}_6$ with a scan rate of 100 mV/s versus Fc^+/Fc (ferrocinium/ferrocene) at 298 K.